



annual review 2008

Demand for RSSB services continues to grow reflecting an increasing recognition from members and stakeholders operating within the UK rail industry that the breadth and depth of expertise available within RSSB can help and support the delivery of their business objectives. Working on behalf of its members RSSB remains focused on continuously improving safety, reducing costs and improving performance.

Len Porter, Chief Executive



“RSSB is established as an authoritative voice on the safety of mainline railways in the UK rail industry.”

RSSB

In October the RSSB Board appointed Paul Thomas CB as Chairman. He joined the Board as a non-executive Director in 2005. With his extensive experience in safety and operations gained within the Royal Navy and civil nuclear industry his appointment received the endorsement of the industry. Headed by a strong Board and managed by an experienced Executive Team, RSSB has facilitated improvements across the range of its services delivering a wide range of information, analysis and knowledge to an industry that increasingly values such specialist support.

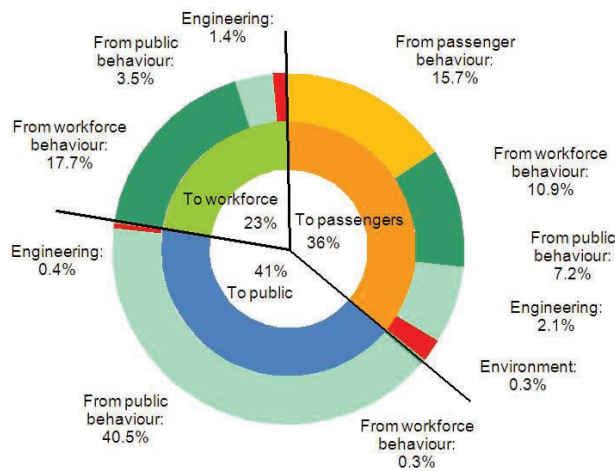
Managing safety risk

An important component of RSSB's services is the management and provision of the Safety Management Information System (SMIS). Information from SMIS forms the backbone of the safety intelligence and risk assessments that are used across the industry to inform safety decision making. On behalf of the industry RSSB has initiated a major programme that will run over the next two years to upgrade and enhance SMIS through a programme known as SMIS Vision. The final deliverable of SMIS

Vision will be to provide the industry with a 'one stop shop' for safety data through one source. For example, this will allow train operators to compare safety performance at the company and route level for cross industry benchmarking.

Extensive work has been undertaken on the Safety Risk Model (SRM). This is an established risk management tool for industry stakeholders used to quantify the risk associated with each of 125 identified hazardous events resulting from the operation and maintenance of the national network. The SRM helps the industry identify and mitigate key areas of risk associated with their operations.

A major area of work continues to be the collation and publication of the Railway Strategic Safety Plan. The 2008-2010 Plan focuses on all areas of system risk and identifies key risk areas. To support the work on its Safety Management Programme, RSSB conducted a series of visits throughout the year to engage with and explain to the industry the value of managing issues such as the duty of co-operation and the development of issues emerging from Europe.



The graphic shows the overall industry safety risk in two complementary ways: 'risk from' the industry's assets and activities, and 'risk to' groups of people.

For in-depth Safety Performance information go to <http://www.rssb.co.uk/safety/spr/sprep.asp>

“RSSB provides a unique mix of technical expertise, knowledge and sophisticated information and risk management tools for and on behalf of the industry.”

A further key area of work has been a major review of injury weighting. Since the late 1980s fatalities and injuries have been used to assess safety risk based on weighted injuries in relation to fatalities where 10 major injuries and 200 minor injuries were statistically equivalent to one fatality. All safety reports and analyses that include the term fatalities and weighted Injuries (FWI) used these figures. In April a new weighting structure was introduced which more appropriately weights the significant number of minor injuries that are not serious enough to be reported under RIDDOR – The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995. Critically this new approach will feed into the assessment, by the industry, of the value of trying to prevent injury, placing greater emphasis on the causes of more serious injuries.

This extensive area of work was included in 'Taking Safe Decisions', an RSSB publication which describes the industry consensus view of how to make commercially sound decisions that properly protect the safety of rail industry staff, passengers and the wider public, while satisfying the law and the interests

of stakeholders. This important publication was developed in parallel with internal guidance on cost-benefit analysis in support of safety-related investment decisions produced by the Office of Rail Regulation for its inspectors.

Ahead of its Annual Safety Performance Report (ASPR), RSSB published, for the first time, a summary report providing an initial high-level overview of the main safety indicators. The ASPR, compiled and published by RSSB on behalf of the industry, presents the level of risk to passengers, the workforce and members of the public and reviews recent trends to highlight areas of changing safety performance while outlining the underlying causes that contribute to the level of risk on the national network. An important change to the report saw the introduction of the new FWI figures. Overall safety performance was in line with the same period in the previous year.

Improvements were seen in some areas such as workforce major injuries and passenger boarding and alighting injuries. A distinct message the statistics provide is that the areas of risk which are within the industry's direct control can be managed and minimised with the support of technology and an awareness and appreciation of the human factors involved. However, by way of example, the higher number of pedestrian fatalities and collisions between trains and road vehicles, both of which were above average, indicate this is a key risk area where the primary risk source is outside the direct control of the industry. In response to this RSSB, through the Road – Rail Interface



“RSSB works on behalf of its members and stakeholders to bring the industry together in a spirit of co-operation and trust to facilitate, build consensus and resolve challenging cross industry issues.”

Safety Group, is facilitating research into level crossings from the public behaviour perspective.

Understanding and improving safety culture is fundamental in the management of safety. Recognising this, RSSB has developed a web based Safety Culture Toolkit to help the industry measure its own safety culture and determine what actions could be taken to tackle identified issues without the need for extensive external support.

After a pilot exercise with one of its members, train operator First Group, RSSB has made the toolkit available to all of its members and stakeholders who are showing a high level of interest. In addition, the Australasian Railway Association (ARA) has approached RSSB and agreed a licence to use the toolkit, providing a useful benchmarking opportunity for the UK rail industry.

Standards management

Issue three of the Railway Group Standards Code (the Code) and Issue One of the Standards Manual came into force in June. Written to be simpler and easier to understand, the new Code explains the role of RSSB in authorising Railway Group Standards (RGSs) and defines the procedures by which RSSB and its members co-operate to create, revise or withdraw RGSs, manage deviations from them and monitor their effectiveness. The new Code aligns the governance of RGSs with the regulatory framework within which the railway operates as defined by the Railways (Interoperability) Regulations 2006 and the Railways and Other Guided Transport Systems (Safety) Regulations 2006. The new Standards Manual

defines those elements of the cross-industry management of RGSs and associated documents not subject to formal approval by the ORR.

Good progress continues to be made on implementing the Strategy for Standards Management. This significant programme of work entails reviewing RGSs to ensure future RGSs are aligned with the Code and focus on co-operation between duty holders. RGSONline, the website providing free access to all current and many withdrawn RGSs, Railway Approved Codes of Practice (RACOPs), Guidance Notes (GNs) and Railway Industry Standards (RISs), was launched as a test site in October. Well received by members and stakeholders, the website went live in December.

During the year, RSSB worked with its industry partners to develop a New Approach to the Rule Book with a view to radically reshaping the volume and complexity of operational rules with which the industry must comply. Work is continuing on preparing a business case and undertaking research to understand the links between competency management systems and the Rule Book.

RSSB continues to make an important contribution to the national, cross-industry projects led by Network Rail, which are developing and implementing the Global System for Mobile Communications-Railway (GSM-R) and the European Rail Traffic Management System (ERTMS). RSSB is providing operational and technical expertise for system design, operational trials and the development of standards.



GSM-R operational testing took place at the end of April in Strathclyde in Scotland and a number of operational and technical issues are being evaluated prior to an extension of the pilot trial. The ERTMS Cambrian Early Deployment Scheme in mid Wales continues to be supported with specialist expertise from within RSSB.

Facilitating the European agenda

RSSB has a growing influence and role as consensus builder and facilitator within the European rail agenda. During 2008 RSSB provided extensive support to the rail industry, Office of Rail Regulation and the Government in the development and implementation of European Technical Specifications for Interoperability (TSIs). The TSIs are becoming increasingly important for the UK mainline rail industry since, once a TSI is in force, it is effectively law in this country. RSSB plays a pivotal role in ensuring that TSIs are fit for purpose for the UK industry. This includes providing substantial technical input to the drafting process of TSIs, including the development of Specific Cases which adjust the content of the TSIs where necessary to maintain the economic viability of the railway in this country. A key example of this relates to the difference in structure gauge between the UK railway and that in operation in Europe. Rolling stock compliant with a TSI is required to operate extensively across a number of routes. The UK network has a smaller structure gauge than the rest of Europe and this has an impact on a number of aspects of rail vehicle design. An extensive piece of work had to be carried out detailing the

economic and technical justification for a Specific Case to address this critical area. In the development of new TSIs, the main focus during the year has been on TSIs for infrastructure, rolling stock and energy. In addition, RSSB has provided advice to the rail industry on the interpretation and implementation of those TSIs already in force, a service which it offers in parallel with similar advice on the interpretation of Railway Group Standards.

A further important area of work facilitated by RSSB related to providing guidance on the management of National Technical Rules (NTRs) and National Safety Rules (NSRs). NTRs need to be identified and approved by industry to fill open points in TSIs, and NSRs need to be identified against the Railway Safety Directive (RSD).

In a move to further improve the development of British and European railway standards RSSB has taken over the external secretariat of some 30 British Standards Institution (BSI) rail sector committees. This transfer presents opportunities to facilitate a stronger and more cohesive approach to the development of British and European railway standards, and provides better value to the UK from shortened lines of communication between the industry and BSI.

Supporting industry

RSSB has worked collaboratively with its partners to widen the appeal and value of OPSWEB, the operational safety website managed by RSSB on behalf of the cross-industry Operations Focus Group (OFG), which leads the drive to

“RSSB works to add significant value to the rail industry by providing an audit trail from data to information and knowledge, underpinning members’ and stakeholders’ critical business decisions in the complex field of system safety.”



reduce operational risk on the rail network. The site now includes coverage of a broad range of operational safety issues to share best practice.

With some 200 suicides a year, RSSB has focused on raising awareness and identifying and sharing what positive steps the industry is taking to help prevent this loss of life. Work continues on facilitating the Infrastructure Safety Liaison Group, a recognised rail industry body which works toward the continuous improvement of safety on the railways and on supporting the industry's efforts to modernise its supplier assurance regimes through the provision and promotion of the Railway Industry Supplier Approval Scheme (RISAS). This is a cross-industry scheme that helps ensure suppliers of critical products to the rail industry have the right systems and resources.

Following extensive consultation with members and stakeholders it was agreed that the Confidential Incident Reporting and Analysis System, CIRAS, should become a business unit within RSSB with safeguards in place to ensure reports continue to be processed and managed entirely confidentially. In March the transfer successfully took place and now CIRAS has greater access to industry safety information. It also has the facility to enhance its reporting mechanism. Increased efficiency and effectiveness has been achieved through shared resources and facilities.

The development of an Industry Shared Risk Database is a major area of work for RSSB which began last year. The purpose of this high level project is to reach cross-industry agreement on the

development of a database that will identify mainline interface risk areas and control measures within each risk area. This project is proving an excellent working example of how RSSB can develop and deliver major cross-industry projects through facilitating and building consensus within the industry.

Supporting industry covers a wide remit for RSSB, and its work in the field of sustainable development is helping industry look forward to potential futures and assess what is needed to deliver a sustainable railway. This has included groundbreaking 'foresight and scenarios research' designed to inform the rail industry's consideration of long-term strategic decision making. The research was designed to enable the industry to answer the question "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?". This work, which forms part of the Sustainable Rail Programme (SRP), has been developed with major rail industry stakeholders and is based on the principle that there are a number of potentially divergent paths to the future and not just one way forward.

The scenarios work, which won a best paper prize at the World Congress on Rail Research, held in Seoul in May, highlighted the different challenges and the need to take a whole system approach to decision making. Some of this work has contributed to key government thinking in this area including the government's discussion paper 'Towards a Sustainable Transport System'.

“RSSB remains focused on the needs of its members and stakeholders and continues to develop the business to address those needs.”



“RSSB’s services are recognised as assisting in the delivery of the industry’s drive towards improved asset management and sustainability.”

An element of the sustainable development challenge facing rail is energy efficiency. As part of the SRP, a project, facilitated by RSSB, has been undertaken to establish a carbon reduction trajectory to reduce carbon emissions from energy use. The project focused on the different energy-saving initiatives of train and freight operators and the building of a cross-industry database to gain an insight into trends and drivers for change. At the first International Union of Railways (UIC) Sustainability Awards this carbon reduction project gained high profile recognition winning the ‘Special Prize’ category.

Benefits of research

The extensive programme of research funded primarily by the Department for Transport (DfT) and managed by RSSB on behalf of the industry continues to provide a wealth of knowledge to support decision making across a wide range of issues. The programme provides benefits that no individual company or sector of the industry could address on a commercially viable basis on its own. It is wide ranging, covering ‘systems’ issues, engineering interfaces across the railway as well as the interfaces with other parts of the community.

Cost-benefit analysis drives the programme. For example, the review of potential efficiency improvements in rail industry supplier assurance has identified that the development of a supplier assurance framework could save the industry up to £35m a year. Another project has shown that providing better information for the public on planned service disruptions could benefit passenger revenue by £1m a year. Research on water recycling technology for train toilets has shown that significant cost savings can be achieved as trains don’t need to return to depots for frequent water changes and recharging. Pay back periods as low as three years could be realised.

In addition to the current research programme, RSSB has been allocated a further £15m by the DfT for a new strategic research programme which will offer a substantial boost to the industry’s R&D capacity. This is scheduled to run over the next five and a half years and will help the industry achieve challenging long term goals such as doubling rail capacity and further reducing the carbon footprint of rail transport. RSSB is now working with the DfT and the industry on further development of the new programme of research work throughout 2009.

Planning for the future RSSB is now a well established, member-owned, independent organisation delivering a significant range of services that support and facilitate improvements across the wider rail industry. RSSB will rise to the challenge of change within the industry by continuing to develop and manage the company to focus on cost optimisation while delivering quality services that represent real value for money for its members and stakeholders.