



Transport Committee

Oral evidence: All lane running, HC 623 Monday 18 April 2016

Ordered by the House of Commons to be published on 18 April 2016.

Written evidence from witnesses:

- [David Bizley, Chief Engineer, RAC](#)
- [Edmund King, OBE, AA](#)
- [Simon Wickenden, and DCI John Oldham, Metropolitan Police](#)
- [Tim Cutbill, and David Bulbrook, London Fire Brigade](#)
- [Dave Allen and Neil Turner, Prospect](#)

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Members present: Mrs Louise Ellman (Chair); Mary Glendon; Mark Menzies; Will Quince; Iain Stewart; Martin Vickers.

Questions 1-83

Witnesses: **David Bizley**, Chief Engineer, RAC, and **Edmund King OBE**, President, AA; **Simon Wickenden**, and **DCI John Oldham**, Metropolitan Police, **Tim Cutbill**, and **David Bulbrook**, London Fire Brigade; **Dave Allen**, and **Neil Turner**, Prospect gave evidence.

Q1 Chair: Welcome to this afternoon's meeting of the Transport Select Committee. Could you give us your name and organisation, please?

David Bizley: I am David Bizley. I am RAC's chief engineer.

Edmund King: I am Edmund King. I am president of the AA and a visiting professor of transport at Newcastle University.

Q2 Chair: Highways England has published evaluations showing improvements in journey time and reliability on the M25 all lane running schemes. Does that mean that all lane running schemes should go ahead as proposed by the Department and that there is no problem with them?

David Bizley: Certainly we are supporters of smart motorways, because wherever some form of smart motorway has been implemented the result has been an increase in the capacity of that road, a reduction in congestion and an improvement in journey times.

However, there are a number of different variants of smart motorways, and clearly we have some concerns about some aspects of safety in all lane running.

Edmund King: It is a case of getting a balance between reducing congestion and not jeopardising safety. From the initial reports, it is fairly early to take a full view of the wider picture. One of the current problems we perceive is the lack of lay-bys or emergency refuge areas. They are every 2.5 km. Quite often drivers break down between those lay-bys on a running lane, which, first, is incredibly frightening but then also leads to congestion, because the lane has to be closed off with a red X and it takes longer to move that vehicle, whereas if there was a hard shoulder people, would go to it.

There is something quite important psychologically. There is a good analogy with waste paper in Disneyland. If people can see a waste paper bin, the majority of them will walk to that bin and put their rubbish in the bin. If they cannot see it, some people—I do not condone it—will drop their rubbish. It is the same on motorways. If you can see the lay-by and you have a blow-out in your tyre or there is smoke coming out of your engine, you will get there. The vast majority of people get there. If they cannot see the lay-by, more than half of people say they would not try to get there; they would stop in the running lane. That puts them and others at risk, but it also leads to congestion.

As an absolute minimum, we would like to see twice as many lay-bys and also twice the length. Currently there is a 30-metre stopping area. One HGV—we are seeing a lot of foreign trucks in these lay-bys—is about 18.5 metres. Basically there is no room for another truck or for repair people to come along. We need twice as many and they need to be twice the length.

Q3 Chair: Mr Bizley, you say that you are content—maybe I am exaggerating that—with smart motorways where the hard lane is out of action for some of the time, but you are very concerned about all lane running where the hard lane is out of action all the time. Why is it okay some of the time but not all the time, or am I misunderstanding you?

David Bizley: There are two differences from the original dynamic hard shoulder motorways. One of those is clearly that you can open or close the hard shoulder when you need to. The other is that the emergency refuge areas are spaced at 500 to 800-metre intervals, whereas on the sections of all lane running they are, as Mr King said, every 2.5 km. Like the AA, we would like to see more emergency refuge areas.

There is also a difference between opening and closing a hard shoulder and opening and closing a running lane. Generally, motorists will move off a hard shoulder if it is closed to traffic, because they are used to not infringing on the hard shoulder. On an all lane running motorway, you only have a red X over the carriageway. Unfortunately, adherence by motorists to red Xs is much less rigorous; indeed, Highways England are taking a number of actions to try to enforce the red X closures. Nevertheless, too many drivers drive down a lane with a red X and that puts at risk people in that lane who may be working or who have broken down.

Q4 Chair: You have both raised some very important issues. What kind of discussions have you had with Highways England about these points and, indeed, any other points?

Edmund King: We have had numerous discussions with Highways England. I have raised our concerns with the road safety Minister via the motorists' forum, which has representatives from different road user groups. We have raised these issues. Both our organisations are members of a group called Survive, which looks at hard shoulder safety from the point of view of breakdown providers. Issues have also been raised through that group.

Q5 Chair: Has anything changed as a result of the discussions that you have had?

David Bizley: Not to my knowledge in terms of the detailed practices, although I understand that Highways England regard the distance between emergency refuge areas as something that is still up for debate. They are not completely committed to 2.5 km on all future stretches of motorway. It is fair to say that Highways England were very active in informing stakeholders as to what was planned, but there was not a formal consultation process in the way that there was, for example, in terms of imposing variable speed limits on some of the new stretches of smart motorway.

Q6 Chair: Was the consultation or discussion something that you felt was a real consultation about whether this should be done, or was it more about the detail of how it should be done?

David Bizley: Certainly, from my perspective, the discussions I was involved in were more about how to make the best of the design and how to operate safely within that design rather than testing and reconsidering its fundamentals.

Q7 Chair: Mr King, do you have a similar view?

Edmund King: In 2012, the Highways Agency informed us that they were going to be running out more schemes using the hard shoulder, but at the time we assumed that it would be more like the M42 pilot, which is a dynamic system with overhead gantries, and so on. We were then advised, without being consulted, that all lane running would also be considered. We believe that is a different principle, because all lane running is getting rid of the hard shoulder permanently. We did not feel that there was adequate enough consultation on all lane running.

Q8 Iain Stewart: Mr King, I would like to take you back to your earlier analogy and the confidence drivers will have if they know there is a lay-by coming up. I quite regularly use the M1 between here and my Milton Keynes constituency. Maybe I am not being observant, but I do not see signs advising where the next lay-by is. Notwithstanding your point about having more regular and longer lay-bys, is there a system of signage that should be introduced to advise drivers when the next one is coming up?

Edmund King: Indeed, I know that section of road. I use it every Friday night to take my son to MK Dons.

Iain Stewart: They are not doing very well at the minute.

Edmund King: There are some signs, but they are not very clear at all. That is one of the concerns that AA's operational people raise with me. The signs are not clear enough to show people where the next lay-by is. One of the concerns is that, if you have two trucks

going past on the inside and there is a sign, you then have to go another 2.5 km. Sometimes it is 5 km, because if there is an exit, they do not have to have another lay-by. You can have the 2.5 km before, the exit and another 2.5 km. Certainly, signage is an issue. If it was made clearer to drivers how far ahead it would be, some of them could then estimate, “I could get to that lay-by more safely.”

David Bizley: The surveying we have done among people who have broken down suggests that there is very poor understanding of what motorists can expect to see in terms of emergency refuge areas and, indeed, what to do if they break down. That is not helped, of course, by the fact that there are several varieties of smart motorway. Even if you know how it works on the M42, that will be different from the way it works on the M25 all lane running sections.

The signage that exists on the motorways was something that both AA and RAC pushed for. The implementation of it has not been nearly as helpful as we hoped it would be, because it is still not visible enough for motorists to understand what to expect in terms of when the next one will be, what to do, and so on.

Q9 Mary Glendon: Some of the figures from the AA survey about how people would use a lane if they saw it marked with a red X are quite frightening. Do you think there is a lack of understanding or are people just chancing what they are doing?

Edmund King: I think it is a combination. Something like 9% in total said that they would not abide by the red X. Some are doing it to gain advantage. In the past, there was not always great confidence when there was a sign that said “Fog ahead” that there actually was fog ahead, because it was a bright, clear day. There is sometimes lack of confidence among motorists as to whether it really applies to an obstacle ahead. We need to educate drivers more that it is incredibly important when there is a red X to avoid that lane.

I have sat in on calls that we have had to the AA call centre when someone has broken down on one of those live lanes. I have to say that it is incredibly frightening listening to the person in that lane. They cannot get out of their vehicle because it is unsafe to do so. Indeed, in one instance I heard a car come up and smash into the back of it, which is absolutely appalling. When there is a red X, we have to educate drivers to avoid that lane.

There is also a concern that sometimes, when traffic is lighter, the automatic detection system does not always detect that there is a car that has broken down. I know this is something that Highways England are looking at. Sometimes at night their system might not pick it up, and obviously at night it is even more dangerous, when more lights on motorways are being switched off, and you are approaching at 70 mph with a stationary vehicle ahead. A lot more needs to be done to make it safer.

David Bizley: The risk assessments suggest that it is in light traffic conditions that people are at greatest risk. If there is heavy traffic, effectively, the obstruction on a live carriageway will slow down all the traffic. It may be frightening for the individual, but actually they are at much less risk than if there is very light traffic and people are travelling faster.

Q10 Mary Glendon: Mr King, you mentioned that education is important. What if there were higher penalties and more enforcement? Do you think that would help or is education the main way forward?

Edmund King: In the first instance, there should be more education. Highways England are beginning to do it. There are now more signs that indicate what the red X means. There needs to be more of that. One of the problems has been a lack, or a demise in the numbers, of dedicated traffic police. Over the last decade, there has been a more than 20% reduction, so drivers are less likely to see a visual presence on the motorways. It is not just about red X enforcement; it is mobile phones, tailgating and other forms of dangerous driving.

One of the ironies of all lane running is that the police are now called to more incidents because more incidents are dangerous. If you end up stuck on a running lane and you call the AA, we will ascertain where you are and your position, but we will call the police at the same time and have a three-way conversation with the police and the motorist. The police are called out more often on all lane running because of the higher risks.

David Bizley: That is an industry standard process. We would do exactly the same in that situation. Highways England have been capturing through CCTV cameras the number plates of people who are not adhering to the red X signage. They have been writing to those people over the last few months, but at the moment my understanding is that you cannot actually enforce using a camera. We would like them to be in that situation as well.

Q11 Chair: Does compliance with the red X signs vary between all lane running motorways and smart motorways? Is there a difference?

David Bizley: I do not think that there is a difference. It is just that you do not need to use red X signs nearly as often on a dynamic hard shoulder motorway or on a conventional motorway. Therefore, you do not have the same level of risk associated with non-compliance with red Xs.

Edmund King: Having said that though, on the stretch of the M1 that Mr Stewart was referring to, there is more confusion about whether or not you can use the hard shoulder. On most Friday nights when I use it there is congestion, so you are allowed to use the hard shoulder. On occasions, I have assumed there was congestion and almost pulled on to the hard shoulder as a matter of habit, so there is that added danger. If people use a stretch of motorway often and they often use it at congested times, they assume when it is not congested that they can still use the hard shoulder. You sometimes see vehicles doing that. I do not think they are being malicious. I think they are just assuming that they can use that lane, so there is that added confusion.

Q12 Will Quince: My first question is in relation to breakdowns. As somebody who has had a blow-out on the M25, I know that it is quite a scary experience to be at the side of a motorway, and that is when you have a hard shoulder to pull on to. If you are stuck in a live traffic flow, what is the advice given to drivers who find themselves in that situation? Ordinarily the advice is to get out of the car and get up on to the bank. I am not sure I would want to do that if I was in a live motorway traffic lane.

Edmund King: If you are in the inside lane, even if it is a live lane, and you are close to the left-hand verge, the advice is that, if possible, you get out of the passenger door—the

left-hand door—and over the barrier. However, if you are in any of the other lanes and you have traffic on either side, the advice is to dial 999 and keep your seatbelt on. Normally, it is unsafe and there have been a number of cases where people have been killed when they tried to get out of the car to get to the central reservation or the hard shoulder and were unable to do so. The advice is to put on your hazard warning lights, keep your seatbelt on and dial 999. That basically shows the severity of the situation. Currently with a hard shoulder, in most breakdowns you can veer off to the left, put your hazards on or whatever.

Q13 Will Quince: That is helpful. My second question is in relation to junctions. There are a lot of people who, even when they see that they can use the hard shoulder, are not sure, so they just won't; they stay in the inside or outside lane, whichever way you look at it. On that basis, have you seen an increase in accidents—this may be a question for the police more than yourselves—where people approach a junction forgetting that the hard shoulder is in use and pull off as normal without checking the left, because ordinarily you would not check on your left, and then collide with a car on their inside, which ordinarily would not have been there?

David Bizley: You would need to address that question to Highways England or the police. Certainly, examining records of breakdowns to which we have been called out and in surveys of patrols, that has not arisen as a particular issue. There are many issues that have, but that is not one of them.

Edmund King: But there is an issue related to it. Going up to junction 13 on the M1 in traffic, you can use the hard shoulder until you get to about two miles of the junction. Then it just says “For Junction 13 only,” so you get crossing of traffic coming in and out. On motorways it has been proved before that entrances and exits are the most dangerous areas. In a way, you are creating an additional hazard a mile or so before the junction.

David Bizley: On the M42 where the first section of smart motorway was piloted, the junctions are so close together that in all cases the hard shoulder was reserved for people either leaving or joining from junctions. Nevertheless, the safety record of that particular stretch suggested that you were only half as likely to be involved in an accident compared with a conventional motorway with three lanes plus a hard shoulder. Despite those areas of risk, overall safety was significantly better than on a conventional motorway.

Q14 Will Quince: That is interesting. Do you think that that in any way is down in part to the fact that people have to concentrate more because there is that extra element, as opposed to an ordinary motorway where you know where your junction is going to be and you almost go into autopilot?

David Bizley: That is true to a degree. There are also variable speed limits that slow traffic to safer speeds in adverse weather and particularly contested conditions. It is a combination of issues. It is important to recognise that the risk assessments for all lane running suggest that the safety of those stretches of road would only be, at best, marginally better than a conventional three lane plus hard shoulder, and certainly not as safe as has been recorded on the M42, for example.

Q15 Will Quince: You are two organisations that survey more road users than most, so do you find that the public find these schemes confusing?

Edmund King: Yes. In a survey of 25,000 drivers last month, 64% said they are not confident that they understand what a smart motorway is, and 47%—almost half—said that they or their friends now avoid driving on motorways because they are nervous of them. That was higher among young drivers, where it was 66%. Some of that is due to the fact that motorway driving still is not an integral part of the driving test, but we were so concerned about the lack of knowledge of motorways that, via the AA charitable trust, we actually launched a course called “Drive Motorway”, which gives free lessons for people. Part of it is to get rid of the nervousness about driving on a motorway, but the other part is actually to educate drivers as to the new smart motorways and what they mean, because there are those high levels of confusion.

David Bizley: We have surveyed smaller groups—people we have gone out to who have broken down on smart motorways, both all lane running and conventional motorways. A good quarter of those we surveyed had no idea what they should have done when they broke down. Between 20% and 25% of those people had no idea what Highways England were likely to do in that situation. There is a massive task in terms of simply educating people what to do and how smart motorways work. Clearly that is not helped by the fact that there are multiple flavours of it at the moment.

Q16 Will Quince: We have talked a bit about enforcement. Do you think it is fair that we go down any enforcement route before we have done the educational piece?

David Bizley: I think the best campaigns are a combination of the two, frankly. The most successful campaigns, like seatbelts and drink driving, have been a combination of a lot of education but also rigorous enforcement. One without the other is never as effective.

Q17 Chair: If there is such lack of knowledge or such confusion about the changes in motorways, do you think the driving test should be altered so that people have to be more aware of all this and what it means?

Edmund King: Yes, certainly in our view, more ought to be incorporated in the driving test about driving on motorways. There has been a consultation as to whether learner drivers can now go on motorways with a qualified driving instructor in a dual-control car. That is certainly something we would support. It is plainly ridiculous that you can take your test in the morning at the age of 17 and then in the afternoon, for the first time ever, drive on a motorway, smart motorway or not, on your own. We would like to see more built into the test that tests people about their knowledge of newer and smarter motorways.

Q18 Chair: Mr Bizley, do you agree with that?

David Bizley: Surveys that we have done suggest that an overwhelming majority of motorists think that motorway driving ought to receive greater emphasis in the driver training and testing process. Clearly, smart motorways are part of that.

Q19 Chair: Is it the case that neither the AA nor the RAC would attend a breakdown if the vehicle is in a live lane?

Edmund King: Yes. The procedure is that if the vehicle is in a live lane we call the police. We attend the breakdown if it is in an emergency refuge area or it is in a live lane that has been closed off. We would not attend it just with a red X; the risks are too great. But if the motorway had actually been closed, for whatever reason, we would attend to help traffic officers, the police or other emergency services.

David Bizley: Typically, we would require some physical barrier, such as a crash protection vehicle or something like that. Again, that is a standard procedure that has been agreed by the Survive group. The AA, RAC and, indeed, other motoring organisations adopt exactly the same policy in that situation.

Q20 Chair: Is the hard shoulder misused more than emergency refuges?

David Bizley: I think they are both misused, frankly. People's idea of what an emergency is varies quite considerably. Mr King referred to the frequency with which overseas lorries stop in emergency refuge areas: for example, if they have run out of driver's hours. That, as much as anything, is lack of understanding that the emergency refuge areas are for emergency use. I have heard it suggested that that is a reason for having fewer emergency refuge areas, but that is a bit like saying we should have fewer accident and emergency units in hospitals because some people go there who should actually go to a GP. The reality is that we need emergency refuge areas on smart motorways, and we need hard shoulders wherever it is possible. There will be a level of misuse and we all have to work to minimise that misuse.

Edmund King: On that point, in our most recent survey 22% of our members say that they often see HGVs stopped in emergency refuge areas. On the roads to the ports there is a greater proportion of foreign trucks. Do they just think it is an ordinary lay-by—some of them may—or are they abusing it? It is perhaps unclear, so greater education is certainly needed there.

David Bizley: It is one of the limitations of the current design of an emergency refuge area. The current design typically has a 30-metre length with a 25-metre entry and exit section. With heavy goods vehicles of typically up to 18.5 metres, as Mr King said, that leaves very little room for anything else to get into the emergency refuge area. Effectively, one truck is blocking the use of that refuge area for anybody else.

Q21 Chair: Do you think it is likely that your concerns will be addressed in such a way as to make you comfortable with the proposals for all lane running?

Edmund King: From the AA's point of view, we would like to see twice as many emergency refuge areas and we would like to see them twice as long. Without that, safety will still be jeopardised. We have put those points to the Department for Transport. One response that I had was that it should be evidence based, but quite frankly we do not want to wait until we have evidence of more people killed on our motorways. It is much safer to get vehicles off live lanes.

If there is a major incident—they are few and far between—as we had at Hungerford on the M4 in 1991 when the fog came down and 10 people were killed, it makes it much more difficult without a hard shoulder at all for the emergency services to get there on time. The

first few minutes after an accident are absolutely vital. We believe that more ought to be done, with more lay-bys as an absolute minimum.

Q22 Chair: Mr Bizley, do you think it is realistic for your concerns to be addressed in such a way that you would be comfortable with all lane running?

David Bizley: Given additional emergency refuge areas—the surveying we have done suggests that 800 to 1,000-metre spacing is what the majority of motorists would like to see—there is certainly an opportunity to improve safety. The original design was fully evaluated in a trial over three years. What will convince us, the RAC, of the safety is a protracted period of trialling of the design, and evidence being gathered to confirm that it is or is not safe. As a minimum, we would like to see the extra emergency refuge areas.

Chair: Thank you very much.

Examination of Witnesses

Witnesses: **Tim Cutbill**, Assistant Commissioner, London Fire Brigade, **David Bulbrook**, Operational Resilience Team, London Fire Brigade, **Simon Wickenden**, Road Safety Engineering Officer, Metropolitan Police Service, and **DCI John Oldham**, Metropolitan Police Service, gave evidence.

Q23 Chair: Good afternoon and welcome to the Transport Select Committee. Could you tell us your name and organisation, please?

David Bulbrook: My name is Dave Bulbrook from the London Fire Brigade. I work in operational resilience and I deal with operational matters relating to London's transport infrastructure.

Tim Cutbill: I am Tim Cutbill from London Fire Brigade. I am Dave's boss and my intention is that, if you ask any difficult questions, I will call on Dave to answer them.

Simon Wickenden: I am Simon Wickenden. I am with the Metropolitan Police traffic management unit. We are responsible for road safety engineering issues when the Metropolitan Police are consulted about such things.

DCI Oldham: I am John Oldham. I am a detective chief inspector with the Metropolitan Police roads policing transport command.

Q24 Chair: The written evidence we received from the Metropolitan Police made some very strong statements about concerns on safety for all lane running. Is there anything further that you would like to say to us about your reason for that concern, and any evidence that you might have?

Simon Wickenden: Yes. We acknowledge that so far, where all lane running has been operational, there has been an overall reduction in collisions, that traffic capacity has increased—the throughput of traffic has increased—and journey time reliability has

improved. The fact remains, and it was acknowledged at the time by the then Highways Agency, that certain types of collision would increase, in some cases quite significantly, but that this would be set against a reduction in other types of collision. Our primary concern is that the types of collision—one in particular—that would increase are not sufficiently mitigated by the engineering that has been installed on this part of the network. More still needs to be done to further mitigate those risks, even when set against the context of an overall reduction in collisions.

Q25 Chair: What type of collisions have increased?

Simon Wickenden: The primary risk that has significantly increased—it was acknowledged at the time that it was in excess of a 200% increase in risk—is that of a broken-down vehicle stopping in a live lane. Clearly, there are certain mitigations in place to try to reduce that risk, but, as I said, it was acknowledged at the time that the increased risk was some 200%. That type of collision is more likely to result in serious or fatal injury than many of the collision types that are being reduced. While numerically they are not a significant number when set against the overall number of collisions, the increase in risk is unacceptable to us with the current level of mitigation that has been put in place.

Q26 Chair: Are there any examples of fatalities because of broken-down vehicles in a live lane?

Simon Wickenden: At the time I drafted our submission to this Committee we had only had two fatalities during the operational period of all lane running. Neither of those was attributable to all lane running. Since then, sadly, we have had another fatality. On 29 March, a vehicle containing three occupants stopped on a live lane running section at 1.30 in the morning, we believe as a result of running out of fuel. Although visibility was clear, it was an unlit section of the road where no hard shoulder was provided. A short time after stopping—it is yet to be determined precisely how long the period was between the vehicle stopping and its being struck—it was struck by a following HGV. That resulted in a fatal injury to the rear-seat occupant and serious injury to the other two occupants of the car. That is still a live investigation; it is still under investigation by Essex Police, so we are unable to discuss it further, but certainly on the facts we have that is precisely the type of collision where it was both predicted by police and acknowledged by the Highways Agency at the time that there was an increased likelihood of its occurring.

Q27 Chair: I appreciate that if it is a live investigation you presumably cannot go into more detail, but it seems to fit with the strong concern that you raised in the written evidence. Have there been other incidents of that sort?

Simon Wickenden: There have not been any other fatalities. There have been a large number of live lane breakdowns. In total, when we look at the northern section, which is junctions 23 to 27, a distance of 17 miles, and on the south side of the M25 between junctions 5 and 7, there were 3,700 live lane breakdowns during the first 12 months of operation. That sounds a very high figure, but it has to be put in the context of the large number of vehicles using that part of the network. It actually works out at less than the rate predicted by Highways England, which was 0.3 per carriageway mile. It is slightly below that. Until the time of the fatality, only two injury collisions had occurred as a result of those stoppages. We emphasise the point that these incidents, tragic though they are, are

rare, but the fact remains that it is extremely dangerous if a vehicle stops in a live lane, particularly during the hours of darkness and particularly if the section of road in question is not lit.

At present, of course, there is no automated system to detect individual broken-down vehicles. All lane running relies on a system called MIDAS—motorway incident detection and automatic signalling; basically, that is conductive loops in the carriageway, or radar at the side of the carriageway, which can detect traffic flow and the space between vehicles as they pass. When traffic reaches a certain density and speed, the system will automatically set variable and mandatory speed limits to reduce traffic speeds and smooth out the traffic flow, in effect. It is a form of queue protection. But that system is unable to detect individual broken-down vehicles. It was not designed to do so and it is unable to do so. There are systems currently under development, but at the time of speaking there is no automated system able to detect individual broken-down vehicles that has yet proved reliable.

Q28 Chair: Have you expressed this concern to Highways England?

Simon Wickenden: Yes. We were first consulted by Highways England in 2012 and it was one of a number of concerns that we expressed at the time.

Q29 Chair: What was their response to that?

Simon Wickenden: At the time, the response was that CCTV coverage would be increased. There is actually almost 200% overlap coverage of CCTV on all lane running sections of motorway, but the CCTV is not monitored continuously. There simply are not enough display screens and staff in a control room. It is beyond human capability to monitor every camera 24/7. We understand that at the time of the most recent incident—the fatality—the vehicle had not been noticed, or it was not detected, until the impact had occurred. It is simply not possible to rely on human beings to monitor a very large number of cameras and to monitor the road effectively in that way. The system requires an automated means of alerting the control room to an individual broken-down vehicle.

Q30 Chair: You are telling us that the technology in certain circumstances may not be adequate and that the CCTV cannot be monitored all the time.

Simon Wickenden: It is not practical or possible to continuously monitor CCTV to a point where you can reliably detect every individual breakdown; no.

Q31 Chair: Does that mean that you are opposed to the introduction of all lane running in the way that is currently proposed?

Simon Wickenden: Yes. That was our position at the time and it remains our position.

Q32 Chair: What are the Fire Service's views on the issues about access to broken-down vehicles where there is all lane running permanently?

Tim Cutbill: For us, predominantly access to emergency incidents on a traditional motorway is via the hard shoulder. Normally, that immediately gives us a very clear access route to the vehicles. Concepts introduced by all lane running with the Xs and the

carriageways being closed are obviously designed to allow us to have a clear carriageway to access. Highways England's evidence shows—as does the evidence from the RAC and AA—that there are large numbers of members of the public who do not really know how to operate in such a smart motorway environment. That poses operational challenges for us in gaining access to broken-down vehicles.

Q33 Chair: What does the phrase “poses us operational challenges” mean?

Tim Cutbill: Effectively, on a traditional motorway we have the hard shoulder, which is clear from when we access the motorway until we get to the site of the crash. With the hard shoulder being used as a live lane, obviously there are vehicles in that lane and the Xs on the motorway are designed as a proactive means to keep a lane clear for us to use, but, as the evidence proves, members of the public do not necessarily know that or comply.

Q34 Chair: What kind of exercises or different approaches have you tried to deal with that?

David Bulbrook: There have been two table-top exercises and one live exercise. Those exercises tested a number of scenarios. The limitation of the exercises reflects the absence of a communications strategy for the London Fire Brigade in terms of reverse access arrangements. I understand that Highways England are looking to implement a work stream to resolve that.

Q35 Chair: What does that mean?

David Bulbrook: The way the London Fire Brigade works is that we have a traditional analogue radio system that allows incident ground communications. We then have a digital main scheme radio that allows communications from the fire engines to our control rooms. The Airwave system providing information to the control room is particularly important, because it is how we pass critical information about the incident and how our control rooms pass information that they receive back to us at the incident ground. At the moment, there is not a system in place to satisfactorily pass that information back from control rooms to the incident ground and, at the same time, liaise with Highways England.

Q36 Chair: Are you saying there is no current system that can do that?

David Bulbrook: No. That is recognised in the regional operating agreement. Highways England, to be fair, have undertaken work to look into that issue and resolve it.

Q37 Chair: When did the Fire Service last discuss that with Highways England?

David Bulbrook: I spoke to the representative of the Chief Fire Officers Association, and I understand that the work stream was discussed in March this year.

Tim Cutbill: Our traditional means of communication are exactly as Dave outlined. On the issue to do with M25 all lane running in particular, the London Fire Brigade is only responsible for a very small piece of the M25. Other fire and rescue services around London are responsible for the majority of the M25. That is not to say that the London Fire Brigade does not attend the incidents. We normally go into a pool of fire and rescue services. Certainly, the Committee may look to seek wider guidance from the other fire

and rescue services that are responsible for probably over 95% of the M25. We responded to the consultation in good faith, but the Committee should understand that we are only responsible for a small part of the M25.

The Chief Fire Officers Association, which is our professional national body, have a working group that are working with Highways England, as they have been over the previous few years. There are two work streams that have recently been set up. One is looking at communications operations and a review of lessons learned. The other one is about incident management during roadworks. The fact that they have been set up acknowledges that there must be more work to do. They have been set up very recently. It is a welcome thing that they have been set up. It also acknowledges that there is work to do.

Q38 Chair: How recently, to your knowledge?

Tim Cutbill: March this year.

Q39 Will Quince: I want to drill into the operational issues point. Say you are driving along a motorway and a major incident occurs while all four lanes are running; traffic comes to a standstill and two lanes are blocked with everyone else filtering. How do you get a fire engine or a police car to that incident without going back in and going contra-flow to the accident?

Simon Wickenden: It very much depends on the speed at which the traffic builds up. At times of light traffic flow, off-peak or overnight in particular, it is not normally an issue. At times of heavy traffic flow on the M25, it is immediately a problem. Once an incident occurs and more than two lanes are blocked, the queue will go backwards in all four lanes at about a mile a minute. What needs to happen is, first, that the incident needs to be detected as quickly as possible. Obviously, with a major incident, that is almost immediate. If it is a single vehicle stopped, it needs to be detected as quickly as possible and signals set as quickly as possible. Beyond that, it needs understanding and immediate compliance from drivers in order to make the lane available for emergency services, and we are certainly not there yet.

It is apparent at the moment that it is not working as well as it might be. In the first two years of operation that we have had so far, reverse access, as we call it, has been called into action effectively 12 times on the 17 miles that we have on the north side, but just once on the south side, which is a notable difference. Reverse access is the only option if we cannot get vehicles through.

The minimum standard for lanes on all lane running is slightly less than it is on a standard motorway. They are not necessarily that width, but the minimum standard reduces them somewhat, which makes filtering through difficult, and in some cases practically impossible. In those cases, reverse access is the only option. There are a certain number of procedures that we have to go through and a certain number of challenges that it presents that have to be overcome before it can be safely initiated.

Q40 Will Quince: This is an assumption, so correct me if I am wrong. Say, for example, there is a major accident and traffic starts building up at a mile a minute because it is at peak time, and that the first police car able to get there is within five or six minutes. That

would not be unreasonable. The fire engine is the bigger issue. Say you have a car on fire and traffic is still going forward so you cannot initially start going contra-flow, because there is still traffic coming onwards, albeit one or two lanes. That is a real problem, isn't it?

Simon Wickenden: The reverse access procedure cannot be initiated until we have a member of the emergency services or a Highways England traffic officer at the scene. That individual can get to the scene on the with-flow carriageway, approaching in the conventional way. If that is completely impossible, we have to initiate what is called a rolling block on the other carriageway and stop adjacent to it, so that the individual can literally climb the barrier and get across. That is fraught with difficulties, as you can imagine. If the road is completely blocked it is not too unsafe, but if there is still some live traffic passing through the incident it is potentially very unsafe. However, we cannot initiate reverse access until we have an individual actually on the scene who is able to stop all further traffic from passing that point. Thereafter, it is a question of ensuring that the carriageway downstream from the incident to the access that we are going to use—the next junction downstream—is also clear. Quite clearly, the greater that distance, the greater the time it will take to ensure that it is clear and the greater the potential risk in driving the wrong way, in effect, on that carriageway.

On the northern section we do not have great distances between the junctions; six miles is the greatest. On the M4 for instance, which is due to begin conversion to all lane running, there are up to 15 miles between sections, which is going to create enormous difficulties. We are in discussion with Highways England about that, and looking towards having some kind of turn-around points installed on some of the bridges that already exist, in order that we can cut that distance down. Quite clearly, 15 miles is much too far to safely initiate that.

Q41 Will Quince: As you rightly say, at the moment it is not a significant problem, because on the motorways where it operates there is not an enormous gap, with a few exceptions, between the junctions. But, as you rightly say, the issue is when you start looking at the M4 or other motorways where there are serious gaps. We all know that with RTAs the most critical point is immediately after the crash. If we delay by any serious stretch of time the amount of time for an ambulance or a fire engine to get there, that represents a real uncertainty.

Simon Wickenden: Unquestionably, there is a delay with reverse access. It is difficult to determine precisely what that delay is—

Will Quince: It could be 15 or 20 minutes.

Simon Wickenden: There are so many variables in terms of what we would have been able to do had a hard shoulder existed, and all sorts of other things about the distance to the next junction, how many vehicles are passing through and all the rest of it. It has to be acknowledged that there is a delay of some magnitude inherent in having to do that, yes.

Q42 Chair: How long is the delay? You say it is “of some magnitude.”

Simon Wickenden: It is impossible to determine, because there are so many variables. We cannot say categorically how long it would take us to get to one particular incident if we had a hard shoulder, for instance. The sort of things that would delay us further would be the distance to the next turn-around point—obviously that is going to be the first access point—the time it takes for somebody to get to the scene to be certain that the road is

clear, and the time it takes to check the carriageway downstream to ensure that there is, for instance, nobody parked in an ERA, an emergency refuge area, who moves off at some point and then we have a situation where they are head to head with the emergency services. It is impossible to say, but factors including the distance to the next turn-around point would obviously increase the time it took to get the emergency services on the scene.

Q43 Will Quince: Have you had instances where the police officer or fire engine has underestimated the extent of the traffic and has therefore been stuck behind four layers of cars without the ability to turn round and go back?

Simon Wickenden: Yes, we have. It is impossible to turn around and go back once you are committed to that carriageway. You are committed to providing more resources, because other resources will have to go cross country or find other means to get to the next junction downstream. It is difficult once you are committed, particularly in a fire engine, because obviously the vehicles are larger and wider. Once you are committed to the carriageway approach there are no options. You just have to struggle and try to get through.

Q44 Will Quince: Inevitably, the first response vehicle is always going to get stuck before alerting the others that they are going to have to divert and find a different route.

Simon Wickenden: With good communications in the Highways England control room that is sometimes but not always the case. Very often a Highways England traffic officer is the first on the scene, but we have to have somebody on the scene—that is an absolute—in order to be certain that no more vehicles get through. Even in a major RTC there are going to be gaps on a four-lane motorway. Once one driver starts to pass through, others will surely follow and you will not be able to stop that until you get somebody down there to physically stop them doing so.

Thus far, we have had one recorded near miss—what we would describe as a near miss. A fire engine and a member of the public passed the scene of an RTC. The fire engine was no longer required and so left the scene. A police car joined the carriageway coming towards them, so they were both on the same carriageway—separated by two lanes because the police vehicle was in the correct lane, which was lane four—travelling towards the incident. However, that was as a result of a communications difficulty, which is a frequent occurrence. By their very nature, motorways cross borders so they often involve multiple police forces, fire brigades and ambulance services. Communication is a vital part of this, and on that particular occasion there was some confusion. That underlines the difficulty that reverse access presents.

Q45 Chair: Who is in overall charge? Could you order Highways England to close a lane? Who could do that?

Simon Wickenden: Highways England are generally in a position where they have more knowledge because they have control of CCTV, so they tend to have an overview of the scene when these incidents occur.

Q46 Chair: But who is in charge? Who would take a decision like that? Would it be Highways England?

Simon Wickenden: It would be the first emergency responder on the scene. They are best placed to make that decision.

Q47 Chair: You could instruct Highways England to close the lane.

Simon Wickenden: Yes, but in practice we are all aware of the attendant risks and difficulties and what services need to get to these scenes. In practice, it is very often Highways England traffic officers who arrive first and close the road. It is not so much the decision making at that point; it is the fact that somebody is there to ensure that it is safe for the other responders to come down. The decision making might almost be taken for granted, but you must ensure through communications that any units that are going to drive on to the carriageway do so safely, or as safely as possible. The only way to achieve that is by having somebody on the scene to physically stop the traffic.

DCI Oldham: I just want to clarify one extra point, to push it home a bit. The time it takes to get to the scene is obviously absolutely critical. The police service nationally is concerned, as we increase the number of these types of motorways, as Simon has articulated, about the amount of extra resources needed to deal with these types of incidents and the fact, as the AA pointed out, that the policing of our roads has got less and less as years have gone by. At the moment, the police force is simply not sufficiently staffed to deal with these increases in workload.

Q48 Chair: What is the Fire Service experience on these points?

Tim Cutbill: The key one for us, particularly if you are looking at reverse access, is communication. In the regional operating agreement, it is acknowledged by Highways England that intra-operability communication between all the different agencies is work that is yet to be completed. There is acknowledgment in the document that they will predominantly talk to our control rooms. Our control rooms can talk to our fire engines, obviously. They express a wish that we all use the Highways England hailing frequency, which, certainly for London Fire Brigade, is something that at the moment we are not prepared to do because it would take away from an awful lot of our safe systems of working. On the same page of the document, it says that more work needs to be done on intra-agency communication.

One of the things I would like to raise is that, as more of these motorways roll out across the country, the regional operating agreement we have for the M25 is being cited as a model to be followed across the country. As you have heard today, there are some concerns about the M25. That is one of the things we would like to raise as much as possible. The M25 being cited as the model to follow is something that needs to be taken with a bit of caution, because there are issues that we are still working through ourselves.

Q49 Chair: You are concerned that the problems you have already experienced are not being registered sufficiently.

Tim Cutbill: One of the things that the working group that was set up in March was tasked to do was to look at the communication issues. On the assumption that those communication issues are solved and we find a work-around for them, that will be fine; but, as we sit here now, we are talking about rolling out more of these motorways across the country, and there are some important issues that need to be resolved.

Q50 Chair: Are you saying that there are ongoing issues to do with communication that have not been resolved?

Tim Cutbill: Yes.

Q51 Martin Vickers: Mr Wickenden, you said that on present evidence you were opposed to the introduction of smart motorways or doing away with the hard shoulder. I was not quite clear whether you feel that motorways are inherently more dangerous without a hard shoulder and therefore you would perhaps be opposed in principle to the idea.

Simon Wickenden: Motorways are safer when a hard shoulder is provided. There are of course risks with stopping on a hard shoulder; it is not a safe place to be and that must be emphasised, but they are safer with a hard shoulder provided. A lot of the safety benefits with all lane running come from MIDAS and the variable mandatory speed limits, something that could of course be incorporated in any three-lane motorway, even if the hard shoulder was retained. Those technologies mitigate and reduce some risks, but the removal of the hard shoulder creates other risks that are in some cases very significantly increased.

Q52 Martin Vickers: During the course of your panel, and the previous one, we discussed various evidence of public concern. Are there any international comparisons evidence-wise that could be drawn on?

Simon Wickenden: I am not aware of any. There are different rules for autoroutes and motorways on the continent: for instance, the use of emergency refuge areas or similar facilities on the motorways. In many cases, it is permitted to use them as rest areas. One of the reasons we are so concerned about misuse of ERAs is that foreign lorry drivers in particular tend to use them for tachograph breaks, when they need a break from driving. We see a large problem in that regard. I am not aware of similar issues regarding all lane running. Many motorways on the continent do not have a full hard shoulder, but of course many do not have the traffic volume that we have. The northern section has something like 120,000 vehicles a day and the south-west quadrant perhaps 220,000 or that type of figure. Those are very high figures; many routes on the continent do not have anything approaching those types of traffic volume.

Q53 Mary Glendon: Highways England said that 8% of drivers do not comply with the red X lane closures. What risk do you think that poses? How could that kind of non-compliance be tackled?

Simon Wickenden: There is certainly a large degree of non-compliance with red Xs and, it must be said, with the variable mandatory speed limits, at present. There is a large degree of misunderstanding and ignorance about red X signals. The Highway Code, of course, does not even refer to or depict MS4 signals, which are the type of cantilever signals that have been incorporated on many sections of all lane running, where we do not actually have the red X signals above the lane in question; they are, effectively, above the nearside lane.

Those signs are an integral part of all lane running and have been in operation for two years, and they are not actually enforceable until this Friday when the traffic signs regulations

change. Certainly it is true that large numbers of drivers fail to comply with red Xs. It is partly ignorance on their part, and partly, I am sure, a desire simply to gain advantage over other traffic. It must be said that the lack of infrastructure contributes to this, in that we have a situation where the signals themselves can be up to 1,200 metres apart. In many cases, there is lack of visibility between them; as you pass one signal, it is not possible to see the next signal downstream. If drivers cannot see either the next signal downstream or the reason for the signal being set, there is a tendency for some—and in many cases many—to ignore those signals. We have had instances of drivers complying with the red X signals and then moving back into the lane that is indicated as closed simply because they cannot see another signal and they cannot see the incident downstream. Lack of infrastructure can contribute to that problem.

There is clearly a need for further education. We are working with Highways England at the moment using a Highways England unmarked vehicle to record with ANPR—an automatic number plate recognition camera—drivers who are failing to comply with red Xs, and then we are sending out warning letters. At present, I think we are in excess of 1,000 warning letters sent out on what is only a small-scale operation. Quite clearly there is a large enforcement or education problem. The thing that needs to be emphasised about all lane running is that, although red X signals have been part of the motorway signalling system for decades, all lane running places much greater emphasis on the need for compliance. What we are doing, effectively, is replacing one safety system, which was the hard shoulder, with another one, which is the red X signals and variable speed limits. If drivers are failing to understand or comply with those, we are not adequately replacing what we had before. There is quite clearly a lot of work still to be done in terms of education and ultimately, to a degree, enforcement as well.

DCI Oldham: That leads to the point that being without the hard shoulder takes away a key device that the police use for dealing with offenders under the road traffic Acts; we cannot stop them on that part of the road so we cannot deal with them. Also, if it was a more serious crime, we cannot stop and deal with offenders on that stretch of road. While Highways England say, “Oh well, wait until the next junction,” that may not always be possible, or indeed safe, so we are effectively losing a tool. That was one of our objections to the initial scheme.

Q54 Mary Glendon: It was said earlier that there is not sufficient capacity now for the police to bring about enforcement. Is that a particular problem?

Simon Wickenden: At present, the cameras to carry out red X enforcement are still under development; they have not been type approved as yet. The only way of enforcing them is via police patrols. Yes, it is true to say that we do not have the capacity, except in small-scale operations, to carry out very much enforcement. It is a matter that really lends itself to automated enforcement. I am given to understand that towards the end of this year the system may be in place to carry that out, but of course that brings an attendant back office demand in terms of processing the said offences. At present, we are looking at very large numbers of offences—certainly way more than we can practically manage. Enforcement is not the only answer. There is clearly an education need as well.

Q55 Chair: Mr Wickenden, you said a system may be in place.

Simon Wickenden: The camera system is being developed. There are certain things that still need to be done in order to ensure that we are able to prosecute with such things. For instance, the image would need to include both the vehicle and the signal being shown at the time, so the camera itself is separated from the signal. We have to have absolute confidence that it is reliable before we take these matters to court. It is being developed. I am not kept in day-to-day contact with how that development is going. I am assured by Highways England that it is in development, but I am unable to say with any certainty when the system will be ready.

Q56 Chair: Who is responsible for doing that?

Simon Wickenden: I am not aware of the individuals, but Highways England are certainly actively working on it. As I say, I am not kept up to date with exactly when it will be available.

Q57 Chair: You spoke earlier about the absence of lighting being of great concern to you. That is in the written evidence as well. You referred to it in relation to the fatality that you spoke about earlier. How concerned are you about the lack of lighting on motorways?

Simon Wickenden: It is a concern. It must be remembered that the junctions themselves and the slip roads are lit, as are the tunnels on the network, but the links between those junctions are unlit on all lane running. It is a question of how much that increases the risk. The view expressed by Highways England when we were consulted about this was that the cost of installing, running and maintaining street lighting might be better used elsewhere, on other parts of the strategic road network, to bring greater casualty reduction benefits than on those links.

Q58 Chair: When was that point put to you?

Simon Wickenden: That would be back in 2012, when we originally consulted about the scheme. It is true that a great many parts of the strategic road network—A roads and dual carriageways—are unlit already. They have not been constructed with street lighting. Motorways in the main, and certainly the bulk of the M25, were. It is a question of degree. There may be some disagreement between ourselves and Highways England as to how much that increases the collision risk, but it is without question that it does increase the collision risk. It also has to be borne in mind that the links on the M25 are relatively short—the stretches of road between junctions. As the junctions themselves and the tunnels are lit, drivers passing along those sections of the motorway are constantly presented with both lit and unlit sections, and in a great many cases your eyes do not adjust properly to driving on the unlit sections because you have just passed through a well-lit section. There is a risk, and the only debate or dispute, if you like, would be the degree of risk and whether the investment in installing and maintaining street lighting would be better spent elsewhere in terms of its casualty reduction benefit. We would maintain that it increases the risk. It also potentially delays collision investigation work, because on a completely unlit carriageway, debris fields, marks and evidence on the carriageway sometimes stretch over a very long section of road. They can be impossible to see correctly, to the point that our collision investigators would simply have to maintain road closures until first light, so that a collision investigation can be properly conducted. Those occasions are rare but they bring difficulties as well as potential delays.

Q59 Chair: You have all presented a very disturbing picture of safety on the proposed all lane running motorways. Have any of the points any of you made been listened to? Do you feel that you were in a real consultation, or were you simply being informed about what was going to happen, or what is proposed to happen?

Simon Wickenden: The Metropolitan Police and other emergency services were only consulted late in 2012 about all lane running. I believe the construction began in about March 2013. It was, effectively, presented as analysis complete. We had been consulted but I did not personally feel that our views influenced the subsequent design. Certainly nothing changed in terms of those designs. It is fair to say that Highways England—or the Highways Agency as it then was—presented quite robustly their safety arguments and analysis of the risks, and we acknowledge, as I said at the start of our evidence this afternoon, that overall collisions have reduced. They were predicted to reduce and we never disagreed with that analysis. Everywhere MIDAS and variable mandatory speed limits have been employed on the fast road network, they reduce shunt-type collisions and they reduce many collision types. But it has been acknowledged by all sides that particular collision risks are dramatically increased.

Q60 Chair: Collision risks are dramatically increased—

Simon Wickenden: A 200% increase in a particular collision risk must be seen as a dramatic increase in the risk of a collision occurring. That has already been borne out by the most recent incident on the M25, within two years of the road opening in its current form, on what is only a 17-mile stretch of road. That is a relatively small section of the network, and within two years we have had a fatality of precisely the type that we most feared and that was acknowledged had an increased risk of occurring.

Q61 Chair: It is extremely disturbing. Mr Oldham, do you want to add to that?

DCI Oldham: All I can say, as Simon articulately stated, is that we had a number of objections. Most of the objections were met with dialogue but no answer to our questions as such. Highways England continue to roll out the scheme, only just after instigating the M25 version, without fully testing it and realising the problems that have clearly manifested themselves. We just worry that this is an ongoing process that will get worse. I cannot overstate our worry about our demand, certainly within the metropolitan area. We worry about the safety not only of the people on the motorway, which Simon touched on, but of the emergency services who have to respond to those incidents. Again, as Simon said, the operation we did demonstrating practically how we would deal with such a situation highlighted a number of really difficult practical problems for us, which we do not want to have to face, quite frankly, but we envisage that we are going to.

Q62 Chair: Can I put the same questions to the Fire Service? Did you feel you were being consulted about something or merely informed about what was being proposed? Has anything changed in relation to the points of concern you raised?

Tim Cutbill: If I can, I will answer the question in a slightly different way. The schemes that have rolled out across the country have evolved over the last two or three years. The refuge areas started off being 800 metres apart. We are now up to 2.5 km apart. What is happening on the M25—bear in mind that it is on a reasonably short section of the M25—

is being cited in meetings around the country as “This works on the M25.” That concerns me. Reference is being made as to what is happening across the M25 as the way to do it going forward, even though the schemes may change very slightly as they roll out across the country.

That raises concerns for me. One of the things in the report about the statistics we have up to now is that they are not reliable. We normally rely on three years’ statistics. The scheme has not yet been running for three years, so we do not have three years’ reliable statistics to show whether it is safe or not. Obviously we have had one fatality, which is very unfortunate and sad, but is that the only one we are going to have or will we have more? For me, if we are allowed to and if we have time, we should take stock of whether this is really working over a fundamental period—the three years that Highways England acknowledge is the best way of monitoring statistics. Over that three years, how many more of these schemes are going to roll out across the country?

The consultation about each stretch, to answer your question more specifically, needs to be not, “This works elsewhere in the country,” but, “What is the length and gradient of the road and how long are the gaps between intersections?” Each scheme should be looked at in its own right, with local experts from the different emergency services consulting in true and meaningful style to make sure that each scheme is built safely based on local needs, as opposed to looking at what else has happened across the country and saying that that is the way to do it. Each scheme—the M4 being a great example—is going to pose its own challenges.

Q63 Chair: You want schemes to be looked at in their own right to see what risks there might be in a particular place.

Tim Cutbill: Yes. With the schemes that have rolled out across different parts of the country, there probably is some best practice to capture, as opposed to focusing on a couple of junctions on the M25. But that can only give best practice; I do not think it should be a rubber stamp or that people should say, “This is definitely how it works everywhere else,” because every road is going to have its own challenges in terms of gradient, lighting, slip roads and junctions. There needs to be true and meaningful consultation about each one of those schemes as it develops and rolls out.

Q64 Chair: Mr Bulbrook, did you want to add anything?

David Bulbrook: No, thank you, Chair.

Chair: Thank you very much for your evidence.

Examination of Witnesses

Witnesses: **Dave Allen**, Negotiations Officer, Prospect, and **Neil Turner**, Traffic Officer, Highways England and Prospect Health and Safety Officer for Highways England, gave evidence.

Q65 Chair: Good afternoon and welcome to the Transport Select Committee. Could you give us your name and organisation, please?

Dave Allen: I am Dave Allen. I work for the Prospect trade union and I represent the members directly in Highways England.

Neil Turner: I am Neil Turner. I am Prospect's national health and safety lead within Highways England. I am also a serving traffic officer. I stress that I am here representing Prospect and not Highways England.

Q66 Chair: Could you tell us what risks have been introduced for traffic officers as a result of all lane running?

Neil Turner: The risks are inherent in the nature of the road—the high-speed traffic. We have the risk of people driving under red Xs and driving down the hard shoulder when it is closed. We face the same risks as our colleagues in the emergency services face.

Q67 Chair: In Prospect's evidence you referred to lot of near misses. Could you tell us any more about that?

Neil Turner: Yes. In respect of the M25, junctions 23 to 27, when I last checked there were 603 near misses recorded since the start of the scheme in 2014.

Dave Allen: Just to emphasise that point, those are 600 near misses reported by traffic officers while they were out on active duty and not necessarily near misses involving members of the public.

Neil Turner: That is correct.

Q68 Chair: I was referring to traffic officers. We want to understand how your work as traffic officers has changed with all lane running and what risks traffic officers themselves are subject to now.

Neil Turner: The risk is that most of the time we are actually working in a live lane. Previously we had a hard shoulder, which was a place of relative safety—I stress the term “relative”. Working on the M25, most of the incidents we deal with are actually in a live lane. Occasionally the vehicles pull off on to the hard shoulder, but by and large it is in a live lane. We are quite often first there and we are dependent on our colleagues in the regional control centre setting the signs and signals and closing the lanes while we deal with traffic management to protect the safety of the travelling public.

Dave Allen: We would echo a lot of the concerns in the previous evidence about the potential risks to members of the public of not understanding the signs or smart motorways. Of course, the inherent risks for a regular or semi-regular user of the motorway are much more amplified for colleagues out on the road, because the live lanes are their working lanes. I recall people talking about where they drive. I recall driving at the start of the M3 and listening to the Radio 2 traffic announcer saying that she had driven on the same piece of road a few days earlier and she would like somebody to ring into the station and explain what a smart motorway is. It is that lack of understanding about the way in which people are using the motorways. We are not a traffic organisation,

but the inherent risks for the public that others have talked about are much more amplified for our members, because they are there 24/7.

Q69 Chair: Is the situation very different when all lanes are running permanently compared with smart motorways where there is no hard shoulder for some of the time?

Neil Turner: I take the contrary view from earlier speakers, in that I actually believe that all lane running is safer than having a dynamic hard shoulder. It takes away the element of uncertainty: “Is lane one open or closed? I don’t know; let’s chance it.” I speak from experience because I actually work on the M1 that Mr Stewart was talking about. We have the dynamic hard shoulder. In 2012, I gave a presentation where I showed vehicles driving under a sign indicating that lane one was closed, and nothing has really changed. They still do that.

Q70 Chair: Your evidence refers to single crewing. Could you tell us a bit more about that and if single crewing is more likely to be used on all lane running motorways.

Dave Allen: Mr Turner might want to add to this. The traffic service has been in existence for 10 or 11 years and the way in which it was set up was on the basis of a double crew. Through that period, single crewed vehicles have been used more and more. There was a risk assessment done at the time around their use. Currently, an officer has to have had two years’ experience in order to be single crew accredited. It is about understanding, and the nature and experience of being out there on the road. That risk assessment, through that period, has come to the conclusion that working in all lane running as a single crew is a red risk and simply cannot be done.

We are aware as the trade union representing traffic officers that Highways England want to move to more single crewing, and particularly to allow it in all lane running. As a trade union, our first priority in those circumstances is the health and safety of our officers and our members. We are happy to work with the employer, but it has to be on a rigorous basis, looking at the processes and the policies and the risk assessments around how they should operate out there on live lanes. I do not know if Mr Turner wants to add to that.

Q71 Chair: What kind of risk assessments have been made? Are you aware of any, Mr Turner?

Neil Turner: I was on the original working group looking at all lane running prior to its inception. My colleague is quite right: single crewed officers working in all lane running was considered a red risk and would not be undertaken. However, there was a pilot scheme that we were involved in on sections 5 to 7 of the M25 down in Godstone, where Highways England were looking at trialling single crewed officers being first on scene in all lane running. It is important to note that while single crewed officers cannot be first on scene in all lane running at present, they can go in support of dual crewed vehicles, so it is the first on scene thing that is the distinction.

Q72 Chair: Could you explain to us what that means?

Neil Turner: We receive a call via the radio system and we attend that call. At present, if you have a call on the M25 at junctions 23 to 27 and you are single crewed you cannot go and attend that call on your own, because you are single crew. It has to be a dual crewed

vehicle that attends first and then a single crewed vehicle can attend in support: for instance, towing a vehicle to the next ERA or providing additional emergency traffic management, and so on.

There was a scheme down at Godstone where they were looking to trial single crewed officers being first on scene in all lane running sections. Unfortunately, the risk assessment had not been done. It is my hope that Highways England will come back to us, we will look at the risk together, carry out a risk assessment and then, hopefully, the pilot scheme will be in a position to be undertaken.

Q73 Chair: Have you been told when you will be discussing this with Highways England?

Neil Turner: No. We had discussions towards the end of last year about single crewing in all lane. I have heard nothing since. I have heard that Highways England should be coming back to us with a risk assessment, which we will look at together and hopefully work with them.

Q74 Mark Menzies: In simple terms for my benefit, could you explain the advantages that having a double crew as opposed to a single crew would bring in that type of situation?

Neil Turner: Typically, if you are deployed dual crewed, once the emergency traffic management has been placed, one crew member would act as a look-out for the other crew member. Obviously, if you are single crewed you do not have the ability to do that; you are, effectively, looking out for yourself. In an all lane running section you do not have the place of relative safety—the hard shoulder—which you can sit on to make decisions about how you are going to deal with that particular situation. I see an advantage in being dual crewed. However, if the risk assessment says that we are able to operate single crewed and we run a pilot scheme, it may actually indicate that we can operate quite successfully on our own.

Q75 Mark Menzies: What is the view of the Department for Transport thus far when it comes to single crew versus a two-crew response in this sort of situation? Do they share your views that it is less safe and really should be avoided?

Dave Allen: Obviously, it is Highways England that are undertaking that. In terms of looking at greater use of single crewing, Highways, to be fair, are involving Prospect in a number of trials and pilots. The trial, or the idea of having more single crewed units and increasing the number of vehicles on the road, so that you potentially get around the look-out, is flowing from a number of pilots. We are involved in those. To answer your question, Chair, we will be involved in that and certainly in the east midlands we are involved in working with the employer on moving single crews on to all points roads, not just the motorway. All of that work is flowing from there. That is the work we are involved in.

Q76 Mark Menzies: In the event of an emergency, what is the level of communication and correspondence between yourself and another emergency service,

particularly the police? In layman's terms for the benefit of the Committee, what does that look like?

Neil Turner: We have our hailing channel on which we are able to talk to the police, and we do so quite successfully. We work with the Metropolitan Police, Hertfordshire, Bedfordshire and Cambridgeshire. It works quite well. Unfortunately we do not have the ability to talk to the fire brigade. That would certainly be beneficial in dealing with major incidents.

Q77 Mark Menzies: Is there anything that your members would like to see done in order to improve the facilitation of all lane running motorways that you have not already touched upon?

Dave Allen: We would very much echo the remarks that have been made in the previous panels. All lane running, as far as our members are concerned, relies upon the technology and the signage. We need more and clearer signage and particular attention paid to sight lines, because it is the signage that colleagues talked about that protects the officers, as well as the public, while they are working on the motorway. It pre-empt and warns road users about what might be coming, which might be officers working in the road. We would also echo the views about ERAs; there should be more of them and they should be more regular, not just to help the public but to assist our officers in taking members of the public and themselves to a place of safety and refuge. Our members working on the roads would echo those things as well.

Q78 Chair: You say that general maintenance has to be carried out at night. Why should it be different from a normal motorway?

Neil Turner: In our submission, we touched on the subject of chapter 8 closures. On a traditional motorway you would have the hard shoulder to set the signs from; obviously with all lane running we do not have that ability. We have had some problems with signs at junctions 23 to 27. We had difficulty in getting to repair the signs due to the inability to carry out a chapter 8 closure. They now use roller shutter signs to indicate closures. Unfortunately, because those signs need maintaining, we have not been able to get to them to maintain them, so when they have been needed they have not been working correctly. We have ended up with a situation where an MS4 that relays vital information has been out of action for a number of months. I heard that last weekend, hopefully, the situation should have been rectified.

Q79 Chair: Could you temporarily close a lane during the day to do maintenance?

Neil Turner: If it was something such as barrier damage, yes, we could; we would put in the initial closure and then the closure would be reinforced by a support unit with larger cones and the proper signage.

Q80 Chair: What is a chapter 8 closure?

Neil Turner: I am not an expert on the subject.

Chair: In general.

Neil Turner: In general, it is a method of placing cones and signs that is standardised throughout the country, so that in theory if you have a closure in the north of England or in the south-west it will look the same and have the same signs. It will use signs called 6.10s, which are white arrows pointing to the left or to the right, no entry signs, and so on.

Q81 Chair: Did you say that Highways England could not enact a night closure?

Neil Turner: They can do a night closure, but the problem was caused by the inability to maintain the signs that were needed to set the closure. You have to have signage as well as cones. Unfortunately, they had difficulties with the roller shutter signs. I understand that the problem has now been rectified, but part of the issue is having no hard shoulder in the first place.

Q82 Chair: We have heard evidence about the MIDAS system and how important it is, but apparently it has difficulties in registering the presence of lone vehicles stopped in very light traffic, such as at night. Is that correct, and what do you think about the system?

Neil Turner: It is correct, because it depends where the vehicle stops in relation to the loop in the road. I understand that at junctions 5 to 7 on the M25 in Kent they are trialling a stopped vehicle detection system. It was explained to me that it fires a radar beam down the road and, if a vehicle crosses it, it activates the stopped vehicle detection system. I do not know how far forward they are with that, but it would certainly supplement the MIDAS loops.

Q83 Chair: Are there any other changes you would like to see on either smart motorways or all lane running motorways that you think would mitigate some of the problems you have identified? Is there a way the system could be improved?

Neil Turner: In respect of the M25 northern section, junctions 23 to 27, I think Highways England made a number of departures from the design specification. It has been accepted that perhaps things could have been done slightly better. I have seen documentation to indicate that they intend to increase the number of signs and the number of ERAs. I would like to see a system where we have MS4s or gantries with a clear line of sight, so you can see from one set of signals to the next set of signals. That would constantly reinforce the message to the travelling public, “This is what we expect you to do.” At the moment, on the northern section, we do not have that. The signs are a good distance apart, so if you have a technology failure, as has happened, it can be 3.5 km between one sign and the next. This is displaying important, even vital, information about lane closures and the type of incident that is ahead.

Chair: Is there anything you would like to add, Mr Allen?

Dave Allen: No, thank you.

Chair: Thank you very much.