



## Railways: safety

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This note looks at the statutory framework for rail safety that was introduced under the *Railways Act 2005* and the regime which it replaced. It also provides information on EU rail safety policy, interoperability and the ERTMS train protection system.

Railway safety management has undergone two major overhauls in the past twenty years – one immediately following privatisation and a second in the mid-2000s when the industry was reorganised and safety responsibility was passed to the rail regulator. Many of the safety requirements on the rail network are mandated under EU law, particularly the Railway Safety Directive and the Interoperability Directive, and overseen by the European Railways Agency.

Information on other rail-related matters can be found on the [Railways Topical Page](#) of the Parliament website.

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## 1 Overview

*A 2010 report by the OECD summarised the changes to the UK's rail safety management structures from pre-privatisation up to the present. This is reproduced in the Appendix.<sup>1</sup>*

The [Office of Rail Regulation \(ORR\)](#) is the independent health and safety regulator for the railway industry, including metros, light rail and heritage, following implementation of the [Railways Act 2005](#). It covers the safety of the travelling public as well as workers on the railways. As the independent economic and safety regulator, ORR can take enforcement action to ensure that those who have duties under the law are held to account for failures to safeguard health and safety.

ORR's health and safety strategy is to secure the proper control by duty holders of risks to the health and safety of employees, passengers and others who might be affected by the operation of Britain's railways. HM Railway Inspectorate (HMRI) sits within the ORR and they have Inspectors and policy advisors who work together to develop and deliver the strategy.

The term 'duty holders' means railway operators such as [Network Rail](#), the [freight](#) and [train operating companies](#) and contractors who have responsibilities under health and safety law. The organisations which manage the business of the railways have the direct responsibility for health and safety but HMRI aims to work with the rail industry to help them in identifying common problems and to agree actions and priorities.

The [Railways Act 1993](#) brought all railway safety legislation within the framework created by the [Health and Safety at Work Act 1974](#), as amended, and confirmed the [Health and Safety Commission \(HSC\)](#) as the principal provider of policy advice to Ministers on railway safety issues. The duties of the ORR with respect to railway safety for the most part replicate those of the HSC as set out in sections 11 and 50 of the 1974 Act. A Memorandum of Understanding exists between the HSE and ORR in order to ensure effective coordination and cooperation between these organisations in relation to the regulation of health and safety, including policy matters and the enforcement of health and safety law, on railways, tramways and other guided transport systems in Great Britain.

HMRI carries out inspections and audits to check that the rail industry has management systems in place and that they are effective in controlling the health and safety risks as set out in the safety cases. HMRI also targets risk areas of particular concern under what is called mandatory inspection programmes.

HMRI is responsible for the investigation of breaches of criminal law and health and safety legislation on the railways while the ORR and the [Rail Accident Investigation Branch \(RAIB\)](#), investigate accidents on the railways. RAIB carries out investigations into the most serious rail accidents and incidents without apportioning blame or liability with a view to enabling lessons to be learned, improving safety on railways and preventing similar accidents and incidents. HMRI is responsible for implementing any recommendation made by RAIB following the completion of their investigations.

## 2 Safety policy and management post-privatisation

### 2.1 Under the HSC and HSE, 1994-2006

The railways were privatised by the previous Conservative Government under the [Railways Act 1993](#), which came into force on 1 April 1994.<sup>2</sup> The 1993 Act brought all railway safety

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<sup>1</sup> OECD, [Safety And Regulatory Reform Of Railways](#), 2010, pp30-31, table 4.1

legislation within the framework created by the *Health and Safety at Work Act 1974*, as amended, and confirmed the HSC as the principal provider of policy advice to Ministers on railway safety issues. A Memorandum of Understanding was signed by HSC and the then Departments of Transport and Environment on 10 October 1996. This Memorandum replaced the Agency Agreement which had existed between HSC and the Secretary of State for Transport, when HMRI was transferred from the Department of Transport to the HSE on 1 December 1990.

It was feared that the entry of new operators into the railway industry, and the division of control between different companies, created the potential for introducing new and inadequately controlled risks onto the system. The HSC, advised in turn by the [Railway Industry Advisory Committee \(RIAC\)](#), was therefore asked to carry out a study of the health and safety implications of the changes and to make recommendations. It published a report in January 1993 and the then government accepted in full their recommendations on how best to secure safety under the privatisation proposals.<sup>3</sup> The report's detailed recommendations were implemented by four new sets of regulations made under the 1974 Act.<sup>4</sup> These were designed to formalise controls over the management of safety, the competence of staff performing safety critical work and the carriage of dangerous goods, all of which had previously been covered by British Rail's internal policy and procedures.

One of the key recommendations of the 1993 report was that there should be a validation procedure for railway operators whereby infrastructure controllers and train service operators were required to produce a Railway Safety Case stating how they would meet all the safety requirements. The Safety Case demonstrated that an operator had the systems in place to manage operations safely and meet required safety standards. In effect this meant that the immediate responsibility for ensuring safety in the restructured railways rested with the party in control of the activity (i.e. usually a train company). However, [Railtrack](#), as the 'infrastructure controller', was responsible for the integration of the system itself and was able to impose conditions on access and to monitor an operator's performance to ensure compliance with these conditions. To facilitate this overall responsibility, the safety professionals at British Rail were among those transferred to Railtrack on 1 April 1994. Regulations and access agreements required that operators complied with the reasonable directions of the infrastructure controller and with specified safety requirements.

Railtrack's Safety Case was accepted in March 1994. It discharged its duty to control safety in the railway industry through a system of 'cascaded' Safety Cases and technical requirements codified into [Railway Group Standards](#); safety performance was set, monitored and enforced through a Railway Group Safety Plan and a series of safety audits. Railtrack published annual Railway Group Safety Plans which set strategic safety objectives for members of the Railway Group (which included Railtrack and the duty holders of Railway Safety Cases accepted by Railtrack) and set the standards which governed Safety Cases.<sup>5</sup>

The main strategy employed by HMRI to regulate safety within what became a geographically and managerially diverse industry was to closely monitor the performance of all the relevant players, using an increased core of field inspectors. The inspectors would

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<sup>2</sup> information on rail privatisation can be found in HC Library note [HSN1157](#)

<sup>3</sup> HSC, *Ensuring Safety on Britain's Railways*, January 1993

<sup>4</sup> *Railways (Safety Case) Regulations 1994* ([HSI 1994/237H](#)); *Carriage of Dangerous Goods by Rail Regulations 1996* ([HSI 1996/2089H](#)); *Railways and Other Transport Systems (Approval of Works, Plant and Equipment Regulations 1994* ([HSI 1994/157H](#)); and *Railways (Safety Critical Work) Regulations 1994* ([HSI 1994/299H](#))

<sup>5</sup> these safety plans were succeeded by the Railway Strategic Safety Plan, see section 3, below

check the actual performance and the effectiveness of the management regimes against the commitments and goals in the safety cases. The Chief Inspector of Railways was given extensive enforcement powers to ensure that effective controls were maintained.

Following the [accident at Ladbroke Grove](#) in October 1999 an inquiry was set up under Lord Cullen to consider the causes of the accident and wider questions of safety management and the appropriateness of the safety regulatory regime. At the same time that the Cullen inquiry was set up, a working group was established by the then Department for the Environment, Transport and the Regions (DETR) to consider the functions of Railtrack's Safety and Standards Directorate (S&SD) and whether there were any improvements which should be made pending the conclusions of the Cullen inquiry. The rail safety policy review reported in February 2000.<sup>6</sup> On 22 February the then Deputy Prime Minister and Secretary of State for Transport, John Prescott, announced that the S&SD would be converted into a separate company, Railway Safety, and appointed Sir David Davies Chairman designate of the new company.<sup>7</sup>

The *Railways (Safety Case) Regulations 2000 (SI 2000/2688)*<sup>8</sup> came into force on 31 December 2000 and made the following changes to the safety case regime:

- Transferred the duty for accepting train and station operators' safety cases and safety case revisions to the HSE;
- Required Railtrack to procure an independent assessment of both its own Safety Case (and subsequent revisions) and the Safety Cases of operators on its infrastructure, before they could be formally considered by the HSE;
- Required Railtrack to secure an independent annual audit of its own safety management systems, and those of station or train operators using its infrastructure;
- Gave the HSE powers to require revisions to safety cases;
- Placed a clearer obligation on Railtrack to ensure that operators complied with their Safety Cases and with Railtrack's 'reasonable safety requests' and a duty to notify HSE of any non-compliance and actions they proposed to take as a result;
- Made changes to the content of Safety Cases; and
- Required Railtrack and operators with existing Safety Cases to submit revisions to the HSE.

In October 2000, the Rail Regulator announced his intention to modify Railtrack's network licence in order that Railtrack should transfer its safety activities from S&SD to a new, wholly-owned subsidiary, Railway Safety Ltd, established on 31 December 2000.<sup>9</sup> From its establishment until 3 October 2002, Railway Safety was a subsidiary of Railtrack Group plc.

On 7 October 2001, the then Secretary of State for Transport, Stephen Byers, petitioned a High Court judge to [put Railtrack plc into administration](#) under section 60 of the *Railways Act*

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<sup>6</sup> DETR, *Railtrack's Safety and Standards Directorate: Review of main functions and their location*, February 2000 [also known as the Rowlands Report]

<sup>7</sup> DETR press notice, "[HSir David Davies appointed as chairman designate of Railway SafetyH](#)", 22 May 2000

<sup>8</sup> replaced in 2006, see section 5, below

<sup>9</sup> ORR press notice, "[HRegulator proposes that Railtrack establish a separate safety companyH](#)", 31 October 2000

1993. It came out of administration on 3 October 2002 when Network Rail took over many of its responsibilities. It also acquired Railway Safety. This required minor modifications to Railtrack plc's network licence.<sup>10</sup>

## 2.2 Under the Rail Regulator, 2006-

Information on ORR's safety regulation activities can be found on the [Health and Safety pages](#) of the ORR website.

In its 2004 rail White Paper the Labour Government announced its intention to transfer safety responsibility to the Office of Rail Regulation (ORR).<sup>11</sup> This was legislated for in the *Railways Act 2005*. The ORR became both the economic and safety regulator for the rail industry on 1 April 2006 when it took over the safety regulation responsibilities of the HSE. These include the power to authorise a person to investigate and make a special report on a major incident, though it may not direct an inquiry and the Secretary of State retains their prerogative powers to call an inquiry should they see fit to do so.

At the time, there were differing views as to whether this was a good idea. Those who favoured the transfer to ORR argued that it helped place the safety regime within the wider context of affordable reform of the rail industry.<sup>12</sup> Others were concerned that the transfer would increase the safety risk on the railway.<sup>13</sup> The HSC and HSE were naturally disappointed with the decision.<sup>14</sup>

## 3 Rail Safety and Standards Board (RSSB)

Lord Cullen's inquiry into the Ladbroke Grove accident in October 1999 recommended the creation of a new rail industry safety body. The Regulator published a consultation document on the proposal in December 2001<sup>15</sup> and [responses](#) indicated strong support for the creation of such a body from a wide range of stakeholders in the railway. The Regulator held two industry conferences and chaired a cross-industry development group to work up and refine proposals. The Regulator's provisional conclusions on how the new body, the [Rail Safety and Standards Board \(RSSB\)](#), should be established and what form it should take were published in October 2002.<sup>16</sup> The new body was established on 1 April 2003. It describes its work as follows:

...The rail industry has access to a unique set of functions, features and services. They represent a combination of services which can be used to underpin knowledge-based decision making through a range of co-operative programmes, groups and activities.

To support this, RSSB provides knowledge, analysis, and powerful information and risk management tools across a whole range of subject areas. RSSB's unique selling point here is that it represents an efficient and cost-effective means for the industry to research, develop and problem-solve while retaining complete ownership and direction of the products on its behalf.

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<sup>10</sup> there were some critics of this approach, such as the Association of Train Operating Companies, who called for a through reform of safety regulation, see: ATOC press notice, "ATOC calls for independent safety regulator", 31 October 2000

<sup>11</sup> DfT, [The future of rail](#), Cm 6233, July 2004

<sup>12</sup> e.g., Christian Wolmer: "[Compromise that fails to confront desperate need for radical reform](#)", *The Independent*, 16 July 2004

<sup>13</sup> TUC press notice, "[TUC has safety worries about rail changes](#)", 15 July 2004

<sup>14</sup> HSE press notice, "[The DfT Rail Review: HSE response](#)", 15 July 2004

<sup>15</sup> ORR, [Establishment of a rail industry safety body: a consultation document](#), December 2001

<sup>16</sup> ORR, [Establishment of a rail industry safety body,; provisional conclusions](#), October 2002



This means the industry makes cost and time savings, and holds accessible knowledge. These core capabilities cut across the whole data-to-decision making cycle in that they represent a range of tools that support more than one aspect of the process – in some cases, nearly all aspects of the process, from data gathering up to the point industry makes a decision

**Our major capabilities include:**

**Risk modelling** - RSSB collects, measures and analyses information relating to safety risk in order to identify hazardous events and precursors, and evaluate their relative importance.

**Safety Management Information System (SMIS)** - RSSB supports the industry in managing system safety through an auditable trail from data to taking decisions affecting safety. The data side includes the collection, analysis and sharing of information about safety related events.

**Confidential reporting (CIRAS)** – RSSB provides the dedicated and distinct facility for the management of confidential reporting of issues between rail staff and individual companies and organisations.

**Research and development** - RSSB provides the R&D capability to industry to develop new knowledge to support industry action and decision making across a range of issues, in response to the data, information and analysis it gleans.

**Shared standards** - RSSB manages Railway Group Standards (RGS) through which the industry defines how it cooperates across interfaces: so that the system can operate efficiently and safely without having to reinvent the basis of that cooperation every time. RSSB also coordinates input to European standards, which are of increasing importance in Great Britain.

**And these capabilities are supported by:**

**Technical expertise** - A significant proportion of RSSB's staff are technical experts, who provide vital input across the range of RSSB's services. Our expertise covers the main branches of railway engineering, including track and structures, control, command, and signalling, rolling stock, and energy; it also covers railway operations, human factors, workforce development, risk analysis, decision support, safety management systems, and sustainable development.<sup>17</sup>

As mentioned in section 2, above, after privatisation safety performance was set, monitored and enforced through a Railway Group Safety Plan and a series of safety audits. This was succeeded by the Railway Strategic Safety Plan in 2005, produced by RSSB. The current plan covers the period 2009-14 (Railway Control Period 4).<sup>18</sup>

## **4 EU policy**

The **Second European Railway package** was agreed in April 2003. One of the Directives that formed part of the Package was **Directive 2004/49/EC** (the 'Railway Safety Directive') on defining common safety objectives for the entire EU railway. It created a clear procedure for issuing safety certificates to rail companies, which they would have to acquire before being able to operate on the European network. The text did not preclude stricter rules but established a notification procedure that to prevent the misuse of higher standards to

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<sup>17</sup> RSSB, H>About RSSB's capabilitiesH [accessed 21 February 2012]

<sup>18</sup> RSSB, HThe Railway Strategic Safety Plan 2009-14H [accessed 21 February 2012]

surreptitiously discriminate between rail companies. The RSSB explains the requirements of the Directive, as amended, on its website.<sup>19</sup>

Two sets of regulations were introduced in 2006 to implement the greater part of the Directive:

- The *Railways and Other Guided Systems (Safety) Regulations 2006 (SI 2006/599)*<sup>20</sup> (ROGS) implemented requirements for railway operators and railway infrastructure managers on the mainline railway to maintain a Safety Management System (SMS); and to hold a safety certificate (or ‘authorisation’ for infrastructure managers) indicating that the SMS has been accepted by the safety authority, before being allowed to operate. ROGS consolidated existing national provisions for non-mainline railways to maintain an SMS and to ensure the safe design of new and altered vehicles and infrastructure. ROGS also implemented a number of recommendations from the Cullen report on the Ladbroke Grove accident on the control of safety critical work. Information on ROGS can be found on the [ORR website](#).
- The *Railways (Access to Training Services) Regulations 2006 (SI 2006/598)* provided railway undertakings applying for a safety certificate, and infrastructure managers and relevant staff, with fair and non-discriminatory access to training services. This includes training for train drivers and staff accompanying the train, whenever such training is necessary for fulfillment of requirements to obtain the safety certificate; and for infrastructure manager staff who perform safety critical tasks. The training service regulations provide a right of appeal to the ORR if access to any of the conferred rights is denied.

In September 2009 the European Commission announced its intention to review rail safety rules and practices across the Union.<sup>21</sup>

## 5 Train protection systems

Summaries of the main train protection systems, including the [Automatic warning system \(AWS\)](#); the [Train Protection and Warning System \(TPWS\)](#); [Automatic train protection \(ATP\)](#); and the [European Rail Traffic Management System \(ERTMS\)](#) can be found on the ORR website.

The system most commonly talked about these days is ERTMS, which was initially recommended for use on the UK rail network by Professor Uff and Lord Cullen in their 2001 Joint Inquiry into Train Protection Systems which followed the Southall and Ladbroke Grove accidents, reported in March 2001.<sup>22</sup> The HSC published a further report in February 2003 which recommended further work on ERTMS and a restructuring of responsibilities for the introduction of the system. It also recommended that TPWS+ should be installed at those signals where it could bring material safety benefit without material adverse effect on capacity, as soon as practicable. Finally, the report warned of the dangers of introducing a

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<sup>19</sup> RSSB, [HEurope: Safety ManagementH](#) [accessed 21 February 2012]

<sup>20</sup> ROGS replaced and repealed the *Railway Safety Case Regulations 2000* (SI 2000/2688); *Railways and Other Transport Systems (Approval of Works, Plant and Equipment Regulations 1994* (SI 1994/157); and the *Railways (Safety Critical Work) Regulations 1994* (SI 1994/299)

<sup>21</sup> EC press notice, [“HCommission to promote rail safety rules and monitor their implementationH”](#), 8 September 2009

<sup>22</sup> HSE press notice, [“HJoint Inquiry into Train Protection SystemsH”](#), 29 March 2001

system in the UK that differed fundamentally from those in other EU countries.<sup>23</sup> The Labour Government accepted the advice to implement ERTMS along the lines recommended in the report.<sup>24</sup>

Alongside these domestic developments, installation of ERTMS became an EU-wide priority and is now mandated for all new lines, substantial renewals or upgrades on the European conventional and high speed networks as a consequence of [Directive 2008/57/EC](#) on railway interoperability. This set out to establish the conditions to be met to achieve interoperability within the Community rail system. These conditions concern the design, construction, placing in service, upgrading, renewal, operation and maintenance of the parts of this system as well as the professional qualifications and health and safety conditions of the staff who contribute to its operation and maintenance. Under the Directive there is a regulatory framework of mandatory [Technical Specifications for Interoperability \(TSI\)](#) and harmonised standards. ERTMS forms part of the Control Command and Signalling TSI.

In 2003 it was estimated that the cost of installing the new system (ERTMS level 2, system D) would be £3.7 billion over 40 years, and that overall ERTMS would deliver an estimated £7.5 billion worth of benefits over that period, of which an estimated £347 million would come from safety benefits.<sup>25</sup> In 2011 the government raised concerns about the European Commission's plans to replace the Trans-European Transport Network Guidelines with a Regulation, which would mandate works to be carried out on the network within a particular timeframe. One of these is the installation of ERTMS. The government calculated that the proposal would cost an extra £1.08 billion and would not represent value for money.<sup>26</sup>

In September 2007 the government published a [national implementation plan for ERTMS](#) and in April 2009 it was confirmed that ERTMS Level 2 would be deployed on the Cambrian Line in Wales by the end of 2009.<sup>27</sup> The government intends to rollout ERTMS on the Great Western main line from Paddington to Bristol in March 2016 and be completed by early 2018.<sup>28</sup>

## 6 Signals passed at danger (SPADs)

A signal passed at danger (SPAD), describes an incident when a train passes a stop signal without authority to do so. There are several hundred SPADs each year. Many of these have little or no potential to cause harm because they are the result of minor misjudgements of distance or braking capability, or they occur at low speed during shunting operations. In most cases the trains stop within the safety overlap provided at the signal. The overlap is a clear section of track beyond the signal, usually 200 yards, which provides protection against relatively minor overruns. The most serious incidents potentially are those when trains run past the overlap, and the line ahead is occupied by another train.

SPADs are only one of the precursors to catastrophic accidents on the railway, but they have been the cause of major accidents including, in recent years, at Southall in 1997 and

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<sup>23</sup> HSC, [HTrain protection – Review of economic aspects of the work of the ERTMS programme team](#), 5 February 2003, p69

<sup>24</sup> [HHC Deb 5 February 2003, cc14-16WS](#)

<sup>25</sup> [HHL Deb 10 June 2003, c20WA](#)

<sup>26</sup> DfT, [HProposal for a Regulation ... on Union Guidelines for the development of the Trans-European Transport Network + Commission Staff Working Documents accompanying the proposal: Impact Assessment; and Executive Summary of the Impact Assessment](#), 9 November 2011; for further information see HC Library note HSN478

<sup>27</sup> [HHC Deb 22 April 2009, cc751-752W](#)

<sup>28</sup> [HHC Deb 4 July 2011, c969W](#)



Ladbroke Grove in 1999. Over time there has been a general improvement in the overall incidence of collisions and derailments. Quarterly figures and further information on SPADs can be found on the [ORR website](#).

## 7 Appendix: Summary of UK rail safety management changes, OECD 2010

Table 4.1. Evolution of regulatory framework for safety: national system: Great Britain

Dates	Nature of railway safety organisation
<b>Rail safety regulator</b>	
Pre-privatisation	<ul style="list-style-type: none"> <li>• The long standing safety regulator was the Railway Inspectorate (RI). Its history goes back to 1840. Functions included the following:               <ul style="list-style-type: none"> <li>• Inspecting new railways</li> <li>• Regulating staff safety</li> <li>• Investigating accidents and recommending safety improvements</li> <li>• Monitoring and reporting on safety generally.</li> </ul> </li> <li>• The RI was part of the Government Department of Transport until 1 December 1990, when it moved to the Health and Safety Executive (HSE, the general industrial safety regulator) on 1 December 1990. A consequence was the more direct application of the general safety legislation to the railways than hitherto (the Health and Safety at Work Act 1974).</li> <li>• Before privatisation the Department of Transport and HSE prepared for privatisation with a document <i>Ensuring Safety on Britain's Railways</i> (1993), which recommended a Safety Case system, the forerunner of today's Safety Management Systems (SMSs). The recommended system was 'cascaded', under which the RI approved the Infrastructure Managers' (IM's) safety cases, and the IM approved the Railway Operators' safety cases.</li> <li>• The number of RI staff throughout the 1980s was about 35, and had risen to about 70 on 31 March 1994, partly in anticipation of privatisation, and partly in response to previous accidents.</li> </ul>
1 April 1994 to 31 March 2006	<ul style="list-style-type: none"> <li>• After privatisation, the Health and Safety Executive remained the railway safety regulator. The Railway Inspectorate retained its identity within HSE, and it was supported by other parts of HSE.</li> <li>• From 1994 to 2000, the RI and the HSE formally approved the IMs' safety cases, including their arrangements for accepting Railway Operators' safety cases. The IM approved the operators Safety Cases. From 2000 onwards, the RI approved both the IM and the operators' safety cases.</li> <li>• The HSE/RI retained powers of accident investigation, but in practice reduced the number of public reports. Two major accidents were subject to (non-RI) independent judicial inquiries. Independent accident investigation was transferred from the RI to the Rail Accident Investigation Branch (RAIB) on 17 October 2005.</li> <li>• Because of the increasing workload, the number of staff in the RI gradually rose from about 70 to 200 on 31 March 2006.</li> </ul>
1 April 2006 to present	<ul style="list-style-type: none"> <li>• On 1 April 2006 rail safety regulation and the Railway Inspectorate were transferred from the HSE to the Office of Rail Regulation (ORR), which was previously the economic regulator for the main line railways.</li> <li>• The ORR now combines economic and safety regulation. The ORR is an independent agency of the Department for Transport.</li> <li>• The RI has been absorbed into ORR without retaining a formal separate identity.</li> </ul>

<b>Independent accident Investigating body</b>	
Pre-privatisation	<ul style="list-style-type: none"> <li>• Before privatisation the independent accident investigator was the Railway Inspectorate.</li> <li>• The RI investigated all serious accidents and published an average of about eight reports per year on accidents of public interest.</li> </ul>
1 April 1994 to 17 October 2005	<ul style="list-style-type: none"> <li>• After privatisation, the RI within HSE continued to be the principal independent accident investigating body, both for 'learning lessons' and for possible prosecutions under health and safety law.</li> <li>• In practice, they did not publicly investigate as many accidents as in the past; this function was largely replaced by Formal Inquiries carried out by the industry itself (which were generally not published).</li> </ul>
17 October 2005 to present	<ul style="list-style-type: none"> <li>• The newly established Rail Accident Investigation Branch (RAIB), took over independent accident investigation from the RI on 17 October 2005. The RAIB is formally part of the Department for Transport.</li> <li>• It is independent, and does not attribute blame in its work. In its first years the RAIB has investigated about 45 accidents or near misses per year. The number of staff in 2007 was about 45.</li> </ul>
<b>Lead industry safety body</b>	
Pre-privatisation	Before privatisation, the lead body was the British Rail Safety Directorate. It distributed standards as internal company documents.
1 April 1994 to 31 December 2000	<ul style="list-style-type: none"> <li>• The Safety and Standards Directorate (S&amp;SD) of Railtrack (the new infrastructure manager) took over the functions of maintaining the suite of standards relating to safety, and also of approving the safety cases of train operators using Railtrack infrastructure.</li> <li>• This entailed imposing legally binding standards on the railway operators.</li> <li>• Given this quasi-regulatory function, the S&amp;SD was kept separate from the main commercial activities of Railtrack, but it remained part of Railtrack.</li> <li>• Railtrack was privatised on 20 May 1996.</li> </ul>
31 December 2000 to 31 March 2003	<ul style="list-style-type: none"> <li>• By the late 1990s, it was judged inappropriate that Railtrack S&amp;SD as a commercial organisation should impose standards on operators with whom it had a commercial relationship.</li> <li>• Railway Safety was therefore set up temporarily as the lead safety body. It was no longer part of Railtrack, but was a subsidiary of Railtrack. At a similar time, the RI took over the approval of train operators' safety cases.</li> <li>• Railtrack itself was placed in administration on 8 October 2001. Railway Safety became a subsidiary of its successor, Network Rail.</li> </ul>
1 April 2003 to present	<ul style="list-style-type: none"> <li>• The newly-created Rail Safety and Standards Board (RSSB) took over the functions of Railway Safety on 1 April 2003. RSSB is an independent body funded by its members.</li> <li>• RSSB maintains national standards on behalf of both Network Rail and the train operators, and performs safety coordinating roles such as detailed safety performance monitoring and the development of a safety risk model.</li> <li>• RSSB also manages research, funded largely by the Department for Transport.</li> <li>• RSSB managed Formal Inquiries into accidents until creation of RAIB, but no longer does so.</li> </ul>