Road driving risk

The rail industry recognises the significance of road driving risk to its workforce and is seeking to improve its controls.

Estimates suggest anything between 25 and 40% of road traffic incidents involve work-related journeys, which would be equivalent to between 475 and 760 work-related driving fatalities a year. Compare that with 173 work-related fatalities in total recorded by HSE in 2010-11 across all work sectors, and which do not include road traffic events.

A dedicated cross-industry steering group has already started to research the broader issue through RSSB, and Operations Focus Group (OFG) has sponsored new research looking in particular at managing occupational road risk associated with road vehicle driver fatigue (project reference T997), which has just been published.

A RSSB survey to better understand road driving risk across a representative sample of employers identified 500 road traffic collisions, 100 injuries and 5 fatalities in one year. These figures, compared to data in the industry’s Safety Management Information System (SMIS) for the same period, showed under-reporting. There are likely to be at least 75,000 road vehicles linked to the rail industry. This includes use by mobile operations managers, maintenance teams and contractors. Staff may need to travel from job-to-job early in the day or late at night, depending on the task in hand, and to access very particular areas of the infrastructure, depending on engineering schedules and incidents that occur.

The research has led to the development of good practice guides for managers and rail staff to help improve the management of occupational road risk associated with road vehicle driver fatigue.

The new resources build on the recently-issued briefing DVD, RED 35, which featured a dramatisation of a road traffic accident caused by the fatigued rail worker involved.

You can subscribe to Information Bulletin on the RSSB website.
http://www.rssb.co.uk/publications/pages/informationbulletin.aspx

For details of changes to Railway Group Standards view the Latest Updates page on the RGS Online website www.rgsonline.co.uk

For details of forthcoming dates for RSSB consultations on standards and associated documents, please see:
http://www.rssb.co.uk/SiteCollectionDocuments/pdf/rgs/Forthcoming%20consultations.pdf

Front page photo: Image courtesy of Network Rail
The DVD programme prompts specific questions for managers to ensure that the potential for road vehicle driver fatigue is incorporated into job design, rostering, work risk assessments, and travel planning for work.

New guidance to help staff and their managers identify the risk from fatigue when driving and how to recognise the warning signs and cope with this issue is now available, as are reminder sheets for staff to keep in their vehicle and an awareness-raising poster to put up in canteens, foyers and mess rooms. These all include references to the issues as well as graphics and imagery used in RED 35 to help people make the connection.

Beyond T997, RSSB has been tasked with developing a dedicated area on the RSSB website for the rail industry to access specific, relevant information on managing road driving risk and help raise awareness. This will aid embedding of work-related driving risk controls into safety management systems, and boost legal safeguards as well as rail staff safety.

For more information, contact RSSB – enquirydesk@rssb.co.uk

RSSB Strategic Review

The RSSB strategic review is progressing on two fronts. A draft strategic business plan for the period 2014 to 2019 is being prepared by the Board for consultation with members and stakeholders, commencing later in June, and the internal process to identify appropriate changes is now well under way. The business plan will show each of RSSB’s products and services against the appropriate Stakeholder group, and against each of RSSB’s functions. The different ‘functions’ were established in the earlier consultation which was completed in January.

At the same time many of the major stakeholder groups that RSSB facilitates are making adjustments to equip themselves for the future and this is likely to impact on the support that RSSB will offer to them. In the light of the challenges and opportunities facing the industry going into the next round of Franchising and Network Rails’ control period 5, RSSBs plans will show what support RSSB provides at the commencement of the plan period, together with the means by which these can be changed according to developing industry priorities. It will also identify the baseline for what is intended to be a five year funding settlement.

New Train Driver Selection Standard approved for publication

A new issue of RIS-3751-TOM Train Driver Selection has now been approved by the Traffic Operations and Management Standards Committee and will be published in June 2013.

This rail industry standard (RIS) is relevant to all organisations who employ train drivers and who perform selection assessments for the recruitment of train drivers. It specifies a selection process that includes core safety critical selection criteria and recommended methods for assessing these criteria. The selection process has been updated to provide a more comprehensive process that is clearly compliant with the requirements of the Train Driving Licences and Certificates Regulations 2010. The new process has been through a rigorous cross-industry evaluation and there is strong statistical evidence in the report to show it is an improvement on the current process.

The new assessment process should be used by all employers of train drivers to provide confidence that they are all assessed in a consistent way and reach the same minimum standard. This RIS has an ‘implementation date’ of 30 September 2013 which is intended to provide employers and assessment centres with enough time after publication in June to get ready to use the new process and to avoid a situation where different companies are using different processes.

RSSB is currently working with Rail Assessment Centres to assist with the transition to the new process.

Further detailed information can be found at: http://www.rssb.co.uk/SiteCollectionDocuments/rgs/Psychometric-assessment-FAQ.pdf or contact assessment@rssb.co.uk with any questions.
What kinds of standards are also used: circumstances is required by law being referenced and are prefixed expected to be beneficial using a common standard.

RSSB has to date published eight leaflets in the series of leaflets entitled ‘Tell me about …’ standards. These leaflets have been produced to help improve the rail industry’s understanding about standards and the rail industry.

Three further leaflets in this series will be published shortly on the following topics:

The Rule Book
This leaflet explains what the Rule Book is, why it is mandatory and who must comply with it, how to apply for a deviation from a rule or rules, how to get a printed copy of the Rule Book modules, handbooks, amendments and updates and how the Rule Book is managed.

This leaflet may be of particular interest to rail industry staff who carry out operational duties and their managers, or people whose work involves the management of standards. It may also be helpful to organisations who are involved in providing support (such as training) to the rail industry.

Rail Industry Standards
This leaflet explains why the rail industry has Rail Industry Standards (RISs), their purpose and who can use them, how to propose the development of a new RIS or a change to an existing RIS and how to deviate from a RIS.

This leaflet may be of particular interest to people who manage projects or operations in the rail industry, rail industry staff whose work involves the management of standards and suppliers, manufacturers or maintainers of railway components, subsystems and vehicles.

National Technical Rules for the GB Mainline Railway
This leaflet explains what National Technical Rules (NTRs) are, why they are required, how they relate to Technical Specifications for Interoperability (TSIs), the type of requirements they contain, how NTRs are notified to the Department for Transport and where they can be found.

This leaflet may be of particular interest to people who manage projects in the rail industry, rail industry staff who use standards and suppliers, manufacturers or maintainers of railway components, subsystems and vehicles.

Copies of the three new leaflets will be sent to key rail industry stakeholders for distribution in their companies and will be published on the RSSB website.

Requests for copies of the three new leaflets can be sent to standardsleaflets@rssb.co.uk.

Feedback on the content of the leaflets produced so far would be welcome at the address above. Further leaflets will be published in the coming year. If there is a topic you would like included in this series please let us know.

The ‘Tell me about …’ leaflets on standards can be viewed on the RSSB website
http://www.rssb.co.uk/standardsrailindustry/Pages/default.aspx

Special topic report: Risk from animals on the line
There has been a rise in the number of incidents where trains strike animals over the last ten years. What does this mean for industry?

The cross-industry Operations Focus Group (OFG) asked RSSB to prepare a special topic report on the risk from animals on the line, and this has just been published on the RSSB website.

Recent and historic accidents are a reminder of both crucial improvements to train crashworthiness and the importance of understanding the risk posed by animal strikes.

The most recent fatal incident in Britain occurred at Polmont in July 1984, where a train struck a cow, and ultimately derailed, resulting in 13 deaths and 14 major injuries, including the train driver.

The learning from that accident led to a review of railway fencing, new driver-to-shore communication systems and a change in the Rule Book to mandate reporting of animals within the railway boundary or which could cause problems. It also led to research into obstacle deflectors, particularly for ‘push-pull’ trains which were operated at the time, where locomotive-hauled trains could be driven in the other direction from a cab in the last vehicle, a converted Mark II passenger carriage, (known as a Driving Brake Second Open).

While the overall risk from animal strikes remains low, incidents still occur. For example, in January 2012, a Hamburg-bound push-pull service running in ‘push mode’ struck a herd of cattle and derailed. One passenger was killed; the driver and one further passenger were injured. In Britain, last July, a passenger train struck cattle on the line and derailed at Letterston Junction, without injury.
A key message coming from the special topic report suggests that the safety risk from animal strike incidents on the British mainline railway is generally low, but that there has been a rise in the number of animal strikes per se, for example, there was a 190% rise in incidents on the Scotland route in 2009/10, compared to 2008/09.

While these incidents still have the potential to cause harm, the overall safety risk appears to remain low and the more notable impacts are commercial, in terms of delays, rolling stock cleaning and line clearance. According to the report, on average, 130,000 delay minutes are caused each year by trains striking animals or animals on the line, and around £4.9million was lost due to animals on the line in 2012/13.

The report acknowledges that there is the potential for ill health exposure to employees from dealing with the clean-up of cattle strikes. The RSSB Workforce Health and Wellbeing project is underway to help members to better understand and tackle such health issues.

The report, Analysis of the risk from animals on the line can be downloaded from the RSSB website.

Removing duplication from assurance of vehicle overhaul suppliers

RSSB has facilitated cooperation between two major supplier assurance schemes, Railway Industry Supplier Approval Scheme (RISAS) and Link-up, to remove the duplication borne by industry suppliers and customers in relation to the assurance of wheelset, wheelset component and bogie overhaul suppliers.

For many years, suppliers and customers within the rail industry have found fault with the complexity and cost of the current set of supplier assurance arrangements. RSSB is coordinating a project for the rail industry to modernise these arrangements for the long term, but there are also some short term improvements which industry wants to realise more quickly.

This includes coordinating the range of schemes industry funds and supports. Backed by Rail Delivery Group, the Board of RSSB has recently set up the Railway Industry Supplier Qualification Scheme (RISQS), with its own Board, to govern Link-Up, using similar principles to the scheme governance of RISAS.

One of the more common complaints from industry concerns continuing duplication of supplier audits, particularly in respect of wheelsets, wheelset components and bogie overhaul. Rail industry policy since 2009 is that all firms in this field are certificated through RISAS which provides a positive demonstration that suppliers are capable of complying with specific requirements, and that compliance is assured. However, when the policy was introduced, no arrangements were made to remove the long-standing Link-up supplier audits and the associated costs.

Now the RISAS Board and the RISQS Board, working together, have decided to alter the way both RISAS and Link-up work, to ensure that wheelset, wheelset component and bogie overhaul suppliers are not audited twice.

A joint statement from the Boards has been made available to all RISAS users, suppliers certified under RISAS and those going through the process, approval bodies (RISABs), the Link-up community, senior engineering contacts in RSSB members including Network Rail, TOCs, FOCs, ROSCOs and infrastructure companies, as well as ORR. There is also a supporting Q&A document. These documents will be available on the web at www.risqs.org and www.risas.co.uk.

The key to all this for RSSB – as the independent body supporting industry in its objectives to make things clearer and more effective – has been to listen to Network Rail, train and freight operators, ROSCOs, suppliers as well as other supporting bodies like ATOC, the Freight Technical Committee, RIA, the Rail Industry Contractors Association, and ORR to establish the best ways forward.

For more information, contact Andy Tandy, systems and stakeholder manager at RSSB andy.tandy@rssb.co.uk.
A Meeting of the Minds...

How can academics help deliver on the Rail Technical Strategy (RTS)? What is the state of the art and what potential is there to research future solutions? How can skills, technologies, techniques and expertise being applied in other industries be transferred to the railway?

The Rail Research UK Association (RRUKA) academic community met on 27 February at the Business Innovation and Skills Conference Centre to try and map it all out (quite literally – giant mind maps were the main tool of the day!) at “The Academic Response to the RTS” workshop.

With a clear focus on blue-skies thinking, existing research knowledge and current gaps, the workshop saw almost 100 academics from 27 different UK universities (and a handful of industry representatives) really get to grips with the content of the Rail Technical Strategy 2012. This included a number of researchers entirely new to rail, many of whom indicated that they would be looking to apply their research to the industry in future.

As well as mapping out the vast range of capabilities existent amongst the academic community, and increasing awareness of these amongst the researchers themselves, the breakout sessions (centered on the six RTS themes), prompted a number of fundamental questions and discussion points.

One of these was that the provision of data from industry would be key to helping academia deliver solutions. It was also established that there are a number of lessons to be learned from what’s taking place in other sectors – but what needs to change for these to be applied to rail and how easy is it?

The discussions also highlighted the key role universities have to play in the training and provision of skilled individuals – linking to thoughts that Gil Howarth (NSARE) shared at the RRUKA RTS 2012 briefing (held on 14 January) regarding the skills challenge.

Initial feedback suggests that more inter-disciplinary workshops would be very welcome to tackle the issue of academics working in isolation, so this is also something RRUKA will look to support in future.

Ultimately, the workshop proved that achievement of the successful delivery of the RTS will not just be about what academics can do for industry but very much depend upon the careful interplay between the two parties. Industry has a role in helping to make things happen – dictating a need for the formation of strong partnerships – something RRUKA was set up to help achieve.

What’s next?

This was very much the starting point for the academic response to the RTS. We expect this to lead to further workshops exploring some of the key areas and also some funded research.

The six breakout leaders will now take the event outputs and contributions and translate them into a living document which will set out the academic research strategy. This will detail the strengths, existing knowledge, research gaps, what’s needed from industry, and other ways in which academia can help to support the delivery of the RTS 2012. It is hoped that a first draft will be presented to the Technical Strategy Leadership Group (TSLG) in June 2013.

RRUKA will soon be launching a dedicated area for RTS activities on the RRUKA website...so watch this space!

(Above: Some of the attendees actively participating in the breakouts and the plenary session)

(Above: the breakout leaders – from left to right: John Preston, University of Southampton; Clive Roberts, University of Birmingham; Stuart Hillmansen, University of Birmingham; Simon Iwnicki, University of Huddersfield; Roger Goodall, Loughborough University)

For further information contact secretariat@rruka.org.uk and visit www.rruka.org.uk
In May 2009, RSSB set up a strategic partnership with the Engineering and Physical Sciences Research Council (EPSRC) and the Department for Transport (DfT). This partnership is designed to deliver high quality academic research that focuses on some of the strategic issues the industry has to address in next few decades, if it is to achieve the vision of the railway of the future. By leveraging the funding from the DfT research grant to RSSB, industry gains more value from the research funded.

The partnership launched its first call for research proposals in April 2010 to fund research aimed at overcoming the capacity constraints at junctions and stations (nodes in the rail network), a key challenge for the rail industry. Nodes in rail networks are vital elements of a railway infrastructure, but they are frequently also a major constraint on capacity.

Five co-funded projects, with a value totalling £1.5m, are underway as a result of this (with links to SPARK):

- OCCASION – Overcoming capacity constraints, a simulation integrated with optimisation for nodes (led by University of Southampton)

- Challenging established rules for train control through a fault tolerance approach (led by University of Leeds and Salford)

- SafeCap – Overcoming the railway capacity challenges without undermining rail network safety (led by Newcastle University)

- REPOINT – Redundantly engineered points for enhanced reliability and capacity of railway track switching (led by Loughborough University)

- Dynamic response signal control for railway junctions (led by University College London)

The projects started in early 2011 and are due to be completed in May-June 2013.

Several dissemination activities have been organised so far. Two seminars have been held, sharing the progress to date, allowing cross-fertilisation between the projects and getting industry input, in November 2011 and then in June 2012. At the latter seminar, particular focus was given towards exploring options for taking emerging ideas forward towards implementation.

RSSB is keen to gain maximum value and impact from these projects for industry and identify any further opportunities to build on their findings. Therefore in February 2013 the five project teams took part in a review process where they presented their ‘path to implementation’ and discussed what it would take for their projects to be of impact to industry.

The cross industry panel who reviews the five projects included RSSB, EPSRC, DfT, ATOC, Network Rail, EIT, TSB and East Coast. The panel assessed the technology readiness, evaluated what is emerging from the research that would bring the most benefit to the GB rail industry and assessed which project(s) would be worth taking forward.

They agreed that the best value would come from combining the approaches of several of the existing projects within one or two new proposals to progress research into improving capacity at nodes, scheduling and future traffic optimisation with FuTRO (Future Traffic Regulation Optimisation) providing a key contextual element for the development of this work.

For more information contact giulia.lorenzini@rssb.co.uk
Coming up: Operations Focus Conference, 3 October 2013

Senior operations managers, directors, and HR/recruitment directors are being invited to join this year’s Operations Focus Conference on 3 October 2013, taking place at the Network Rail Leadership Development Centre, Westwood, near Coventry. The annual event is an excellent opportunity for the industry to come together in one room to focus on operational issues.

The theme of this year’s event is ‘big builds’, looking at the operational and manpower challenges associated with large scale projects like Reading and big electrification schemes. The conference will feature a series of topical presentations and exhibitors, and will also provide the opportunity for plenty of open-forum discussion and networking.

The conference will also be an opportunity to share the outputs of industry’s work to modernise safety cooperation with the future working of new groups working on operational safety matters, including the System Safety Risk Group (SSRG). An article on the new group arrangements will also appear in a future Information Bulletin.

For more information about this invite-only conference, contact Catherine Gallagher, Programme Manager, Operational Safety, catherine.gallagher@rssb.co.uk, telephone 020 3142 5300.