

26 February 2008

Dear

## **RSSB Guidance on the use of Cost-Benefit Analysis in making decisions affecting safety**

This letter is to inform you of the latest RSSB guidance on how to incorporate safety risk into your decision making process. It updates the value of preventing a fatality (VPF) for 2008 and advises of a change in the relative weighting of certain minor injuries when calculating fatalities and weighted injuries.

### **Value of preventing a fatality (2008)**

The value of preventing a fatality for 2008 has been calculated by RSSB from Department for Transport (DfT) guidance to be:

$$VPF_{2008} = \text{£}1,652,000$$

This figure is for use within quantitative analysis to support decision making. The  $VPF_{2008}$  is also available electronically on the RSSB website:

[http://www.rssb.co.uk/safety/safety\\_strategies/vpf.asp](http://www.rssb.co.uk/safety/safety_strategies/vpf.asp).

### **Weighting of injuries – RSSB Board approves a change**

Since the late 1980s, fatalities and injuries have been used to assess safety risk and the reasonable practicability of proposed changes. The established means of taking injuries into account has been to weight injuries in relation to fatalities, where 10 major injuries and 200 minor injuries are taken as being statistically equivalent to one fatality. All safety reports and analyses that include the term Fatalities and Weighted Injuries (FWI) use these weightings. For example, the current level of risk, as defined in the Safety Risk Model version 5 (SRMv5), is 182 FWI/year.

Following a significant amount of research, consultation within the industry, the ORR and DfT, along with a recommendation from the Safety Policy Group, the RSSB Board has recently approved a change to this approach. With effect from 1 April 2008, a new weightings structure will be introduced, which more appropriately weights the significant number of minor injuries that are not sufficiently serious to be reportable under RIDDOR; it also formalises weightings for the occurrence the shock/trauma that can occur as a result of witnessing or being involved in a range of accidents/incidents.

The weightings will be as follows:

	Now	1 April 2008
Fatality	1	1
Major Injury	10	10
Minor Injury	200	No longer applicable
Shock/trauma	200	No longer applicable
Reportable Minor Injury and Class 1 Shock/Trauma		200
Non-reportable Minor Injury and Class 2 Shock/trauma		1000

Where:

- Class 1 Shock/trauma injuries relate to witnessing fatality incidents and train accidents (collisions, derailments and fires), and
- Class 2 Shock/trauma injuries relate to all other causes of shock/trauma such as verbal assaults, witnessing physical assaults, witnessing non-fatal incidents and near misses.

The new weightings will have an effect on the future reporting of safety information and in the assessment of the value of preventing the less serious minor injury and shock/trauma events. The RSSB Board considers that this will reflect the value society places on such events more accurately. Due to the high number of the less serious minor injuries and shock/trauma events that occur on the mainline railway each year, the change in the weightings will result in the current level of risk, predicted by SRMv5, of 182 FWI/year being reduced to approximately 140 FWI/year.

The Board has recommended that all currently approved plans are not amended, but that these figures are used with immediate effect for the assessment of future investments and safety improvement schemes.

### **Decision taking framework**

The latest RSSB guidance describing how to incorporate the VPF and FWI weightings into your organisation's decision making process, *Taking safe decisions*, can be found at:

[http://www.rssb.co.uk/safety/safety\\_strategies/sdmoukr.asp](http://www.rssb.co.uk/safety/safety_strategies/sdmoukr.asp)

During the early months of 2008, we will be publishing further guidance in support of *Taking safe decisions*. This will take account of a recent ORR consultation on the use of cost-benefit analysis, the changes to the weighting of injuries outlined above, and the consensus that has been developed through the cross industry 'think tank,' the Safety Policy Group and the RSSB Board. When the guidance document is published, we will be withdrawing '*How safe is safe enough*' and a number of other supporting documents, in favour of '*Taking safe decisions*'.

If you or your colleagues want any advice or help with the interpretation of this letter or the documents that we are publishing, I will be happy to make the appropriate arrangements.

Yours sincerely

Anson Jack  
**Director of policy, research and risk**