RIHSAC 100 – IN RETROSPECT

When we look back at the history of the Railway Industry Health & Safety Advisory Committee (RIHSAC), what we are doing in effect is to review the last 40-odd years of railway policy in Britain, and in particular, the safety and regulatory challenges that have been faced by the industry during those decades - partly as a result of institutional change, partly as a result of technical progress, partly as a result of evolving societal attitudes and expectations, and partly as a result of advances in the understanding and systematic management of risk generally.

1974 Health & Safety at Work etc Act (HASWA)

The story really begins with the passage of this act, which gave legislative effect to the proposals in the Robens Report of 1972, and brought into being the Health & Safety Commission (HSC) with its executive arm, the Health & Safety Executive (HSE). It placed the responsibility for delivering safety at work jointly on the shoulders of employers and employees, setting the test of reasonable practicability, and it continues to underpin the regulation of occupational health and safety to this day. However, it also imposes a duty to ensure the safety of third parties, and although Robens had specifically stated that the arrangements he was proposing were not intended to apply to transport users in general, there was no such exclusion clause in the Act. Railways were already covered by a body of prescriptive, industry-specific safety regulations such as "lock, block and brake", going back in some cases for 130 years, which were not limited to occupational safety, and had their own enforcers in the guise of HM Railway Inspectorate (HMRI), which operated under the wing of the Department of Transport (DoT) and was also responsible for accident investigation. So an agency agreement was reached whereby the HMRI would act on HSE's behalf as far as the railways were concerned.

1978 RIAC

What was originally called the Railway Industry Advisory Committee (RIAC) and is now RIHSAC was set up in 1978 as one of a whole constellation of industry-specific industry advisory committees (IACs) which drew their membership from the two sides of each industry and whose agenda was the health and safety issues arising in their specific economic sector. They all operated under the wing of HSC, so the committees' titles simply referred to the industry rather than to the subject matter of their deliberations.

1987 Kings Cross fire and Fennell Inquiry

The horrific escalator fire at Kings Cross Underground station in 1987 resulted in a public inquiry which sat for several months and produced a long list of recommendations relating to the management of safety in general, and fire safety in particular, within the Underground environment. But it also raised some more general issues. London Underground (LUL) contested whether the 1974 Act (and the criminal sanctions which could be imposed for failure to comply with it) applied to public safety, rather than simply that of employees, and Fennell concluded that it should do so. The inquiry into this accident, like some of those into others which were to follow, was conducted by a lawyer and not (as would normally have been the case) by a railway inspector, because the effectiveness of the safety regulatory regime was itself one of the issues in contention.

1989 Clapham Junction accident and Hidden Inquiry

The Kings Cross fire was followed two years later by the multi-fatality collision near Clapham Junction, caused by defective signalling. The inquiry focussed on the management of safety-critical work and the supervision and testing of signalling renewals, but it also made recommendations about hours of work and about the development of automatic train protection. One of the items taken in evidence was the minutes of RIAC meetings, and the inquiry recommended that passenger representatives should be invited to attend RIAC

(originally just as observers) in recognition of the fact that unlike most industries, the railways invite the public at large onto their premises and may expose them to risk as a result.

1990 HMRI transferred to HSE

After a departmental review in 1990 the railway inspectorate was transferred both organisationally and geographically from a location within what was then DoT to one within HSE. Over time, this change was reflected both in the professional background from which its members were drawn and in the extent to which the approach to rail safety regulation was subsumed within the broader regulatory philosophy of the Executive – a development which was not universally welcomed within the industry and led to some on-going friction.

1993 Railways Act

The privatisation of the mainline rail network under this Act resulted not only in the fragmentation of British Rail (BR) into a host of new entities – the infrastructure operator (Railtrack), the train operating companies (TOCs), the freight operating companies (FOCs), the rolling stock companies ("roscos"), the infrastructure maintenance companies ("infracos"), etc – but also in the creation of new governmental agencies to oversee the industry. The Office of the Rail Regulator (ORR) came into being as the economic regulator, and the Officer of Passenger Rail Franchising (OPRAF) as the body responsible for awarding and overseeing the passenger franchises. One of the lines of attack mounted by opponents of privatisation was that the profit motive might cause the new commercial entities to compromise on safety, and the industry's record was the subject of high-level political concern, as evidenced by the report on *Railway Safety* from the House of Commons select committee on Environment, Transport and the Regions. So HMRI produced a report called *Ensuring Safety on Britain's Railways* which put forward a new and much more elaborate system for safety regulation, enshrined in the safety case and safety critical work regulations. All major operators would have to prove their fitness by submitting a safety case for approval, demonstrating their capability and commitment to delivering safety effectively, and all staff employed in safety critical roles would have to be licensed. Under the cascade model, HMRI was responsible for approving the safety case of Railtrack, the network operator, and it in turn was responsible for approving those of individual train operators. And to resolve the issue debated in the Fennell Inquiry, all existing rail safety legislation was brought within the scope of HASWA, thus making explicit the Act's application to public as well as occupational safety.

1997 Southall accident and Uff inquiry

The collision between a high speed train and a freight train resulted from a sequence of signals passed at danger (SPADs) compounded by an inoperative automatic warning system. The recommendations covered driver training, fault reporting, vehicle design, and accident investigations – the last of these being an issue because the inquiry had been delayed for two years by criminal proceedings.

1999 Railway Safety Regulations

HSE was keen to see the elimination of the less-crashworthy Mark 1 rolling stock, of the kind involved at Clapham Junction, the introduction of compulsory centralised door locking and sealed windows and the enhancement of existing signalling by the introduction of a train protection system, but it could not impose these requirements under HASWA as they did not pass the economic test of "reasonable practicability". So it spotted and seized the political opportunity presented by the arrival of a Deputy Prime Minister with departmental responsibility for transport. John Prescott was no fan of privatisation and was keen to be seen to be getting tough with the industry, so he was happy to sign the requisite regulations into law, notwithstanding the major cost implications.

1999 London Underground PPP

In 1999 Transport for London (TfL) was created as an agency of the newly established Greater London Authority, headed by a directly elected Mayor, but the Underground was not transferred to TfL's control until the government had put in place a public-private partnership (PPP) under which responsibility for maintenance and upgrading of the infrastructure had been hived off to private infracos.

1999 Ladbroke Grove accident and Cullen inquiries

The accident was a head-on collision between two passenger trains as a result of a SPAD, and led to two inquiries, one into the event itself and one into railway safety more widely. The Part 1 report dealt with signal sighting, driver training, crashworthiness, passenger protection and evacuation. The Part 2 report covered safety leadership and regulation, recommending that the regulator rather than the infrastructure operator be responsible for approving train operators' safety cases, that an industry-wide safety body be set up to be responsible for safety monitoring, research and standards, and that accident investigation be moved from the regulator to an independent agency. Cullen was not persuaded that the regulator's role should be removed from HSE (which had been advocated by all of the industry parties to his inquiry, as well as the unions and the passenger and survivor groups), but he stated that the HMRI should be placed under the direction of a new post, to be filled by a person of outstanding managerial ability, not necessarily with a railway background. There was also an inquiry into train protection systems, chaired jointly by Cullen and Uff, which recognised that the European Rail Traffic Management System (ERTMS) was the long-term solution but reaffirmed the Train Protection & Warning System (TPWS) rather than BR's prototype versions of automatic train protection (BR-ATP) as the better interim strategy – an "interim" which has proved to be much more prolonged than almost anyone foresaw at the time.

2000 Hatfield accident and demise of Railtrack

Whilst the Cullen inquiry was still sitting, the fragmentation of a rail under a train at Hatfield led to the imposition of temporary speed restrictions across the network, a spectacular fall in service performance and ultimately to the trial of Railtrack, its contractor and several senior managers for offences under HASWA (and in some cases for manslaughter, of which they were acquitted). But this experience had triggered what one senior industry figure described as a collective nervous breakdown in the company, and the following year it was put into administration by the government, to emerge in 2002 as a not-for-profit organisation rebranded as Network Rail, one of whose early actions was to bring responsibility for infrastructure maintenance back in-house.

2001 Strategic Rail Authority

Meanwhile OPRAF had been superseded by the Strategic Rail Authority (SRA), with a wider responsibility not just for franchise management but for increasing capacity and guiding the future growth of the mainline network. But the ORR remained in being as the economic regulator, with some consequent ambiguity in their division of functions.

2002-03 Alan Osborne

In pursuance of Cullen's recommendation regarding leadership of HMRI, HSE recruited a new rail safety director in the person of Alan Osborne, who had taken charge of safety at London Underground after the Kings Cross fire (in which capacity he had been a member of RIAC) and had subsequently gone on to occupy the same role at the British Airports Authority. But within 11 months he had quit, describing HSE as grossly inefficient and dysfunctional, blaming turf wars and infighting for the lack of progress in delivering some of Cullen's proposals. This brought back into the open the low-intensity warfare between the railways and their safety regulator which had already been exposed in the course of the Ladbroke Grove inquiry.

2003/05 RSSB and RAIB

The government and industry continued to work through the Cullen recommendations, with the Rail Safety & Standards Board (RSSB) coming into being as the industry-owned body set up to give collective leadership on safety issues and the Rail Accident Investigation Branch (RAIB) as the independent accident investigator.

2004 EU 2nd Railway Package

The European Union (EU) was now taking an ever more direct interest in railway issues, and in 2004 its 2nd Railway Package created the European Rail Agency and the framework of Technical Standards for Interoperability which has gradually superseded many of the bespoke national safety standards on the main line networks. It also mandated independent safety regulation and accident investigation, and a system of certification or authorisation for operators based on the ability to demonstrate that they have effective systems for risk identification and mitigation, and for safety management generally. It introduced common EU-wide safety targets, indicators and methods. This model was largely based on British experience during the previous decade, and was given legal effect here in 2006 in the guise of the Railways and Other Guided Transport Systems (Safety) Regulations (ROGS), which also formalised what had previously been an implied duty of co-operation between industry parties in safety matters.

2005 Railways Act

The SRA was John Prescott's creation and it did not long survive his loss of the transport portfolio to Alastair Darling, an ex-Treasury minister who took advantage of what he saw as SRA's failure to rein in Network Rail's ever-increasing costs and dependence on subsidy (a charge which may sound familiar) to secure its abolition and the return of most of its functions to Whitehall. At the same time HSE was stripped of its responsibility for the railways and ORR took over as their safety regulator, more than doubling the headcount of the organisation in the process.

Since then the institutional architecture has been comparatively stable, apart from internal restructuring within the Department for Transport (DfT) and the railways' improving safety record (particularly the absence of fatal train accidents) has kept this aspect of their performance out of the headlines and off the political agenda. But there have been other developments of note.

2010 End of Underground PPP

Flaws in the contractual matrix, and the misalignment of the objectives of the contractors with those of LUL, meant that the PPP model was always problematic and by 2010 TfL had bought out both of its infracos and taken their work back in-house.

2012 Red Tape challenge

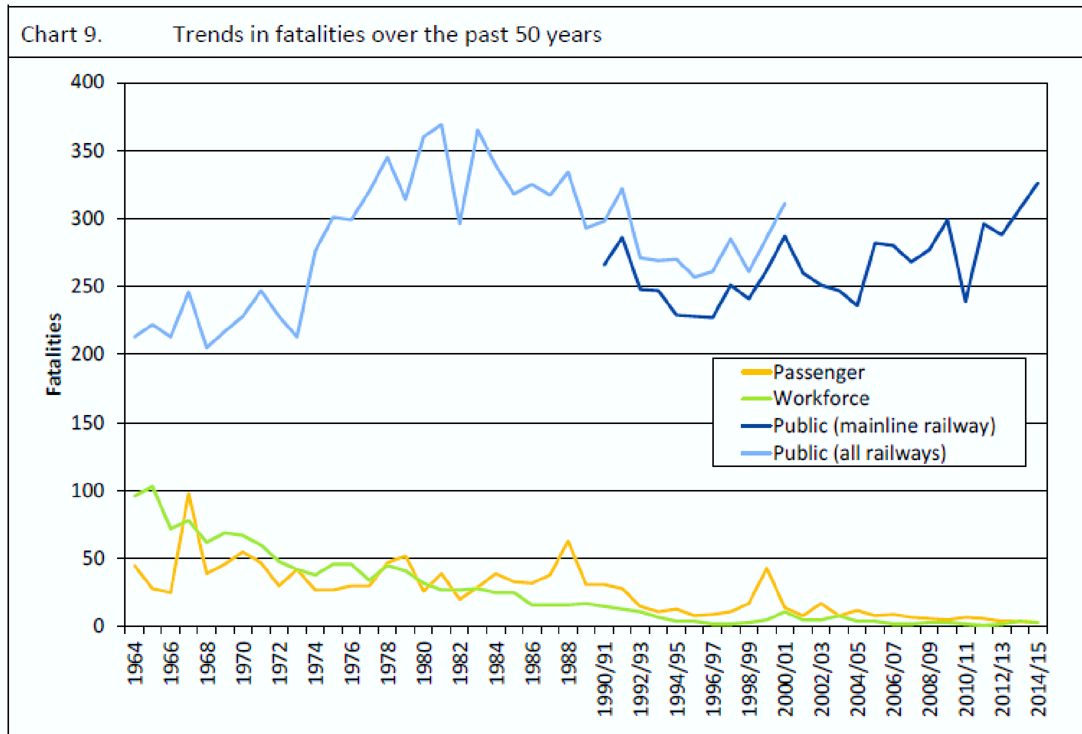
This was the centrepiece of the coalition government's attack on the alleged burden of over-regulation, but as far as railway safety was concerned, the response was a vindication of the status quo, with no discernible demand for change, and ORR offering only the token sacrifice of the 1999 regulations which had by now served their purpose.

2013 Law Commissions' report on level crossings

This was the product of a long-running review initiated at the prompting of ORR, which has set out an agenda for the long overdue modernisation of the legal framework governing this element of the road/rail interface. It now awaits parliamentary time.

Trends in safety performance

There is an ancient Chinese curse, “may you live in interesting times”, and I think that this brief gallop through four decades of constant institutional upheavals and policy reversals could well lead to the conclusion that the railways have indeed been cursed. But what we must not lose sight of is the fact that hour by hour, day by day, out there on the network, tens of thousands of railway men and women have been working tirelessly to understand and to control the risks to which railway operation can expose both the public and themselves, and that over time the data demonstrate that this challenge is one that they have been meeting with ever-growing success.



You’re all familiar with this chart, but it is still a remarkable fact that whereas 50 years ago the rate of passenger fatalities on the main line railways was running at roundly one a week, and of workforce fatalities at two a week, both are now down to low single figures in a year, in a period when usage of the network has doubled. The chart doesn’t include metros or light rail or heritage lines, or indeed non-fatal casualties, but if you added them in, the overall trends would not change hugely. In the 1970s, there were an average of four fatal train accidents a year. It is now eight years since there has been one. The tragedy is that the trajectory of the blue lines, i.e. the fatalities arising from public behaviour, principally trespass and suicide, has more often been up rather than down, and these are now close to one every day – a fact which excites virtually no media or public debate.

Composition of RIHSAC

Throughout these four decades, RIAC – now RIHSAC – has been a continuing presence. It was noteworthy that in all the debates that have taken place about how and by whom railway safety should be regulated, the one point on which all the various parties have agreed was that RIAC should continue. But that does not mean that it has not evolved over time. In 1978 it had eight members, four nominated by the Confederation of British Industry (CBI) and four by the Trades Union Congress (TUC), reflecting the corporatist structure of the HSC itself. The CBI members were three from BR and one from LUL. The TUC members were one from the TUC and three from the rail unions. But there were also several observers, always including the doctors who headed the BR and LUL in-house medical services, as well as various HSE officials. The Chair*man* was the incumbent Chief Inspecting Officer.

In 2015 it has grown to 19 members and six observers. The same unions are here, though two have changed their names, as is London Underground. And the representatives of the Association of Train Operation Companies (ATOC), the infracos, Network Rail, the freight operators, RSSB and the roscos are all drawn from what were once constituents of BR. But now the industry membership has widened to include UK-Tram, the Heritage Railways Association, the Railway Industries Association and HS2. The consumer voice is heard in the guise of London TravelWatch and Transport Focus, plus a couple of co-optees drawn from the travelling public at large. The British Transport Police and the Parliamentary Advisory Council on Transport Safety are here as observers, as are the DfT and its three counterparts in the devolved governments. The (now gender-neutral) Chair is a board member of ORR, an arrangement which maintains the practice introduced by the HSC in the aftermath of the Cullen inquiry.

Terms of reference

In 1978 its terms of reference were relatively succinct : "to consider and advise the HSC on the protection of people at work from hazards to health and safety arising from their occupation within the railway industry" although interestingly they also included "the protection of the public from related hazards arising from such activities", even though public safety made few appearances on its agenda in the early days.

Today its scope is wider (or possibly just more wordy) :

- To advise ORR on developing and implementing its strategy for improving standards of health and safety in the rail industry and protecting passengers, people at work and the public from related hazards
- To provide informed comment to ORR on its proposed advice and guidance to the rail industry arising from ORR's strategies and policies
- To encourage the participation of representative organisations in the protection of people from hazards to health and safety arising from the operation of railway services
- To involve all those with an interest in health and safety on Britain's railways in the work of RIHSAC.

Status of proceedings

In 1978 all of its papers were marked "members in confidence". Today, they are all on the internet.

Subsidiary bodies

At one time or another it has had standing sub-committees – for occupational health, for freight, for human factors, for safety critical work, for the prevention of trespass and vandalism, and for communications and research. Some of these held conferences and/or produced good practice guides, a role which has since largely been taken up by RSSB and/or ATOC, so that while today its rules still provide for there to be working groups, there have been none for some years. For a while, RIAC experimented with public meetings around the country, though it found it difficult to identify and reach its target audience, and some of the meetings were targeted by pressure groups, such as angry train drivers and even angrier Scottish ramblers.

Topics of concern

Has the focus of its deliberations changed? In some respects yes – in its early years it was very preoccupied with trackside safety, with driver stress, with electrification and with violence to staff, all of which remain important topics, but no longer dominate the agendas. Some issues have arisen as the result of accidents and the ensuing inquiry recommendations – such as fire safety, train protection, rolling contact fatigue, and the integrity of the infrastructure. Some have been driven by changes in the regulatory regime and the industry's structure, such as safety cases, ROGS and the rules governing the carriage of dangerous goods. Some have emerged onto its agendas as RIHSAC's remit was extended to embrace non-

occupational elements of safety, such as crowding, trespass, vandalism, suicide and the road/rail interface. And some have always been there, but have emerged to take centre stage as other greater risks have been more effectively managed.

So, as technical and operational advances have brought SPADs, or vehicle crashworthiness, or fires, or track defects, or road vehicle incursions under more effective control, so the focus of concern has shifted towards what were once regarded as residual issues such as road accident risks to railway employees, or slips, trips and falls, or the platform-train interface. And it's certainly possible to point to a number of issues which have been first raised here at RIHSAC and then taken forward by ORR and the industry, of which freight train derailments and the safe management of passengers at times of disruption are recent examples. What distinguishes the topics on today's agendas is the absence in some cases of obvious (or, at any rate, "reasonably practicable") engineering solutions, and consequently an increasing need to understand the human factors in play here in order to bring about behavioural change – which is often required on the part of people who are not under the railways' direct command.

Taking stock

I was not a founder member of RIAC, but I can claim to have attended about three quarters of its meetings. It's been a privilege to know and to have worked with so many outstanding and able personalities from all parts of the industry, among them seven successive chief inspectors (of the 23 there have been), including in Linda Williams the first of – hopefully - many female holders of that office, in a shared endeavour to maintain and to enhance the railways' safety performance during times of constant organisational, technical, financial and political challenge. It's impossible meaningfully to quantify the specific contribution to this outcome of any individual body, but I'm confident in my own mind that the well-informed, frank, and mutually respectful exchanges which have taken place around RIHSAC's tables have made a positive contribution to the vastly improved and still improving safety performance which we've witnessed. The breadth of experience amongst its members, and the openness of its discussions, give this committee a unique and invaluable role in exchanging knowledge and advancing understanding.

Of course, we don't always agree about everything, as the next item on our agenda this afternoon will almost certainly prove. But when there are differences of view amongst us, they are about methods and trajectories and means and priorities, not about our direction of travel or the ultimate goals on which we are agreed. If there were no such differences, there'd probably be little point in our meeting, for as John Milton wrote in *Areopagitica,* his treatise on free speech*,"where there is much desire to learn, here of necessity will be much arguing, much writing, many opinions; for opinion in good men is but knowledge in the making."*

I'd like to finish with another quotation, this time from the minutes of RIHSAC (or as it then was, RIAC) itself. On 20 November 1992, at their thirty first meeting, the members said farewell to Robin Seymour, the departing chief inspector of the day, and the first holder of that office who was not retired army officer. In fact he described his previous occupation as a signalman, though on closer investigation this turned out to mean that he'd been a national serviceman in the Royal Corps of Signals. Paragraph 17.2 of the minutes records that *"Mr Seymour replied that chairing RIAC had caused him more trepidation than most activities, due to the excellent quality of the membership. He felt confident that members would continue to accord his successor a high level of not uncritical support."* I think that according the inspectorate "a high level of not uncritical support" is a duty which we can fairly claim to have fulfilled over the subsequent 23 years, and I'm confident that it's a challenge to which RIHSAC will be equally well equipped - and equally eager - to rise in its next one hundred meetings, to which I know that all of you, like me, are now keenly looking forward.

JC 12.10.15