



OFFICE OF **RAIL REGULATION**

**NATIONAL SAFETY AUTHORITY (NSA)
REPORT**

AUGUST 2013

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Scope of the Report

1. This report covers the period from 1 January 2006 to 31 December 2006; it is concerned with the UK mainline railway system as a whole and does not restrict itself to the interoperable railway. It does not include metros, trams and other light rail systems, networks that are functionally separate from the rest of the railway or privately owned railway infrastructure that exists solely for the use by the infrastructure for its own freight operations.
2. Safety Authority responsibilities in the UK are shared between the Office of Rail Regulation (ORR) and the Department for Regional Development in Northern Ireland (DRDNI). ORR is the safety authority for England, Scotland and Wales (known collectively as Great Britain – GB) and the DRDNI is the safety authority for Northern Ireland. It has been agreed, however, that the GB safety authority, ORR, will represent Northern Ireland in relations with the ERA. Taken together, the two authorities carry out the functions of the safety authority of the UK. Part A of the report refers to Great Britain and Part B refers to Northern Ireland.
3. The Common Safety Indicator (CSIs) data at Annex C relates only to rolling stock in motion and includes passengers, workers, members of the public and emergency services. This data is aggregated at the UK level, and therefore combines the data relating to GB and Northern Ireland.

Part A - Great Britain

1. Introduction

See Annex A1 for mainline network map in Great Britain.

See Annex A2 for list of Railway Undertakings and Infrastructure Managers having a service in Great Britain

- 1.1 This is the first Annual Safety Report produced and published by the Office of Rail Regulation (ORR) as the National Safety Authority (NSA) for Great Britain as required by Article 18 of the Railway Safety Directive 2004/49/EC which states;

Each year the safety authority shall publish an annual report concerning its activities in the preceding year and send it to the agency by 30 September at the latest. The report shall contain information on;

- (a) the development of railway safety, including an aggregation at Member State level of the CSIs laid down in Annex 1;*
- (b) important changes in legislation and regulation concerning railway safety;*
- (c) the development of safety certification and safety authorisation;*
- (d) results of and experience relating to the supervision of infrastructure managers and railway undertakings.*

- 1.2 A template and guidance providing a common structure and suggested content for annual safety reports was issued by the European Rail Agency (ERA) Task Force on Annual Safety Reports in January 2007. This report conforms to that guidance and is expected to meet ERA requirements.

- 1.3 The ORR Annual Safety Report will be published on both the ORR and ERA public websites and will contribute to the ERA biennial report on safety performance, the first of which will be published in 2008.

2. The National Safety Authority for England, Scotland and Wales

- 2.1 The GB arm of the National Safety Authority, the Office of Rail Regulation (ORR), was established on 5 July 2004 under the Railways and Transport Safety Act 2003 as amended. ORR is an independent statutory body led by a Board. The Secretary of State for Transport makes appointments to the Board for a fixed term of up to five years.
- 2.2 ORR has a range of statutory powers under the Railways Act 1993. It also has concurrent jurisdiction with the Office of Fair Trading under the Competition Act 1998.
- 2.3 On 1 April 2006, ORR assumed new responsibilities as a combined health, safety and economic regulator for Great Britain with the transfer from the Health and Safety Executive (HSE) of its responsibilities for health and safety in the rail industry.
- 2.4 Our three-year corporate strategy was published in April 2006 and will take ORR to 31 March 2009. The strategy sets out our long-term vision for the mainline railway industry:

‘a successful partnership of Network Rail, operators, suppliers and funders working together to meet the needs of passengers and freight customers, and deliver a safe, high performing, efficient and developing railway.’

- 2.5 ORR’s key responsibilities are:
- 2.6 to ensure that Network Rail, the owner and operator of the national railway infrastructure – the track and signalling – manages the network efficiently and in a way that meets the needs of its users;
- to encourage continuous improvement in health and safety performance;
 - to secure compliance with relevant health and safety law, including taking enforcement action as necessary;
 - to develop policy and enhance relevant railway health and safety legislation; and

- to grant licenses to operators of railway assets, to set the terms for access by operators to the network and other railway facilities, and to enforce competition law in the rail sector.

2.7 ORR's main office is near Covent Garden in London with additional offices at various locations across England, Wales and Scotland. ORR's workforce consists of around 350 people in total.

See Annex B1 for ORR organisation chart as at 31 December 2006.

2.8 Within ORR, Her Majesty's Railway Inspectorate has a key role in meeting GB's obligations to enforce European Union health and safety law, focusing effort on the most serious risks and the areas where intervention will have most effect. On 31 December 2006 there were 154.4 full-time equivalent staff in HMRI.

See Annex B2 for HMRI organisation chart and team responsibilities as at 31 December 2006.

2.9 ORR's role as the National Safety Authority for Great Britain is to:

- work with Department for Transport (DfT) to provide the appropriate regulatory framework so that railway safety is generally maintained and, where reasonably practicable, continuously improved;
- assess each duty holder's application for ROGS safety certificates and authorisations, including its co-operation arrangements; and
- assess whether safety is being achieved by inspecting duty holders' safety management systems (SMSs) and assessing available safety information and data.
- authorise the placing into service of structural subsystems on the UK trans-European network; and check that they are operated and maintained in accordance with the essential requirements.

3. Development of railway safety

- 3.1 The general trend of improvement in railway safety for passengers and workers in the UK continued in 2006 with key areas such as level crossing fatalities and railway employee injuries reducing. In the last 5 years, the risk of dying in a train accident has halved, largely due to the use of the train protection warning system (TPWS).
- 3.2 The Railway Safety Directive requires infrastructure managers (IMs) and railway undertakings (RUs) to be responsible for the safe operation of the railway system and to co-operate with each other where appropriate. In the UK, the Railways and Other Guided Transport Systems (Safety) (ROGS) Regulations 2006 place an explicit obligation on IMs and RUs to work together as equal partners to achieve the safe operation of the system. This has changed the role of IMs, as their previous responsibilities to oversee system safety have been removed. For example, the way in which changes to rolling stock and infrastructure are introduced onto the mainline network is altering. Until now, the IM controlled the introduction onto the network of engineering changes to rolling stock. This process is being replaced by a cooperative assessment of compatibility, with the aim of reaching agreement between the IM and RU, and referral to the NSA in cases where agreement cannot be achieved.

Common Safety Indicators (CSIs)

- 3.3 This is the first year that CSI data has been collected and there is no historical data for comparisons. Trends in CSI data will be reported in future years.

See Annex C for UK Common Safety Indicator data.

Rail Accident Investigation Branch

- 3.4 The Rail Accident Investigation Branch (RAIB) was established by the Railways and Transport Safety Act 2003. The Railways (Accident Investigation and Reporting) Regulations 2005 – the RAIR regulations), made under the Act, provide the detailed framework for their activities, and implement Chapter 5 of the Railway Safety Directive. RAIB's remit is to carry out a no-blame investigation into railway incidents and determine root causes. ORR remains responsible for investigating incidents to determine whether any

breaches of health and safety law occurred and for taking enforcement action as necessary.

- 3.5 In 2006 RAIB undertook 51 investigations and published 26 reports with a total of 133 recommendations. Recommendations covered such areas as rolling stock modification, changes to points design and safety management systems (SMS) relating to railway undertakings and infrastructure managers.

4. Important legislative changes

The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS)

- 4.1 The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) (which together with existing national legislation implement Chapters II and III OF THE Railway Safety Directive) came into force on 10 April 2006 and represent a significant change in the way that safety on Britain's railways is regulated. ROGS has also had a significant impact on the railway industry's own safety related processes. ROGS simplifies and consolidates the legislative framework for railway safety and reduces bureaucracy for railway duty holders.
- 4.2 ROGS requires railway operators and railway infrastructure managers on the mainline railway to maintain a safety management system (SMS) and hold a safety certificate/authorisation which indicates that their SMS has been accepted by ORR. ORR may accept or refuse applications for safety certification (railway undertakings) or authorisation (infrastructure manager) and revoke certificates/authorisations already issued.
- 4.3 One key aspect of the ROGS Regulations is the requirement for duty holders to have in place a safety verification (SV) scheme for introducing new or altered equipment that is novel to the transport system and is likely to give rise to a significant new risk or a significant increase in existing risk.
- 4.4 In terms of railway safety regulation, ROGS means that ORR's role is changing from involvement in approving schemes to a greater emphasis on inspecting and monitoring duty holders' SMSs, and SV schemes in particular.

Enforcing Authority for Railways and Other Guided Transport Systems Regulations 2006 (EARR)

- 4.5 The Enforcing Authority for Railways and Other Guided Transport Systems Regulations 2006 (EARR) establish the areas of responsibility of ORR and the Health and Safety Executive as regards railway safety.

See Annex D for details of relevant regulations.

5. The development of safety certification and authorisation

National legislation – starting dates – availability

- 5.1 The ROGS Regulations came into force on 10 April 2006, and the requirements regarding safety certificates and safety authorisations applied from 1 October 2006.
- 5.2 Transitional arrangements mean that the holder of an accepted railway safety case (RSC) under the previous Railways (Safety Case) Regulations is deemed to comply with the requirement to obtain a safety certificate and/or safety authorisation until a specified date, after which they will need to have obtained a full certificate and/or authorisation under ROGS. This date will depend on the date that their RSC periodic review would have fallen due. Full certificate/authorisations are required by 1 October 2008 at the latest.

Safety Certificates

- 5.3 To help the rail industry meet the new requirements placed on it by ROGS, we led a project involving the Association of Train Operating Companies (ATOC) to develop a template to be used by rail companies for submitting safety certificate submissions to ORR. ATOC has agreed to share the template with any duty holder who is proposing to submit an application for a safety certificate or authorisation
- 5.4 No updated or amended Part A or Part B certificates have been issued in the period covered by this report.. No Part A or Part B certificates were issued during this period. (NB All Part A certificates where the assessment commenced in this period were issued within the 4 month timescale set out in Article 12(1) – even if the issue date was in 2007).
- 5.5 We received no requests in this period from other National Safety Authorities to verify/ access information relating to a Part A certificate of a railway undertaking that has been certified in the UK but applies for a Part B certificate in another member state.

See Annex E for numerical data.

Procedural Issues

5.6 The following issues were raised by railway undertakings:

- concerns about classifying infrastructure maintenance companies (IMCs) as freight operators.
- issues about ensuring that safety representatives have been consulted and affected parties informed as required.
- issues in certain cases on deciding who should actually apply for the certificate due to contractual and licensing relationships.

5.7 There are two main feed back routes for railway undertakings to express their opinion on issuing procedures/practices or to file complaints.

- (a) An industry liaison group has been formed to gain industry and trade union input into the overall ROGS (RSD) package and this specifically covers Certificate/Authorisation process.
- (b) A 3-year project evaluating the ROGS regulations is under way. This will involve questionnaires to railway undertakings on the overall ROGS package including the certification/authorisation process.

Safety Authorisations

5.8 No updated or amended authorisations have been issued in this period. No part authorisations have been issued during this period. (NB All authorisations where the assessment commenced in this period were issued within the 4 month timescale set out in Article 12(1) – even if the Issue date was in 2007).

See Annex E for numerical data.

Procedural Issues

5.9 The following issues have been raised by infrastructure managers:

- ensuring that safety representatives have been consulted and affected parties informed as required.
- the level of detail of the evidence that needs to be provided in an application.

- There feed back routes for infrastructure managers to express their opinion on issuing procedures/practices or to file complaints are those described in paragraph 7, above.

6. Supervision of Railway Undertakings and Infrastructure Managers

- 6.1 Within ORR, supervision of the health and safety performance of the railway industry is largely carried out by HMRI.
- 6.2 Before the transfer of health and safety responsibilities to ORR in April 2006, HSE undertook work to review and improve HMRI's structure, processes and strategies. One output was a new process to produce HMRI's annual work programme. This process was retained on transfer to ORR and remains a key driver for the Inspectorate's detailed operational planning. In addition to statutory and reactive work, the process includes two proactive components: one based on the identification of risk-based topics applicable across the industry as a whole; and one based on duty holder specific issues. Once the risk-based topics have been identified, a strategy is developed for each of the topic areas (Topic Strategies).
- 6.3 The Topic Strategies (see the list below) enable HMRI to plan its inspection activities in accordance with the ORR's corporate strategy and business plan and its specific commitment that the inspectorate's activities will primarily be driven by risk and the likely effectiveness of the intervention.

Topic Strategies

Employee Safety
Command Control Signalling
Level Crossings
Track, including switches and crossings
Health and Safety Management Systems and Risk Assessment
Human Factors
Occupational Health
Traction supply systems
Railway Operations
Rolling stock
Route Crime
Stations

Structures

Vehicle and animal incursion

- 6.4 The strategies set out what we aim to achieve, and include potential work streams for ensuring that the risks associated with individual topics are properly managed by duty holders. They provide a focus for the Inspectorate on the key issues for the control of catastrophic and other significant risks. Because they are based on evidence and risk, they are influential in setting future direction but do not detail how the work streams are delivered year-on-year.
- 6.5 HMRI produces an annual Operational Plan on the basis of a fiscal year. Included as part of the operational plan are delivery plans for the Infrastructure Manager and the Railway Undertakings. The delivery plans outline the number of days allocated to assignments; each assignment relates to a Topic Strategy and may consist of a number of inspections.

Purpose of assignments

- 6.6 Assignments have three main purposes:
- To direct inspector resources to important areas, in accordance with strategy, for them to be inspected and assessed locally, and local action taken as a result.
 - To capture the outcomes of those inspections systematically so as to judge and report upon the national safety performance.
 - To use judgements about national performance to seek improvements via the national issues system.

Summaries of main findings by topic and inspection assignment

- 6.7 The programme of proactive inspections is based on topics selected according to an analysis of the risks and standards of control. Our priorities for the infrastructure were track, signalling and telecommunications, maintenance, level crossings and employee safety.

- 6.8 A major safety initiative by the infrastructure manager was to embed the responsibility for safety within the functions responsible for delivering the activity. This is making an impact in the areas of operations, maintenance and major projects.
- 6.9 Our inspections found significant improvements in the management of assets and associated safety performance. We found improvements to the asset management system and in its frontline application. An exception was the maintenance of stations with a significant backlog needing to be tackled.
- 6.10 On structures there were problems of earthworks failures that were mostly related to higher than expected rainfall.
- 6.11 With track, there were improvements in the overall condition and in the control of poor track conditions. Where poor track conditions occurred they were being identified and managed but with some local exceptions.
- 6.12 During the year, the infrastructure manager introduced a change to the management of staff competence that would affect safety, designed to achieve a step-improvement in operational and safety performance. This included the competence of staff maintaining the assets, and whilst this is still being implemented, we found an area that required particular vigilance was maintaining the competence of signal maintenance technicians.
- 6.13 A major cause of accidents is level crossings and the infrastructure manager is engaged in high-profile initiatives to reduce the numbers of incidents caused by public misuse. User-worked crossings are a significant source of risk and we found evidence of improved maintenance.
- 6.14 On operational safety, the infrastructure manager introduced a safety initiative to improve safety critical communications and this was extended to involve train operators.
- 6.15 There were instances of a lack of industry co-ordination and potential conflict between the desire of train operators to run trains and the need of the infrastructure manager to have sufficient time to undertake maintenance work. This is a particular concern when traffic flows are increased.
- 6.16 On workforce safety, the main numerical measures of risk were all positive, with no fatalities to infrastructure manager staff or their contractors during the

year. The reportable accident frequency rate continued to fall substantially. This was a strong performance.

- 6.17 From the inspection work we continue to find examples of where protection of track workers needs to be improved.
- 6.18 The occupational health of the workforce is taking an increasing profile within the sector. The industry is making advances steadily. We found improvements in welfare at mobile worksites, and in managing, work-related violence at major stations. Areas of occupational health still requiring attention included manual handling (e.g. lever-pull operations) and asbestos in railway buildings.

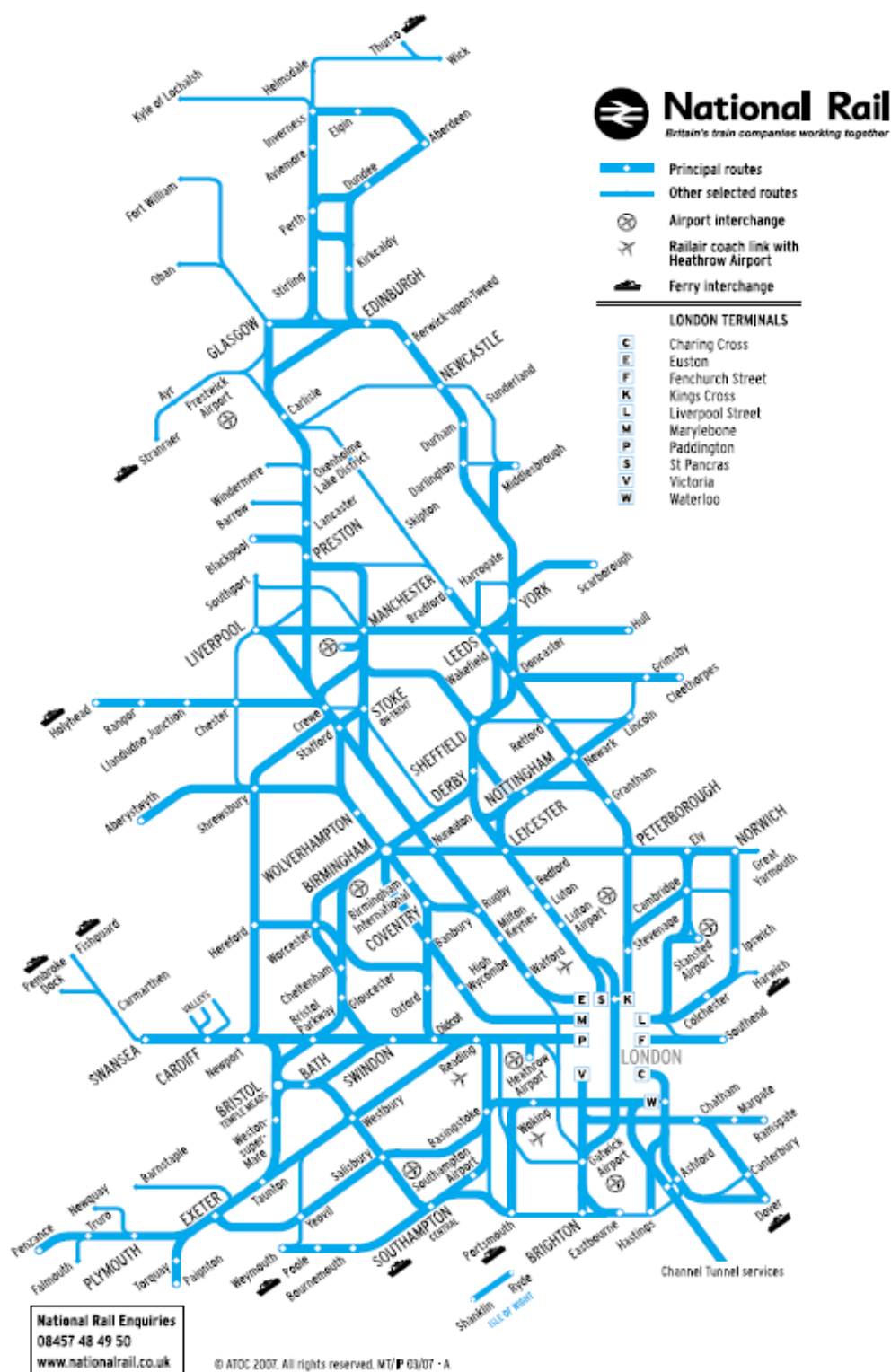
General

- 6.19 There are several industry initiatives underway that aim, among other things, to improve safety, including: awareness of hazards in the workplace; safety culture; and safety leadership and safety on the line. Other initiatives are in the early stages of delivery such as: communication; behaviours; competence assessment; and possessions.

7. Conclusions

- 7.1 The generally improving trend in railway safety continued in 2006, with key areas such as level crossing fatalities and railway employee injuries reducing. The numbers of train incidents remain similar to 2005, but the number involving malicious action reduced.
- 7.2 ROGS came into effect in April 2006 and we worked with the industry to ensure smooth implementation.
- 7.3 During 2007-08 we will continue to press for improved safety, performance and efficiency on the UK railway and we will take action on under-performance as necessary. We will continue to support and encourage all Britain's railway enterprises to meet their obligations under health and safety law, though we will take enforcement action should it be necessary.

Annex A1- Map of GB Mainline Railway



Annex A2 - List of GB Railway Undertakings and Infrastructure Managers

RAILWAY UNDERTAKINGS		
NAME	ADDRESS	WEBSITE
Arriva Trains Wales Ltd	St Mary's House 47 Penarth rd Cardiff CF10 5DJ	www.arrivatrainswales.co.uk
Central Trains Ltd	Central trains Ltd Box 4323 Birmingham B2 4JB	www.centraltrains.co.uk
Chiltern Railway Company Ltd	Great Central House Marylebone Station Melcombe Place London NW1 6JJ	www.chilternrailways.co.uk
c2c Rail Ltd	Floor 11 207 Old St London EC1V 9NR	www.c2c-online.co.uk
Direct Rail Services Ltd	Kingmoor Depot Etterby Road Carlisle CA3 9NZ	www.directrailservices.com
Eurostar (UK) Ltd	Eurostar House Waterloo Station London SE1 8SE	www.eurostar.com
First Capital Connect Ltd	Hertford House 1 Cranwood St London EC1V 9QS	www.firstcapitalconnect.co.uk
First Greater Western Ltd	Milford House 1 Milford St Swindon Wiltshire SN1 1HL	www.firstgreatwestern.co.uk
First ScotRail Ltd	Atrium Court 50 Waterloo St Glasgow G2 6HQ	www.firstgroup.com/scotrail
First/Keolis Transpennine Ltd	50 Eastbourne Terrace Paddington London W2 6LX	www.tpexpress.co.uk
Gatwick Express Ltd	5 th Floor Terminal House Grosvenor Gardens London SW1W 0AU	www.gatwickexpress.com
Great Central Railway (Nottingham) Plc	Sherwood House 7 Gregory Boulevard Nottingham NG7 6LB	www.gcrailway.co.uk
Great North Eastern Railways Ltd	Main Headquarters Station Rise York YO1 6HT	www.gner.co.uk

RAILWAY UNDERTAKINGS

NAME	ADDRESS	WEBSITE
Heathrow Express Operating Company Ltd	Floor 3 Eastbourne Terrace Paddington London W2 6LE	www.heathrowexpress.com
Hull Trains Company Plc	Premier House Ferensway Hull HU1 3 UF	www.hulltrains.co.uk
Merseyrail Electrics 2002 Ltd	Rail House Lord Nelson St Liverpool L1 1JF	www.merseyrail.org
Midland Mainline Ltd	75 Davies St London W1K 5HT	www.midlandmainline.com
Northern Rail Plc	Serco House 16 Bartley Wood Business Park Bartley Way Hook Hampshire RG27 9UY	www.northernrail.org
London Eastern Railway (T/A One)	75 Davies St London W1K 5HT	www.onerailway.com
Silverlink Train Services Ltd	Floor 11 207 Old St London EC1V 9NR	www.silverlink-trains.com
Stagecoach South Western Trains Ltd (T/A South West Trains)	Friars Bridge Court 41-51 Blackfriars Road London SE1 8NZ	www.southwesttrains.co.uk
Stagecoach South Western Trains Ltd (T/A Island Line)	Friars Bridge Court 41-45 Blackfriars Rd London SE1 8PG	www.southwesttrains.co.uk
London and Southeastern Railway Ltd (T/A Southeastern)	Friars Bridge Court 41-45 Blackfriars Rd London SE1 8PG	www.southeasternrailway.co.uk
New Southern Railway Ltd	Go-Ahead House 26-28 Addiscombe Road Croydon Surrey CR9 5GA	www.southernrailway.com
Cross Country Trains Ltd	4 th Floor East Meridan Birmingham B5 4HA	www.virgintrains.co.uk
West Coast Railway Ltd	Warton Road Carnforth Lancashire LA5 8HX	www.wcrc.co.uk
West Coast Trains Ltd	120 Campden Hill Road London W8 7AR	www.virgintrains.co.uk
Freightliner PLC	3 rd Floor The Podium 1 Eversholt St London NW1 2FL	www.freightliner.co.uk
Freightliner Heavy Haul Plc	3 rd Floor The Podium 1 Eversholt St London NW1 2FL	www.freightliner.co.uk

RAILWAY UNDERTAKINGS

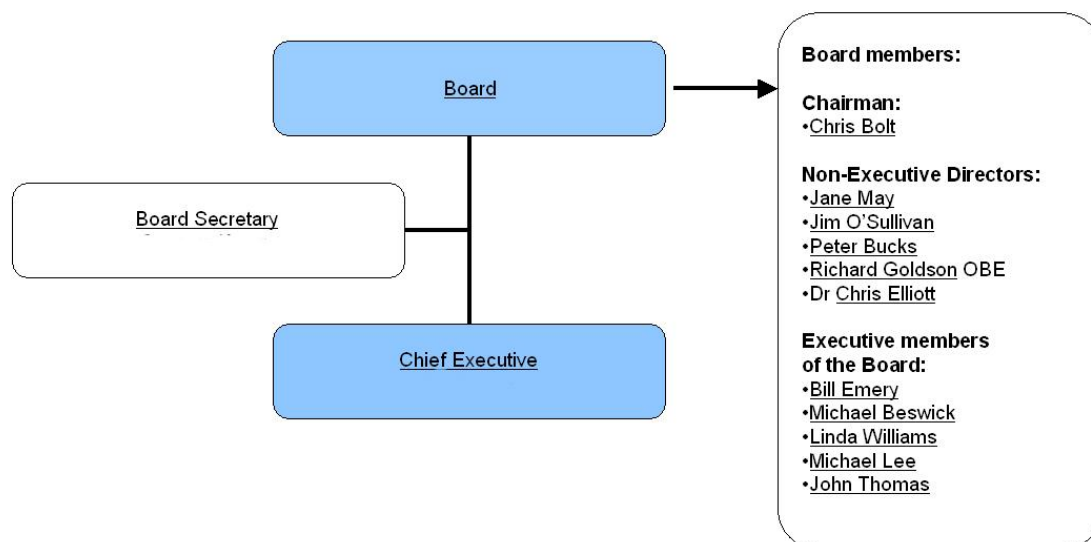
NAME	ADDRESS	WEBSITE
English Welsh and Scottish Railway Ltd	McBeath House 310 Goswell Rd London EC1V 7LW	www.ews-railway.co.uk
GB Railfreight Ltd	15-25 Artillery Lane London E1 7HA	www.gbrailfreight.com
Fastline Limited	Meridian House The Crescent York YO24 1AW	www.fastline-group.com
Advenza Freight Ltd	PO Box 22 Gloucestershire GL11 5YA	www.advenza.com
Amec Spie Rail (UK) Ltd	Floor 4 Stephenson House Croydon Surrey CR9 6JA	www.amec.com
First Engineering Ltd	3 Lister Way Hamilton International Park Blantyre Scotland G72 0UY	www.firstengineering.co.uk
Carillion Construction Plc	24 Birch St Wolverhampton WV1 4HY	www.carillionplc.com
Grant Rail Group Ltd	Lakeside 1 Carolina Way Doncaster South Yorkshire DN4 5RA	www.grantrail.co.uk
Balfour Beatty Rail Plant Ltd	Manor Lane Hither Green London SE12 0UA	www.bbrail.com
Amey Infrastructure Services Ltd	The Sherard Building Edmund Halley Road Oxford OX4 4DQ	www.amey.co.uk
Harsco Track Technologies Ltd	Grove House Grove Road Northfleet Kent DA11 0AX	www.harscotrack.com
Serco Railtest Ltd	Derwent House London Road Derby DE24 8UP	www.serco.com

INFRASTRUCTURE MANAGERS

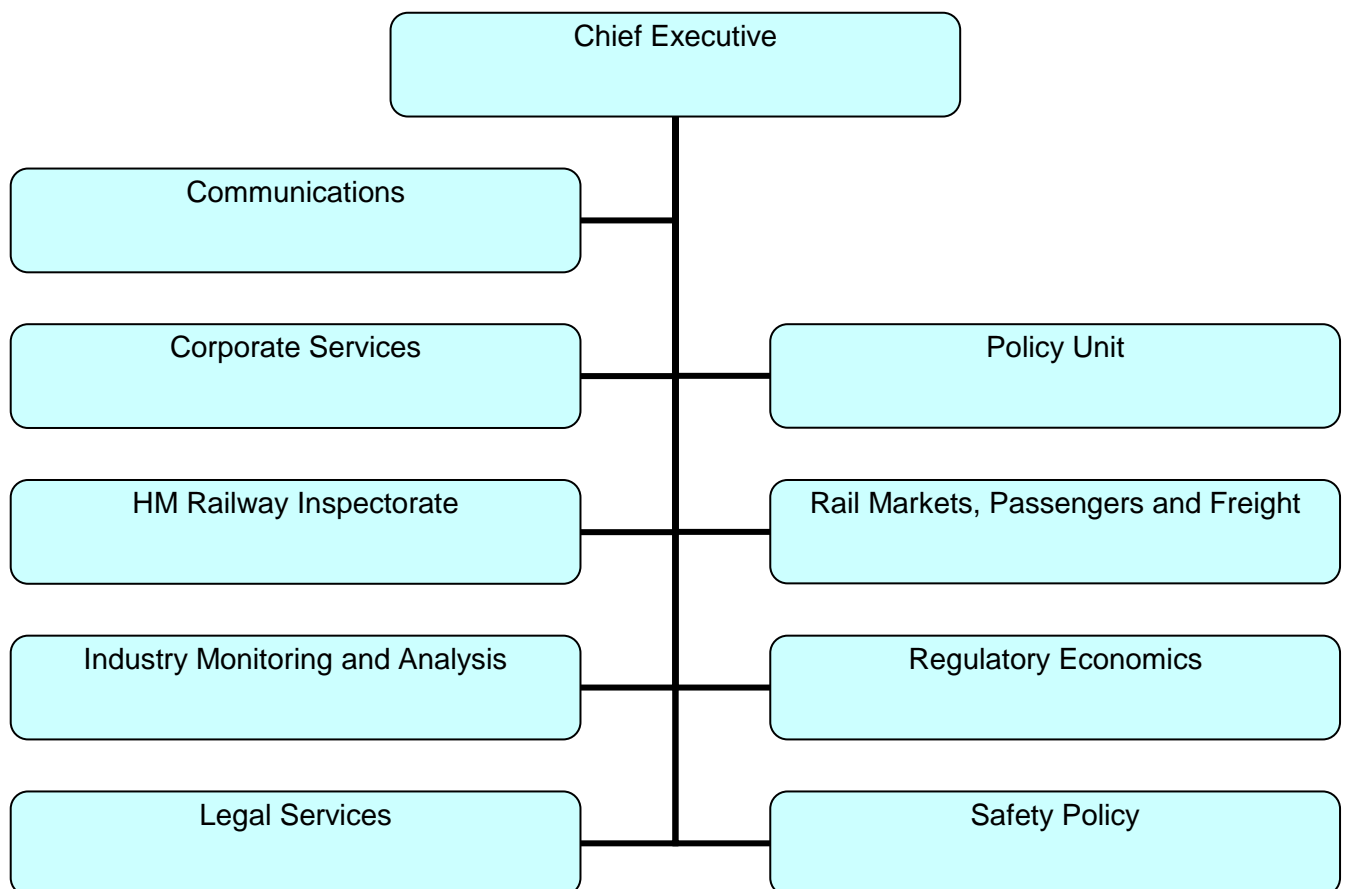
NAME	ADDRESS	WEBSITE
Network Rail (CTRL) Ltd	40 Melton St London NW1 2EE	www.networkrail.co.uk
Network Rail Infrastructure Limited	40 Melton St London NW1 2EE	www.networkrail.co.uk

Annex B1 - Office of Rail Regulation Organisation Chart

ORR Board at 31 December 2006

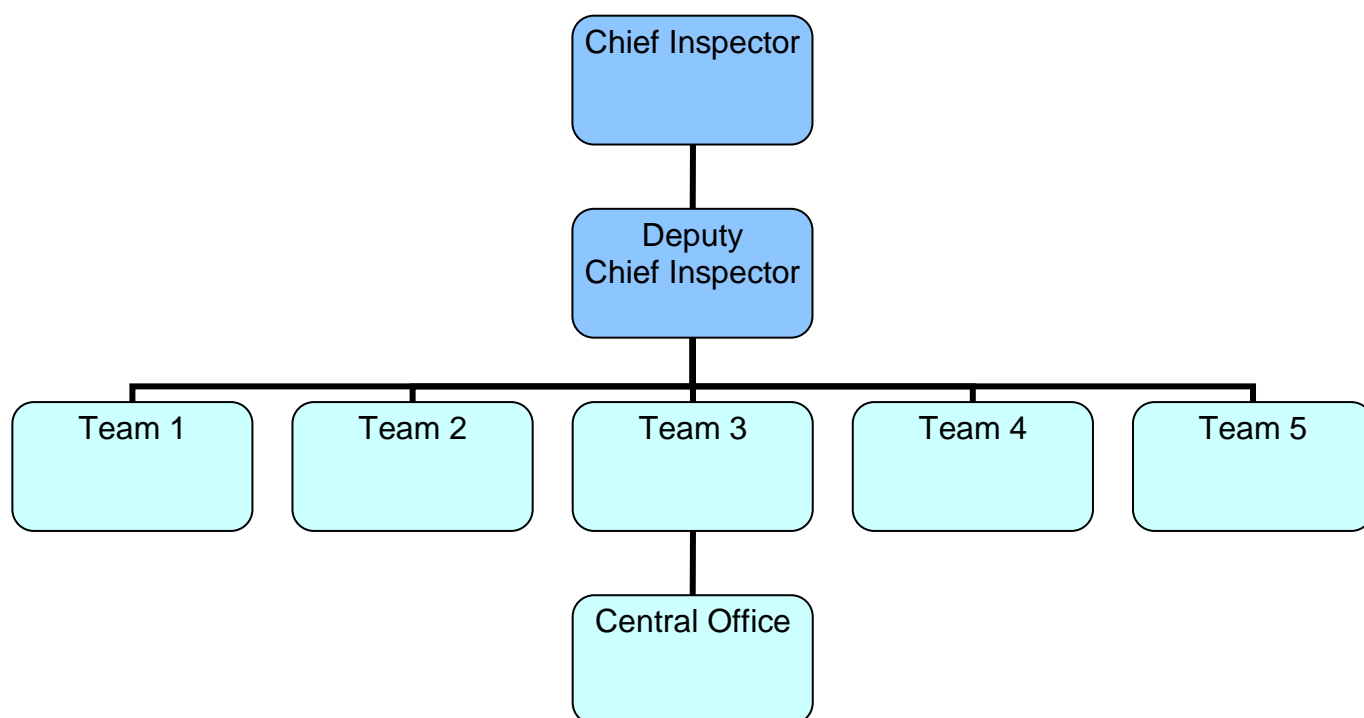


ORR Organisation Chart at 31 December 2006



Annex B2 - Her Majesty's Rail Inspectorate Organisation Chart and Team Responsibilities

HMRI Organisation Chart at 31 December 2006



Team 1	<ul style="list-style-type: none"> • Account manager for Network Rail • National Expertise Team for Command Control and Signalling • National Expertise Team for Level Crossings • National Expertise Team for Operations
Team 2	<ul style="list-style-type: none"> • Account Manager for Railway Companies Team • National Expertise Team for Rolling stock • Scotland Area Team • London North East Area Team • London North West Area Team
Team 3	<ul style="list-style-type: none"> • Account Manager for Contractors • Account Manager for London Underground • National Expertise Team for Light Rail/Metro/Minor Railways • National Expertise Team for Infrastructure
Team 4	<ul style="list-style-type: none"> • National Expertise Team for Human Factors • Kent and Anglia Area Team • Sussex and Wessex Area Team • Western Area Team
Team 5	<ul style="list-style-type: none"> • Process Management • Information and Intelligence • Account management for HMRI's work with RAIB • Topic Strategy

Annex C - CSI data (UK)

Header State UK

Reporting year: 2006

Common Safety Indicators (CSI)

1. Indicators relating to accidents

1.1a. Total number of accidents and a break-down into the following types of accidents

1.1b. Relative to train kilometres number of accidents and a break-down into the following types of accidents

	Total number of all accidents, excluding suicides	Collisions of trains, including collisions with obstacles within the clearance gauge	Derailments of trains	Level-crossing accidents, including accidents involving pedestrians at level-crossings	Accidents to persons caused by rolling stock in motion, with the exception of suicides	Fire in rolling stock	Others
Number of accidents	117	4	22	9	81	0	1
Relative* Number of accidents (per million train km)	0.218	0.007	0.041	0.017	0.151	0.000	0.002
	Suicides						
Total number of suicides	227						
Relative to "rolling" train kilometres number of suicides	0.424						

1.2a. Total number of persons seriously injured by type of accident divided into the following categories

1.2b. Relative to train kilometres total number of persons seriously injured by type of accident divided into the following categories

1.2c. Relative to passenger kilometres total number of persons seriously injured by type of accident divided into the following categories (for passengers only)

	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Total seriously injured	25	1	0	3	19	0	2
Relative* Total seriously injured (per million train km)	0.047	0.002	0.000	0.006	0.035	0.000	0.004
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Passengers	1	0	0	0	1	0	0
Relative* Passengers (per million train km)	0.002	0.000	0.000	0.000	0.002	0.000	0.000
Relative* Passengers (per billion passenger km)	0.020	0.000	0.000	0.000	0.020	0.000	0.000
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Employees including the staff of contractors	4	1	0	0	1	0	2
Relative* Employees (per million train km)	0.007	0.002	0.000	0.000	0.002	0.000	0.004
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Level-crossing users	3	0	0	3	0	0	0
Relative* Level-crossing users (per million train km)	0.006	0.000	0.000	0.006	0.000	0.000	0.000
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Unauthorised persons on railway premises	14	0	0	0	14	0	0
Relative* Unauthorised persons (per million train km)	0.026	0.000	0.000	0.000	0.026	0.000	0.000
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level-crossing accidents, including accidents involving pedestrians at level-crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fire in rolling stock	In others
Others	3	0	0	0	3	0	0
Relative* Others (per million train km)	0.006	0.000	0.000	0.000	0.006	0.000	0.000

Common Safety Indicators (CSI)

1.3a. Total number of persons killed by type of accident divided into the following categories

1.3b. Relative to train kilometres total number of persons killed by type of accident divided into the following categories

1.3c. Relative to passenger kilometres total number of persons killed by type of accident divided into the following categories (for passengers only)

	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level crossing accidents, including accidents involving pedestrians at level crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fires in rolling stock	In others
Total killed	65	1	0	5	59	0	0
Relative* Total killed (per million train km)	0.121	0.002	0.000	0.009	0.110	0.000	0.000
	Total number in all accidents, excluding suicides	In collisions of trains, including collisions with obstacles within the clearance gauge	In derailments of trains	In level crossing accidents, including accidents involving pedestrians at level crossings	In accidents to persons caused by rolling stock in motion, with the exception of suicides	In fires in rolling stock	In others
Passengers	0	0	0	0	0	0	0
Relative* Passengers (per million train km)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Relative* Passengers (per billion passenger km)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Employees including the staff of contractors	0	0	0	0	0	0	0
Relative* Employees (per million train km)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Level crossing users	5	0	0	5	0	0	0
Relative* Level crossing users (per million train km)	0.009	0.000	0.000	0.009	0.000	0.000	0.000
Unauthorised persons on railway premises	56	0	0	0	56	0	0
Relative* Unauthorised persons (per million train km)	0.105	0.000	0.000	0.000	0.105	0.000	0.000
Others	4	1	0	0	3	0	0
Relative* Others (per million train km)	0.007	0.002	0.000	0.000	0.006	0.000	0.000

2. Indicators relating to incidents and near-misses

2.1a. Total number of incidents and near-misses and a break-down into the following types

2.1b. Relative to train kilometres number of incidents and near-misses and a break-down into the following types of accidents

	Total number of incidents and near-misses	Total number of broken rails	Total number of track buckles	Total number of wrong-side signalling failures	Total number of signals passed at danger	Total number of broken wheels on rolling stock in service	Total number of broken axles on rolling stock in service
Number of incidents	1,287	232	86	617	352	0	0
Relative* Number of incidents (per million train km)	2.402	0.433	0.161	1.152	0.657	0.000	0.000

Common Safety Indicators (CSI)

3. Indicators relating to consequences of accidents

3.1a. Total costs in euro of all accidents

3.1b. Relative to train kilometres total costs in euro of all accidents

3.2a. Total number of working hours of staff and contractors lost as a consequence of accidents

3.2b. Relative to number of hours worked number of working hours of staff and contractors lost as a consequence of accidents

	Total costs of all accidents	Costs of deaths	Costs of injuries	Costs of replacement or repair of damaged rolling stock and railway installations	Costs of delays, disturbances and re-routing of traffic, including extra costs for staff and loss of future revenue
Costs (in Euro)	€185,001,771	€145,606,500	€5,600,250	€16,071,468	€17,397,673
Relative* Costs (in Euro) per million train km	€345,309	€271,777	€10,453	€29,998	€33,593

	Total number of working hours of staff and contractors lost as a consequence of accidents
Total number of working hours lost	38,887
Relative* Total number of working hours lost	0.021%

4. Indicators relating to technical safety of infrastructure and its implementation

	Percentage of tracks with Automatic Train Protection (ATP) in operation	Percentage of train kilometres using operational ATP systems	Total number of level crossings	Total number of level crossings per line kilometre	Percentage of level crossings with active (automatic or manual) protection
4. Number	4.28%	3.03%	7,211	0.228	23.41%

5. Indicators relating to the management of safety

Internal audits accomplished by infrastructure managers and railway undertakings as set out in the documentation of the safety management system.

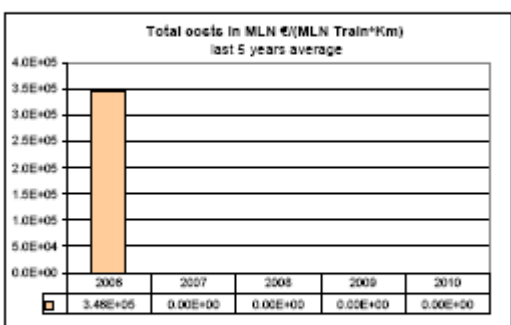
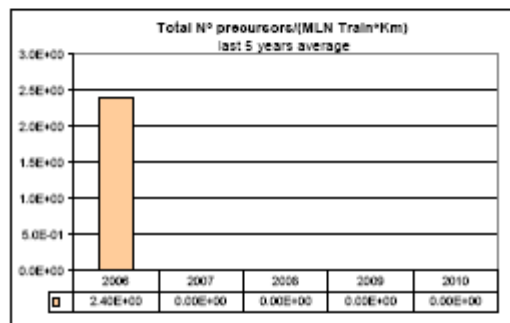
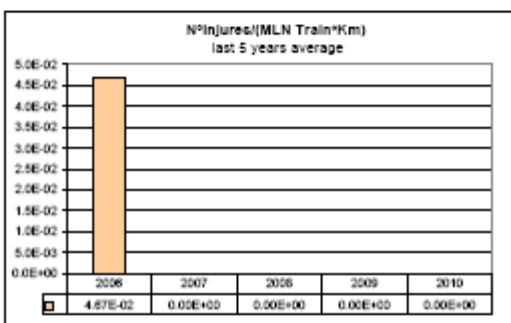
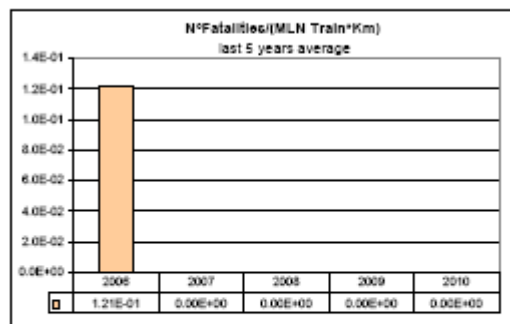
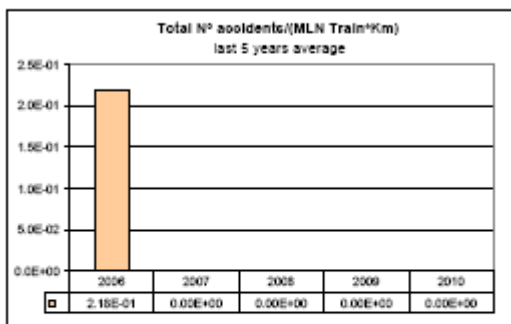
	Total number of accomplished audits	Percentage of audits accomplished (requested number planned)
Number	720	93.2%

6. Reference data

	Number of Train kilometres (million)	Number of Passenger kilometres (billion)	Number of passenger journeys (million)	Trains of freight carried (million)	Number of line kilometres	Total number of working hours (thousand)
Number	535,757	49,570	8,583	104,000	31,594,000	184,127,4

C.1. CSIs data

Performances at a glance



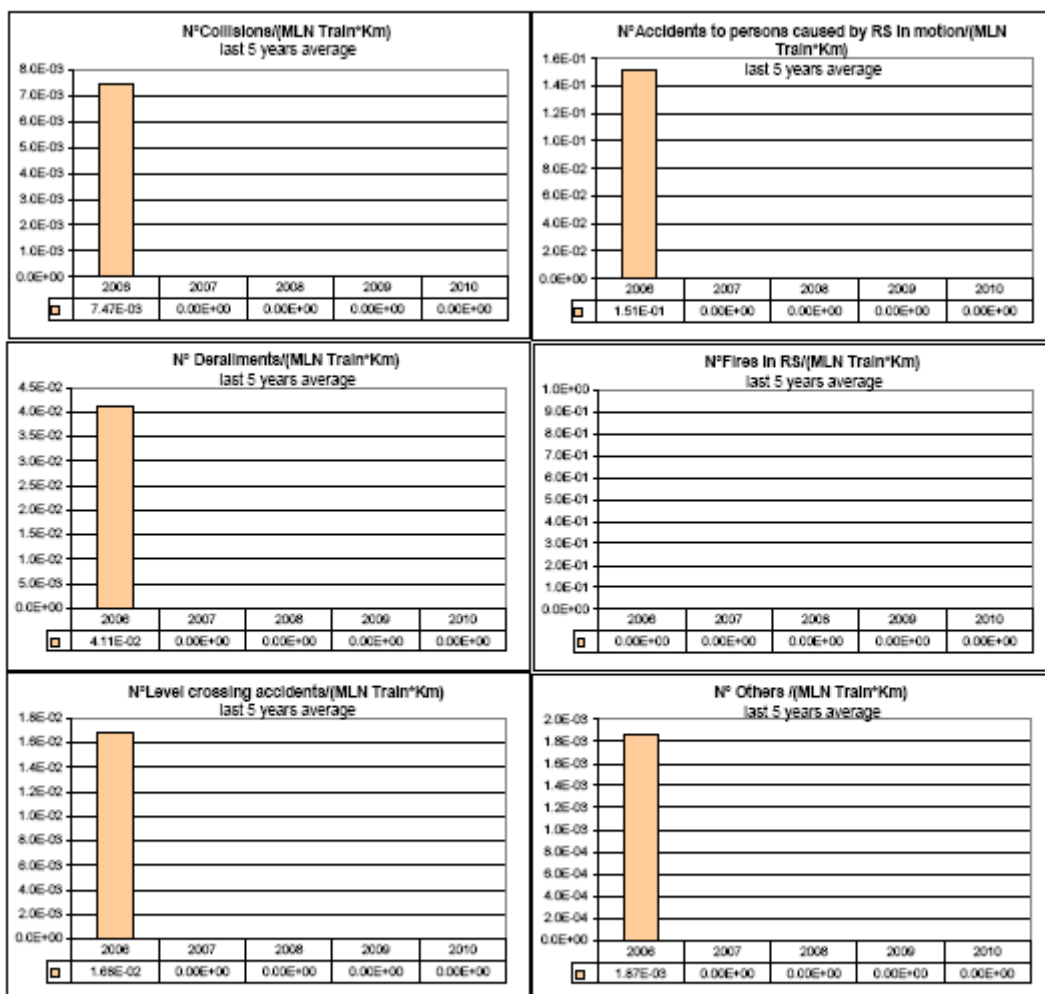
2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.

2009 report: values related to the average among 2006, 2007 and 2008.

2010 report: values related to the average among 2006, 2007, 2008 and 2009.

Accidents divided by type



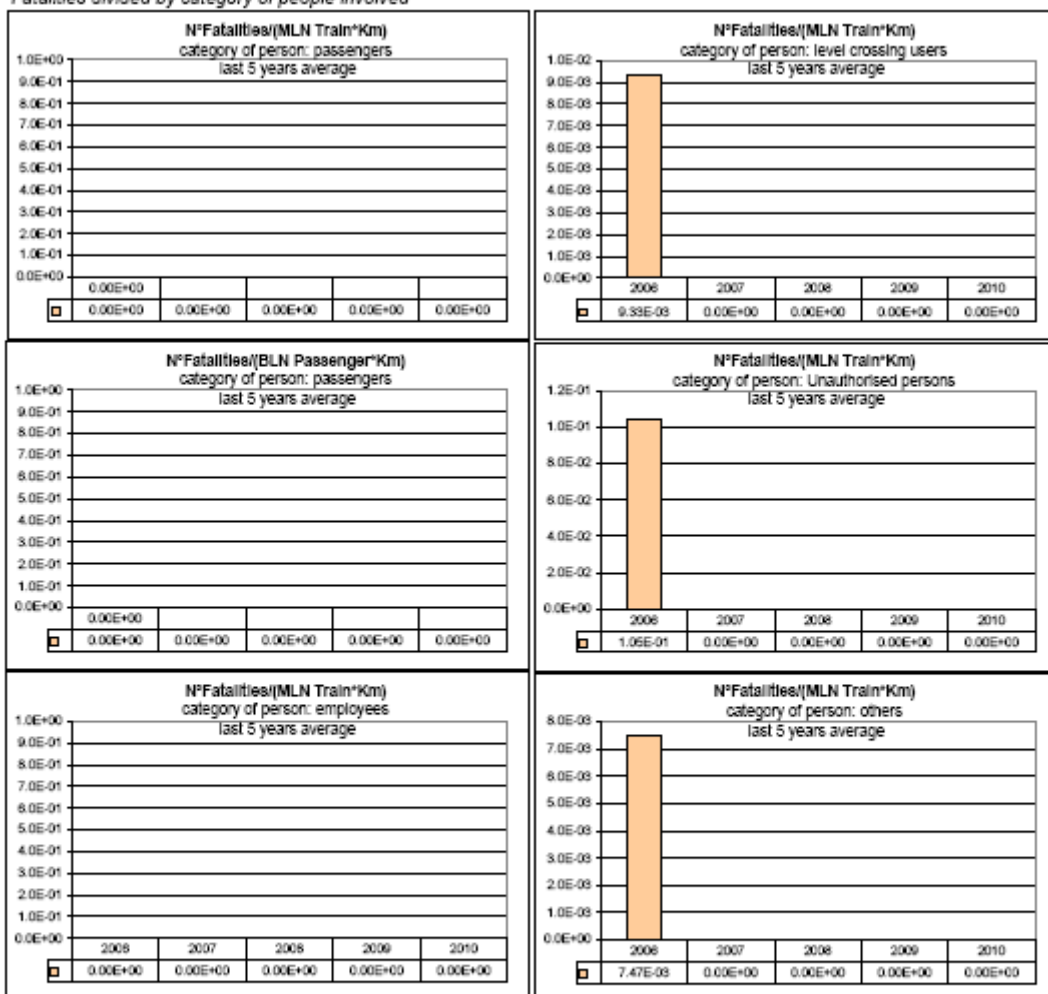
2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.

2009 report: values related to the average among 2006, 2007 and 2008.

2010 report: values related to the average among 2006, 2007, 2008 and 2009.

Fatalities divided by category of people involved



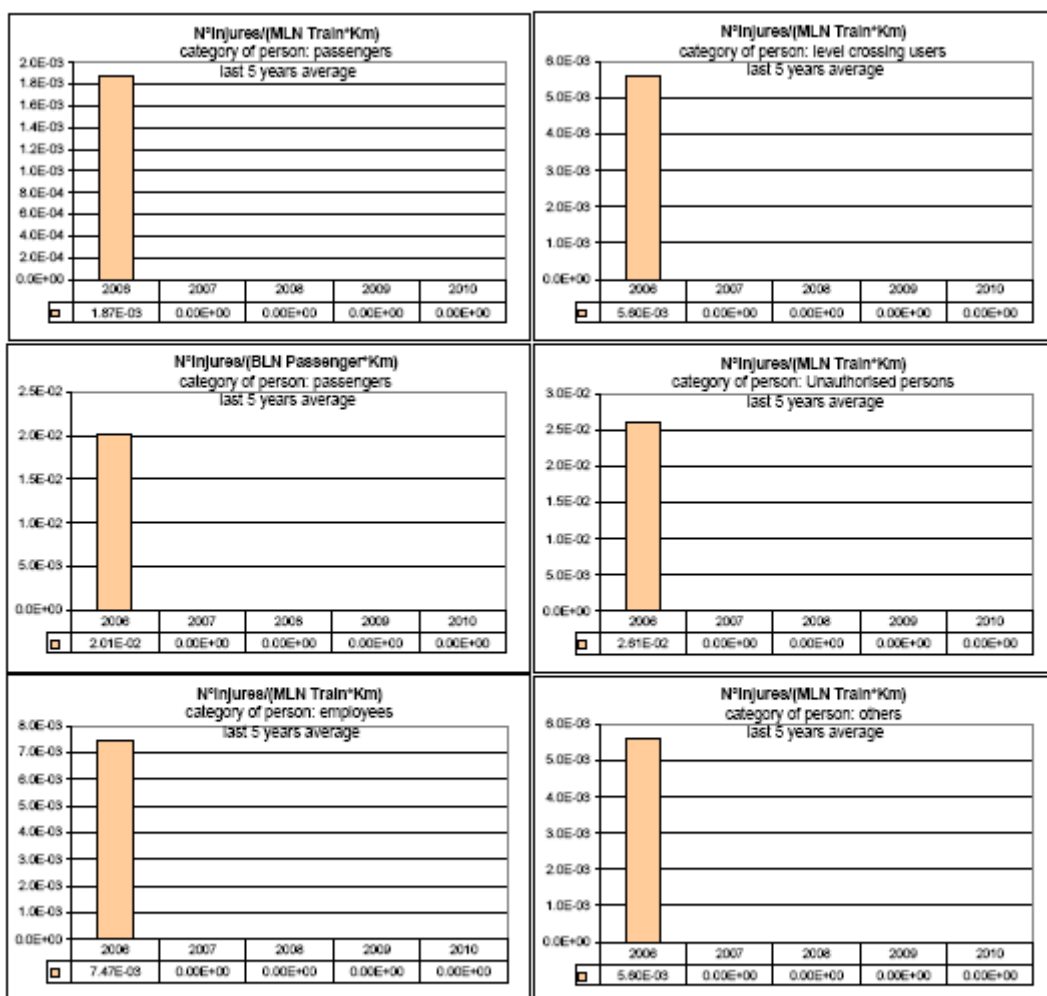
2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.

2008 report: values related to the average among 2006, 2007 and 2008.

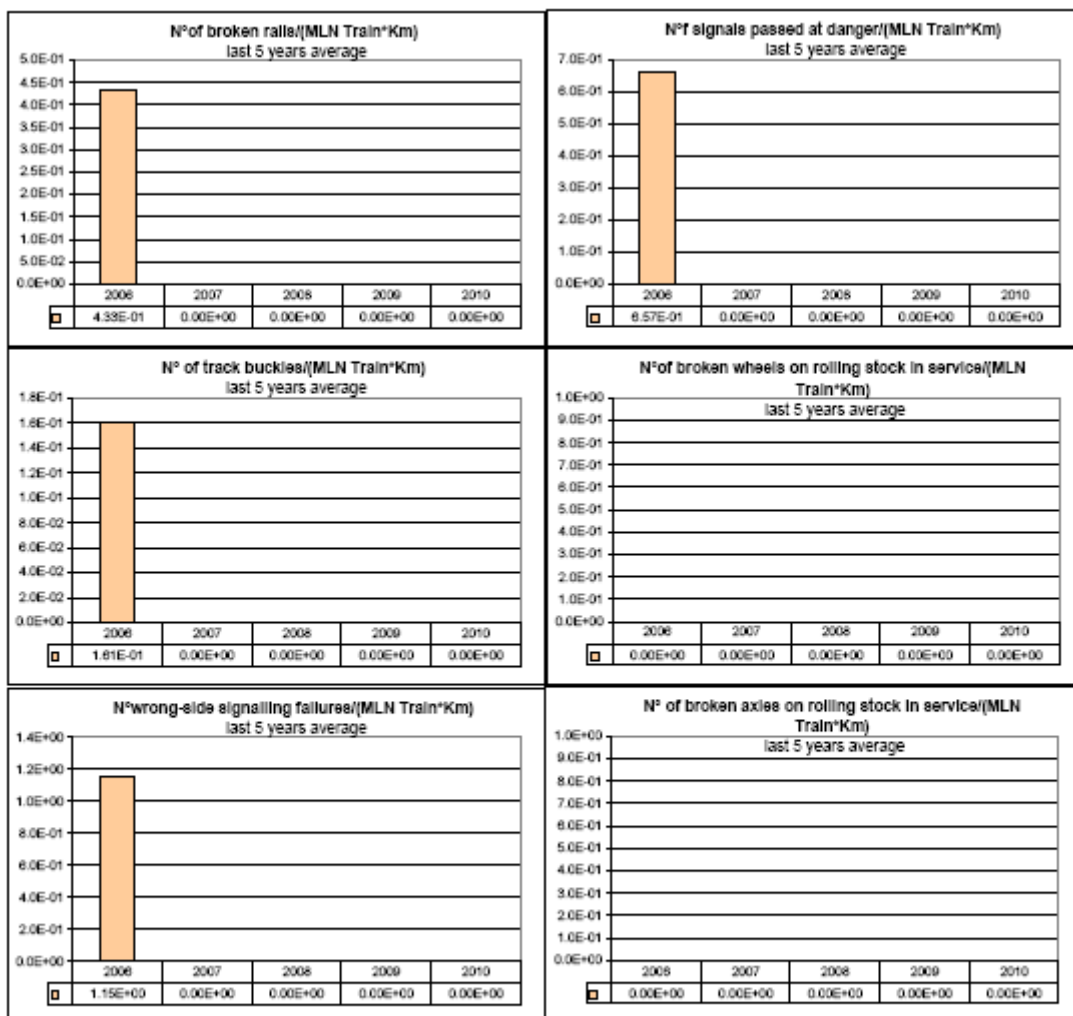
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

Injures divided by category of people involved



2007 report: values related to 2006.
 2008 report: values related to the average between 2006 and 2007.
 2008 report: values related to the average among 2006, 2007 and 2008.
 2009 report: values related to the average among 2006, 2007, 2008 and 2009.

Precursors to accidents



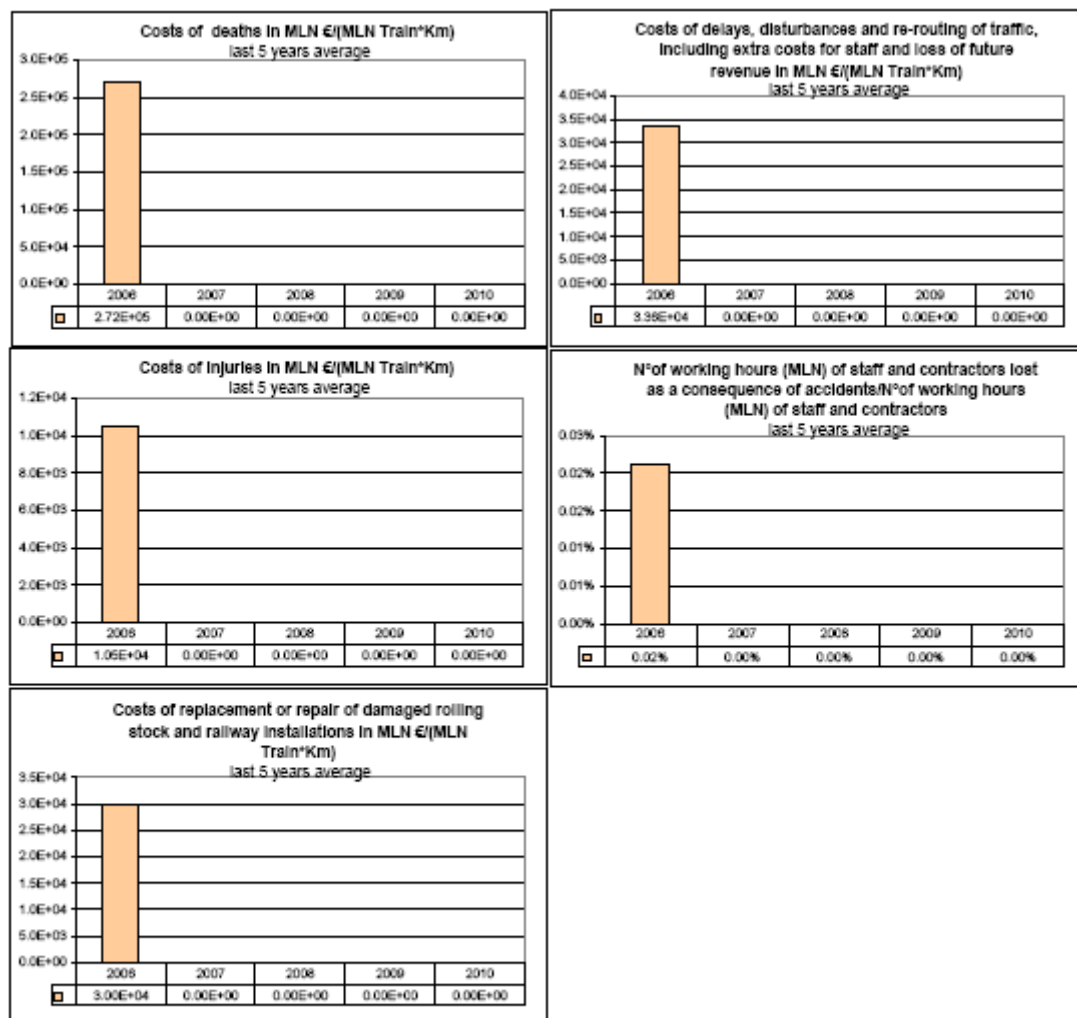
2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.

2008 report: values related to the average among 2006, 2007 and 2008.

2009 report: values related to the average among 2006, 2007, 2008 and 2009.

Cost of all accidents, number of working hours of staff and contractors lost as a consequence of accidents

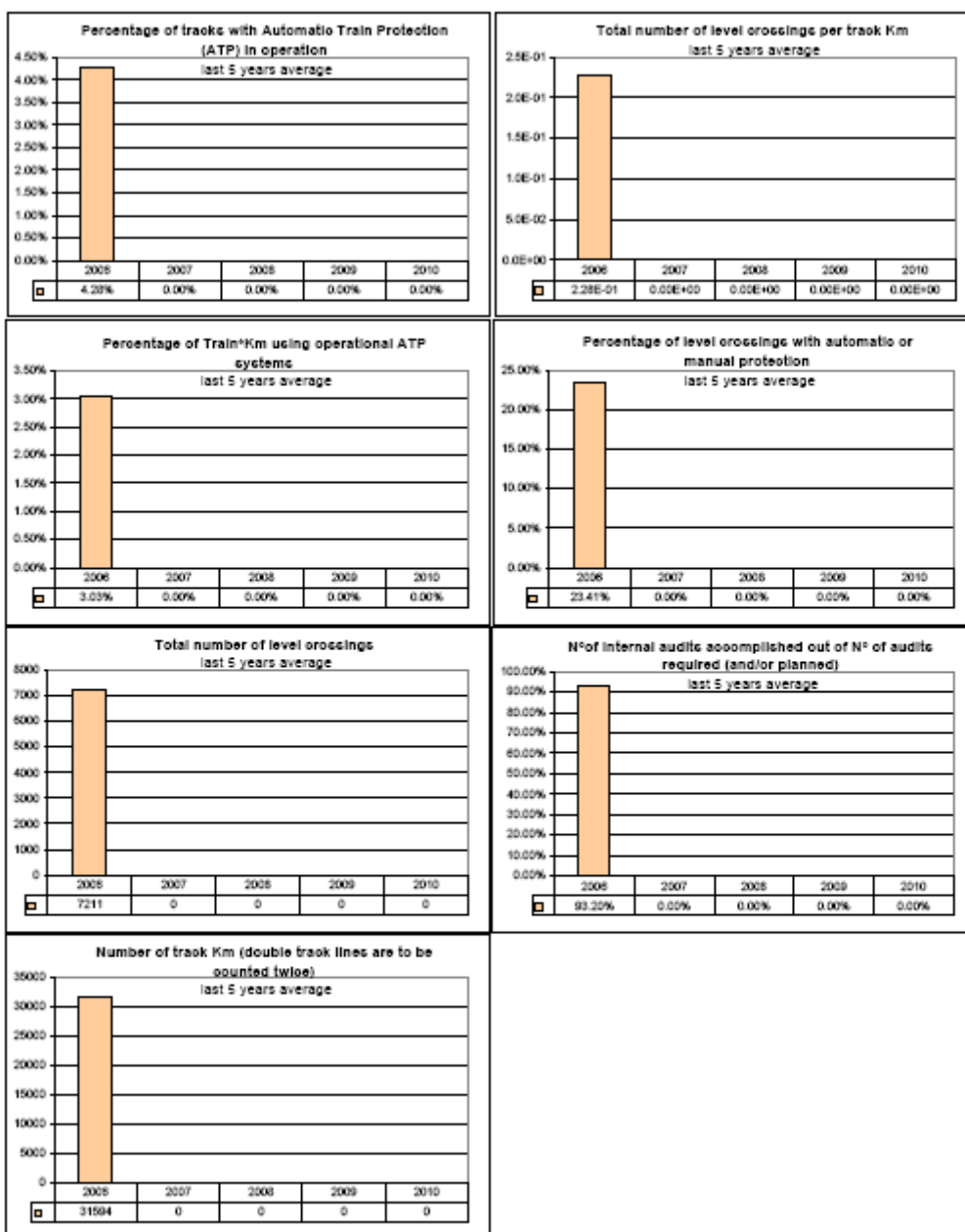


2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.

2008 report: values related to the average among 2006, 2007 and 2008.

2009 report: values related to the average among 2006, 2007, 2008 and 2009.



2007 report: values related to 2006.
 2008 report: values related to the average between 2006 and 2007.
 2009 report: values related to the average among 2006, 2007 and 2008.
 2010 report: values related to the average among 2006, 2007, 2008 and 2009.

Notes on definitions of CSI data

Accident:

Only accidents related to railway vehicles in motion are included. For example, this includes collisions, derailments, fires in running, persons struck by trains and on-board accidents due to trains in motion. The data does not cover injuries from boarding or alighting a stationary train, from slips trips and falls in stations (unless the person is subsequently hit by a train) or workforce injuries where train movement is not involved.

The accident must have caused at least one fatality or serious injury; or significant damage (equivalent to 150,000 euros or more) to rolling stock, other installations or the environment; or extensive disruptions to traffic (main line blocked for more than six hours). The only exception to this rule is dangerous goods incidents that are reportable under the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) which are included.

Accidents that occur in workshops, warehouses or depots are excluded.

The accident must be unwanted or unintended, thereby excluding all vandalism, assaults and terrorist acts.

If an accident leads to a secondary accident (such as a fire following a derailment), it is reported under the type of the primary accident, irrespective of the consequences of the primary and secondary accidents.

Fatality:

A person killed immediately or dying within 30 days as a result of an accident, excluding suicides.

Serious injury:

Any person injured who was hospitalised for more than 24 hours as a result of an accident, excluding attempted suicides.

Suicide:

Suicides are calculated using the Ovenstone theory, which provides a method of classifying a fatality as suicide or suspected suicide using objective evidence such as eye witness accounts and coroner's verdict.

Train:

One or more vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point. A light engine, i.e. a locomotive travelling on its own is not considered to be a train. Accidents involving light engines, shunting movements and maintenance machines are recorded under the category 'other accidents'.

Incidents and near misses:

Includes broken rails, track buckles, wrong-side signalling failures, SPADS, broken wheels and broken axles.

Passenger:

Any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark or disembark from a moving train are included. However, people waiting on the platform are not. A person intending to travel who falls from a platform and is struck by a train is included under the 'other' category (see below).

Employee:

Any person whose employment is in connection with a railway and is at work at the moment of the accident. It includes the crew of the train and persons handling rolling stock and infrastructure installations, including contractors.

Level Crossing User:

Any person using a level crossing to cross the railway line, whether by road vehicle or on foot.

Unauthorised person:

Any person present on railway premises where such presence is forbidden (with the exception of level crossing users). For example, people involved in an accident while

trespassing on the tracks or 'train surfing' would be classified as an unauthorised person.

Other:

Third parties not captured within any of the above. For example, a person involved in a rolling stock in motion accident (eg struck by a train) while waiting on the platform would be classified as 'other'.

Annex D - Important Changes in GB legislation and regulation

Regulation:	Railways and Other Guided Transport Systems (Safety) Regulations (ROGS)
Legal reference:	UK Statutory Instruments 2006 No. 599
Date change comes into force:	10 April 2006 Transition period due to end 1 October 2008 (Tramways and heritage railways extended until 1 October 2010)
Reason for change:	Implements some of the requirements of the European Union's Railway Safety Directive (2004/49/EC) Simplifies and consolidates the legislative framework for railway safety and reduces bureaucracy for railway duty-holders
Description of change:	ROGS requires railway operators and railway infrastructure managers on the mainline railway to maintain a Safety Management System (SMS) and hold a safety certificate (or 'authorisation' for infrastructure managers) indicating that the SMS has been approved by ORR The ROGS SMS requires duty holders to have in place a Safety Verification (SV) scheme for introducing new or altered equipment that is novel to the transport system and is likely to give rise to a significant new risk or a significant increase in an existing risk
Regulation:	Health and Safety (Enforcing Authority for Railways and Other Guided Transport Systems) Regulations 2006
Legal reference:	UK Statutory Instrument No. 557
Date change comes into force:	Came into force on 1 st April 2006.
Reason for change:	To enhance the clarity of the regulatory boundaries between HM Railways inspectorate and HM Inspectors of Health and Safety of the Health and Safety Executive (HSE) following reallocation of railways safety enforcement responsibilities within HM Government in line with the requirements of the Railway Act 2005 (which makes provision for the transfer to the ORR of railway safety functions previously conferred on HSE by the Health and Safety at Work etc. Act 1974 (c. 37))
Description of change:	The regulations set out the railway related activities that will be subject to enforcement by HM Railway Inspectorate following transfer to the Office of Rail Regulation.

Annex E: The development of safety certification and authorisation in GB – Numerical Data

		New	Updated / amended	Renewed
Number of valid Safety Certificates Part A held by Railway Undertakings in the year 2006 being registered	in your Member State	0	0	0
	in another Member State	0	0	0

		New	Updated / amended	Renewed
Number of valid Safety Certificates Part B held by Railway Undertakings in the year 2006 being registered	in your Member State	0	0	0
	in another Member State	0	0	0

			A	R	P
Number of applications for Safety Certificates Part A submitted by Railway Undertakings in year 2006 being registered	in your Member State for	new certificates	0	0	19
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

			A	R	P
Number of applications for Safety Certificates Part B submitted by Railway Undertakings in year 2006 being registered	in your Member State for	new certificates	0	0	19
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

A = Accepted application, certificate is already issued
R = Rejected applications, no certificate was issued
P = Case is still pending, no certificate was issued so far

	New	Updated / amended	Renewed
Number of valid Safety Authorisations held by Infrastructure Managers in the year 2006 being registered in your Member State	0	0	0

		A	R	P
Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2006 being registered in your Member State	new authorisations	0	0	12
	updated / amended authorisations	0	0	0
	renewed authorisations	0	0	0

A = Accepted application, authorisation is already issued
R = Rejected applications, no authorisation was issued
P = Case is still pending, no authorisation was issued so far

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the	a licence released by your Member State	N/A	N/A	N/A

receipt of an application and the final delivery of a Safety Certificate Part A in year 2006 for Railway Undertakings holding	a licence released by another Member State	N/A	N/A	N/A
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		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part B in year 2006 for Railway Undertakings holding	a licence released by your Member State?	N/A	N/A	N/A
	a licence released by another Member State?	N/A	N/A	N/A

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Authorisation in year 2006 for Infrastructure Managers holding	a licence released by your Member State	N/A	N/A	N/A
	a licence released by another Member State	N/A	N/A	N/A

Part B - Northern Ireland

1 Introduction

1.1 This section of the report covers the railway system in Northern Ireland for the period 1st January 2006 to 31st December 2006. There are no metros, trams or other light rail systems in Northern Ireland, nor is there any privately owned railway infrastructure.

1.2 Translink is the brand name of the integrated public transport operation of Citybus, NI Railways (NIR), and Ulsterbus. NIR operates a fully integrated system, acting as both Infrastructure Manager and Train Operator. The Department for Regional Development assists Northern Ireland Railways to operate rail services. Funding helps maintain and develop the rail infrastructure, (track, stations, bridges, level crossings) and rolling stock, which includes trains, equipment and associated plant machinery.

See Annex F for Northern Ireland railway network map.

1.3 Heritage and Tourist Railways in Northern Ireland are privately owned and run, for the most part on dedicated track. They do not provide passenger services for the travelling public and are not funded by the Department. They are however a valuable tourist and heritage amenity.

1.4 All railway operators in Northern Ireland including light and heritage railways are required to comply with regulations introduced by the Department to further improve railway safety. In some circumstances heritage railways operating on their own tracks and at a line speed that does not exceed 25mph/40km may be exempted from some regulations where the Department is satisfied that the safety of passengers and the general public is not compromised.

2 Safety Authority for Northern Ireland

2.1 In Northern Ireland the Safety Authority for the purpose of implementing the Railway Safety Management Regulations(Northern Ireland) 2006, is the Department for Regional Development, established by article 3(1) of the Departments (Northern Ireland) Order 1999.

2.2 The Department's key responsibilities as Safety Authority are:

- to ensure that Northern Ireland Railways, the operator of the public railway service in Northern Ireland manages the network efficiently and in a way that meets the needs of its users;
- to encourage continuous improvement in health and safety performance;
- to secure compliance with relevant health and safety law, including taking enforcement action as necessary;
- to develop policy and enhance relevant railway health and safety legislation; and
- to issue or refuse safety certificates to railway operators in accordance with the Railway Safety Management Regulations.

2.3 The Safety Authority duties is managed by the Department's Ports and Public Transport Division, 3rd Floor Clarence Court 10-18 Adelaide Street, Belfast BT2 8GB.

2.4 The Department's role as Safety Authority for Northern Ireland is to:

- provide the appropriate regulatory framework so that railway safety is generally maintained and, where reasonably practicable, continuously improved;
- assess each duty holder's application for safety certificates and authorisations, including its co-operation arrangements;
- assess whether safety is being achieved by inspecting duty holders' safety management systems (SMSs) and assessing available safety information and data.; and
- authorise the placing into service of structural subsystems in Northern Ireland on the UK trans-European network; and check that they are operated and maintained in accordance with the essential requirements.

3 Development of Railway Safety in Northern Ireland

3.1 The Railway Safety Management Regulations (Northern Ireland) 2006 are aimed at harmonising safety standards on the NI Railway Network. These regulations enable Northern Ireland to play a full part in the development of the single European railway. Specifically the new framework for rail safety will:

- Bring together and streamline rail safety requirements to secure greater proportionality to risk and reduce costs – three sets of proposed new NI regulations were replaced by one. This made safety regulation more effective, better focused, more coherent, and less bureaucratic ;and
- Apply the same principles of regulation to heritage and tourist railways, but only in proportion to risk and the character of the railway operation.

Common Safety Indicators (CSIs)

3.2 CSI data has been collected and there is no historical data for comparisons. Trends in CSI data will be reported in future years. See Annex C for UK CSI data

Rail Accident Investigation Branch

3.3 The Rail Accident Investigation Branch (RAIB) established by the Railways and Transport Safety Act 2003 is established on a UK-wide basis and undertook one investigation in NI in 2006 of a derailment of a ballast regulator at Trooperslane County Antrim on 23rd April 2006. There were no reports of injuries. NIR cooperated fully with the investigation. Eight recommendations were made, seven of which were directed at NIR. The Department, as the Safety Authority, is working with NIR to ensure full implementation of the recommendations.

4 Important legislative changes

4.1 The Railway Safety Management Regulations (Northern Ireland) 2006 were made on 25th May 2006 implementing the necessary requirements of the Railway Safety Directive (RSD). The regulations were made under the Health and Safety at Work (Northern Ireland) Order 1978 as the detail of the Directive applies to the safety of workers and passengers. This is in line with Government policy to use related domestic legislation, instead of section 2(2) of the European Communities Act, unless there are good reasons to do otherwise.

4.2 The Department for Transport (DfT) in London has implemented the remaining provisions of the RSD on a UK-wide basis, in part through regulations detailing the functions of the RAIB. The RSD requires Member States to create a regulatory framework for rail safety and a Safety Authority. In Northern Ireland railway operators are already subject to the general duties in Sections 2 and 3 of the Health and Safety at Work (NI) Order 1978 (HSWO) which set out the level of safety to be achieved for both workers and the public. In line with the requirements of RSD, these requirements must be generally maintained, but we believe there is no need for additional general duties of this nature to be placed on railway operators for the reasons given above

5 Development of Safety Certification and Authorisation

Safety Certificates

5.1 No updated or amended Part A or Part B certificates have been issued in Northern Ireland during this period. No Part A or Part B certificates were issued during this period. Existing NI legislation does not require such certification to be issued before June 2008.

5.2 We received no requests in this period from other National Safety Authorities to verify/ access information relating to a Part A certificate of a railway undertaking that has been certified in the UK but applies for a Part B certificate in another member state.

Procedural Issues.

5.3 No specific procedural issues were raised by NIR during the period covered by this report. This is partly due to the fact that the Department continues to work closely with NIR on the development of their application for certification.

5.4 The main routes for NIR to express opinion on issuing procedures, practices or to file complaints is through the on-going contact between them and the Department. .

Safety Authorisations

5.5 No updated, amended or part authorisations have been issued in this period. This is partly due to the fact that the Department continues to work closely with NIR on the development of their application for authorisation.

Procedural Issues

5.6 No specific procedural issues were raised by NIR during the period covered by this report. This is partly due to the fact that the Department continues to work closely with NIR on the development of their application for authorisation.

6 Supervision of Railway Undertakings and Infrastructure Managers

6.1 In Northern Ireland, the day to day supervision of the health and safety performance of the railway industry is undertaken through the Railway Safety Management Regulations(Northern Ireland) 2006 where the Safety Authority is DRD.

General

6.2 There are several industry initiatives underway that aim, among other things, to improve safety, including: awareness of hazards in the workplace; safety culture; and safety leadership and safety on the line. Other initiatives are in the early stages of delivery such as: communication; behaviours; competence assessment; and possessions.

7 Conclusions

7.1 Northern Ireland has historically a low level of serious rail incidents. This situation has been maintained during 2006.

7.2 The Railway Safety Management Regulations (Northern Ireland) 2006 came into effect on 30th June 2006 and we will continue to work with NIR to ensure smooth implementation.

7.3 During 2007-08 we will continue to press for improved safety, performance and efficiency on the Northern Ireland railway network and we will take action on under-performance as necessary.

Annex F - Map of Northern Ireland Railway

