



**Writing safety plans -
A guide for operators
Spring 2010**

Introduction

In 2007 the railway industry adopted a radically new approach to safety planning. Previously, a group of national targets had been set, supported by a national safety plan that advised the industry as to the initiatives that would help to achieve them. The new approach was bottom-up, aggregating the actions and initiatives the industry was intending to take and from these producing a set of trajectories showing the expected results in risk terms. This change coincided with the Government's decision to set a safety target within the High Level Output Specification (HLOS) for the period 2009-14. Although the trajectories are not determined with reference to HLOS, they do demonstrate how the industry expects to achieve the target.

Following publication of the 2009-14 Strategic Safety Plan (SSP) it is not intended to produce a further plan until 2014, which will reflect the Government's targets for the 2014-19 period. In the meantime, actual performance against the trajectories will be monitored and mapped in the Annual Safety Performance Report (ASPR). However the trajectories – which were drawn up to cover the full 5-year period will not be re-plotted.

Nevertheless, the industry's underlying safety planning process will continue, even though an annual top-level public-facing plan will not be published. The intention is that a continuous period of coordinated safety planning will feed directly into a strategic safety plan covering the period beyond 2014. RSSB will continue to need sight of each railway operator's annual safety plan to assess the effect of any significant changes that may affect progress against HLOS.

This document explains in detail the essential safety planning information that is needed. It should be particularly noted that this need not necessarily be set out within a formal safety plan (note that the ROGS regulations do not require railway operators to produce a safety plan, only to undertake safety planning). The guidance should be read in conjunction with the 2009-14 SSP which gives a detailed explanation of how trajectories are formulated from the information provided by railway operators.

Purpose

This document sets out the information RSSB needs from railway operators in order to prepare the Railway Strategic Safety Plan (SSP). In most cases, this information will be presented in the railway operators own safety plans and may form the basis on which their plans are constructed. However, the safety plans of some railway operators take a high level approach and would not include a sufficient level of detail for incorporation into the SSP. In these cases the information should be supplied to RSSB separately.

This document sets out a 5-stage procedure and can be thought of as a 'quick start' guide.

Stage 1: Identify your key risk areas

The SSP identifies nine key risk areas for Great Britain's main line rail industry as a whole. These account for over 95% of the total residual risk on the railway; therefore efforts to improve the industry's overall safety performance should be concentrated in these areas. However, individual railway operators will inevitably identify a different set of key risks, reflecting the nature of their operations. For example, track worker behaviour is not a risk area for Railway Undertakings as this lies entirely within the control of Network Rail and its contractors; similarly, shunting within depots may be a key risk for a Railway Undertaking but would be out of scope for the SSP. RSSB is able to assist railway operators in identifying their key risks using data extracted from the safety risk model.

Stage 2: Explain current safety performance in the key risk areas

In analysing safety performance, each key risk area may need to be split up into a set of individual indicators; for example, *risk from train crew* might include SPADs, miscommunication and train despatch. Safety performance can be expressed in several different ways according to the preference of the railway operator; for example in terms of incident rates, accident frequency or risk.

Stage 3: Identify actions that address each key risk area

The actions need to be specific and measurable. In general, actions that refer to process reviews or exploring potential initiatives, although potentially important, are themselves of no use for the SSP. The actions emanating from those reviews however might well be of relevance. Generic actions addressing entire key risk areas should be avoided; so, for example, 'improve driver training' as a way of addressing train crew risk is unhelpful, whereas 'increase the use of driving simulators to reduce the number of SPADs' would be. Actions do not have to be new initiatives; on-going actions should also be included if they will provide future safety improvements.

Stage 4: Forecast anticipated safety benefits

Companies do not take action unless there is a defined anticipated benefit, so each action listed in a safety plan or related document should have the potential to result in a measurable improvement. The total benefit expected from actions listed under a key risk area should be aggregated to produce a result that represents a realistic aspiration. This may be expressed in terms of percentage risk reduction, percentage safety improvement or a reduction in the actual numbers of accidents or precursor incidents. Where possible, the improvement should be projected forward for at least three years, although the figures are likely to become less precise as the projection continues. In some cases, there may be a one-off improvement to be realised at a particular point in time whereas in others there may be gradual on-going improvement. One effective way of expressing this is to produce a graph showing risk reduction projected over a three year period; an example of how this might look for different types of action is shown below:

Graph 1 showing one-off improvement



Graph 2 showing gradual on-going improvement



Alternatively, a table such as that as shown below would be equally effective:

Action	Risk sector affected	Affected persons	Forecast risk reduction		
			2009	2010	2011
Improving stairs by marking the nosing – high risk stations	Passenger slips, trips and falls on stairs (currently xx passenger incidents per year)	Passengers	-2%	-2%	-2%
		Public	0	0	0
		Workforce	0	0	0

Stage 5: Submit the information to RSSB

Although the next SSP will not be published until 2014, to cover the period 2014 – 2019, the industry's underpinning safety planning work will continue and RSSB will monitor the commitments made in company safety plans. A copy of each safety plan should therefore be supplied to RSSB's safety planning team, either electronically or in hard copy, when it is published. The contact details for RSSB are:

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