

Background

While individual organisations are accountable for safety within their own undertakings, RSSB plays a key role in suporting an understanding of system safety - RSSB's core functions include measuring safety performance and analysing risk.

As a world leader in the field of railway risk modelling, RSSB seeks to maximise the benefit its members can derive from data through its Safety Risk Model (SRM) which models hazardous events that could directly lead to injury or fatality during the operation and maintenance of the mainline railway and the Precursor Indicator Model (PIM) that measures the risk, per million train miles, of a train accident - i.e. collision, derailment, fire or striking a road vehicle on a level crossing.

RSSB undertook a programme of work on behalf of the UK rail industry following a range of requests from industry stakeholders to:

- establish a common understanding as to how the industry delivers safety
- develop a framework of processes and criteria for decision makers to apply
- achieve clarity and stability in the safety governance of the railway

The work acknowledged that decisions about safety are not made separately, but are very much part of the normal business management processes.

The Challenge

Almost every policy, investment or operational decision taken by the GB railway industry has an impact on safety. It is therefore vital that the consideration of safety is embedded effectively into the decision-taking process. RSSB's technical expertise in risk and appraisal, and consensus building were ideally suited to meeting industry's need for formulating a consistent approach.

How We Can Help

Through an extensive programme of research, analysis and consultation the rail industry agreed on a consistent framework and approach to decisionmaking – which was published in a document called 'Taking Safe Decisions'.

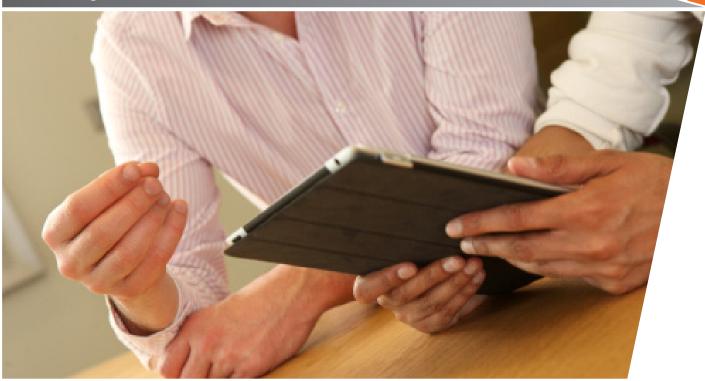
This describes the industry consensus view of how decisions should be taken that properly protect the safety of rail industry staff, passengers and others, satisfy the law and respect the interests of stakeholders, while remaining commercially sound.

It also provides guidance on what they mean in practice, and includes worked examples for those taking decisions that potentially impact upon safety.



Consulting

NetworkRail



Key Outputs

Industry agreement on the fundamental issue of safety was achieved through a think tank of industry experts, and was approved by the industry through industry stakeholder groups the and RSSB Board.

It was developed in parallel with guidance on cost-benefit analysis (CBA) in support of safety-related investment decisions, which was produced by the Office of Rail Regulation (ORR) for its own inspectors and published on the ORR website. Achieving consistency between the documented approaches of ORR and the industry was viewed as a considerable achievement for both parties. The consensus also led to clarification of the following:

a judgement about whether a measure is required to ensure safety so far as is reasonably practicable might be supported in some circumstances by a CBA including new guidance about how to construct a CBA for this purpose.

- the role of societal concern about risk impacts on government decision making
- application of the Tolerability of Risk (TOR) framework (published by the HSE in Reducing Risks, Protecting People) is not a requirement of the Health and Safety at Work Act etc 1974. The TOR framework is a conceptual guide for regulators that may help duty holders manage and prioritise safety activity by providing an alternative perspective on risk.

As a result, 'Taking Safe Decisions' is recognised as the authoritative reference on how the rail industry makes decisions that affect safety. It therefore provides the framework for a broad range of other cross-industry and individual company decisions and decision making processes.

Journal of Risk Research

'The route to Taking Safe Decisions' was published in the Journal of Risk Research in spring 2009 (G.J. Bearfield, Achieving clarity in the requirements and practice for taking safe decisions in the railway industry in Great Britain).

Safety & Reliability Society

In September 2009, 'Taking Safe Decisions' was recommended as 'very useful input to work on balancing risks' in relation to the nuclear sector by the chairman of the Safety and Reliability Society.

Highways Agency

In 2010, the Highways Agency applied 'Taking Safe Decisions' as 'industry good practice' as a decision making framework that supported clarity while also being efficient, as it justifies collecting data only on the basis of need for a particular decision.

