



Rail Safety & Standards Board

# INFORMATION BULLETIN

## Railway Strategic Safety Plan 2008 -10



The 2008 -10 plan will be published towards the end of January 2008. The plan maintains the structure of the current 2007 - 09 plan by again focusing on key risk areas and the production of industry trajectories and gives an industry wide perspective of safety initiatives being taken by train operators and Network Rail. A significant

development has been the production for the first time of quantified trajectories through the aggregation of individual company plans and the specific actions which duty holders intend to take to mitigate risk associated with their operation.

The plan also takes an initial look at how the industry might expect to perform in terms of meeting the DfT's High Level Output Specifications (HLOS) for safety and concludes that there should be confidence that they can be achieved.

Copies of the plan will be distributed to all duty holders on publication and it will also be available to download from [www.rssb.co.uk](http://www.rssb.co.uk)

## Train driver licensing

The European Directive on the certification of train drivers (2007/59/EC) was published in the Official Journal of the European Union on 3 December 2007 and member states now have two years to transpose the Directive into national regulations. The requirements of the Directive will be phased in and it requires all drivers to hold a two part licence: one part with validity across the European Union covering general aspects of train driving competencies and health issues and a national certificate specifying the routes and types of rolling stock the holder is authorised to drive.

The licenses will initially be introduced for drivers employed on cross border operations but the Directive includes a provision for a member state to apply for a derogation for drivers operating exclusively on the territory of that member state if a cost benefit analysis shows that the costs of applying the provisions outweigh the benefits.

An industry group has been established to work with the DfT and ORR in developing and implementing the UK regulations and the DfT will formally request that the European Commission undertake a cost benefit analysis for 'domestic' drivers.

For more information contact **Graham Arkwright**, senior policy adviser on 020 7904 7963 or email [graham.arkwright@rssb.co.uk](mailto:graham.arkwright@rssb.co.uk)

## Retirement – Ray Ford



Ray Ford, who worked as a Rolling Stock Engineer at RSSB retired from the industry on 11 January 2008 after completing 46 years railway service. Ray started an apprenticeship at Derby Locomotive Works before he became interested in the design of

wagons and passenger vehicles and moved to work at the Railway Technical Centre in Derby. Here, Ray worked on various types of rolling stock including two generations of Royal Trains where he specialised in air-conditioning system design. Other projects included the specification and design scrutiny of Eurostar trains. While at RSSB, Ray has brought his broad knowledge and expertise to the Vehicle Acceptance process, drafting Railway Group Standards and acting as the technical specialist on the recently published crashworthiness and passenger containment research.



## Standards News

### Publications and Withdrawals in the Railway Group Standards Catalogue

Please note, December saw a large number of new, updated and withdrawn standards added to the Railway Group Standards Catalogue.

For more details on these changes to standards, please refer to the 'What's New' and 'Briefing Note' sections at [www.RGSONline.co.uk](http://www.RGSONline.co.uk) or contact **Marie Marks, head of standards management** on **020 7904 7588** or email [marie.marks@rspb.co.uk](mailto:marie.marks@rspb.co.uk)

Got an issue with a Railway Group Standard?  
Call the **RSSB Enquiry Desk** on **020 7904 7518** or  
email [enquirydesk@rspb.co.uk](mailto:enquirydesk@rspb.co.uk)

## What does the future hold?

What are the challenges that lie ahead for the rail industry to address, to stay nimble-footed and sustainable in the face of social, technological, environmental, economic, political and organisational change? No one has a genuine crystal ball, but industry strategy will be much better informed by findings of RSSB research project T713 *Foresight studies and futures planning for the rail sustainable development strategy*.

Scenarios and futures work are based on the principle that there are forking paths into the future, not just one track. There are inflection points which lead to multiple possible future worlds. It is designed to help people take a different view of the choices facing them now, and to make better long-term decisions as a result. It should improve strategy when the future seems complex or uncertain.

Forming part of the Sustainable Rail Programme, the work was facilitated by RSSB's sustainable development specialists, who also enlisted the expertise of Henley Centre HeadlightVision (HCHLV), consultants with an unrivalled knowledge base of global trends.

Four potential scenarios of the future have been developed with major rail industry stakeholders using a range of proven futures techniques, including a series of intensive workshops attended by senior representatives

from Network Rail, train and freight operating companies, suppliers, ROSCOs, as well as the Office of Rail Regulation (ORR), and the Department for Transport (DfT).

The question asked in the research was: *'What are the potential futures for the rail industry which will affect its operating environment and therefore its ability to deliver a sustainable industry between now and 2040?'*

In anticipation of the final report which will explore the strategic implications of the scenarios, expected in the next three months, a brochure has been produced to communicate the scenarios and flag the strategic questions for consideration. The scenarios highlight the different challenges faced, depending on whether there are more or fewer people travelling, and on whether the transport outcome for society is led more by a specific policy agenda, or influenced more by market forces. The need for action to avert significant climate change is assumed across all scenarios.

For example, in one scenario, affectionately labelled, "Gold Stars", a range of challenges are described for a future influenced by the market and where more people are travelling. In this world, the challenge to rail is to convince Government advisors that it performs well against "carbon and resource use measurement protocols" and so can deliver the most public and social value sustainably. The risk here is that potential lack of united action within the rail industry could lead to competing modes stealing political ground. For example, the automotive sector could potentially "wow" decision makers with great strides on low emission technologies.

In another scenario, "Cloud Zero", rail confronts a different set of tests where the outlook is defined by a clear integrated transport policy involving less travel. In these circumstances, people are constrained by a carbon allowance, forcing them to make choices about activities which come at a financial and a carbon price – including transport. Here, business relies increasingly on telecommunications rather than travel, but rail still sees some demand as a low-carbon means of transport. In particular this leads to a big increase in freight travelling by train, rather than road-based HGVs.

Clearly the findings do not represent cast iron predictions of the future or policy prescriptions. But they do present a range of challenges that might be met along the road to sustainability.

This work will feed into further work for the Sustainable Rail Programme; in particular, the development of the rail sustainable development strategy. The scenarios themselves however, offer an excellent stand-alone tool for individual organisations wishing to explore drivers of change across the spectrum of certain versus uncertain and high versus low impact.

For more information or a copy of the Sustainable Futures brochure, contact **Joanna Gilligan, programme manager, sustainable development** on **020 7904 7655** or email [joanna.gilligan@rspb.co.uk](mailto:joanna.gilligan@rspb.co.uk)



## Railway Industry Supplier Approval Scheme (RISAS) Update

At the request of the RISAS Board, RSSB has commenced a structured engagement project with individual passenger and freight operators, ROSCOs, infrastructure contractors and Network Rail. The purpose of the project is to secure the commitment of all Safety Management System (SMS) holders to recognise RISAS certified suppliers in their supply chain management systems. The project will commence with structured interviews with the Engineering Director, Procurement Management and Safety Manager of each train and freight operator where the opportunity will be taken to explain operation of the scheme, understand issues and opportunities for improvement.

The ORR have also recently confirmed their intentions to undertake a planned inspection programme of SMS holder arrangements for management of new rolling stock supply chain including application of RISAS. To help inform the HMRI field inspectors and their teams who will be validating this programme, RSSB and members of the RISAS Board will be undertaking a series of regional bookings for HMRI Inspectors.

At the request of the ORR, the RISAS Board is to develop proposals for the scheme to be extended to cover certification of Level 4 and 5 train maintenance depots. It is expected that the European Union is going to require the national safety authorities of member states to develop suitable schemes for certification of such depots in 2008.

The three main European system integrators (train manufacturers) have sponsored the development of a supply chain accreditation system called IRIS. The scope of IRIS is suppliers of new build products and equipment. The IRIS accreditation system isn't 'independent'; however the Board of RISAS has established a close dialogue with the IRIS working group to see what synergies can be gleaned.

Extensive recent dialogue with suppliers, SMS holders and the ORR has revealed confusion and concern over the variety of different supplier qualification and accreditation systems employed by the industry. At the request of all RSSB members, the Board of RISAS are

developing with all main stakeholders, proposals for a simpler and more efficient supplier accreditation architecture. Once developed and agreed by the RISAS Board, these proposals will be submitted to a future meeting of the RSSB Board for endorsement.

For more details contact **John Abbott, director of national programmes** on **020 7904 7689** or email [john.abbott@rssb.co.uk](mailto:john.abbott@rssb.co.uk)

## Road/Rail Interface – RSSB Board paper and Special Topic Report

Road rail safety risk is dominated by level crossings and incidents at these locations account for the third largest group of fatalities on the railway - after suicides and trespass. Responsibility for management of road rail risk is shared between the rail industry and highways authorities, with Network Rail being the lead rail industry duty holder. Much work has been undertaken in recent years by Network Rail supported by RSSB to mitigate risk at level crossings, bridges and incursion sites, however the potential remains for infrequent but high consequence incidents between trains and road vehicles.

The RSSB Board has recently considered the road rail risks and overall arrangements for their management through one of its 'strategic agenda' papers. The paper, which is published on the website defines the current risk profile, reviews safety and train performance, discusses factors which influence the risks and summarises recent and planned risk improvements initiatives. It features input from Network Rail and other key stakeholders including the Office of Rail Regulation (ORR) and trade unions.

In support of industry safety managers, a more detailed Special Topic Report on the road/rail interface has also been published on the RSSB website.

To view the RSSB Board Paper see  
[http://www.rssb.co.uk/publications/board\\_discussion/road\\_rail\\_interface.pdf](http://www.rssb.co.uk/publications/board_discussion/road_rail_interface.pdf)

To view the Road/Rail Interface Special Topic Report see - [http://www.rssb.co.uk/pdf/reports/road-rail\\_interface\\_spr\\_full.pdf](http://www.rssb.co.uk/pdf/reports/road-rail_interface_spr_full.pdf)

## New Board Members

RSSB welcomes two new members to its Board. Paul Kirk has been appointed to represent the Infrastructure contractors taking over from Peter Hutchinson and Keith Heller represents the Non-Passenger TOC community taking over from Stuart Boner.



## Paul Kirk

After a career of 25 years in the motor industry during which time Paul held a range of positions including Managing Director for a number of manufacturing operations including Longbridge and Cowley, he moved into the Rail sector.



In 1999 Paul became the Managing Director of joint venture business GTRM Ltd maintaining c. 25% of the UK's rail network and subsequently led the development of a large Rail Projects business for Carillion plc. He took on additional responsibilities to manage Carillion's road maintenance and projects business which included responsibility for maintaining large motorway sections including M25, M11, M40 and M62 with their surrounding trunk road networks. After 32 years in very demanding 24/7 operational roles Paul left Carillion in 2006 to pursue a career of non-Executive positions and Consultancy work within the Transport sector.

His current responsibilities include: Chairman of National Rail Contractors Group, Non-Executive Director of Redhall Group plc, Non-Executive Director of Develop Training Ltd., and Non-Executive Director of RSSB. In addition Paul has provided Consultancy support for the Rail and Highways Industry.

## Keith Heller

Keith Heller is a railway professional with more than 40 years experience. His railway career commenced when he joined Canadian National Railways (CN) in 1966. Over the next 20 years his railway career was focused on Operations, Customer Service, IT and Marketing, while contributing to improvement in the reliability and efficiency of CN's operation and development of its people.



In 1995, the year CN was privatised, he was appointed CN's Senior Vice President East where he revitalised an unproductive and under-utilised territory, significantly reducing infrastructure and other costs. From there he moved on to take overall responsibility for operations within North America. During 1999 Mr Heller became Senior Vice President, responsible for operations and sales, for CN's Eastern Canada Division, a diverse and complex area involving ocean ports and border crossings in a comprehensive east/west, north/south network.

In 2001, CN purchased Wisconsin Central Transportation Corporation, a North American railroad,

and in the process acquired an interest in UK based English Welsh & Scottish Railway (EWS). Mr Heller became an EWS Board Member in March 2002 and joined EWS as Chief Executive in January 2004. During his time at EWS he has developed the freight business and created two subsidiary companies – Euro Cargo Rail to develop European business opportunities (the first commercial service ran in May 2006) and Axiom Rail, a trading and brand name for EWS rolling stock services of refurbishment, leasing, maintenance and suspension system solutions.

In November 2007, EWS was purchased by Deutsche Bahn (DB), the German railway company. Keith Heller remains as Chief Executive of EWS and its associated companies.

## Train Protection and Warning System (TPWS) Panel Design Trials

The industry has achieved around a 90% reduction in the risk from Signals Passed at Danger since 2001, largely through the implementation of the Train Protection and Warning System (TPWS). Although TPWS performance has exceeded its design target, 'TPWS reset and continue' events represent a remaining risk that the industry is conscious of and seeking reasonably practicable ways to reduce. There have been 27 such events occurring since the installation of TPWS. A number of initiatives have been introduced in order to reduce the likelihood of reset and continue events and the current rate at which they occur is at a significantly lower level than a year ago.

One possibility being considered is, a redesign of the in-cab TPWS panel under RSSB research project T725. The aim is to improve the clarity of the indications – both visual and audible – that the driver receives following brake interventions, whether due to passing a signal at danger, going too quickly across over-speed sensors or being late to acknowledge the AWS horn.

The potential TPWS panel designs are being trialled with all types of qualified train drivers, in order to:

- test performance – ie measure by how much the designs reduce the likelihood of human errors and violations
- obtain feedback from drivers (which may also help with planning implementation of any new designs)

During December, 24 drivers from all types of train operator throughout Britain took part in the trials; many thanks to everybody who enabled this!

The trials are being hosted by South West Trains' simulator centre in Basingstoke. RSSB's Human Factors



team, is now planning to trial further designs, using up to another 30 drivers during March this year.

The report – which will compare the human error rates associated with the different panel designs – will be submitted to the ATOC-led, 'TPWS in-cab modifications working group' at the end of March.

The results of these trials will be an important factor in the Train Operator's decisions about future improvements to TPWS.

For further information please contact **Gaynor Pates, research manager** on **020 7554 4607** or **gaynor.pates@rssb.co.uk**

## Research scores football fan management goals

Train operating companies and the football industry has teamed up to address fan management on the railways, applying the findings of recently published RSSB research.



Every football season, there are over 3.5 million rail journeys solely for the purpose of attending football matches. The behaviour of football fans has a considerable impact on medium and long haul train services, rail staff and other passengers. Train operating companies (TOCs) are regularly faced with the difficulties of managing the violence and abusive behaviour associated with a small but significant minority. Whilst much effort has gone in to controlling the problem, many front line managers and rail staff believe the risk has grown in recent years.

In response, T592 *Management of football fans on the railway*, facilitated by RSSB in conjunction with the Association of Train Operating Companies (ATOC) aimed to gain a greater understanding of the problem and associated safety risks created by football fans travelling on the railway, identify effective control initiatives to reduce the risks and gain greater understanding and support from external agencies.

The research found that there is good range of initiatives already underway, mostly involving TOCs and the BTP, but independently of football clubs and the fans themselves. These have led to a reduction in serious incidents but have been less effective in controlling 'opportunistic' crime and anti-social behaviour fuelled by

high levels of alcohol consumption. It is this opportunistic crime which is fuelling the rate of increase in football-related incidents – much greater than the rate of increase for all other types of incidents, with a 63% increase recorded in the number of staff abuse/assault football-related incidents from 2003-2004 to 2004-2005 against 8% for all other types of staff abuse/ assault incidents.

Applying the research findings, the rail industry has established two key bodies, to bolster partnership between the railway and football spheres and to oversee the ongoing development of solutions to address fan management:

- **Rail Football Forum (RFF)** – a high level forum at which the railway industry has a voice and can develop joint strategies with the Football Association, football leagues, the police, and fans groups, to develop joint strategies for dealing with football fan management issues, and to endorse and oversee individual working groups' action plans and outputs. The group is chaired by the FA and also involves the Premier League and the Football League. Members include ATOC, five individual TOCs, EWS, Network Rail, the Football Supporters' Federation (FSF), the Association of Provincial Football Supporters Clubs in London (APFSCIL), British Transport Police (BTP), the UK Football Policing Unit and the Home Office.
- **Train Operator Football Alliance (TOFA)** – an alliance between TOCs and Network Rail who are affected by anti-social fan behaviour. TOFA represents a united voice for the industry to the RFF, presenting good practice and improves the industry's lobbying position with external agencies, including voicing passenger and fan concerns. The group is chaired by ATOC, and members include individual TOCs, EWS, Network Rail, BTP, Passenger Focus and RSSB.

Following meetings of the RFF and TOFA, workstreams have now been established, which are now being project managed by RSSB's National Programmes team. The workstreams for 2008 include:

- Improvements to working and monitoring arrangements for football incidents
- National Protocol for information sharing
- Fan Behaviour Charter
- National Strategy for dealing with problem fans
- Ensure safety risks taken into account for match fixtures
- Improvements to information flow between Rail and Football/Fans
- Provide updates of rail travel schemes
- Exploring mutually beneficial travel scheme initiatives
- Home Office Policy on BTP Charges for football

For more information on developments in this area, contact **Maurice Wilsdon, head of national programmes – railway operations** on **020 7904 7510** or email **maurice.wilsdon@rssb.co.uk**



## Events

Date	Name of event	Location
19 March 2008	Community Safety Forum	The National Motorcycle Museum, Birmingham
3 - 4 July 2008	Risk Management Forum See Flyer	Nottingham University

For more information contact **Stella Okezie, conference manager** on **0207 904 7934** or email **stella.okezie@rssb.co.uk**

## Spotlight

### RSSB and First Group corrects Transport Times on containment

Working with our industry partners our purpose is to:

- Continuously improve the level of safety in the rail industry
- Drive out unnecessary cost
- Improve business performance

To achieve this, RSSB calls upon a wide range of disciplines and skill-sets, exploiting in-house expertise and research to provide powerful information and risk management tools to support the rail industry with enhanced company and collective decision-making capabilities.

One aspect of RSSB's work is communication – to bring members together to realise the benefits and value-for-money delivered to their businesses and operations. This includes collaborating with industry players on key messages, and pre-empting any public criticism of industry's decisions.

This kind of communications work and industry collaboration proved invaluable when *Transport Times*'s recent coverage of the research on containment in train accident scenarios contained many misleading and critical claims – directed at RSSB and First Great Western. (RSSB report was published in July 2007, and noted in *Information Bulletin* 104).

The conclusion of this research was that the industry should consider progressive fitting of laminated glass to older train fleets, and the introduction of a revised

approach to escape, where passengers are discouraged from using windows, and emergency hammers are withdrawn.

However, *Transport Times* gave a somewhat cynical and scaremongering view of the rail industry's strategy, and suggested RSSB should effectively force train operating companies into introducing across-the-board laminated glass in all fleets with immediate effect.

First Group was one of the TOC-owning companies which actively participated in the research, and through its close association with the 2004 Ufton Nervet accident which was caused by a suicide, was also the target of negative remarks about their containment strategy.

Such an article cannot go unanswered, particularly as it paints a misleading picture of what RSSB has researched, and can affect the overall reputation of the rail industry, including TOC owners such as First Group.

Both RSSB and First Group wrote to *Transport Times*, and both responses were published in December's issue, making the following points:

- The research showed that laminated glass provides significantly better containment protection in accidents, and that progressive replacement of breakable toughened glass is recommended.
- An industry-wide consideration of standards change, including the mandating of the fitment of laminated glass, will take place in 2008 after the RAIB report into the Grayrigg accident is published. The report could provide valuable intelligence relating to the issue of passenger containment
- First Group's plan to fit laminated glass to its HST fleet arose through its active engagement in the research and a subsequent Board decision as part of its refurbishment programme and was not 'a belated response to the Ufton Nervet inquest' as the article alleged
- Clarification that RSSB is not a safety regulator and that our role is to facilitate the cooperation and industry decision-making (our members) through a publicly available code and set of criteria which can be found on our website – [www.rssb.co.uk](http://www.rssb.co.uk)

Having set the record straight, the editorial team and readers of *Transport Times* will have a more accurate impression of the containment research and what it means going forward. For more information contact **Matthew Clements, industry communications manager** on **020 7904 7593** or email **matthew.clements@rssb.co.uk**

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**[www.rssb.co.uk](http://www.rssb.co.uk)**