Managing the Accidental Obstruction of the Railway by Road Vehicles

INTRODUCTION

This leaflet summarises the available guidance on how highway authorities and rail authorities can demonstrate that they have assessed risk at sites where roads cross or run alongside railways and that they have considered how to reduce that risk.

The guidance comes as a booklet, with everything authorities should need to assess and plan for risk reduction. Its contents are described in ‘THE GUIDANCE BOOKLET’ section below.

The advice in the booklet emphasises the need for consistency in assessing rail interfaces with roads. Proforma spreadsheets make this easier to achieve. There is also guidance on assessing how to minimise the risk at specific sites. This guidance indicates the level of justifiable expenditure for sites scoring at different levels in the initial ranking process.

Final decisions on the need for, and type of, treatment rest jointly with highway and rail authorities. They should not rule out the possibility of action at any site.

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Traffic Advisory Unit
**RANKING RISK AT ALL SITES**

All sites must be inspected to assess comparative risk. The scoring system highlights any potential high risk areas and a record of risk assessment is made using a consistent scoring sheet for each site and road type (Chapter 3, Forms 1a, 1b, or 2). This will provide an audit record.

The higher the score, the higher the estimated likelihood of a vehicle leaving the road and reaching the railway, resulting in a serious accident. Sites can score up to 147 but less than 8% of the approximately 8500 sites in the country are likely to score over 100.

The scoring sheets give key road and rail factors, each with an associated scoring system, that are considered most important in the assessment of risk. The scores attained for each factor are summed to give an overall score for the site. The three scoring sheets are similar but reflect the key differences in assessing risk at single-carriageway overbridge sites, dual-carriageway and motorway overbridge sites, and at parallel sites. The notes accompanying the scoring sheets (Chapter 3) explain how to use them and define clearly the different categories possible within each factor.

**ASSESSING SCOPE FOR TREATMENT OF A SITE**

The risk ranking process identifies the worst case parameters contributing to an assessment of the overall level of risk at a site. The second stage assessment process then refines the initial assessment by collecting and recording more information. Following this, the mitigation spreadsheet (Form 3) may be used to help engineers choose cost-effective risk-reduction measures.

Engineers should consider a range of measures at each site. The spreadsheet then gives the relative cost per unit reduction in risk for different measures.

The guidance on assessing the scope for treatment (Chapter 4) explains the stages of the process following completion of forms 1a, 1b or 2. The notes explain how the mitigation spreadsheet works and encourage the engineer to exercise his own judgement at each stage.

Section 4.3 of the notes gives indicative guideline figures on how much can justifiably be spent at a site, depending on its comparative risk score. Final decisions on justified cost should take account of local factors, and be agreed jointly between highway and rail authorities. Section 4.4 of the notes discusses some of the different types of treatment available that are designed to either reduce the likelihood of vehicles leaving the road or the probability of them reaching the railway track. Section 4.5 gives examples of site assessments.

The guidance packbooklet also gives details of:

- How scores should be documented
- Contacts who can provide further advice and guidance.
THE GUIDANCE BOOKLET

The guidance packbooklet ‘Managing the accidental obstruction of the railway by road vehicles’ is available on the DfT website and comprises:

- The process of managing the road/rail interfaces (Chapter 1)
- Responsibility and costs (Chapter 2)
- Ranking risk at all sites (Chapter 3)
  - Road vehicle incursion risk ranking scoring sheets
    - Overbridge sites
      - Single carriageway (Form 1a)
      - Motorways & dual carriageways (Form 1b)
    - Neighbouring (Parallel) road sites (Form 2)
- Assessing scope for treatment at a site (Chapter 4)
- Mitigation spreadsheet (Form 3)
- Working group members (Appendix 1)
- Contact points (Appendix 2)

THE PROCESS OF MANAGING THE ROAD/RAIL INTERFACES

This chapter gives the overview of the whole process (Chapter 1). It provides the background to the guidance on the treatment of road rail interfaces.

It sets out the thinking behind the suggested approaches. It describes and explains the suggested approaches, stage by stage, and addresses many of the issues that are likely to arise during the process.

The chapter also shows how a consideration of the national picture has enabled DfT to predict the distribution of risk across all sites and so to offer guidance of reasonable costs at a local level.

RESPONSIBILITY AND COSTS

Chapter 2 is the protocol for apportioning responsibility and costs of improvements made at locations where roads maintainable at public expense meet, cross or run close to railways. The protocol does not cover level crossings.
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