

Transport Committee

Oral evidence: Rail Safety, HC 694

Monday 28 November 2016

Ordered by the House of Commons to be published on 28 November 2016.

[Watch the meeting](#)

Members present: Mrs Louise Ellman (Chair); Clive Efford; Robert Ffello; Mark Menzies; Huw Merriman; Will Quince; Iain Stewart; Graham Stringer; Martin Vickers.

Questions 98 - 251

Witnesses

[I](#): Paul Plummer, Chief Executive, Rail Delivery Group, Gary Cooper, Director of Operations, Rail Delivery Group, and Dr George Bearfield, Director of System Safety, Rail Safety and Standards Board.

[II](#): Mick Cash, General Secretary, RMT, Mick Whelan, General Secretary, ASLEF, and Hugh Roberts, National Officer, Unite.

Written evidence from witnesses:

- [Rail Delivery Group](#)
- [Rail Safety and Standards Board \(RSSB\)](#)
- [RMT](#)
- [ASLEF](#)
- [Unite the Union](#)

Examination of witnesses

Witnesses: Paul Plummer, Gary Cooper and Dr George Bearfield.

Q98 **Chair:** Welcome to the Transport Select Committee. Would you give your name and organisation, please?

Paul Plummer: I am Paul Plummer. I am chief executive of Rail Delivery Group.

Gary Cooper: I am Gary Cooper, director of Rail Delivery Group, and I specialise in operations, safety and engineering.

Dr Bearfield: I am Dr George Bearfield from the Rail Safety and Standards Board.

Q99 **Chair:** Thank you very much. Dr Bearfield, could you tell us what work the Rail Safety and Standards Board is doing in relation to safety on the railway? What do you think are the most important things you are doing?

Dr Bearfield: That is quite a big question to start with.

Chair: A brief answer though.

Dr Bearfield: RSSB's role is as an independent technical organisation of the railway. We work across the various members primarily to provide research, analysis and standards, with a focus on safety, but also health and efficiency. We work across the industry to bring it together to work on shared initiatives, to share information and to improve on safety. As an example of that in terms of key pieces of work, last year we launched the platform/train interface strategy, working closely with the Rail Delivery Group. That is a programme of work looking at risks at the platform/train interface. It started with data analysis, using our evidence base, which we collect through various reporting systems, to develop strategies, initiatives, briefings, models and tools. There is a whole range of different services to help bring the industry together to deliver a safer and more efficient railway.

Q100 **Chair:** The ORR has just published an independent review of RSSB. I think it is being published today. In that report they say, among other things, that the RSSB should clarify its role in relation to members and provide stronger thought leadership. What do you think they mean by thought leadership?

Dr Bearfield: The RSSB has a unique position in the industry. The safety responsibilities obviously sit with the duty holders—the member companies, Network Rail and the train operators. We work to help bring the industry together to work on those co-operative issues and bring a systems view. In the challenge set for us from the ORR report, we need to think about how to do that efficiently. We are only 250 people so we have to focus our energies where they will add the most value and set ourselves a work programme that the industry recognises as supporting and adding value, so that we put our effort into the right places.

Q101 **Chair:** You told us a minute or two ago that one of your key roles is to provide information in relation to safety. What evidence do you have that driver only operation is safe?

Dr Bearfield: Obviously, we provide various sorts of evidence.

Q102 **Chair:** In relation to driver only operation, what is the evidence for your conclusion that it is safe?

Dr Bearfield: We have conducted a number of research reports over many years and looked at the issue of driver only operation. We have not found anything in that work that says it is not safe. If we had, we would have said so. As well as working through research, we have various collaborative groups that work together to build consensus. The other thing we do is to support industry in their management processes.

Q103 **Chair:** Let me just stop you. At this point, I am interested in driver only operation. You have repeated what I have read, and you say that driver only operation is safe.

Dr Bearfield: Yes.

Q104 **Chair:** But when I read what you are actually saying in the research that has been conducted it is not so clearcut. It talks about its not being a risk, provided that a very large number of detailed conditions are met, which you call mitigations. Would you like to tell us what those conditions are? It is not correct, is it, that you are saying that driver only operation is safe, full stop?

Dr Bearfield: It is, in that the conditions are local so you cannot spell out the particular conditions. Any risk assessment is based on the local circumstances, so if a driver—

Q105 **Chair:** Yes, but if somebody is making a judgment on whether driver only operation is safe, it inevitably has to be applied in a particular location.

Dr Bearfield: Absolutely.

Q106 **Chair:** So it is absolutely essential that we know what those conditions are. Can you tell us the nature of the conditions, because it just is not true, is it, that the RSSB says driver only operation is safe, full stop? It is not like that, is it, when you actually read the research?

Dr Bearfield: It is, in that the research—

Q107 **Chair:** Full stop, with no conditions attached.

Dr Bearfield: It is about context. The legal requirement is to do a local risk assessment. That is a responsibility that sits with the duty-holder companies. They have a safety management system, which means that arrangements have to be looked at locally, whether it is cameras, mirrors or other arrangements. There is a risk assessment process that needs to be followed as part of their safety management system. Driver only operation is done extensively around the network, as it has been for many years, and in all cases it is safe where it is done in accordance with the safety management certifications.

Q108 **Chair:** Let me stop you there. Who is responsible for the safety management certifications?

Dr Bearfield: The responsibility for satisfying that the safety management system is correct is with the duty-holder companies, and the ORR has a regulatory role in approving those arrangements.

Q109 **Chair:** Does that mean it would not be right for anybody to make a blanket statement that the RSSB says that driver only operation is safe, full stop? You are now saying it is subject to assessment of particular locations. Would that be a fuller statement?

Dr Bearfield: We have been very clear in what we have said. As far as we are concerned, DOO is safe because it is done extensively within the conditions of safety management system arrangements. We have conducted various research projects over many years, and we have never come across anything that we believe is unsolvable in terms of the particular management arrangements that have been put in place.

Q110 **Chair:** But you are saying quite different things. I was not saying that it might not be safe in a particular location, but in fact you have made it rather less sure than I thought it was; you have no reason to believe it is not safe, but it is subject to a risk assessment in individual cases.

Dr Bearfield: But those things have to happen before driver only operation can be done.

Q111 **Chair:** I think you are avoiding what I am saying to you. Is it not true that on your assessment it is safe provided that risk assessments are done relating to individual locations?

Dr Bearfield: Yes, which they have to be.

Q112 **Chair:** That is a true statement. What I am saying is accurate, isn't it? The RSSB is not saying that driver only operation is safe, full stop. You are saying that it is safe provided that the relevant risk assessments are made in individual locations. Is that a correct statement?

Dr Bearfield: Yes, that is correct.

Q113 **Chair:** That is rather different, isn't it? That is rather different from a blanket statement that RSSB says it is safe, full stop.

Dr Bearfield: The statement we have made is that it is safe if those risk assessments are done.

Q114 **Chair:** If, if. It is "if", isn't it?

Dr Bearfield: Which they have to be.

Q115 **Chair:** But it is "if". Who makes sure they have to be? Who is following up whether those conditions are actually met in a particular location?

Dr Bearfield: It is a very explicit and clear management responsibility to do the risk assessment.

Q116 **Chair:** But who?

Dr Bearfield: Most organisations have independent checks and audits. The Office of Rail Regulation will support that. In RSSB, for example, we have just released a platform/train interface risk assessment tool to help to do it more efficiently and more effectively.

Q117 **Chair:** Yes, but I want to know if this is actually done and who is responsible for making sure it is done.

Dr Bearfield: Ultimately, it is the individual duty holders.

Q118 **Chair:** Who would that be?

Dr Bearfield: Network Rail or the train operating companies.

Q119 **Chair:** Either Network Rail or the train operating companies are responsible for ensuring that those conditions are met in specific locations. Is that what you are saying?

Dr Bearfield: Yes, absolutely.

Q120 **Chair:** Who makes sure that happens?

Dr Bearfield: The Office of Rail Regulation carries out inspections to check those arrangements.

Q121 **Chair:** Is it their responsibility?

Dr Bearfield: They have a regulatory role to check.

Q122 **Chair:** Would it be their responsibility to ensure that those conditions are met in a specific location?

Dr Bearfield: RSSB's role is not as the regulator or the duty holder. It would probably be fair to ask ORR about the extent to which it does regulation around the risk assessments. It is certainly my understanding that it does.

Q123 **Chair:** Mr Plummer, can you help us with this?

Paul Plummer: I can try.

Q124 **Chair:** It is a very critical question. Clearly, there appears to be a big difference of opinion about whether driver only operation is or is not safe. It is often quoted that the RSSB says it is safe. Looking at it in detail, it is not quite like that. It is subject to conditions being met in individual locations. I am still not clear who would be responsible for assessing whether those conditions are being met in a particular location rather than as a general statement. Can you assist us on where the Rail Delivery Group stands in relation to the sector as a whole?

Paul Plummer: Certainly, Chair. I will ask Mr Cooper to elaborate in a moment, but the key point is that the conditions you have heard referred to, the risk assessment, and likewise the conditions you heard about from the rail regulator recently in their evidence, apply regardless of how trains are dispatched. There are exactly the same requirements in terms of the risk assessment that has to be done, regardless of that decision. It is not just an issue about driver only operation. It is an issue about any

form of operation. The duty holder has that accountability and the rail regulator has the responsibility to act as regulator in making sure that those duties are carried out effectively.

Q125 **Chair:** Could you give us any examples of conditions or “mitigations,” in the sector’s words, that would have to be met before driver only operation could be dispatched in a particular location?

Gary Cooper: I can help there. As Mr Plummer said, irrespective of the matter of train dispatch you have to have a risk assessment—

Q126 **Chair:** I am focusing now on driver only operation. What I am asking you—whoever feels able to answer the question—is to give me some examples of the mitigations, to use the industry’s word, or conditions, using my word, that would have to be met to ensure that it was satisfactory to operate that system in a particular location? Can you give me examples of those mitigations?

Gary Cooper: For driver only operation, you have to ensure that the side of the train is visible to the dispatcher, to the driver. You do that by equipment on the train or on the platform. You have to ensure there is adequate lighting. You have to ensure there are adequate processes for train staff and keep their competence. You have to ensure that there are appropriate processes in place to continue to assess people’s competence and performance.

Q127 **Chair:** What about technology? The research that the RSSB used talks about the need for the same technology throughout the system. What does that mean exactly?

Gary Cooper: One of the pieces of research from the RSSB on managing risk is that, if you can use the same dispatch process throughout a corridor, it is one of the ways of mitigating the risk; people expect the same method of dispatch at the locations they serve.

Q128 **Chair:** Who is responsible for ensuring that all of this is done?

Gary Cooper: The duty holders. Those who operate the train service are responsible for ensuring that they have a safe method of train dispatch, whatever it is. It is the same for DOO. They are accountable for that being safe and having demonstrable risk assessments, and ensuring that the equipment, the personnel training and all the other environmental factors are in place to ensure that the dispatch process is safe.

Q129 **Chair:** It was said before that the operator or Network Rail could be responsible. Is it one or the other? How is it determined who is responsible in a specific location?

Gary Cooper: Those who operate the service, the railway undertakings, the train operating companies, work with Network Rail—the infrastructure manager—so that there is an agreed risk assessment for every location where a dispatch occurs. The accountability is with the railway undertaking—the TOC—to agree it with Network Rail, the infrastructure

manager; it has to be agreed because there are two actors in the equation.

Q130 **Chair:** How often is it assessed?

Gary Cooper: They will be reassessed for cause; for example, if there was a change of rolling stock, of timetable or of use of the station, the risk profile would possibly or probably be different, so we would reassess the risk. If there were no changes in timetable, rolling stock or traffic through the station, at the time you make the risk assessment you would make a judgment of how often you need to come back to assess it, unless it was for a specific cause.

Q131 **Chair:** How often do emergencies occur that require the second safety critical member of staff to intervene?

Dr Bearfield: I do not have the figures to hand, but that is something we could provide. The risk assessments that Gary is referring to would require us to look at the various scenarios and various accidents that could happen, and to put in place arrangements. If it was felt that there was a particular risk and there was a need for a second person to be present for any particular task or any part of risk mitigation, it would come out of the local risk assessment.

Q132 **Chair:** Does anyone want to add to that?

Gary Cooper: I support that answer. It would be picked up on the risk assessment. As George said, we can provide data but it is part of the local risk assessment for every location where the dispatch process occurs. That would be one of the causal questions: "If there were a need, how would you mitigate it?"

Q133 **Will Quince:** On that very point, I would be interested to know the accident statistics in relation to both accidents at stations where there are potentially other staff available to help and accidents when they are on the train, when they would not necessarily be. If it is the former, it may be less of a problem because there are other people who may be able to help. If it is on the train, it may be a different question. If we could have that data broken down, it would be very helpful.

Gary Cooper: We can provide that data.

Q134 **Huw Merriman:** Am I right in saying that your point on DOO is that it is not unsafe in principle, and what makes it signed off as safe is the risk assessment that has to be undertaken at each station? It is at that point that it becomes—

Dr Bearfield: It is not just the risk assessment; it is the safety management in the whole, which requires ongoing monitoring and review of the arrangements. It is a continuous management process, to make sure that those controls are in place. Part of what we do at RSSB, for example, is to support the data collection to monitor those controls over time, to make sure that arrangements are reviewed and supported.

Gary Cooper: In that sense, it is not a unique process. There are safety critical processes that the railway undertakings and Network Rail take 24 hours a day, seven days a week. Each of those will have a risk assessment profile to ensure that the work is carried out safely. DOO is another process, but there are many processes of engineering, design or train dispatch.

Q135 **Huw Merriman:** I want to make reference to the incidents at Watford Tunnel and Holgate Junction that have been reported to us. There seems to be a suggestion by the RMT that, without the second member of staff on board, things could have been a whole lot worse. Do you have a view on that?

Gary Cooper: Watford Tunnel is still under investigation, so it is too early to comment on what the conclusions of that investigation will be. When they are published, we will look at them. The information we have is that all the railway staff involved acted professionally and well, cared for customers and handled the incident well. We will wait for the report, and, as we do with all accident reports, we will discuss it both through the RSSB architecture and through the Rail Delivery Group architecture.

Q136 **Huw Merriman:** I would not wish to pre-empt the report, but the union makes reference to the fact that without the second member of staff on board things would have been a lot more difficult. I will just make two observations on that and ask for your comment. First, my understanding is that in Watford it was the driver, notwithstanding that he was trapped in the cab, who pressed the button that stopped other trains operating in the area, so I am not sure what the RMT is getting at there. The second point is that it is the train driver who can open the doors, and the suggestion was that, thanks to the conductor, he kept everybody inside the train. I found it slightly unusual that passengers would attempt to leave the train in that situation. If the driver is operating the door, the conductor can let them out anyway. I find that strange and I wondered if you had a view on their assertions.

Gary Cooper: There are several things. Yes, because of the technology in the cab the driver could mitigate the consequences of the accident by using an emergency call from the cab. That means that the trains were travelling at lower speed. In terms of keeping the customers on the train, research shows that you keep them on the train by keeping them well informed. If you can explain to customers what is going on, what is likely to happen and when it will happen, they are unlikely to evacuate in an uncontrolled way. As you say, control of the doors is with the train driver, but of course there is emergency access from every train, because of emergencies. Again, the key thing is keeping the customers informed. Research shows that, if you keep them informed, they tend to act in a more sensible way than if they are uninformed and do not know what is going on.

Q137 **Clive Efford:** In any of the incidents involving driver only trains where there have been accidents, have any of the reports into those incidents resulted in recommendations not to have driver only operated trains on

those services and to reintroduce guards?

Dr Bearfield: I am not aware of any that have. We would have to look through the RAIB investigations and the local investigations to see. For the West Wickham incident, for example, there is certainly work going on to look at how we potentially review the RSSB rulebook, which is the set of rules around operations that exist on the network; similarly, whether or not there is an impact on railway industry standards that we can produce. That is the standard process whenever there is an accident. It is a continuous cycle of feedback and learning. That is part of what we do. We feed the learning back to make sure that we have systematic learning across the board. There are certainly conversations going on with West Wickham about how to improve the rulebook around the driver, and we are looking back on other things to improve those processes. Again, it comes down not just to the rules but how they are monitored and enforced over time.

Q138 **Clive Efford:** When you provide the information about risk assessments, could you let us know what proportion of them decide that driver operated opening is not recommended, and you decide it is not appropriate in those circumstances? Could you give us an idea of how it is reassessed? Train services are becoming more heavily populated, which places increasing demand on our rolling stock. The density of people on the trains is increasing. How frequently are there reassessments to see if driver only operation is still appropriate and whether it is a safe means of operating the trains?

Gary Cooper: We can provide that information. As I mentioned earlier, the assessment depends on a number of factors, including whether there has been a change in circumstances. There will not be one absolute answer. It will be what it looks like at a place in time, and we can provide that information.

Dr Bearfield: It is also worth saying that, if there is a significant change, there are certain requirements for a very thorough risk assessment and analysis process with a degree of independent review. That is taken into account.

Q139 **Martin Vickers:** When you are compiling the risk assessment that you mentioned earlier, presumably it takes account of the length of the train. Trains can be one coach, six or eight cars. Can you confirm that is the case?

Gary Cooper: Yes, it takes account of the length of the train. That is one of the factors that is taken into account.

Q140 **Martin Vickers:** Does it also take account of whether the station is staffed or unstaffed?

Gary Cooper: It takes account of a significant range of factors. Yes, it would also include the staffing at a station.

Q141 **Chair:** Dr Bearfield, the RSSB is an industry body, isn't it?

Dr Bearfield: Yes.

Q142 **Chair:** Can it be impartial? Does it inevitably look at the interests of the industry, rather than those of the passengers?

Dr Bearfield: We are impartial in what we do. The reason we were set up is to provide impartiality and objective information to the railway when there are complicated decisions to be made.

Q143 **Chair:** But how can you reassure people that you are impartial, because you are an industry body, and you are sometimes involved in controversial issues such as the one we are talking about? How can people feel sure that you are impartial and not just a spokesman for the industry?

Dr Bearfield: We certainly are not. You can look at the way we work. We work through evidence and information. We work through robust processes and consensus building. If there is an issue, we bring all the affected parties around the table and work through it in a consensus-based manner. That is part of our constitution and our governance arrangements. Our board has representatives from the industry, as it would need to for us to provide the useful information that we provide, but we have an independent chair and independent non-executive directors. You only have to look at our track record. In the past, we have come up with positions that have not necessarily always been with the weight of where the industry is.

Q144 **Chair:** Give me an example of that.

Dr Bearfield: A good example would be a review we did some years ago when a potential issue of under-reporting of contractor major injuries at Network Rail was flagged up. Network Rail commissioned us to do an independent review. We found that there was validity in that. There was a report and significant recommendations with quite far-reaching consequences.

Q145 **Chair:** What year was that?

Dr Bearfield: I think it was 2010. We can provide evidence of that.

Q146 **Chair:** That was six years ago. Let me look at the issue we are talking about now, which is driver only operation. The RSSB's research report in March 2015 found that driver only operation was only safety neutral if a range of mitigations was implemented. Your statement—not report—in June 2016 said that driver only operation was safe, and that in some circumstances it might improve safety. What is the information or the research that caused that change in tone?

Dr Bearfield: Again, it would be in the context of the research report, and the scope under which it was done and what it was looking at.

Q147 **Chair:** Was new research undertaken that led to you making that quite different statement in March?

Dr Bearfield: No, I do not think so, and I do not think in context that the statements are inconsistent. There are clearly benefits in terms of simplifying—

Q148 **Chair:** I am asking you why you changed your tone in such a significant way. Was it new information that had come to light? Why did you decide to speak in a different way?

Dr Bearfield: I am not sure that we did, if the reports and statements are taken in context. The research report would have been written from a certain perspective and with certain information. The statement was made looking at the top level at what the position was. It actually raised the fact, as a point of comparison, that, if you can remove one person from the chain of decision making, there are advantages to that, in isolation. The point we keep coming back to is that you have to do a local risk assessment that takes on board all the different factors.

Q149 **Chair:** Simon French of the Rail Accident Investigation Branch told us that the trap and drag incident at Hayes & Harlington was the result of a “loss of corporate memory” among staff in relation to the importance of the final safety check when dispatching a train. How could that loss of corporate memory happen?

Gary Cooper: Simon is correct to say that in any institution there is loss of corporate memory. That is true. To take trap and drag, I first remember talking about the days of trap and drag and briefing staff when I was working in Brighton in 1990. I wonder how many of the staff I briefed in 1990 remembered that I was talking about trap and drag then. People lose memory; it is a human factor.

There are also system factors. One of the things we have to do through RSSB and RDG is to try to keep that corporate memory loss as low as possible. That is why the RSSB and the RDG architecture tries to bring people together to share lessons and learning. Is it a factor? Yes. Do we try to mitigate it through our processes? Yes, we do. It is a factor in any complex industry and it is a factor of interactions with people.

Q150 **Chair:** Do you think this was just a one-off incident, serious as it was, or do you think it might be happening more regularly, although not with disastrous consequences?

Gary Cooper: We will always have to be vigilant about corporate memory failure, because of the system issues and human issues. We try to address those. There is work on human factors that RSSB leads, and there are system issues that the RDG works with its members to deliver. It is something we have to be vigilant about.

Q151 **Robert Ffello:** I am sitting here marvelling really. We are relying, for the safety of passengers, on whether somebody remembered something or not.

Gary Cooper: No, I am not saying that. I was answering a question about corporate memory. There has to be an assessment of every activity on the railway that is safety critical. Train dispatch is one of them. You do

risk assessments. It means you have the right equipment; the right environment; the right people trained to be competent; you have them assessed, monitored and re-evaluated if they are found to be short of competence—

Q152 **Robert Ffello:** What is the relevance of corporate memory?

Gary Cooper: I am answering the question and I am supporting Simon French. In all organisations, from time to time there is a corporate memory loss.

Q153 **Robert Ffello:** But what is the relevance of it? What is the relevance of corporate memory? If you have all these procedures documented and laid out, what is the relevance of corporate memory?

Gary Cooper: I am asking the question about corporate memory—

Q154 **Robert Ffello:** I think we are asking the questions. What is the relevance of corporate memory?

Gary Cooper: I am answering the question about corporate memory. Part of what you have to do when designing safety systems is recognise that there is corporate memory loss. You have to mitigate against system factors and human factors. Part of it is training and part of it is competence. Part of it is re-briefing with training days and safety days.

Q155 **Robert Ffello:** Not documentation.

Gary Cooper: Documentation is part of all those things.

Q156 **Robert Ffello:** If I cannot remember what I did three weeks ago, I look at the document of my diary. I do not have to worry about whether my corporate memory loss is such that I have forgotten what I did three weeks ago because it is documented.

Gary Cooper: It is documented. That is part of the training and competence.

Q157 **Robert Ffello:** What is the relevance of corporate memory as to whether something was documented or not?

Gary Cooper: I am struggling to understand your question. I am sorry.

Q158 **Chair:** Mr Plummer, did you want to come in on this?

Paul Plummer: You are right; it is in the documentation. Mr Cooper is emphasising the fact that people have to be constantly trained so that things are remembered and the importance of those things is highlighted. Part of the risk management process is to make sure that training and capability is constantly refreshed.

Q159 **Clive Efford:** One of these incidents happened with a driver under instruction and undergoing training, didn't it? I am wondering what corporate memory loss means in that situation.

Gary Cooper: One of the events happened with a driver under instruction, yes. Is that about corporate memory loss? I don't know if

that is about corporate memory loss. What we know is that one of the features of training drivers after classroom and simulation training is training on the job and in the cab when it is safe to do so. Part of that means that they have to have a qualified instructor with them. That is a way to train them, but it also presents a number of risks that you mitigate. If you have another person in the cab, there is the potential for other risks to be imported, but that is all part of the risk mitigation process that we have been talking about. I do not think that is a corporate memory issue. Again, it is about people following processes and us recognising that there are human factors involved in all processes.

Q160 Clive Efford: There are definitely human factors involved, but there is this issue about corporate memory loss. It suggests that at one given moment in time everyone has forgotten that you need to close train doors safely.

Gary Cooper: I am not saying that everyone has forgotten. Some people some of the time forget some things. Many people most or all of the time remember all their training. That is what training and competence is all about. I was picking up the point that Simon French made here a couple of weeks ago about there being corporate memory loss. It is not industry loss. It is that some people forget or mis-remember some things. We have to guard against that, and we have processes to guard against that with the training and competency programmes that we have, through the briefing programmes, through the documentation we have and through people being able to ask in a risk-free way, "Look, I am not sure about this. Can you help? Can you remind me?" All those things are in place to protect against any failure.

Q161 Clive Efford: Learning the lessons from that and understanding that there is this phenomenon out there called corporate memory loss, have those procedures of refreshing and retraining train drivers and guards been reviewed? Have any changes taken place in light of that?

Gary Cooper: George spoke just now about the RSSB looking at some of the things that came out of the West Wickham incident. Whenever there is an accident, a near miss or an event on the railway where there could have been a loss event, we, as an industry, look through them and learn from them. If necessary, we change documentation, training, assessment or the briefing. I hate to say business as usual, but it is business as usual. It is part of our daily job: "Is this still as safe as it can be? Can we learn from that? If so, can we make it safer?"

Q162 Chair: Are you satisfied that you learn from those incidents and that changes are made?

Gary Cooper: I am satisfied that we learn from the incidents. I am also being honest; there is still, in some small cases, some small part of the time, a memory loss. It is not industry-wide but individual.

Dr Bearfield: Can I go back to the question about RSSB's role? As part of our role, we provide guidance, training and materials. We help to spread good practice and raise awareness of issues that may be occurring

locally across the system. All the products and services that we provide are about making sure that we are learning and feeding back. Gary is right; it is about constant vigilance. Although the system that we have in place in terms of the organisations may seem complicated to the uninitiated, the responsibilities are very distinct and very clear.

If you benchmark our safety performance against others, we are the safest major railway in Europe. We are the safest on the latest statistics for both passengers and at level crossings. In fact, recently we had a visit from SNCF who were looking at organisational change and came to look at the way we were set up as an organisation to facilitate the sharing of learning. It is a model that is recognised to have strengths and which is respected internationally. A big part of it is about trying to make sure that we are complementing individual relationships and practices so that there is a quick feedback loop and the right things are being learned at the right time.

Q163 **Mark Menzies:** This is on a related subject but moving on slightly. It concerns the issue of passenger safety and crowd situations, particularly at major mainline stations at peak times. I am thinking of Euston, which I use myself. When the information goes up on the board, and there is a busy train with lots of people with luggage and unreserved tickets, there is a stampede and all hell breaks loose. What work is being undertaken in order to evaluate passenger safety in those crowd situations?

Gary Cooper: First, we clearly do not want any customers hurt. We want customers safe home every day, as we want staff safe home every day. We recognise that about one fifth of the risk to customers is at the platform/train interface, and about half the fatalities, so it is something at the forefront of our minds.

We have a platform/train interface strategy that was launched in late 2015 across the industry, which looks entirely at that risk area and what we can do with it. It has some very short-term and immediate actions and some very long-term actions. We keep that strategy under review, both as to the delivery of its content and for its content. For example, with the ORR, we are looking at all methods of train dispatch as part of the PTI. Also, interestingly, the significant part of the risk at the platform/train interface is when there is no train present at the platform. There are staff campaigns about looking out for vulnerable customers, such as people who may be intoxicated; people who are old, infirm or unsure of themselves; people who have luggage or people who look like they are new to the railway. There has been year-long work across the industry to train staff on stations.

We have been doing messaging for customers about being alert. The railway, if properly used, is a safe environment, but as with crossing a road you have to take some responsibility for yourself. We are talking about taking some responsibility there. If you turn up under the influence of drink or drugs, the railway is going to be less safe. Our staff have to recognise that, but there is also a responsibility for customers. Those are some of the short-term things. We are looking at station design, in terms

of how you sign stations and post trains. We can try to manage that, and it is all part of the process.

There are longer-term issues about train and station design. Can you get customers on and off trains quickly? Can you get customers in and out of stations quickly? How can you signpost so that people behave more safely? There are other post-event designs, such as what we can do to mitigate an event if something happens. For example, if somebody comes off a platform on to the railway, is there a recess under the platform where they can get out of the way of a train? There is a programme from short-term advertising campaigns to long-term design and engineering changes.

- Q164 **Mark Menzies:** You have touched on some interesting points. Let me take you back to the Euston situation, which is one that I experience virtually every week. At half past six, the Glasgow train goes up. You have a very busy station as it is, with other announcements going on and people cutting off. All hell breaks loose. I cannot believe the statistic that there are not injuries; I just cannot believe that. I see people running, trawling luggage behind them. This is not the odd person; this is the norm. I cannot believe that over the course of a year we do not have injuries as a result of chaos. That is a miracle.

Gary Cooper: I do not think I said that there were no injuries.

- Q165 **Mark Menzies:** What do we have then?

Gary Cooper: We have data on the number of injuries that are caused at stations. We can provide the Committee with that. Again, I come back to risk mitigation. Part of the risk mitigation in relation to posting trains at Euston, dispatching trains at Euston and using the barriers at Euston is how you address those behaviours. That forms part of the local management mitigations.

- Q166 **Mark Menzies:** We are talking about a very busy train. There are 11 or maybe 13 carriages. It is at peak time when the station concourse is already flooded with people. The train staff are often given less than 10 minutes to load the train. You are turning around a train that is coming in and getting a fully laden train off, with that flow of passengers. It is the sheer volume of people. It begs the question, was the station ever designed, in the first place, to handle that volume of people coming in and going off? It really concerns me when there are numbers of people moving at force and so on, that in the worst-case scenario you could find yourself in a crowd-crushing situation, or at the very least people tripping over and then more people on top of them.

It is simply not enough to talk about staff training. The staff I see do the best that they can with what they have at their disposal. I question things like the time that people are given. Is 10 minutes enough to get people on and off a train? Virgin must have data as to how many people on an average night will be getting on a train without a reserved seat. There must be a better way that the industry can manage what we know on a typical day will be large volumes of people rushing at speed on and off. It

worries me that we might go from a casual trip to a situation that is far more serious and there is a crushing incident, which the staff, with the best will in the world, are not prepared to deal with.

Paul Plummer: May I help further? I use Euston station every day myself so I recognise what you are describing. It clearly was not designed to deal with the passenger numbers we have today. That is precisely why, as an industry, we have to be able to invest in more capacity. We have seen passenger numbers double over the last 20 years. We expect them to double again over the next 20 years.

Euston, with the growth on that corridor, is critical, and that is partly why we need to build HS2, ultimately. All of these things are interrelated in the need to invest in capacity and modernise the use of technology. We need to continue to focus on putting the customer absolutely at the heart of everything. At Euston station, you will recognise that changes have been made over the last few years to take clutter away from the station concourse, as far as we can. There has been development upstairs and outside to move some of the facilities. The staff make sure that the gates are open when necessary rather than becoming a further block as people go down towards the platforms. We are trying to educate people that they really should not be running in the way you have described to get on the train. We put on additional staff when we need to in order to help with that. We have to invest and modernise, but in the meantime we have to be able to mitigate risk in the way that Mr Cooper described.

Q167 **Mark Menzies:** That brings us to another point, which is linked to that. Staff find themselves in a pressurised situation. You have a hoard of people running towards you. You are trying to check the tickets. You are creating a situation where you increase the likelihood of abuse of staff and conflict with staff. The staff try to say, "Go back on to the concourse." The customers say, "No, I'm not going back on the concourse." What are you doing in terms of dialogue with the trades unions, for example, and with staff groups in order to try to find a better solution that clearly is customer facing but ultimately is safe?

Gary Cooper: I was a station supervisor in 1986 and nothing was being done. Now we have national training campaigns for staff on conflict avoidance and how they can help. We have national campaigns for customers and other users about how offenders will be followed up. We have training for managers so that they are better at assessing the risks of assault. The type of things you described can be put in place, such as crowd control measures and mitigation measures. We have BTP action agreed with the industry to tackle violence against the person. There is a whole programme of work with the British Transport police. We recognise the issue. We did not when I joined the industry. There is a lot being done. There are things we can do in the short term around behavioural change, around management and around mitigation. Some of them, as Mr Plummer said, are going to be longer term. Some of them are design, structural and engineering changes, but we are alert to all of those.

Q168 **Chair:** Do you have any specific recommendations you would like to

make to deal with the safety issues that Mr Menzies has just outlined?

Gary Cooper: Mr Plummer's issue is the important one. It brings out the importance of the modernisation programme and the way that we need to modernise the railway to deal with the success it has had and the amount of growth. That is part of what we have to address.

Q169 **Chair:** But is there anything specific that could be done now to make things safer? There is growing concern about overcrowding, which happens for various reasons.

Paul Plummer: As I said, there are things we need for the longer term and we are making that case. In the meantime, the duty holders have to own those risk assessments—

Q170 **Mark Menzies:** Can I stop you there? In terms of the case you are making, taking Euston for example, what is that case? What can we do to assist you in making it safer for passengers and the people who work there?

Paul Plummer: In terms of investment in future capacity, we have done a lot to try to explain that need and the capacity crunch we are facing. Euston is just one example. There is work in terms of bringing in new trains and being able to use those trains in the most efficient way, and providing additional information to passengers.

You specifically mentioned the unions. We are absolutely keen to work with the unions. There are a lot of areas where there is a common agenda. Mr Cooper talked a lot about staff engagement, and we are working with the unions on a common agenda around how our staff are treated and how they engage with passengers. Any form of bullying or intimidation is completely unacceptable, whether between staff or between staff and the public. There is a whole load of things very specifically that the individual duty holders will do. They need to work collaboratively with the unions, and they want to do so.

There are ultimately things we need to do to make the case for investment and to make the case to the public about how important it is that we modernise and improve working practices right across the railway. We want to make sure that the customer is right at the heart of all the decision making, but we also want to make sure that we are helping all our staff to do that effectively.

Q171 **Chair:** I want to turn to a different issue, which is light rail. The tragic accident at Croydon has focused attention on light rail. Do you think your organisations pay enough attention to safety on light rail systems?

Dr Bearfield: From our perspective, light rail systems do not fall within RSSB's scope. That is really a historical thing based on the legislation that existed around the time that we were set up. We certainly look not just at light rail but at any accidents that occur, for cross-learning to the rail sector. We are very open to collaboration with any organisation where there are lessons to be learned and work that can be done. We do not specifically have a role to look at tram systems.

Q172 **Chair:** Are there any other comments on safety on light rail? Mr Plummer, does your remit cover light rail?

Paul Plummer: Not specifically. Obviously some of my members are involved in different forms of transport, but our focus is on the mainline railway.

Q173 **Chair:** There is a lot of concern about the role of fatigue in accidents. Dr Bearfield, I think you are involved in some research.

Dr Bearfield: Yes. Obviously fatigue is a long-standing issue for railways, right back to the driver safety device that stops the train working if somebody becomes incapacitated. Within RSSB we have very good expertise in human factors. We have done significant research over many years. We have commissioned special topic reports looking at safety incidents that might be caused by fatigue. We have done research to help rail companies get better at predicting fatigue, and at planning and preparing rosters and shift patterns. There are also things around first night shifts.

There are lots of individual initiatives. It goes back to what I said before about us working across the industry to share good practice and help refresh good practice in areas. Fatigue is one of the things in the new health and safety strategy, Leading Health and Safety on Britain's Railway. It is about recognition of where the industry feels it can work together collaboratively to push forward safety practice in certain areas. We are strengthening the framework to bring the collaboration that we need across the industry on key topics, one of which is fatigue.

I mentioned before the relative success in some regards, although we are not complacent about the safety performance of UK rail. We recognise, for example, road risk. The road fleet is a core residual risk on UK rail networks. So far this year we have had one workforce fatality; it was somebody driving between railway work sites. Obviously, fatigue is a massive issue in terms of road risk as a relative cause, and we need to think very hard about how to plan shift patterns and people's suitability and fitness for work. They are all things we are active in when producing guidance and research and all the other things that RSSB does. We also bring the industry together to work on those topics.

Q174 **Chair:** Are there any other comments on fatigue?

Gary Cooper: There are tools to help managers to roster staff in a way that makes their work patterns the least fatiguing. There is also work on helping people with their lifestyle—how to sleep well, good diet and how to get rest periods. It is not just about the hard and fast of how you roster people for work, what breaks they get and how much time they get off. All the train operating companies also offer people help on what they do in their home life and how that impacts on their ability to get a good rest.

Q175 **Chair:** Is the culture on health and safety right in the rail sector? Is there sufficient awareness and concern?

Gary Cooper: It is unrecognisable from where it was when I joined. It is so much better than when I joined. The single biggest change was probably catalysed by the Clapham accident in 1988. It became very clear then that safety was everybody's responsibility, and that it was not just the front-line worker; it was managers, directors and right the way through the chain. You have to have processes in place to understand the risks that you are trying to manage.

There is complete understanding that we are dependent on each other and that we need good collaboration and good co-operation. Good safety is good business. Everybody wants to run a successful business and a good business, and good safety is good for business. It is an industry that is unrecognisable from the one I joined. We are still on a path. It can still be better, but we are the safest major railway in Europe and we need to continue to build on that.

Q176 **Graham Stringer:** If we had been talking to you 15 years ago we would have been talking about signals passed at danger, I dare say. There has been a huge success in reducing the numbers. Can you explain to the Committee how it has been achieved?

Gary Cooper: Part of it was a technical solution. We were talking just now about one of the things the Committee can help with, which is the modernisation agenda, and the need to improve the railway through technical solutions. That was part of it. There are devices now to stop a train passing a signal at danger, whereas in the past the driver was given advice.

Q177 **Graham Stringer:** That is the train protection warning system, is it?

Gary Cooper: Yes. That is a large part of it.

Q178 **Graham Stringer:** Is that throughout the railway?

Gary Cooper: Yes. Although we were talking about it 15 years ago, there is still far more attention paid to some non-technical factors. How do you measure driver concentration? How do they keep their concentration? We are helping people understand how they can keep their concentration. There has been a lot more work on non-technical skills.

Q179 **Graham Stringer:** Is it technically possible for trains to go through red signals now?

Gary Cooper: Yes, it is technically possible, but it would have to be an event that you chose to do. If you have a protected signal, the train will be brought to a stand.

Q180 **Graham Stringer:** If it is technically possible, how many trains go through signals at red now?

Gary Cooper: We can bring that data to you. Can I just check the question?

Dr Bearfield: It is of the order of 20 a month.

Q181 **Graham Stringer:** The old SPAD definition.

Gary Cooper: We still have SPADs, yes.

Q182 **Graham Stringer:** You are saying it is technically very difficult now, but not impossible. I just wondered what the figure was.

Gary Cooper: Yes, we have the data. It is about 20 a month.

Dr Bearfield: One of the key residual risks, as well as human behaviour, is around adhesion. In the leaf fall season when the brakes do not work, in effect, it can cause a signal to be passed at danger. Obviously at this time of year Network Rail is very focused on that in its management arrangements.

Q183 **Graham Stringer:** Let me go back to the questions that were being asked at the beginning. In answer to the Chair's questions, in essence, you said that the protocols meant that single driver operations were safe. Is a disabled person on a train that is in a collision as safe with single driver operation as that passenger would be if there were a second operative on the train?

Dr Bearfield: Driver only operation does not say that there cannot be a second person on board the train.

Q184 **Graham Stringer:** But if there is only the driver and the train is in a crash and one or more disabled people are on the train, are those disabled people as safe as they would be if there was a second operative, a conductor, on the train?

Dr Bearfield: It is very difficult to say without—

Q185 **Graham Stringer:** Would that not be part of the assessment?

Dr Bearfield: Yes, it would be.

Q186 **Graham Stringer:** In your assessment are those people as safe?

Paul Plummer: It would not be about the question of whether that person is controlling the doors. It would be about whether there should be a second person on the train, which is separate from whether they are controlling the doors. That is the whole point about on-board supervisors providing additional service to customers.

Q187 **Graham Stringer:** I do not quite understand that answer.

Paul Plummer: There is a question about control of the doors, which we have been talking about, and there is a question about an additional member of staff on the train. I think your question is to the second point rather than—

Q188 **Graham Stringer:** If the train runs into another train or the buffers or whatever—there is a crash, and there is disorientation but not fatalities—are disabled people in wheelchairs who need assistance of some sort in a worse situation if it is a driver only operated train?

Chair: You must have an answer.

Dr Bearfield: That is not the question—

Graham Stringer: That is my question.

Dr Bearfield: There has to be a balance of the risks. You have to look at the residual risk and the costs in place ultimately.

Q189 **Graham Stringer:** I accept that, if there is an extra person, there is extra cost. Are you saying there is also extra risk to those passengers?

Dr Bearfield: I am saying, following through the logic of that conclusion, that it would mean every single train on the network would be manned regardless of the circumstances, and that is not the way that—

Q190 **Chair:** But Mr Stringer is asking you a question. It deserves an answer.

Dr Bearfield: Safety is a balance, because you have to make a judgment in the circumstances about the acceptability of risk. Ultimately, it comes down to what is reasonably practicable in terms of the situation.

Q191 **Graham Stringer:** I said there are costs and risks. I am asking the question, is a disabled person more at risk if there is not another operative on the train? Is that your assessment?

Dr Bearfield: That would not be the assessment that would be made. The assessment that would be made is, is it reasonably practicable to put another person on the train to deal with—

Q192 **Chair:** Mr Stringer is asking you a question about risk. He is not assuming what the answer is for all cases. He is asking you a question: is the risk higher?

Dr Bearfield: Is the risk higher?

Q193 **Chair:** Is the risk of accident to the person involved higher if there is a disabled person on the train and there is a driver but no other safety operative?

Dr Bearfield: It would depend on the nature of the accident. In many cases, it would probably be a negligible difference. It really depends on the circumstances of the accident, which is why you need to do a robust risk assessment.

Huw Merriman: I have a very brief observation, going back to Mr Stringer's point. If there was a crash and you had one conductor on, or you did not have a conductor on, the reality is that if you were disabled or otherwise you would be reliant on the emergency services to get you off. I am surprised that you were not able to draw that into your answer. Maybe I answered my own question.

Q194 **Chair:** Could you tell us what work is being done to reduce the risk of suicides on the rail system? This is still a major issue despite the progress that has been made.

Gary Cooper: On 10 November, the industry introduced a nine-point plan on how railway undertakings could reduce suicides on the railway. There has been a medium strategy for seven years on how we reduce

suicides on the network. There is a campaign on identifying people at risk, so that we recognise the type of person at risk. There is training of front-line staff so that they can make interventions. That has been very successful. There are poster campaigns and messaging on tickets.

Customer groups have asked us whether they could help with identifying people who are potentially suicidal. There is a lot of attention given to it. We outreach to local authorities, because, in one sense, suicide is a societal problem. It starts upstream from the railway. We outreach to local authorities and local health areas to see if they can help us, and learn how to help us address and manage suicide, and how to stop people presenting themselves to the railway. We are doing a lot of work.

We have also recently done some research to ask why people choose rail. That research has just been published. Broadly, people in the UK choose rail because, if you do online research, rail comes out with a 96% chance of lethality. That is the type of figure. It is the fourth most lethal after cyanide, explosives and firearms. The railway is more accessible than cyanide, explosives or firearms, so we now know why people choose rail. It is because of the perceived lethality.

The next step of our longer-term campaign, which is going to be the more challenging one, is to find a way of having a conversation with society. Not only do we want to prevent suicide in society, but choosing rail because you perceive it to be lethal is not a good choice. It is a sensitive area, because people have life-changing injuries rather than fatalities. It is a piece of work that has only just landed. The other piece of work, which we have just started—it was in the newspapers about 10 days ago—is with Nottingham University on looking at hot spots and what causes certain locations to be chosen. The final thing, which I should have said at the start of my answer, is that there are physical mitigations. We are putting in fences and gates. We are putting up signs at barriers, and messaging to try to prevent access to the railway as well.

Q195 **Chair:** How is this work funded?

Gary Cooper: It is part of Network Rail's regulatory settlement through the control period. It is an industry programme funded through Network Rail's regulatory settlement for each control period.

Q196 **Chair:** Is the funding continuing at its current level?

Gary Cooper: In our submission for the next control period we will be asking for the funding to continue.

Q197 **Chair:** You are asking?

Gary Cooper: Yes. It is part of the railway's submission for funding for Network Rail for the next control period. We want to continue the programme.

Q198 **Mark Menzies:** Clearly, rail suicide is a very difficult area. If somebody is determined to kill themselves, they will. If I can suggest another area you may want to look at, it is the sense that people who may choose to

use a train feel that not only is it quick and lethal but somehow it is victimless. Of course, it is far from victimless. I remember about five years ago at my surgery a former train driver came to see me. About 20 years ago, he was driving a train and there was a suicide. It left that man scarred for life. No amount of counselling, therapy or whatever was going to get him through that.

A lot of people, no matter how desperate a situation they may be in, do not necessarily want to turn upside down the life of somebody who is completely unknown to them. When you take into account the number of people who will have to, frankly, pick up the pieces, no matter how desperate someone is, they do not necessarily want to put someone through that. Again, it is a very sensitive issue. It is not the nicest area to talk about. Perhaps if you had real-life examples of drivers whose lives had been affected to the point that they were unable to work again and the impact it had on them as a result, it could be quite powerful.

Gary Cooper: Yes. That is a very good suggestion and we will follow it through. There are two things I should have said, which your question has prompted me about. There is a reach-out programme for customers or staff who are traumatised by any event. Clearly it is traumatic, so there is ongoing engagement with anybody who has been affected by either picking up the pieces or by witnessing. It is traumatic for people. All of the industry has processes in place to deal with that. British Transport police have it for their staff as well. As you said, part of the lethality research showed that customers said, "The other reason I picked the railway was because I thought it was victimless." As I said, we have just started thinking about how we can say it is not lethal and also not victimless. That is part of our thinking.

We have also reached out to staff who have been affected. We are talking to them and asking if they would be prepared to talk about it. We are trying to get the message both to those who have suicidal tendencies and to those who have been victims in the past. It is a sensitive area. We are alert to it, and your suggestion is helpful.

Q199 **Will Quince:** Certainly in my area, and I am not sure if it is nationwide but I suspect it might be, local news outlets—both local newspapers and regional TV stations—choose not to publicise when somebody has decided to take their life on the railway. There is prolific use of social media now, and I am aware of websites that advise people on where the best place is to do it. How do you think that is affecting what is sadly already an increasing trend?

Gary Cooper: The research I have just described landed in my email as I was walking in here. I had seen the draft. It discusses some of that, so we can share that research with the Committee, and we should do.

Will Quince: That would be very helpful.

Gary Cooper: Social media are self-policing to a certain extent. One of the things we do through the programme is monitor websites and other places. Clearly, we can only do so much as a programme, but we

intervene where we can and we try to use social pressure and social media to stop clumsy comment on suicide. The key thing for us is the report that landed in my email today as I walked in here. I have seen the draft report and there is a lot of information there for us to take forward.

Chair: Thank you very much, gentlemen.

Examination of witnesses

Witnesses: Mick Cash, Mick Whelan and Hugh Roberts.

Chair: Welcome to the Transport Select Committee. I would like to declare that I am a member of Unite.

Robert Ffello: I am not a member, but I know Mick Whelan pretty well.

Graham Stringer: I am a member of Unite.

Clive Efford: I am a member of Unite.

Huw Merriman: I am not a member of Unite.

Q200 **Chair:** Could you tell us your name and organisation, please?

Mick Whelan: Good afternoon. I am Mick Whelan and I am the general secretary of ASLEF, the train drivers union.

Hugh Roberts: I am Hugh Roberts, the national officer for rail for Unite, the union.

Mick Cash: I am Mick Cash, the general secretary of the RMT.

Q201 **Chair:** Thank you. According to RSSB and ORR, driver only operation can be introduced safely with appropriate mitigations. We have heard during this afternoon's session from RSSB that they consider that driver only operation can be introduced safely. They did not seem to have many qualifications of that. Why do you think that the situation is not satisfactory?

Mick Whelan: I am rather confused, Chair. I heard you talking about Wickham and Hayes and the recent reports and advice from the Rail Accident Investigation Bureau. There is associated advice from the ORR and discussions are going on behind the scenes within the industry. As I understand it, while people keep talking about modern technology, the actual technology that it is based upon is 1980s technology. The technology was that, if anything interfered with the doors, either the brake would come on or you could not take power. The recommendations recently have been that we can no longer rely on the traction interlock for underpinning what we do. It does not matter whether it is DOO, baton, flag or the traditional conductor or guard. The technology that tells the driver that it is safe to leave is no longer sufficient.

What allowed DOO to happen, when we had far fewer passengers and less footfall than we have now, was the fact that you would have some sort of supporting indication that it was safe to go, if it was DOO, whether

it was a mirror, which has now come into disrepute, or TV monitors. Associated with that, there is a lovely little blue light that told you that nothing was trapped in the doors and you could go.

I wrote to every operator in the UK post-Wickham asking, based on the advice, what second test they expected us to do. On average, we are allowed two seconds to look at the images on the TV screen. That little bit of technology supported what we did to say that nothing was trapped in the doors. I have had no answers from the operators in relation to what to expect.

If we were to apply the railway rulebook—we are not quite the Luddites you think we are on some occasions—no train in the UK would currently be operating, because the second check, according to the rules we apply, is a physical one. It actually says that the driver should get out, physically get on the platform and check the doors. If we had to do that and leave the train, we would have to shut down the train. That is the advice post-Madrid and the terrible problems we have had in the past with terrorism across the world. Then we would have to check all the doors. The reality is that we cannot do that.

You spoke about Euston and people charging towards the train. I challenge anybody to go to a major conurbation in the UK currently where they are not 20 deep on the platform, and if they cannot get on the first train they are standing there to get on the second one. There is no passenger train corridor, although the advice of the ORR is that, if we cannot see a passenger train corridor, we should not leave the platform. The reality is that we are struggling.

Q202 Chair: Mr Cash, in your view what is wrong with the reassurances we have been given by both RSSB and ORR?

Mick Cash: I have now had the benefit of watching the Transport Committee meeting with Ian Prosser, who is the director of rail safety at the ORR, the Office of Rail and Road these days. His other title, by the way, is Her Majesty's chief inspector of railways, HMRI—Her Majesty's railway inspectorate. I noted that when Mr Merriman asked him the question, "Is DOO safe?" he did not get a yes or a no. That shocked and surprised me a bit. I was expecting a yes or a no, as I am sure Mr Merriman was. That told me that there are real issues around driver only operation.

The reality for us is that driver only operation is less safe. Equally, the consequence of it is that there is more risk if you get a problem. Earlier, the gentleman from the RSSB, who was sitting where I am sitting, would not give a response about the consequences of driver only operation as a result of an accident. In the RSSB report that was issued in 2015, where they talked about how to introduce DOO and how you could save money by it—surprising from a railway safety board—they identified that there is more likely to be a higher risk of consequences from an incident when there is driver only operation than if a guard is on the train.

As Mick said for the train drivers, there are a lot of concerns and issues. The last time I was here we said that we were trying to sit down with the industry to talk about the risk around platform/train interface. We had a meeting with the ORR. Simon French was there from the RAIB. I think RSSB was also there, as well as a number of key players from the industry at MD level. We said that we needed to sit down and talk about the whole issue of driver only operation, the platform/train interface and train dispatch. It is clear to me that one size does not fit all. Ian Prosser's response to you was full of ifs and buts. That indicated to me that you cannot turn round and get a situation where you mandate—as the DFT seems to be doing at this moment in time—driver only operation, for example, on Northern Rail, where 50% of trains are planned to be driver only operation and where up to 70% of platforms or stations will either be unstaffed or staffed part time.

We have real concerns that we are being mandated to do something that has been identified previously by Mick and myself, and by the RSSB, as having greater consequences after an accident if there is driver only operation. We will be saying that it should not be mandated, and that the industry should be allowed to sit down, look at it and see how to measure the risk and come up with solutions to suit the circumstances.

Q203 Chair: Mr Roberts, do you agree with what has been said, or is there anything different you would like to add?

Hugh Roberts: Absolutely. It is obvious to Unite that the criteria for defining safety with driver operation are being driven by cost rather than public safety.

Q204 Huw Merriman: Mr Cash, I remember the exchange that you referenced. I am pleased to say that I received a letter from Ian Prosser as the director of railway safety after I asked him to publish a more definitive view on DOO and safety. He responded with their position that "DOO can be operated safely, and DOO operations have been used on the British Railway network for over 30 years." As the rail regulator has now opined that it is safe, are you willing to fall behind his view on this, given that he has statutory responsibility for safety and the unions have not?

Mick Cash: It is interesting that Ian Prosser said that. I would like to have that conversation with him myself, if that is the case.

Huw Merriman: I have a copy of it here.

Mick Cash: Fair do's, but the meeting we had was at Ian's instigation because it related to concerns around the issue of train dispatch and driver only operation. I do not know why we are having discussions, which will continue around the industry forum, to look at the whole issue, led by the ORR and the director of safety, if it is all safe. What is the point of doing it? I raised concerns about the issue of driver only operation. Those concerns still remain. Of course, the rail regulator regulates the economics of the railways as much as it does the safety. It is fully independent—

Q205 **Huw Merriman:** The rail regulator is responsible for safety. If he is saying it is safe, that would be good enough for passengers.

Mick Cash: I don't think he is saying it is safe, actually. Perhaps I could ask—

Q206 **Huw Merriman:** Maybe I could extend the point. If it is indeed unsafe, to go with your line and the ASLEF line, the bit I do not understand—I know that ASLEF has announced strikes again on Southern—is why you are going on strike where it is currently being proposed but not operated, yet your members are operating it on 30% of the railways and you are not going on strike. If it is so unsafe, surely you would be out on strike where it is used.

Mick Whelan: If you would like us to call a national strike on your advice, we would be more than happy to do so.

Q207 **Huw Merriman:** I would like consistency.

Mick Whelan: Consistency is that it is currently being applied. Unfortunately, you have not seen the full dialogue between Southern and ourselves, and the fact that they have not carried out due diligence to the level that was carried out on Thameslink in their testing for DOO. I have copies of the correspondence with me. It is intriguing that you say Mr Prosser says that it can be safe. He does not say that it is safe.

Q208 **Huw Merriman:** Mr Whelan, what he says is that it is with the appropriate testing and what-have-you. Again, that comes back to a point you have just mentioned. You and I exchanged views. I asked you if it was the case that your members were going off doing the testing, and I think we agreed that about 155 stations have been tested by your members. I assume that you go through that process in order to be able to confirm that it is indeed safe.

Mick Whelan: We rejected the outcome of that testing and the company has ignored it. Unfortunately, that is not part of that correspondence. The final meeting on it takes place this week. It is also intriguing when you talk about the ORR and other bodies. It is the ORR that stipulates that there should be a passenger train corridor where you can see clearly between the edge of the train and where the passengers should be. None of the technology provided for us, whether it be for the length of the train or looking at separate doors, would allow you to see more than 12 inches from the edge of the train. It would not facilitate that.

Q209 **Huw Merriman:** Is it not the case though, Mr Whelan, that with DOO the train operators can see, with the videos, the train in the platform as it leaves the station, whereas at the moment the conductors cannot? Surely that is an enhancement on safety, is it not?

Mick Whelan: It is not an enhancement. With the greatest of respect, I have been a train driver. If you are telling me that I can analyse and assimilate 24 different images in two seconds, and do that adequately and safely for the safe transport of other staff and the travelling public, I am telling you that I cannot and my members cannot.

Huw Merriman: Let me ask you this then—

Mick Whelan: If I could underpin it before you do—

Q210 **Huw Merriman:** Let me just make this point to you. A conductor can look outside the train, check that no one is there, then the doors close and then the train moves. At that time, under DOO the driver would still have the video of the platform—

Mick Whelan: It does not happen. He does not have the video. Also some of it is on a loop and it is not actually happening as you do it. It depends on the age of the train. You have 24 separate images to look at in two or five seconds, or whatever it is going to be. I am quite happy for people to spend 30 seconds looking at each individual image, but by the time you got to the 24th image you would have to start again.

Q211 **Huw Merriman:** Mr Whelan, the great news is that I believe this Committee, hopefully with your members, is going to view it so that we can see for ourselves.

Mick Whelan: Please. I will send you 10,000 images where we cannot see properly.

Q212 **Huw Merriman:** Hopefully, you can come with us. I have one last question. You talk about safety. At the moment, if it is the case that a second conductor could not join the train—I believe that Southern would like to operate those trains in exceptional circumstances, so in most instances there would be a second crew member—and they are not able to attend, you as a union require that train to be cancelled. We are talking about a network that carries about 23% of the train-travelling public. Why is it safer to have a cancellation, and therefore disruption at stations with overcrowding, rather than just operating the train in exceptional circumstances and getting people home safely?

Mick Whelan: There are two issues, before I come back to the thing I was trying to underpin and say in the first place. Isn't it miraculous that the work commissioned in March 2015 by the RDG, who are actually the same people who are members of the RSSB, and which was on the RSSB website, stated that on trains where you only had 12 images the driver would pick up a safety incident only 90% of the time, so 10% of the time we are running around unsafe? Those are their own figures and their own work. It may be uncompleted work and there may be complementary work that happens later, but currently the last study they commissioned, and did, says that for 10% of the time the driver will not pick up an incident.

As for what you were saying, we currently have an agreement with Southern on disruption if a guard is on another train. It can go from point A to point B and continue its journey. There is no need for what they are doing now, but of course you will be unaware that we have those agreements in place.

Q213 **Chair:** We cannot get into the detail of exactly what is going on. We are trying to work out—

Mick Whelan: I am sorry, but at the same time I kept hearing that debate about the second person. On most of these occasions, they want to take the safety critical role away from the second person so that they cannot evacuate in a fire or a major incident. Of course, if there is a train crash as someone alluded to, the person who is normally injured or incapacitated is the driver.

Chair: I am going to ask the ORR to publish the statement they made in relation to where Southern operates so that we can see exactly what they are saying.

Q214 **Robert Ffello:** If there is an incident on a DOO train and the driver did not see or did not look properly, who is responsible for that in law? Who would be held responsible for that train's safety?

Mick Whelan: The way the legislation is currently, it would be the driver. The driver would be the person going to prison.

Q215 **Robert Ffello:** If something happens and the driver does not see it, the driver is the one who is responsible. You might say that they have a fairly critical role in safety. In the earlier session, we heard a lot about the fact that DOO is safe provided risk assessments are done. Do you know how often those risk assessments are carried out?

Mick Whelan: Not that often. We went to the ORR recently because we had had a number of complaints about overcrowding on platforms and the ability for people to safely dispatch. We were asked to supply seven locations so that they could be checked. We supplied 169, of which seven were chosen nationally. They found no fault. The real problem is that normally it is for the company to do their own risk assessments and tell the ORR that they have sufficient processes in place.

Q216 **Robert Ffello:** In terms of what the driver and the guard are doing, could you describe it as dynamic risk assessment every time they operate a train? They are looking at what the environment is, what the weather is doing and the number of passengers. Whether they realise it or not, they are doing a dynamic risk assessment of what is going on at the scene.

Mick Whelan: Drivers are trained to look forward and not backwards, and they have been for years. The reality is that the driver is meant to ensure that there are no obstructions ahead, that the signal is off and that it is safe to go in relation to what they are doing.

Q217 **Robert Ffello:** Is it what the guard is doing?

Mick Whelan: The guard concentrates solely on platform dispatch. The guard controls the platform/train interface. Once he or she has been reassured that it has been done safely, they give the appropriate signal to the driver and the driver concentrates on their role.

Q218 **Robert Ffello:** Irrespective of the fixed risk assessment that may have been done yesterday or a year ago, it is the guard's role to do that dynamic assessment of whether it is safe to move off.

Mick Whelan: That is correct.

Mick Cash: That is what managing a platform/train interface is about. It is interesting that we are having these discussions about whether a guard is needed or not. Southern recently issued a notice—I think we have given a copy to the Committee—where they mandated that the guard, or the OBS, as they call it, has to get off the train and make sure that anybody who is vulnerable has the ability to get on that train safely, and they take local control of the doors to do that. They have introduced that system because of concerns about accessibility.

The guard has a broad role. There is the issue of managing the platform/train interface. They reassure passengers on and off the train. There is the issue about having a safety critical guard on the train; is there a guarantee? I want to read something about what happened at Watford from a guard who is one of our members. It is somewhere I know pretty well. After the crash, unfortunately the driver could not get back to the passengers: "I started to walk towards the front to check my driver. I was calming passengers down while walking. I put down track circuit operating clips to protect the line and my train was on the up slope. I was making sure that all passengers were okay as I made my way to the front. Some passengers pulled the release on the right side." You will know that the right side of the train on the down road was where the train was coming at 80 mph through the tunnel. "I informed them that the safest place to stay was on the train."

There is a video called "Red 43" where there was a fire on the train and a passenger got off. Unfortunately, the passenger got killed. There was a fire this morning on a train at Eastbourne and there was a fire at Holgate recently where there was a guard. These incidents are happening. The reality is that, if you do not have the guarantee of a guard or a safety critical person on that train who is suitably trained and qualified, you leave it down to the driver at the front, and that is less safe and riskier. That is the crucial issue. It is a holistic role. You can take a situation where you spend up to six months being trained—

Chair: I think you have made the point, Mr Cash. We understand that.

Q219 **Clive Efford:** Do you understand the term "corporate memory loss"?

Mick Whelan: Strangely enough, it was in this room that one of my colleagues, who has been at Three Bridges all his career, coined the term that he was the "corporate memory of the industry," because he had had so many banners above the door since privatisation.

We do not understand the term "corporate memory loss," because the agreements that we have in place and how we got to them are well recorded everywhere. We have a copy of every one we have ever made, with BR through to its successor companies; so, no, we do not.

Mick Cash: The trade unions are the ultimate continuity in the industry. We have seen more companies and employers come and go than I care to mention. We understand the rationale behind why things are done. We are worried that, when you get the constant change that happens with franchise and management changes, the people who make the

decisions—who often do not listen to trade unions, by the way, and do not engage properly—make them based on what they are told to do, rather than the people, including our members, who move from one company to another and continue to be employed.

In this industry there is not a corporate memory facility because they are like ships that pass in the night. They move from one place to another. The workers and the organisations are the memory and provide the continuity. We sometimes get called Luddites and get criticised for opposing stuff. That is because we have been here before; we have seen this stuff before. We are told we do not know what we are talking about, or we get called reactionaries; yet more often than not it turns out to be true, because of our knowledge and experience.

Q220 Clive Efford: Before it was used in this Committee you had never heard the term. It is not a regular term used in the industry.

Mick Whelan: No, not to my knowledge.

Hugh Roberts: I think the expression “corporate memory loss” is a nebulous entity. It is an absurdity.

Mick Cash: Someone told me I had corporate memory the other day. I sit on the Network Rail safety, health and environment committee. I have been on it for about four or five years. We were having a discussion about a number of issues and I happened to remember when they started. A lot of people on that committee were not around when they started.

Q221 Will Quince: I have a couple of questions. The first is to Mr Cash. I was interested to hear the statement you have just read out about the Watford incident. Correct me if I am wrong, but my understanding around the Southern position is that actually the second person is going to be on trains apart from in exceptional circumstances. Without the opening and closing of the doors—I will come to Mr Whelan’s point in a moment—surely that individual will be able to do all those things, and potentially more, because they are not closing and opening doors.

Mick Cash: No. The OBS is not trained to the same standard as a guard. They are not safety critical. They do not have a PTS—personal track safety. That means they do not go trackside. An OBS would be trained in four weeks. A guard takes up to six months. They have a wide range of different skills, knowledge and experience.

The reality is this, and you have heard me say it before. A safety critical guard on a train means that there is a guarantee of a second person on the train. If it is exceptional circumstances, if there is no difference in rate of pay and if we are going to have someone who is highly skilled, why can’t we give the guarantee that there will be a second person on a train? There are solutions, Mr Merriman, to the issue of making sure that trains do not get cancelled, for example.

We have recently been told that Southern identified that only 0.6% of trains will not run without an OBS. That relates to somewhere in the region of five trains a week, if you are lucky, that could not possibly run. All you have to do is have a situation where you staff up the arrangements and work the drivers and the guards together. Then you do not have cancellations and you do not do it at the price of cost cutting. That is a solution; it is there on the table. I wish people would pick it up.

Q222 Will Quince: That is up to five, even in your own words. It seems an unreasonable stance to take, in my view, but given that they have guaranteed the jobs, you are going to have the same trained people. In any event, can you give me an example of an incident where the training given would not qualify them or make them able to deal with the situation you have just described at Watford?

Mick Cash: There was a situation recently in Crawley. The equipment failed on the train. There was a guard acting as an OBS and the train was going to be taken out of service. A senior manager who happened to be travelling on that train—the company having introduced driver only operation—turned round and instructed the OBS to act as a guard. There are equipment failures; believe it or not, DOO equipment does fail. That seems to be counter to the whole process.

In future, that would not happen. You would not have that level of skills and knowledge, so you would not be able to do that. The company has now turned round, as a result, and issued instructions to drivers about what to do in circumstances when their equipment fails, which could incur greater loss and greater disruption because the driver now has to get out of the cab and do more checking and suchlike. I was a bit surprised and shocked, because there have been concerns raised by one of our members, who is a train driver and is going through the grievance procedure, about another incident where another senior Southern manager sought to force a driver to run a train when there was an equipment failure. That is the reality. I was talking to that person last week.

Q223 Will Quince: These are all small anecdotal cases, “It is this one and this one and this one,” but in my view you have not provided any evidence to suggest that there is a large-scale problem that warrants the action you are taking, which many commuters, in particular on Mr Merriman’s line, would find quite unreasonable.

Mick Cash: Would you like me to provide something when someone gets injured or killed? It only takes one—

Chair: Mr Cash, I don’t think that is very reasonable.

Will Quince: Or appropriate.

Chair: Mr Quince was asking a legitimate question.

Mick Whelan: In this modern performance-driven industry, one of the reasons why trains are in the wrong place is that they get turned back into their own paths rather than finishing their journey. The reason

people may not be available to pick them up where they should be able to pick them up is to protect performance. There is a penalty regime within the industry between the TOCs and Network Rail. That is the first point. I wonder how many of those five trains a week would be down to not disruption per se but people protecting performance.

The second thing is this. I will give you an incident with a driver last year when the wires came down. When the wires come down, you have to go to the nearest bit of catenary to give them the location so that they can come and do what they need to do. When the wires come down, they are meant to trip out; they are 25,000 kV. For whatever reason, the equipment failed. The driver got down in the rain and got electrocuted. That driver would be dead if there had not been a guard on the train. I've got a real thing about it, and not only for the travelling public. If there had only been a driver on that train, the train would have been stranded and the driver would be dead. Those people would be left alone and there would be no one to assist and no one to call. Unfortunately, in a safety-driven industry, or a safety critical industry as we call it, we need those people.

Q224 **Will Quince:** I am a bit confused about this whole door opening thing. You mentioned that you were formerly a train driver. Taking on board all the points that Mr Cash made about the other roles that these individuals play—I do not doubt that they have some importance—you mentioned the opening and closing of doors. In my experience of using a train, the only person at the point before departure who has full sight of the outside of the train is the driver. You are shaking your head.

Mick Whelan: Because it is not true; that is why.

Q225 **Will Quince:** How do you go in and turn the doors? There is a point at which you stick your head out and withdraw back in. You or Mr Cash earlier said that quite often platforms are full of people trying to get on a train. They do not have enough room to get on so they wait and then there is another row of people ready to get on. You and I both know that sometimes you can have only two or three feet. Are you saying that at the point at which they withdraw their head back into the train and turn their key they have full sight and visibility of that train? I cannot see how that is possible.

Mick Whelan: No, they do not. That is the point we are making, either on the technology or looking back.

Q226 **Will Quince:** With respect, it is not the point you are making—

Mick Whelan: I am making the point about the CCTV, the monitors or the mirrors that do not work in the rain or that you cannot see in the sunlight. Looking back along the platform is the one thing we are not allowed to do. Look-back DOO fell into disrepute in the very early 1990s.

Q227 **Will Quince:** Who has visibility of the CCTV?

Mick Whelan: The CCTV is a little monitor. It can have up to 24 images.

Q228 **Will Quince:** Which the driver sees.

Mick Whelan: But, depending on the traction you are in, it does not show you the length of the platform. On some it will; some will show each individual set of doors. It will not show you beyond six or eight inches from that individual set of doors, so you cannot see what you are meant to be looking at.

Q229 **Will Quince:** Which the CCTV does. On, say, a 12-carriage train, let's say that the guard is in the middle and let's take an example of a platform where there are lots of people waiting to get on. Are you saying that no one can then step forward, put their hand in and get stuck? That is an incident in the report. I cannot see how a guard could possibly stop or prevent that.

Mick Whelan: If you rely on the traction interlock, that is the bit of technology that was meant to stop that happening. If somebody put their hand, a bag or a coat in, we should not be able to get any power or take the brakes off.

Q230 **Will Quince:** With respect, that is not an answer to the question.

Mick Whelan: It is an answer to the question. Technology does not work in isolation.

Q231 **Will Quince:** With respect, it is not. What is the point of that second pair of eyes when they withdraw into the train to operate the doors? They cannot see the length of the carriage. The only person who can do that, I put to you, is the driver.

Mick Whelan: No, because the guard—

Q232 **Will Quince:** But they are inside the train.

Mick Whelan: If you are not going to allow me to explain, I am going to have a difficulty with you, sir. The reality is that the guard looks along the train until he is assured that there is nothing trapped in the doors. Once he has closed the doors, he does a second visual check before he gets into his vestibule.

Q233 **Will Quince:** How can he do that when all the doors close at the same time?

Mick Whelan: Because he then looks along both sides of the train to do so.

Q234 **Will Quince:** But he is in the train.

Mick Whelan: He is not in the train. He would be standing on the platform. We have vestibule doors by the guard's cab on most tractions.

Q235 **Will Quince:** On most tractions, but not all.

Mick Whelan: In that case, if we did not have 40-year old rolling stock there wouldn't be a problem, would there? There again, if we had addressed the capacity problems in the past, maybe some of these issues would not be here.

Chair: We have probably gone as far as we can on that.

Robert Ffello: Just to help my colleague on the Committee, on the vast majority of trains I have travelled on where there is the sort of operation that has been described, the guard physically stands on the platform and looks down. He closes all the doors apart from his or her own.

Huw Merriman: Not on mine. I have used Southern trains for 10 or 11 years. If that had happened—

Chair: I do not want to dive off into dialogues between ourselves.

Huw Merriman: This is massively important because I just feel that we are getting flannel.

Will Quince: This is the line in question.

Chair: Mr Quince, do you have any more questions?

Will Quince: I think we have exhausted that line of inquiry.

Chair: Mr Merriman?

Huw Merriman: No, it is beyond belief.

Q236 **Chair:** Overcrowding has already been mentioned. How serious a problem is overcrowding on platforms?

Mick Whelan: It is a massive problem because the technology—

Chair: Could you give us some examples of how it is a problem?

Mick Whelan: The real problem is that we are seeing more incidents of people falling between the platform and the train. We are seeing a slight increase in slips, trips and falls. The real issue in overcrowding of course is visibility and the platform/train interface problems that we are experiencing.

We then get nonsensical directions around stations. I am sorry that your colleague with the Euston experience is not here. You go to a station and all of a sudden they announce a change of platform, and people have two or three minutes to get across 12 platforms with all their luggage. It may be down to the ancient design of stations. We are a make-do-and-mend railway and we will always remain so. Part of the problem is confusion. There is real confusion, particularly in intensive inter-urban; people do not want to miss the next train and they push each other forward. I think we are extremely lucky in not having more incidents than we do.

Q237 **Chair:** Do you have any proposals about what could be done to assist? We asked this question in the previous part of the meeting. We were told basically that the big issue was to do with getting more capacity on the railway. Before that is achieved, are there specific things that could be done to deal with this problem?

Mick Whelan: Not really. The biggest problem with overcrowding is that it does not seem to be the responsibility of those on the gate line any longer to monitor the volume on the platform. The main purpose of those on the gate line seems to be to ensure that people are travelling with a

ticket. We would all like people to pay their way, but the real problem is that, when something is late or delayed, there is nothing to stop more and more people crowding on to platforms and causing the problems that we have.

Q238 **Graham Stringer:** Are there no capacity limits at stations?

Mick Whelan: I do not believe there are. I am not aware of any.

Q239 **Graham Stringer:** I was on a train from Durham to Manchester on Saturday morning. A lady got on my train and sat next to me. She said that she had not been allowed on the previous train because it was crowded. Nobody has that responsibility, do they? Would a guard take that decision?

Mick Whelan: A guard may take that decision, and depending on the nature of the train he may then, if there is first-class and second-class, be able to declassify other carriages to increase capacity. With most of the intensive suburban and inter-urban stuff, that facility is not there. It is purely, "If you can't get on, please stand back and wait for the next train."

Q240 **Graham Stringer:** Do you think there should be a capacity limit?

Mick Whelan: I would like to see limits on the number of people on platforms in the peaks, because I get quite fearful—

Q241 **Graham Stringer:** So, on platforms rather than in trains?

Mick Whelan: In trains, once you reach the Tokyo point where you cannot get any more on, nobody else can squeeze on, so it is then about whether you can close the doors or not. I would like to see responsibility for the way footfall is ushered through stations. In this day and age, it is about getting them off the concourse where the food outlets are and on to the platforms to allow the next tranche to come on. I worry about that.

Mick Cash: I want to follow on from what Mick was saying. The whole problem we have is that the infrastructure of the rail industry was not designed for the number of people who use it. It needs investment in bigger and longer trains, which is one solution. Mick and I use Euston regularly, so we understand Euston. If you put bigger and longer trains into the throat of Euston on platforms 8 to 11, all you are doing is putting a lot more people through a load of electronic barriers, and that stops the flow. There is a lot more work that needs to be done to understand the management of stations as they are at the moment. If you increase the capacity of trains, you need to increase capacity at some of the stations to make sure they can handle it.

Q242 **Graham Stringer:** Are you saying that there is a safety issue with the new barriers going up in mainline stations that Virgin and other operators have introduced?

Mick Cash: The problem when you have a lot of people going to certain platforms is that you get squeeze points. The people coming in and out literally become a barrier to passenger flow. If you were in Newark and

only half a dozen passengers were getting on a train it would not matter, but at Euston there is quite a lot of concern about people backing up.

People come on to the platform as well as coming off it, so there is the issue of how to manage passenger flows and how to announce trains. There is some learning that the industry needs to do. I am sure they are doing it, particularly at big termini stations, to make sure they understand crowd control effectively. We do not get a lot of engagement about it. Another problem that happens, and which concerns me, is that I do not think the TOCs are incentivised enough to run trains when there is disruption or degraded mode. Again, my experience of Euston is that you get a whole lot of emergency timetables. That means people are coming on to platforms to get a train, but there is no train to get them out. If there is a train it is short stock, so it is four-car rather than eight-stock.

Strategically, there is a lot more that the industry can do effectively to manage crowd control in normal circumstances, when there are more and more passengers. It is about investment in trains and in stations. It is also about understanding flows, and particularly seeing whether there are behaviours that happen. Train operating companies seem to get paid whether or not they move passengers in disruption. There are behaviours that do not incentivise train operating companies to move passengers when there is disruption.

Q243 Chair: Is worker fatigue an issue that is addressed properly and taken seriously on the railway?

Mick Cash: I was interested in the discussions earlier relating to worker fatigue. It depends where you are and what you are doing. There is the Network Rail scenario around their own people, their agencies and the contractors that use them. They have a 14-hour door-to-door rule that their people can use. You have a slightly different situation with TOCs running different types of patterns and shifts.

My concern about worker fatigue is that in some areas they manage the solutions better than others. I heard today that driving was one of the key risks and that is an area where I want more attention. Network Rail have somewhere in the region of 60,000 contractors or agencies that operate for them. That is a guesstimate, because to operate on a railway you have to have a PTS card—personal track safety—and that means that you are registered with the employer, which is not necessarily Network Rail. Those people travel quite considerably around the network. There seems to be a lot of vehicle travel done by the industry. It seems to be on the increase rather than decreasing. Problems with worker fatigue are not just about how people get rostered; it is about the time not captured when you are not rostered. I think the industry can do more about it. I am concerned that there is still a high level of zero hours and bogus self-employment on Network Rail, which I do not think helps.

Q244 Chair: Mr Roberts, did you want to add something?

Hugh Roberts: Network Rail should be commended. They have a new determination to reduce fatigue, but there is a lot they could do about the

organisation of the work itself that would reduce fatigue. We have instances where gangs are actually passing each other on the motorway and going to different places of work. That is ridiculous. That is a question for them to organise.

Q245 **Chair:** What about workers engaged in construction on the railway, whether it is to do with repairs and refurbishments or new construction like High Speed 2? Do you think that enough attention is given to safety for those workers?

Hugh Roberts: Through the TUC, we have reached a framework agreement with HS2 as to best practice. When you talk about construction, you have to distinguish between construction in engineering and construction in general terms. In engineering construction, there are specific agreements, clear guidelines and procedures as to how work should get done and who should do it. In general construction, there is a wild west of health and safety, where there are a multitude of contracts, short-term agency staff and a vicarious set of employment relationships where accountability is poor. I noticed with some interest that Mr Carne referenced his previous experience in the energy industry and how he was trying to transfer that across to the rail industry through better practice. That is to be commended, but I would not look to construction as the model for better practice in the rail industry.

There are examples of opportunities for the future. For example, from a Unite perspective we hope Hinkley Point will be a very good example where a large site will be built to best practice. The more obvious example of poor practice is London Bridge, where Network Rail's involvement, from a Unite perspective, has been pretty poor, in terms of a guarantee that construction was taking place in accordance with best practice. At London Bridge, we saw incidents of overcrowding and people confronted with barriers.

Mick Whelan: It was interesting to hear one of the previous speakers talk about Hidden and Clapham. There is no statutory regulation for hours in the railway industry, particularly for train drivers. If you are a truck driver, you have the tachograph. If you are a bus driver, there is legislation. For train drivers, there is nothing at all. We had one or two recommendations that we sought to underpin through collective bargaining, where we count a minimum of 12 hours between shifts and no more than 70 hours in a week. But people are still working 13 days out of 14, and with the authority of the company they can go beyond that.

We would like to see some legislation or statutory regulation around what people can and cannot do. We now have a major player in the industry saying that they are going to have to declare bankruptcy unless we allow drivers to drive in a van for an hour, work 11.5 hours with a bare 20-minute break, to be taken when they decide, if at all, and then drive up to an hour afterwards. The cumulative effect of that, if people work 13 days on the trot, terrifies me. When we talk about safety in the industry, if we truly want to look at what we do, the first thing we should be doing

is looking at the periods of time people can concentrate and are able to concentrate.

Another factor we have seen recently, underpinned by TUC and other studies, is that many people now do not live where they work; on average, 60% of male workers now travel over two hours to get to where they want to be. In a 24-hour, seven day a week shift-driven industry, again that is something we have to look at. A lot of work has been done on fatigue, as colleagues said earlier, but it has not been translated in the last 20 years into anything substantial. We still roster people backward, even though people say circadian issues mean that it is unsafe. We have a very heavy and intensive high hours industry. Things have not changed much from BR times in relation to how we roster people and what we expect them to do.

Q246 **Chair:** Does the industry engage adequately with the unions in relation to safety?

Mick Whelan: Yes and no.

Q247 **Chair:** Tell me something good and something where there is a problem.

Mick Whelan: We have many undertakings now. We engage incredibly well with some, and with some others the standard is not as good. Across the industry, like most industries, when something goes incredibly wrong we are all very good at getting together and trying to learn the lessons from it. Whether they are always applied after we have been through that process, I am not sure.

Mick Cash: I would say we do not. We get involved in projects. The RSSB might be doing a project and we might get involved in things like that. We might have a company-specific arrangement. We have a good working relationship with Network Rail in terms of safety, and we help them move the safety agenda forward, but across the industry per se, no. It is difficult to bring it all together.

What we should be doing is looking at getting an independent inquiry into safety reps and how safety engagement happens in the rail industry. I think you will find that it is a patchwork quilt. In any arrangement where you want to make change, the issue for us is having access to the people who make decisions. Not only do you want to be in a position to engage and put your point of view, but you have to do it with the people whom you can influence and who can make decisions. I do not believe we do. For example, I do not know what the role of the Rail Delivery Group is these days. It seems to be no more than a bosses' club. It has all the key players in it, but they seem to be there just to co-ordinate what the employers want and not necessarily what the industry wants. We have been in the industry for some time, and there is a lot more they can do.

Q248 **Chair:** Mr Roberts, are there specific changes that you would like to see in relation to safety?

Hugh Roberts: In terms of the train operating companies, our experience is that safety is a mixed picture. Some are very good and

some are not. If I had a specific proposal, it would be that data are standardised across the industry and collated more uniformly.

Q249 **Robert Ffello:** We have talked mainly about train operating companies and Network Rail. To widen it slightly, is there anything you can add in respect of freight operating companies and the safety issues?

Mick Whelan: With freight, we are in a massive race to the bottom at the moment. In a post-austerity world, NDS, which is the contracting arm of Network Rail, is quite naturally looking for the best value it can get for its buck. That has allowed increased casualisation. That allows people who may have retired to come back and work 20 hours one day and then not work for the rest of the week. They are never going to be picked up in any average figures on breaking any of the constraints that we have.

A difficulty is that people who work for TOCs during the week might like to drive big-wheeled trains at the weekend. There is no sharing of information. If there is a safety incident it is not always reported as quickly as we would like it to happen. The constraints of the working time directive have never been fully applied in the industry. That is not just for people who might work in more than one company. As in most industries, I imagine, there are people who drive wedding cars, do discos or something else. With the working time directive, you are meant to encapsulate all working hours when you look at what you are going to do for rostering for fatigue and the associated issues. To my knowledge, that has never happened anywhere. It is correct that there are some real problems.

Mick Cash: The freight industry seems to face more and more competition from other modes of transport, whether it be road or even shipping these days. That is creating difficulties. There are lost markets, and where they can get guaranteed work it is becoming more and more limited. Network Rail could do a bit more to give them more guarantees. The danger we face is that the freight infrastructure, whether it be the yards, the trains, the equipment or the staff, will diminish. Rail freight as a mode of transport in the UK will be less rather than more, despite the fact they are planning to grow.

Q250 **Huw Merriman:** I want to ask about engagement between the industry and the unions, with no reference to Southern.

Chair: In fact, we will bar any more references to Southern for this meeting.

Huw Merriman: I want to ask about examples of good practice and then to ask about the digital railway after that. Could you give examples of good practice that works with the unions and the industry, and maybe where it could be improved?

Mick Whelan: The history of the privatised industry has been based on good will between all the parties concerned. Regardless of my view on privatisation, there was a massive rush to do it. We had to learn very quickly. Overnight, we went from centralised bargaining with one unit—

British Rail—to 30 or more operators. They were fledgling operators. To ensure that everything worked safely, we had to come together.

Hatfield is the classic example where nobody knew the state of the infrastructure. It was the workers on the railway, in conjunction with the stakeholders, who kept it running until we got to a point where we knew we had a safe railway operating again and kept it going. We continue to do so. There has not been a major project in the last 20 years, whether it be the west coast upgrade, the introduction of new trains or after an unfortunate incident, where all the stakeholders have not come together to make it work at some point. Until recently, where we have been allowed to do it on the basis of how we have always operated, there has not been a problem. It is going to get increasingly more difficult in the future if things are mandated via invitations to tender rather than the industry coming together to do what it needs to do.

Mick Cash: There is a lot of work that happens on the ground. We literally have an army of safety reps out there—representatives who are in a position to engage with employers. I do not think people recognise that. The rail industry is a lot safer than it was, but that did not happen overnight and it did not happen by accident. The engagement of our staff at the frontline, particularly our representatives, plays a big part in keeping management honest. A senior person who talked to our guys recently said that the safety reps are their eyes and ears on the ground. We have done pretty good work with Network Rail, for example, around a fair culture regime. We want to see that pushed forward elsewhere in the industry.

There is stuff around close call and CIRAS. We sit down and talk about what happened in accidents and how we are learning. That is all happening. As a union, we have an annual safety conference, and more than 150 delegates turn up. Quite often, we invite employers along to talk about the issues. The next one, next year in February, is going to be on fatigue. We want to engage. We want to see those issues addressed. There is more that could be done. I worry slightly—again this is the point made earlier—about having access to the people who make the decisions. Rather than just being eye candy, for want of a better phrase, “Oh, we have consulted the RMT, Unite and ASLEF,” they should involve us more in what goes on. Real engagement is two way.

Q251 **Huw Merriman:** Given that there is such a great change in terms of the advance of technology, which will ultimately mean a debate about safety and the fact that it is as safe, last week in the autumn statement there was again talk of the digital railway. When we heard from you last time, it is fair to say that you had not had any engagement with the industry on that technology. Has any engagement occurred since, or is any scheduled?

Mick Cash: In terms of the digital railway, I have had one briefing from the new guy at Network Rail about what it means. Can I give a warning? This is an important point that I personally feel—I do not know whether others feel it—and that is that there is a culture in the industry that new

technology is the get out of jail card for the industry and that it solves all the problems for driver only operation. In relation to embankments and bank slips, the Network Rail safety guy talked about putting in remote monitoring. We have remote plain line recognition of trains. There is track patrolling done by trains. We have the rail operating centres, which is where the digital railway is going to come in—the 12 operating centres where Network Rail are going to put 12 eggs in one basket. They are concentrating where they put their operating centres and their signallers. They are going to use algorithms to decide where the trains are going to be. They have to have traffic management systems in place to do that.

People, decision makers and knowledge and skills become more and more technology driven. People become remote from what happens in the industry. It is a very mechanical industry. It has a lot of technology around it, but it is literally two iron rails with iron wheels carrying people on it. There is a lot of technology around that, and I worry, particularly about the digital railway. With all the money it is going to cost, if it comes in, it will help with capacity. Capacity is an issue. It will get rid of fixed signals and allow the distance between trains to be determined by technology. That is a bit like what happened when we first had trains many years ago. They used to use time; every five minutes you would put through a train. It was unsafe and that is why they put fixed signals in. There is the ability to do it, but it will cost a lot of money.

One thing you always have to remember is that the 12 rail operating centres are going to have signallers who will be making judgments, day in, day out, unless traffic management makes it automatic. When the railway is degraded, which means when things go wrong, you need people who are able to make the key decisions and judgments and have the knowledge and experience to do it. There are a lot of people running around in the industry these days who think that new technology is going to solve all our problems. Digital railway is part of that. It should be an aid to ensure that workers in the industry can safely and efficiently move people. It should not replace them. There is a danger that some see that as the direction of travel, and I worry about that.

Hugh Roberts: As an example of good practice, Greater Anglia has a lot to be applauded for. The majority of our members are concentrated in engineering grades and engineering depots. The fleets for that franchise are going to be completely replaced. There has to be a move to new technology, and we are in negotiations with the franchise about the use of digital technology, tablets and the rest.

Pivotal to the safety culture in a depot is a depot manager who is committed to a zero tolerance approach to hazard and an open door for the trade union rep. At both the Greater Anglia depots in Norwich and Ilford, that is very self-evident. I would hold them up as an example for the rest of the industry. If the rest of the TOCs were following what I see in the engineering depots in that franchise, I would be a happier person.

Mick Whelan: For my sins, I have been heavily involved for a number of years in various ways, first with the Thameslink 2000 project—it will be

nice when it finishes—and of course I had a lot of responsibility for the Channel tunnel in the early days. Again, we have never been against technology to increase capacity, or to increase the ability for freight or passengers to move more quickly. The biggest problem we have always had in the UK network is how intensive it is. We bolt every new technology on to the existing Victorian infrastructure, and that brings its own problems and issues. Of course, when it degrades, we need people, as Mick said, to run the railway in the traditional manner, otherwise the lines do not get cleared.

We have no fear of digital technology, if that is part of the question. We want to work with it. I was heavily involved, as I said, with St Pancras and the core, and the automatic trains through the core and St Pancras. Why would we object to 30 trains in each direction every hour going everywhere we want, when on the rest of the line they are driven conventionally? It is the right place to be.

Chair: Thank you very much, gentlemen.