



Rail Safety & Standards Board

INFORMATION BULLETIN

Rail industry looks to deliver a sustainable railway for passengers

Rail industry leaders united in a robust call for a sustainable future which builds on rail's obvious strengths in contributing to a sustainable transport system.

Senior figures from across the rail industry made the pronouncement at the *Railways – A Sustainable Future* conference in London, 31 October 2007, organised by Rail Safety and Standards Board (RSSB), as part of the Sustainable Rail Programme.

The conference also gave Transport Minister Tom Harris MP the opportunity to present his views which made mention of the Department for Transport (DfT)'s recently launched consultation paper: 'Towards a Sustainable Transport System: Supporting economic growth in a low carbon world'.

The Minister acknowledged the industry's own call to devote more attention to further electrification, seen by the industry as a key component of a sustainable railway serving the needs of the economy, society and environment. On this, Harris emphasised that whilst electrification is not off the agenda, the Government's focus will remain on capacity rather than further electrification at this stage. It follows a recent joint letter sent by Network Rail and the Association of Train Operating Companies (ATOC) to the Secretary of State, calling for more prominence for electrification on the agenda.

The conference also neatly coincided with the launch of Network Rail's Strategic Business Plan 2009-2014 which includes annual investment of £2billion over five years on capacity and services.

Other points of interest from the conference included:

- A call from Stephen Joseph, Executive Director for the Campaign for Better Transport, to plan for the entire door-to-door journey and rail's role in a wider sustainable transport system.
- An aspiration to deliver lighter trains, with faster acceleration, lower infrastructure impact and lower energy use – epitomised by the aims and objectives of the Intercity Express programme.
- A thorough consideration of future energy needs of the rail industry, including integrating the Government's respective transport and energy policies.
- The practical steps the industry is already undertaking towards cleaner fuels, sustainable biodiesel, regenerative braking and future power technologies
- A sustainable community is a well-connected community. Rail must be physically accessible, sufficiently frequent and affordable to fully facilitate social inclusion.
- Consideration of transport links in the planning system is critical to developing sustainable communities, to capitalise on rail's ability to enable economic growth and greater social accessibility.



Christmas 2007

RSSB would like to wish everyone a Happy Christmas in 2007 and good wishes for the New Year and to say that, as in previous years; we will be making a donation to charity instead of sending industry Christmas cards.

Our charity in 2007 will be the Histiocytosis Research Trust (Charity No. 1004546) and the donation will help towards a cure for sufferers.

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- The Scottish Government recently announced an extensive investment in an electrification programme to be delivered over the next 10 years, as outlined by Malcolm Reid (Transport Scotland) at the conference, as a means of reducing emissions and increasing capacity of Scotland's railways.

The conference formed part of the Sustainable Rail Programme, a future-looking cross-industry initiative led by executive director-level representatives from Network Rail, train operating companies, rolling stock leasing companies (ROSCOs), Railway Industry Association (RIA), Association of Train Operating Companies (ATOC), Department for Transport (DfT), Office for Rail Regulation (ORR) as well as Transport for London (TfL), Transport Scotland and the Railway Forum. The programme, which has become a driving force for future activity on sustainable development, is facilitated by RSSB.



A conference summary including some of the presentations made on the day can be downloaded from the RSSB website at:

http://www.rssb.co.uk/national_programmes/sustainable_rail/shared_understanding.asp#sust_dev_conf

Standards News

The Rule Book and other National Operations Publications – RSSB Website Updated

National Operations Publications, which include the Rule Book, are standards which set out mandatory requirements for direct application in the workplace. These include:

- Modular Rule Book

- Working Manual for Rail Staff: Handling and Carriage of Dangerous Goods
- Working Manual for Rail Staff: Freight Train Operations

A subsidiary publication, called Changes to National Operations Publications, contains new and previously published amendments to National Operations Publications, which are considered too urgent to await a complete reissue of the document concerned.

The Modular Rule Book was introduced in June 2003. It is made up of 50 task based modules covering a variety of operational activities which are designed for specific groups of staff. The modules can be obtained singly so that a custom-built Rule Book can be made up which is specifically applicable to an individual's role.

The RSSB website (www.rssb.co.uk) has been updated to provide the latest information on:

- the Rule Book (GE/RT8000)
- the Working Manual
- National Operating Publications

If you require more information on the Rule Book and National Operating Publications, you should contact the RSSB Enquiry Desk who will respond to your enquiry in liaison with the Traffic Operation and Management Standards Delivery Unit. RSSB's operations specialists will be pleased to deal with any question about the meaning of any instructions contained in either the Rule Book or the working manuals. The enquiry desk can be contacted on **020 7904 7518** (085 77518) or enquirydesk@rssb.co.uk

GSM-R – Operational Trial in Strathclyde

Shortly after 1200hrs on Tuesday 30 October 2007 the GSM-R Operational Trial in Strathclyde commenced. The first GSM-R service departed from Bellgrove at 1208hrs en-route to Milngavie without any problems and throughout the first day, ten turns of duty by drivers resulted in the running of over 50 GSM-R services, clocking up 917 minutes (over 15 hours) and 1,151 miles. As the number of trained drivers increases, the GSM-R miles run will increase. When all drivers are trained there will be 32,897 miles and 632 hours of GSM-R running per week.

The initial user feedback received to date has been positive with a general view that GSM-R is superior in voice quality to Strathclyde Manning Agreement. There have been some minor issues since the Trial commenced but nothing too serious. All problems and issues that arise are being reported through the trouble ticket system no matter how minor they may appear so that they can be tracked through to resolution.



Throughout the first couple of weeks of the Trial a strong on-site, cross industry presence has been maintained to offer support to the users and to quickly deal with any issues that arose.

Work will now continue to demonstrate that GSM-R is usable, reliable and available and to satisfy the objectives and purpose of the Operational Trial in Strathclyde.

RSSB is working within the GSM-R programme on the operational design validation and evaluation of the Strathclyde Trial.

For more details contact **Natalia Boniface, GSM-R project manager** on **020 7904 7967** or email natalia.boniface@rssb.co.uk

Progress with the review of the Railway Group Standards Code

A review of the Railway Group Standards Code (the Code) commenced in May 2006, through a subgroup of the Industry Standards Coordination Committee (ISCC) which has been facilitated by RSSB.

A draft copy of Issue Three of the Code and a supporting document called the Standards Manual was issued for consultation in May 2007. The ISCC subgroup, has been meeting throughout the summer to address the comments raised during that consultation and the proposed responses to the industry comments were approved by ISCC on 16 November 2007. These responses together with the latest draft of the Code and Standards Manual are now available from the Consultation and Stakeholder Register on the RSSB website – www.consultation.rssb.co.uk

The current plan is for the revised Code and Standards Manual to be submitted to ISCC for approval on 14 December 2007, then to the RSSB Board at their February 2008 meeting and, following Board approval, to the Office of Rail Regulation (ORR). It is anticipated that the revised Code will come into force in the second quarter of 2008, allowing time for amendments to the processes to manage changes to Railway Group Standards.

RSSB will provide an update on progress with the Code in future issues of the Information Bulletin and will be distributing a summary of the key changes to the Code once it has been approved by the ORR.

If you have any questions regarding the Code, either the current Issue Two or draft Issue Three, please contact **Adam Milligan, head of systems coordination** on **020 7904 7629** or adam.milligan@rssb.co.uk

RGS Catalogue & Website – Amendment to RIS-1700-PLT

From industry feedback, an error has been identified in the standard RIS-1700-PLT: Rail Industry Standard for Safe Use of Plant for Infrastructure Work.

In section 3, clause 3.1.3, the distance shown as a) is incorrect, the distinction by line speed contravenes the requirements set out in the Rule Book. The whole clause should read as follows: *The planning process shall ensure that, unless this line is protected as set out in Rule Book modules T2, T3 or T4, the intended route of any road vehicle allows no part of the vehicle or any part of the load to encroach to closer than 6 feet 6 inches (2 m) to the closest railway line.*

The amendment will be attached to the standard on www.RGSOnline.co.uk from December 2007. However, this amendment was too late for inclusion in the December catalogue, but will be included in the February 2008 issue.

For more details on changes to standards, please refer to the 'What's New' and 'Briefing Note' sections in www.RGSOnline.co.uk or contact **Marie Marks, head of standards management** on **020 7904 7588** or email marie.marks@rssb.co.uk

Got an issue with a Railway Group Standard? Call the **RSSB Enquiry Desk** on **020 7904 7518** or email enquirydesk@rssb.co.uk

RSSB publishes the R&D stakeholder's guide

RSSB has produced *A stakeholder's guide to participating in the RSSB-managed rail industry research and development programme*. The guide is intended to act as a reference manual for the R&D Advisory Group (R&DAG), client groups and anyone who participates in the research and development programme. It sets out the purpose of the programme, how it is governed and delivered, and the roles (and responsibilities) of the parties involved.

R&DAG and RSSB have made significant progress over the past year or so in defining the governance arrangements for the research programme. The approved governance framework empowers RSSB to



drive improvements to the way in which the R&D programme is directed, managed and delivered. The main thrust of these improvements is to derive greater value and benefit from the available research funds.

The guide provides a holistic overview of how all the elements of research fit together, and what participating in the R&D programme means in practice. It describes the changes that client groups and technical staff can expect to see, and the ways in which client groups can actively engage in the programme in order to enhance its effectiveness and to realise benefits for the industry that can flow from research and development. The improvements include:

- A more structured R&D process
- Client (i.e. cross industry) ownership of the business case for a project
- Better prioritisation of research against industry objectives and topic plans
- Better definition of deliverables at the beginning of a project
- Client ownership of a 'benefits delivery plan' to encourage industry to derive full benefit from the research
- Client identification of responsible owners to take research findings forward, future industry actions and future industry costs
- Where possible delivering projects using own or industry resources

An electronic copy of the guide is available on the RSSB website (http://www.rssb.co.uk/pdf/r_and_d_stakeholdersguide-issue1.pdf).

All Level Crossing Risk Model wins award

In September 2007, the ALCRM won the Award for the Advancement of Railway System Safety which was jointly awarded to Network Rail and RSSB by the Institution of Engineering and Technology.

In spite of the railway's good safety record, there remains the potential to improve the management of key risks. Level crossings are one such example which represents a range of risks for the railway. In 2006, there

were 11 collisions between road and rail vehicles. Although this is a reduction on the average figure of 19 collisions per year over the previous decade, level crossings represent the largest single source of train accident risk on the railway in Great Britain.

RSSB and Network Rail have worked in close partnership on a great deal of research on level crossings, a key component being the All Level Crossing Risk Model (ALCRM), a web-based risk tool used by Network Rail, to manage the risk to crossing users, passengers and rail staff by targeting those crossings with the highest risk for remedial measures.

The rail industry has also been keen to assess the benefits of risk models used by railway administrations in other countries. Further work by RSSB compared these models with the ALCRM and assessed their benefits to see if any could be applied. The work produced seven ideas for developing the ALCRM further and these are being considered by RSSB and Network Rail. Similarly, there has been analysis of research ideas from recent international level crossing conferences, which have provided pointers for further work ensuring that the GB rail industry gets maximum benefit from research abroad.

Although the knowledge base for reducing risks at level crossings is substantial, one means of taking the risk out altogether is to simply close a crossing. However, crossings for busy public roads or public rights of way mean that the procedures for negotiating and financing crossing closures can be lengthy, complicated and costly. Further work by RSSB studying the attitudes to, and processes and funding for, crossing closures in other countries, examined the differences between national approaches to closing level crossings, and identified lessons that may be learned that would make the closure of crossings in Great Britain less complicated. Related published research includes:

Development of a universal level crossing risk tool
http://www.rssb.co.uk/Proj_popup.asp?TNumber=028&Parent=80&Ord=

Developing enhanced consequence algorithms for level crossing risk models
http://www.rssb.co.uk/Proj_popup.asp?TNumber=521&Parent=80&Ord=

Research into obstacle detection at level crossings
http://www.rssb.co.uk/Proj_popup.asp?TNumber=522&Parent=80&Ord=

Use by other railways of risk models and risk assessments for level crossings
http://www.rssb.co.uk/Proj_popup.asp?TNumber=524&Parent=80&Ord=



Analysis of research ideas from recent international level crossing conferences

http://www.rssb.co.uk/Proj_popup.asp?TNumber=527&Parent=80&Ord=

Attitudes to, processes and funding for, crossing closures in other countries

http://www.rssb.co.uk/Proj_popup.asp?TNumber=528&Parent=80&Ord=

Safety Risk Model and Practitioners' Working Group

The Safety Risk Model is a key industry resource, used to measure risk, plan improvements and, over time to monitor change. As the number of uses of the model has increased, government and regulatory interest in the model and its outputs has similarly grown. In the July White Paper the government identified that it was going to use the Safety Risk Model to measure changes in safety risk relating to its High Level Output Specification (HLOS). The increased public profile of the model places an enhanced responsibility on RSSB to effectively manage the development and control any changes to the model.

In June 2007, RSSB, through the Safety Policy Group, established a Practitioners Working Group (PWG) to engage with stakeholders in the development and to provide the governance and control of future versions of the Safety Risk Model (SRM). The PWG comprises a range of industry representatives, including Network Rail, train operators, rolling stock manufacturers, infrastructure maintenance companies and the ORR.

The SRM (now at version 5) is a structured representation of the 125 hazardous events that could lead directly to injury or fatality, during the operation and maintenance of the UK mainline railway. The publication of the SRM analysis in the Risk Profile Bulletin (RPB) is one of RSSB's core outputs and assists the rail industry in understanding system-wide risk and allocating safety resources in the most effective way.

So far the SRM PWG has provided valuable input into the development of the next two versions. Its members have provided insight into why certain trends in risk are

occurring, and have advised on the planned changes to the railway (eg, rolling stock changes, new systems etc), so RSSB can ensure the SRM remains representative of the risk on the railway at the time of publication.

The group have helped prioritise development areas to ensure the model meets the industry's needs. They have recommended key modelling changes such as the need to model high speed derailments separately rather than as part of the current average derailment model. They have also supported publication of an interim SRM update to be published in 2008, based on version 5 to assist industry with producing their company safety plans and ongoing safety management. Version 6 will be published in March 2009 as it is required for the base lining and monitoring of the High Level Output Specification (HLOS)¹ safety metrics relating to passengers and workforce risk. In December, the SRM PWG will be discussing the content and format of the SRM's outputs (such as the RPB and the SRM templates for generating individual operator risk profiles) to ensure that what is delivered meets the industry's needs. Upcoming on the agenda is the provision of more support to our members, in terms of using the SRM and the SRM templates.

For more information, please contact **Jackie Barrett, senior risk analyst** on **020 7904 7504** or email jackie.barrett@rssb.co.uk

¹ The HLOS is required under Railways Act 2005 and sets out, to ORR, what outputs DfT wishes to procure from the passenger railway (in terms of capacity, performance and safety), and the funds which are available for doing so.

Magistrates hear about staff assault issue from RSSB

RSSB has drawn the attention of magistrates to the issue of railway staff assaults. Writing in October's edition of 'Magistrate' magazine, RSSB's Community Safety Programme Manager Alan Davies emphasised the impact of abuse on staff and the economic hit the railway and wider society absorbs, in a striking two-page feature.





A guide to ROGS requirements for duty of cooperation between transport operators

Ultimately, it cannot be right that loyal staff have to put up with abuse and antisocial behaviour simply as a result of doing their job. The human cost can be significant when people are injured and have to take time away from work. There is also the psychological trauma and loss of confidence when they return, which can increase staff turnover, adding to recruitment and training costs. Of all the risk of harm to the entire railway workforce, a staggering one-fifth is due to assaults.

Being read by hundreds of magistrates across the country, the timely article asks for more appropriate sentencing for staff assault offences, a message made clear by the stark case study of a guard who was the victim of a highly aggressive physical assault, but whose assailant received what seems a comparably modest sentence, including electronic tagging for a year and an order to pay £150 in compensation and costs.

However, recently, the Crown Prosecution Service (CPS), working with the train operating companies and the Association of Chief Police Officers, has confirmed that assaults on public-facing rail staff should be considered as 'assaults against a person serving the public.' This makes it an aggravating factor so that prosecution is likely to follow in the public interest, under the code for crown prosecutors. The Crown Office and Procurator Fiscal Service also have a similar policy, so that cases involving attacks on staff working with the public on the railway in Scotland will lead to prosecution

Stressing this point, the article also features details of the activities and initiatives RSSB facilitates on behalf of the industry through the Rail Personal Security Group (RSPG), including close partnership working with the British Transport Police (BTP) and the production of SWeRve, the training DVD designed to help rail staff learn how to manage conflict situations better, and which has been shortlisted for several rail awards in 2007.

This is obviously an excellent place for RSSB and the wider rail industry to get its voice heard by a crucial target audience. If you would like to receive a copy of the article, or would like more information about RSSB's activities in this area, please contact **Alan Davies, community safety programme manager** on **020 7904 7964** or email: alan.davies@rssb.co.uk

The introduction of the Railways & Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) removed the system safety role of the infrastructure manager (previously the infrastructure controller) and established a "level playing field".

This levelling of the roles of the mainline transport operators (infrastructure managers and railway undertakings) changed the relationship with regards to cooperation and consequently new requirements for formalised arrangements were detailed in ROGS Regulation 22, 'Cooperation'.

Over the past 10 years the industry has developed a variety of processes and arrangements for safety cooperation but these have never been summarised or documented in one readily accessible publication. In order to assist the industry in meeting its statutory requirements and to consolidate the requirements of ROGS Regulation 22 the guide was produced.

The guide is published in 2 parts:

- Part 1 is published in hard copy and is intended to provide industry with a concise, easy to use, guide that identifies the areas where cooperation is required, together with examples of affected activities / processes and also the measures required to comply with the requirement
- Part 2 of the guide, which is published on a CD Rom with hyperlinks from Part 1, contains more detailed guidance and advice to supplement the information provided in Part 1.

Part 1 of the guide has been written to be largely "future proof" where as Part 2 will require more regular revision to reflect new and amended processes.

Although largely written around current practice, the guide does include the new process on the arrangements for escalating and resolving safety concerns.

Hard copies of Part 1 and CD Roms with Parts 1 and 2 were given to the 160 delegates who attended the ROGS conference on 8 November 2007. Wider distribution across the industry will follow and Parts 1 and 2 (updated as required) will be made available on the RSSB web site and visits to give assistance to transport operators can be arranged if requested.

For more information contact **Andy Bain, sms specialist** on **020 7904 7687** or email andy.bain@rssb.co.uk



ROGS 'One-Year-On Conference – a shared learning experience'

To mark the first anniversary of the implementation of the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS), conference was held at the Wellcome Conference Centre in London on 8 November 2007. This well-attended, interactive event was jointly facilitated by the Rail Safety and Standards Board and the Office of Rail Regulation (ORR) and provided managers in the rail transport industry with an opportunity to share and learn from the safety management system development and application experience of key players in the British rail industry.

Delegates at the conference heard from Network Rail, English, Welsh and Scottish Railway, Southern and Grant Rail on their experience of ROGS. Further insight into the new regime was also provided by the ORR, National Union of Rail, Maritime and Transport Workers (RMT), Associated Society of Locomotive Steam Enginemen and Firemen (ASLEF) and the European Rail Agency. In addition to the informative presentations, delegates also participated in specialist breakout workshops on key aspects of ROGS; Safety Verification and Interoperability, Safety Critical Work, Annual Safety Reporting and Duty of Cooperation and System Safety.

The key message from the speakers was that the transition from the safety case regime to certification and authorisation was and continues to be less-onerous than originally perceived. In particular, delegates were urged those who are yet to submit a 'ROGS application' to build on the good work already underway regarding cooperation and to work closely together and involve key players such as the regulators, trade unions and other affected parties in the development of not only the submission document but the development of safety management systems generally.

A brief insight was also given by the ERA into developments within the European Union which will have a significant impact on the development of British safety management systems. Also a wealth of information was gained from both the workshops and the question and answer sessions which will serve to inform the workstreams and initiatives underway within the industry.

The event also provided the ideal opportunity for RSSB to launch the 'Duty of Cooperation' Guide and ORR 'A

Guide to ROGS', which have been recently produced to support the developing initiative within the rail industry.

The presentations delivered at the conference can be viewed at

http://www.rssb.co.uk/national_programmes/sms_rogs_authorisation.asp#_ROGS_One-Year-On_Conference:

Systems Integration at the Vehicle/Track Interface

The Fourth Vehicle Track System Interface Committee Seminar (V/T SIC) took place on Friday 16 November 2007 at the Congress Centre, London.

The seminar is a forum which aims to update industry on V/T SIC current workstreams and potential projects. This year over 60 delegates attended the seminar representing organisations from both sides of the wheel/rail interface, including train operators, vehicle owners, consultants, infrastructure managers, etc.

Andy Doherty, Chairman V/T SIC, opened the seminar with an overview of the key projects V/T SIC had supported this year. Steve Topping gave a presentation on the V/T SIC strategy, indicating how the current projects support the strategy.

The format of the seminar was similar to last year including two breakout sessions; each having three presentations. The delegates had the choice of attending two of the three presentations. The morning breakout sessions included the following presentations;

- Taking theory into practice - how the rolling contact fatigue theory lead to development of a prediction tool and the developed remediation methods.
- System solution case studies - understanding of Hull Trains Class 222 stability issues and how wheel and rail profiles can reduce Rolling Contact Fatigue.
- Vehicle/Track interaction on the London Underground

In the afternoon the following sessions were available:

- Wheel lathe best practice
- Emerging solutions in rail management
- Incentives for good behaviour - to reduce the lifecycle costs of the vehicle/ track system

In addition a presentation was given by Al Reinschmidt of Transport Technology Center Inc. dealing with the overseas perspective of "where we are going". He gave an insight into some of the projects TTCI are involved with including how neural network theory is being applied to track maintenance.

For more information please contact **Nagina Hussain, stakeholder support manager** on **0207 904 7968** or email nagina.hussain@rssb.co.uk



The new industry website OPSWEB is launched



November saw the industry website SPADWEB replaced by OPSWEB. www.opsweb.co.uk

OPSWEB is sponsored by the new Operations Focus Group and in accordance with its remit will address all operational safety issues including SPADs.

The site will provide the industry with a resource centre to learn and share good practice on SPADs, operational safety and railway communications. It also contains good practice and initiatives associated with a range of operational activities, such as train driving, shunting, train despatch and signal operations. Links are provided on the site to industry research, on-line tools, and industry working groups. The site will also feature a regularly updated new page.

If you have any information or good practice you would like to share please submit it through the link on the site www.opsweb.co.uk or direct to **Susan Cassidy, programme manager, operational safety** on 020 7904 7475 or email susan.cassidy@rssb.co.uk

Events

Date	Name of event	Location
19 March 2008	Community Safety Forum	The National Motorcycle Museum, Birmingham
18 - 22 May 2008	World Congress of Railway Research www.wcrr2008.org	Seoul, Korea
3 - 4 July 2008	Risk Management Forum	Nottingham University

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

Spotlight

ATOC Personal Track Safety DVD



The new ATOC and RSSB sponsored Personal Track Safety (PTS) DVD was launched at the Driver Training Conference in September. The DVD provides trainers in rail companies with a complete package to enable them to train and assess operational staff who are required to access the lineside environment as part of their duties.

The training material has been provided specifically to meet the requirements of the operational workforce in train, freight and infrastructure contractors who are not covered by the Network Rail SENTINEL scheme.

The package provides all the materials necessary for a two day track safety course, including topics such as the railway infrastructure and signage, safe systems of work and emergency actions. In addition it also covers refresher training and recertification assessment.

It has been delivered as an interactive DVD with video, graphics, voiceover and exercises. The modular design provides flexibility so the trainer can tailor each course to meet the needs of particular delegates. The package will also include a library of assessment papers, lesson plans and handouts.

It has been produced and validated by a team of operational experts from across the industry led by RSSB.

The course package contains assessment papers and corresponding answers and is intended for use by individuals delivering training to their organisation.

To apply for a free copy of the DVD please go to its supporting website www.ptscourse.co.uk where you will need to complete an online form to verify application details.

For further information please contact **Catherine Gallagher, programme manager, operational safety** on 020 7904 7726 or email catherine.gallagher@rssb.co.uk

Log on to our website:
www.rssb.co.uk