

The Railway Strategic Safety Plan 2006 Executive Summary

This Strategic Safety Plan (SSP) is a joint statement by the companies responsible for Britain's mainline rail network, setting out an industry-agreed approach to managing safety-related activities during 2006. We are committed as an industry to maintaining the level of safety performance in areas where it is managed well, and to delivering continuous improvement in priority risk areas, wherever it is reasonably practicable to do so.

The underlying theme of this plan is continuity. This means maintaining current safety performance while paying particular attention to those areas – notably workforce safety – where improvement is necessary. Therefore, many of the actions set out in the plan are predicated on the industry continuing initiatives that are already in place.

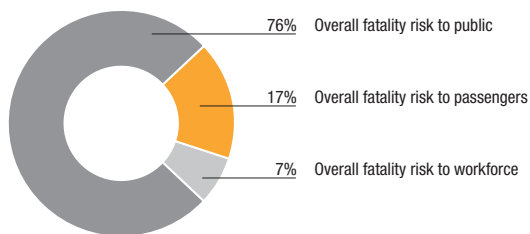
Context

Britain's main line railways have become increasingly safe in recent years. At the same time passenger numbers are growing at an unprecedented rate, freight traffic has grown and is set to expand even further, and performance is improving. All this bears out what railway people have always known: that high standards of performance and safety are inextricably linked. They provide what customers expect while creating the essential condition for growth in the level of traffic.

SAFETY PERFORMANCE

RSSB's Safety Performance Report for the half-year to June 2005 was able to report that risk under the direct control of the railway continues to fall, except workforce risk, which is more variable. Indirect risk – such as trespass – is also more variable (fig 1.1)

Fig 1.1 Overall risk
(81.0 expected fatalities per year)



Figures based on current estimate of risk according to Safety Risk Model version 4

Risk associated with signals passed at danger incidents (SPADs) has fallen by 76% from the benchmark level at the end of March 2001. There has also been a reduction in the number of track faults, representing a significant contribution to the overall 49% reduction in train accident risk arising from infrastructure failures since the end of March 2001. Level crossings now represent the greatest proportion (42%) of total train accident risk. This includes the risk to train passengers and to road users. Level crossing risk arises almost entirely from misuse by the public. Irregular working is the second largest contributor to train accident risk, and has an upward trend.

Workforce safety remains a serious cause for concern. The eight fatalities involving track workers during 2004 was the highest fatality figure since 1991. There have been five further fatalities during 2005. Physical and verbal assaults on staff and passengers also remain a concern.

By 2004, as the use of slam-door stock without central door locking was falling, fatalities related to incidents involving train doors reached the lowest level ever recorded. Trespass fatalities fell significantly in 2004, but these gains have been reversed during the first half of 2005.

Railway fatality rates in other EU countries have remained broadly in line with UK rates since the mid-1980s, falling at a similar rate. Britain's railways also compare well with other modes of transport. The risk to the individual rail passenger is about the same as the risk to an air passenger and very slightly higher than the risk to a bus and coach passenger. Travelling by train is about nine times safer than travelling in a car.

Safety management

The development of an effective safety management system is fundamental to maintaining and improving safety. To achieve this, it is essential that industry staff have the necessary competencies and behaviours, and are well motivated to do their jobs.

→ ACTIONS

The industry will:

- continue developing new safety certificates and safety management systems that specify the risk profile and control measures according to a plan agreed with the safety regulator
- define in the new safety certificates and safety management systems the safety interface controls required between companies, and how the industry will co-operate to deliver them
- work with the safety regulator to deliver a more efficient safety certificate process than the current process
- exert influence on the developments of the European Rail Agency to achieve solutions appropriate to Britain's railway
- support the new standards committees to drive the delivery of the strategy for standards management and co-ordination of the UK input to TSIs
- ensure that responsibilities transferred to them by the new approach are properly integrated into safety management systems
- provide technical experts from the industry to participate in the development of Railway Group Standards and European TSIs
- work together to improve the quality of SMIS data through training and support of input staff
- develop a new precursor indicator model for workforce safety and review the potential use of such models in other areas such as passenger safety at stations
- work with the CIRAS team to promote the existence of a credible confidential reporting facility and the benefits it can bring
- review and improve its internal arrangements for timely responses to CIRAS reports
- work with the CIRAS team to improve the quality of analysis and management intelligence available from the system
- work with RAIB, RSSB, HMRI and the British Transport Police to ensure that the new accident investigation regime is successful in learning lessons from individual accidents and identifying underlying trends
- determine with the ORR, in its role as the safety authority, how it will track recommendations, and ensure it retains mechanisms for rapidly identifying and implementing early lessons before investigations are complete
- develop the means to retain a collective memory of lessons learned from accidents and incidents, including ones that occur abroad
- review internal processes for accident investigation to ensure the appropriate selection of investigation level and lead organisation for each investigation
- consider how good practice from outside the industry might be identified and implemented to improve accident investigation
- work together to agree common competencies, ensuring that, where appropriate, similar roles have equivalent competencies
- work together to ensure that where individuals from different companies need to interface, they are competent to do so
- ensure that senior managers have appropriate competency in safety leadership

- support, where appropriate, innovations in training and competency
- review existing training for those roles that undertake safety critical communications to ensure that it is in line with industry requirements
- continue to ensure that opportunities exist to discuss railway safety issues in depth
- ensure the appropriate use of new tools for training and briefing that spread the understanding of drugs and alcohol policies
- review the potential of new technologies for testing for the presence of drugs and alcohol in the body.

Current safety case holders will:

- develop new audit systems appropriate to the nature of their business where existing systems are no longer fit for purpose.

RSSB and its industry members will:

- continue working together to manage shared risk and enable visible safety leadership and challenge to take place.

RSSB will:

- develop the work packages and drive through the implementation of the strategy for standards management, including facilitating and co-ordinating the industry in influencing TSIs
- project manage the enhancement of SMIS to simplify input and data interrogation, to facilitate improvements in data integrity
- further improve the safety risk model in support of improvement plans for level crossings, operating irregularities and workforce safety
- continue to sponsor the Safety Critical Communications Focus Group.

Individual rail industry companies will:

- continue to review behaviours among their workforces, taking appropriate action to create a management system and working environment in which the root causes of irregular behaviour are reduced.

What the industry is doing

LEVEL CROSSINGS

The industry is committed to leading safety improvements at level crossings in the UK.

→ ACTIONS

The industry will:

- work to influence changes in legislation, and encourage a more balanced and risk-based joint rail/road approach to mitigating the risk arising from users
- implement a level crossing awareness programme.

Network Rail will:

- continue to focus on managing level crossing risk by updating its policy and continuing to develop reasonably practicable level crossing safety improvement schemes while discouraging any new level crossings
- actively pursue closure of existing level crossings where there is a justified safety benefit for doing so.



AT STATIONS

The majority of safety-related incidents involving passengers take place at stations. The risk areas at stations are: boarding and alighting from trains; trespass; slips, trips and falls; personal security and public behaviour; staff assaults; and crowding.

→ ACTIONS

Train and station operators will:

- actively seek opportunities within planned station redevelopment schemes for addressing boarding and alighting hazards
- continue to take opportunities presented by the introduction of new trains for reducing boarding and alighting hazards
- ensure that platform staff retain the competencies necessary to despatch slam-door stock at stations where charter train operators continue to use these vehicles.

Station operators will:

- adopt viable recommendations arising from current research programmes
- continue to ensure that stations are maintained to the appropriate standard
- continue to improve passenger information
- continue to improve station environments with improved lighting and core safe areas, where appropriate
- continue to work with the British Transport Police, supporting the police community support officer scheme and employing dedicated security staff, where appropriate
- make greater use of CCTV
- work towards an agreed industry specification for CCTV installation and download to simplify the process of making use of recorded images in tackling crime
- bring more stations into the Secure Stations Scheme
- review the impact of the proposed change to 24-hour licensing on public behaviour issues on the railway
- review their current arrangements for managing crowds at each of their stations.

The industry will:

- continue to adopt the range of initiatives set out in the RSSB good practice guide *Staff Assault: Reporting and Recording Assaults on Rail Staff*, published in 2004.

ON THE TRAIN

On train risk areas addressed in the Plan are: personal security; public behaviour; SPADs; vehicles; carriage of freight; and incident management.

→ ACTIONS

The industry will:

- continue to investigate and evaluate incidents to understand and address the underlying factors that lead to SPADs
- pursue its strategy to solve the 'reset and continue' problem
- continue to work with the HM Rail Inspectorate (HMRI) to determine whether TPWS is an appropriate method for reducing risk at speed restrictions
- continue to use table top and live exercises to enhance preparedness for incident management
- continue to investigate technology that prevents trains being stranded without essential services
- continue to improve the standards of safety critical communications.

Network Rail will:

- continue to review multi-SPAD signals and install additional risk mitigation where reasonably practicable
- continue to make information about multi-SPAD signals available to train operators through the SPADWEB website
- implement the new freight loading manual and associated competency regime for trains conveying infrastructure materials
- continue to develop and enhance plans for taking the lead on emergency response.

Train operators will:

- continue to ensure that drivers are fully briefed with the latest information on SPADs.

Vehicle owners and operators will:

- continue to review emerging trends in their risk profile for vehicles, and develop appropriate action plans
- ensure that new and refurbished vehicles are designed to reduce the risk from fire.

Freight operators will:

- apply the DfT's code of practice and maintain procedures to govern the security of dangerous goods on the network
- maintain robust operating arrangements in place at yards, sidings and depots when traffic flows and operators change.

Train operators and Network Rail will:

- review current contingency plans in the light of increasing passenger numbers and the opportunities and constraints imposed by modern rolling stock.

TRACKSIDE

The railway industry has put a great deal of effort into reducing the risk to workers and discouraging trespassers from gaining access. These efforts will continue in 2006. The railway is vulnerable to environmental factors outside its control including flooding, high tides, landslips and train adhesion problems caused by fallen leaves.

→ ACTIONS

Network Rail will:

- continue its programme to reduce risk at track access points, improve the safety of the trackside environment through vegetation management and lineside tidiness, the removal of

redundant materials and structures, and provision of safe walking routes

- continue to develop a competent and capable supplier base for infrastructure work
- continue to find innovative ways to communicate the safety message to individual track workers
- undertake a risk-based assessment of its maintenance operations at specific junctions and other locations
- develop improved automatic warning systems
- place increased reliance upon train-mounted and fixed inspection equipment
- complete the current work to simplify rules applicable to track work, making them easier to understand and follow
- pursue initiatives to ensure that RRVs are used safely
- continue to develop its earthworks database following a detailed assessment of embankments and cuttings
- review emerging trends on high-risk infrastructure failures, ensuring that appropriate maintenance regimes are in place
- continue to assess and, where viable, to remove redundant buildings, achieve better control of fly tipping, improve vegetation control, and reduce the opportunity for graffiti
- continue to undertake detailed engineering assessments of each potentially vulnerable bridge, to identify those where less restrictive arrangements can be applied without compromising safety
- continue to evaluate initiatives designed to reduce occurrences of bridge strikes, and work with highway authorities to implement reasonably practicable arrangements.

The industry will:

- review trends in the exposure of its workforce to general construction and other risk as it applies in the railway environment, and take appropriate mitigation measures as necessary
- collaborate to review the rules governing possessions – including the roles of nominated staff – to ensure that they are clear, unambiguous and practical
- continue its initiatives to reduce the effects of leaf fall
- continue its strategy based on the 4Es approach – enabling, education, engineering and enforcement.

Network Rail and infrastructure contractors will:

- complete their review of the purpose, effectiveness and use of method statements leading to improved planning and communication of project safety arrangements at all levels.

Network Rail and its suppliers will:

- continue to improve the quality of information on its assets through initiatives such as the high-speed measurement train and the experimental fitting of track geometry measurement systems to in-service trains.

Network Rail and train operators will:

- work together to train more staff to carry out inspections of bridges following bridge strikes.

Network Rail, in conjunction with the highways authorities, will:

- continue to pursue a programme of mitigation measures at the most vulnerable locations. This programme will be completed in March 2007.