

HMRI's Risk Profile Topic Strategy for Railway Operating
Incidents

2006-07 to 2008-09

Author

Stephen Poole

Email address

Stephen.poole@orr.gsi.gov.uk

1 INTRODUCTION

This document explains HMRI's policy, strategic aims, current position and proposed workstreams for 2006-07 onwards regarding the following Risk Profile Topics (RPTs):

- passenger train incidents;
- operating irregularities, including signals passed at danger (SPADs); and
- non-passenger train incidents.

The detailed scope of this strategy is set out in a supporting document. Contact the author for details. This also explains the Topic Planning Process, which resulted in the three RPTs being risk-ranked 10th, 12th and 17th respectively out of a total of 18. Each RPT has a number of contributory sub-topics, details of which are also explained in the same document. HMRI's overall strategy is described in [Introduction to Topic Strategies](#). This gives the wider context in which this document should be read.

Separate documents give details for the following Topics that are Railway Operations related, but have individual strategies:

Route Crime; (*insert hyperlink*) and

Vehicle and animal incursion (*insert hyperlink*)

2 CURRENT POSITION

2.1 Passenger train incidents

Falls from trains have largely been controlled with the near abolition of slam door stock without Central Door Locking, but Selective Door Opening has been introduced with controls differing between operators.

HMRI lacks a clear understanding of the relative merits of emergency preparedness arrangements on LUL and NR infrastructures. Emergency preparedness may need revising in the light of changed terrorist tactics.

HMRI and industry are unclear on the effects of train overcrowding on issues such as thermal stress, practicability of evacuation and crowd control.

Industry is weak on the risks from slips, trips and falls on trains and therefore on the management of those risks.

2.2 Operating Irregularities (including SPADs)

SPAD risk has reduced by 86% since 2001. Residual risk is focused largely on shunt moves, Empty Coaching Stock and out-of-course working and is largely associated with human factors and health and safety management systems, rather than with equipment. HMRI and industry position on SPADs is aligned, but comparative risks between LUL and Network Rail infrastructure are yet to be assessed.

HMRI and industry are weak on the definition of operating irregularities and therefore of the risks posed by them.

2.3 Non-passenger train incidents

HMRI and industry have done a lot of work in recent years on the carriage of dangerous goods, including train preparation and routing, but it is possible that the consequences and management of a major dangerous goods incident have not been adequately addressed. HMRI may need to import expertise on the consequences and management of fire and explosion.

Incidents of unsafe loading and unsafe train preparation are mainly restricted to trains coming out of possessions, but have implications for dangerous goods and other movements.

Dangerous goods are being carried by more companies.

There are discrepancies between Railway Group Standards and Carriage of Dangerous Goods Regulations 2005.

The number of freight trains becoming divided in running has increased, posing an increased risk to Drivers and Rolling Stock Technicians working lineside whilst re-coupling.

3 HMRI POLICY

To direct our work activities so that they effectively add value to the maintenance of, and where reasonably practicable, further sustained reductions in catastrophic and other significant risk to passengers, staff and public from: collision, derailment, fire, explosion, radioactive or chemical contamination resulting from railway operational activities or from lack of emergency preparedness by railway operational management and staff.

4 STRATEGIC AIMS

- Ensure that dutyholders have effective management systems and procedures to control risks;
- Ensure that information and intelligence on risk and trends in incidence and compliance are used effectively to direct targeted programmes of work;
- Ensure recommendations relating to the management of relevant risks from investigations of recent major incidents; from Rail Accident Investigation Branch (RAIB) investigations, as well as other HMRI and industry investigations are satisfactorily addressed;
- Promote transparency and consistency in HMRI's operational activity by production of clear guidance on current standards and enforcement issues, of which the industry also has a clear understanding;
- Ensure that HMRI's management arrangements for planning, implementation, monitoring, and review of its own activities are suitable and effective; and
- Undertake proportionate enforcement action in accordance with the ORR Enforcement Policy Statement.

5 PROPOSED DELIVERY OF THE STRATEGIC AIMS

The main focus will be on catastrophic risk, with particular attention on emergency preparedness, management of a major dangerous goods incident and better understanding of the risks posed by operating irregularities. Within this there will be considerable emphasis on human factors and health and safety

management systems. There will be better targeting of HMRI resources in respect of a) influencing duty holders through attendance at meetings, b) carrying out of investigations and c) monitoring of close-out of industry recommendations.

5.1. Generic Railway Operational Incident Risk

- Attendance at NR, LUL, TOC/FOC, RSSB, etc. meetings and conferences. Work is proposed to improve targeting of HMRI attendance at meetings and conferences, to include assessing which skills are required by those attending, how those skills are acquired/maintained and how feedback from meetings should be disseminated. This with the aim of increasing the 'influencing' aspect of HMRI attendance, with particular emphasis on high level H&S management systems;
- Better targeting of HMRI investigations towards incidents posing the highest risk and those which, while of apparently low risk, may be indicative of underlying problems, and the acquisition/maintenance of sufficient intelligence and expertise to make judgements as to which incidents these may be;
- Collation and review of intelligence on comparative risks and how they are managed, especially regarding management of emergency preparedness, SPADs and operating irregularities by vertically integrated operators in comparison with NR/TOCs/FOCs;
- Monitoring of the quality of industry investigation reports and the provision of advice to the industry to help improve the outputs and outcomes of those reports; and
- Tracking of recommendations from HMRI, RAIB, RSSB and industry incident reports, with an improved system of ensuring close-out.

5.2 Passenger Train Incidents

In addition to 5.1. above:

- Working with LUL, NR, TOCS, BTP, HSE, etc. to ensure that emergency preparedness arrangements take adequate account of changed terrorist tactics;
- In conjunction with RSSB, achieving a clearer position on the safety risks, if any, of overcrowding on trains; and
- Achieving a consistent approach to the human factors elements of operation of Selective Door Opening by traincrews.

5.3 Operating Irregularities (including SPADs)

In addition to 5.1. above:

- Working with all duty holders and RSSB to establish a clear definition of operating irregularities and the risks they pose; and
- Ensuring, by a continuing programme of inspection, that remaining risk from SPADs is being adequately managed.

5.4 Non-passenger train incidents

In addition to 5.1. above:

- Assessment of industry preparedness for a major dangerous goods incident;
- Working with NR and FOCs to ensure that Railway Group Standards are brought into compliance with Carriage of Dangerous Goods Regulations 2005; and
- Ensuring that freight companies take into account the risks to staff working next to divided trains on the running line.