



OFFICE OF RAIL AND ROAD



2017 UK Annual Safety Report to the European Union Agency for Railways

September 2018

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1. Introduction

The purpose, scope and other addresses of the report

1. The purpose of this Report is to comply with Article 18 of the Railway Safety Directive. This requires all National Safety Authorities (NSAs) to publish an annual safety report. The report covers the UK NSA's activities from 1 January to 31 December 2017.
2. In the UK, the role of NSA is shared between the Office of Rail and Road (ORR) and the Department for Infrastructure (DfI). ORR is responsible for England, Scotland and Wales, collectively known as Great Britain (GB), and DfI is responsible for Northern Ireland (NI). ORR represents DfI in relations with the European Railway Agency (ERA) and therefore this report covers the UK as a whole. There is a separate section covering DRDNI's activities in Northern Ireland (see section I). The Common Safety Indicator (CSI) data has been aggregated at UK level and includes data for the mainline network in Great Britain and Northern Ireland.
3. As well as being the UK NSA, ORR is in addition the economic Regulatory Body (RB) and competition authority for railway services. It is also the licencing authority for track access on the rail network for railway undertakings (RUs), known as Train Operating Companies (TOCs) for passenger services and Freight Operating Companies (FOCs) for freight services.
4. The scope of this report is the entire UK mainline railway system (including the high speed line between London St Pancras and the Channel Tunnel (HS1)), and covers both 1435mm (GB) and 1600mm (NI) gauge networks. Mirroring the scope of UK implementation of the Railway Safety Directive, the report does not cover metros, tramways and other light rail systems, or infrastructure that is functionally separate from the rest of the UK mainline network.
5. The report does not cover the Channel Tunnel which has a separate NSA known as the Intergovernmental Commission (IGC). The IGC produces a separate annual report to ERA. As of 2016, ORR along with its French counterpart ARAF is responsible for regulating access to the Channel Tunnel.
6. As well as the Agency, this report will be made available via ORR's website to the UK Department for Transport (DfT), the Railways Accident Investigation Branch (the UK's NIB), the Railway Safety and Standards Board (RSSB), RUs, IMs, entities in charge of maintenance (ECMs), passenger associations (Transport Focus and London Travel Watch), notified bodies (NoBos) and designated bodies (DeBos).

Possible significant organisational changes affecting the NSA

7. During 2017 there were no significant organisational changes made by ORR.

2. National safety strategy, programmes and initiatives

8. The scope of this report is the UK mainline network. It focuses therefore on the ORR safety strategy, programmes and initiatives in relation to Network Rail – the main line infrastructure manager - and the mainline freight and passenger railway undertakings.

9. ORR has teams of inspectors allocated to different areas of the railway network:

- Network Rail and associated suppliers and contractors. Each Network Rail route has a team of inspectors assigned to it. There is also a national team that deals with issues, such as level crossings, that are relevant to all routes.
- Passenger Railway Undertakings
- Freight Railway Undertakings, metros, trams and heritage railways
- Transport for London (TfL). This team covers London Underground, the Docklands Light Railway and some commuter rail services (TfL Rail and London Overground)
- A central regulation team covering human factors, occupational health & safety and railway safety policy. The team also provides the UK secretariat to the IGC and CTSA which provide support to the head and members of the UK delegations.

ORR strategy

10. ORR is strategic in how health and safety on Britain's railways are regulated. ORR's key approach is to deliver a safe railway where the health and safety management is cost effective and performance is amongst the best in the world.

11. ORR's health and safety strategy covers 12 key areas:

1. Health and safety management
2. Industry staff competence and human failure
3. Management of change
4. Level crossings
5. Interface system safety
6. Infrastructure asset safety
7. Rolling stock asset management
8. Workforce safety
9. Occupational health
10. Management of training movements and signalling
11. Health and Safety by design
12. Leadership and culture

12. The above areas are covered in more detail as part of our 'strategic risk chapters' on ORR's website¹.

ORR's role as Regulatory Body

13. As well as the National Safety Authority, ORR is also the Regulatory Body for mainline railways in Great Britain and also regulates Highways England, the managing authority for controlled and limited-access trunk roads in England. In October 2013 ORR published the 2013 periodic review (PR13) – a final determination of the outputs that Network Rail must deliver, the efficient cost of delivering those outputs, and the access charges the company can levy on train operators for using its network to recover those costs.
14. PR13 covers the period from 1 April 2014 to 31 March 2019, known as control period 5 (CP5). PR13 also establishes the wider 'regulatory framework' including the incentives that will act on Network Rail, railway undertakings and others in the industry to deliver and outperform ORR's determination.
15. In terms of health and safety, the determination includes a ring-fenced fund for Network Rail to deliver level crossings closures. Funds have also been made available to enable electrical isolations to be taken more safely and quickly and to replace a number of road-rail vehicles.

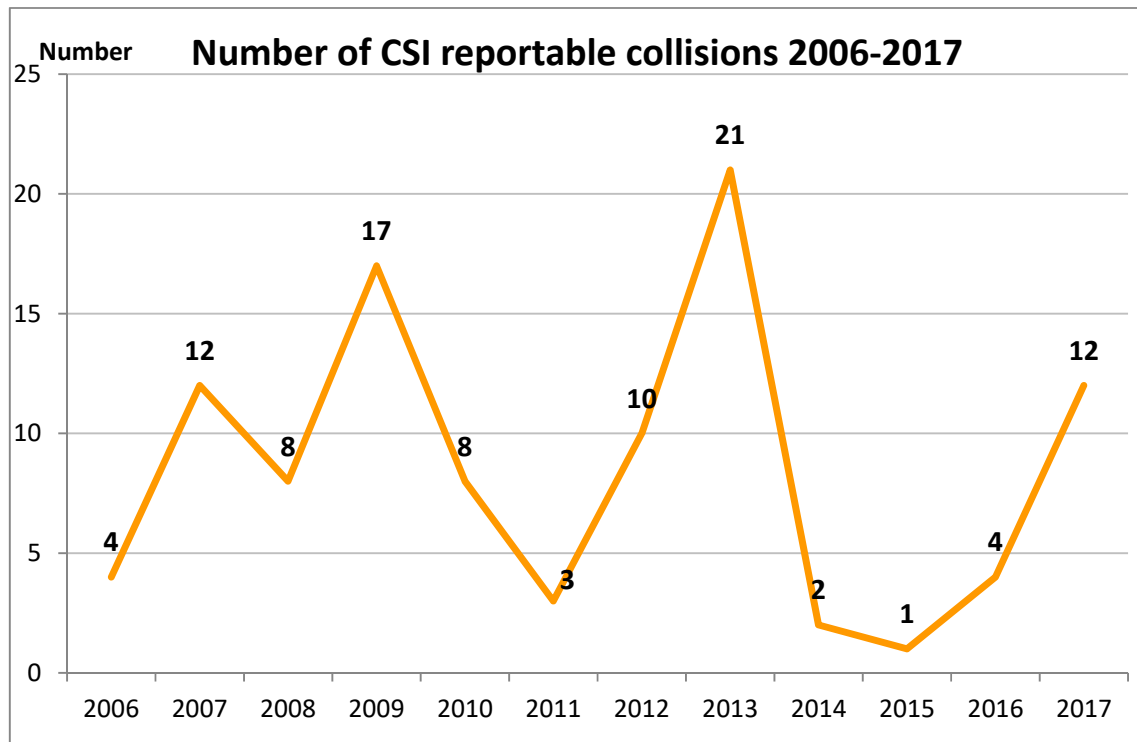
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¹ <http://orr.gov.uk/rail/health-and-safety/health-and-safety-strategy/our-strategic-risk-chapters>

3. Detailed analysis of the latest recorded trends

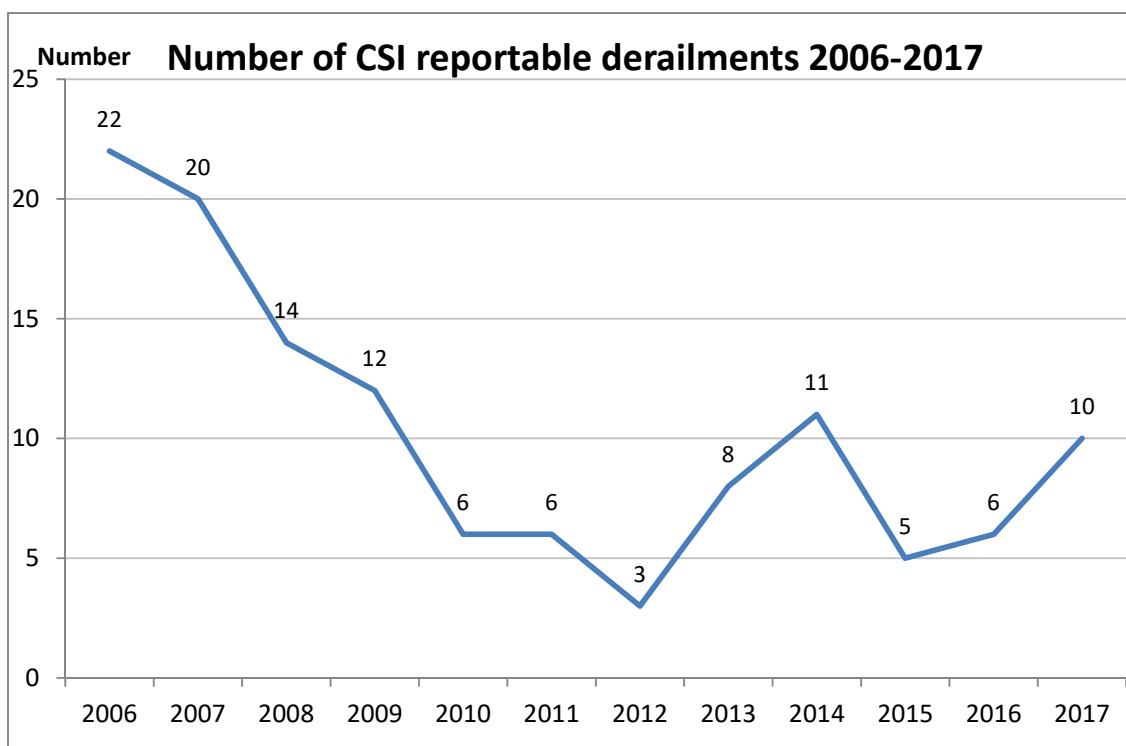
16. This section provides an overview of CSI data for 2017, which has now been collected for 12 years.
17. In 2017, the total number of CSI reportable accidents was 71, an increase of 20 from 2016 and the second annual consecutive increase.
18. All CSI categories saw the number of incidents increase over the past year with the exception of level crossing incidents, which were stable. There were no CSI reportable fires in rolling stock.. A graph and appropriate analysis is included for each of the six CSI categories where incidents were recorded in 2017:
 - Collisions
 - Derailments
 - Level crossing accidents
 - Rolling stock in motion accidents
 - Broken rails
 - SPADs

CSI reportable collisions



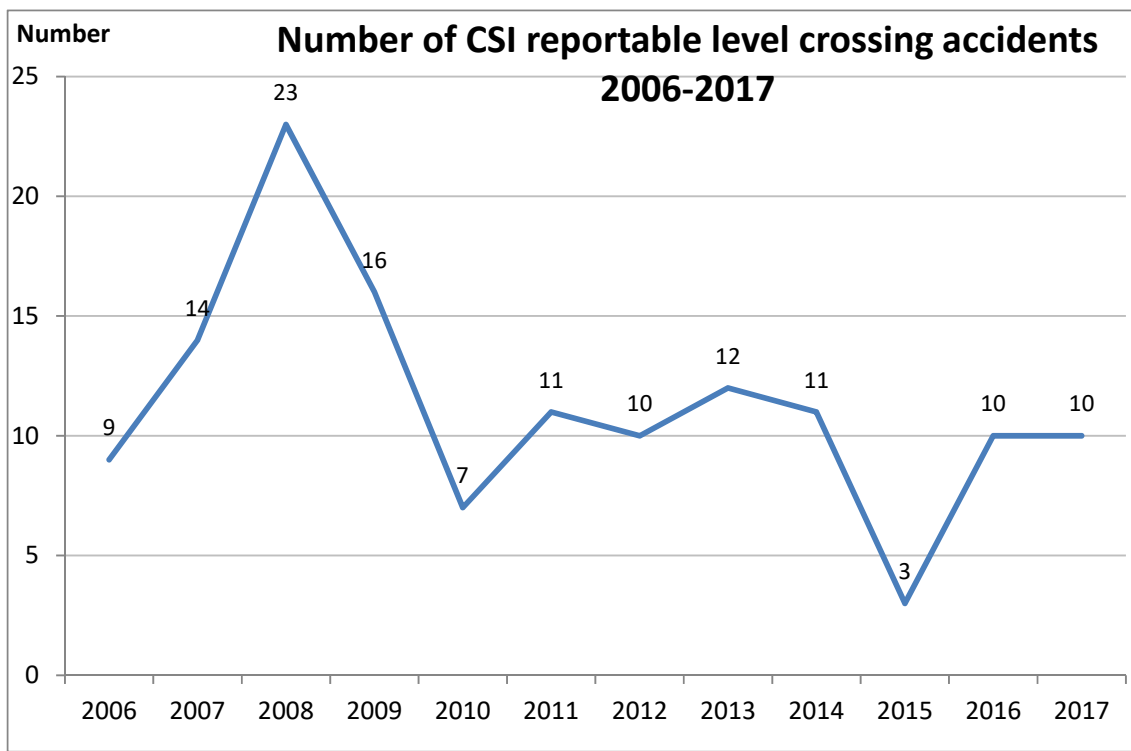
19. The number of CSI reportable collisions rose during 2017 and recorded its highest figure since 2013. This follows several years of very low incident numbers

CSI reportable derailments



20. In 2017, the number of derailments recorded increased from 6 to 10. As during the previous two reporting years, none of the incidents resulted in a fatality or serious injuries. The figure is also low by historical standards: In the late 1990s there were typically 40-50 freight train derailments every year.

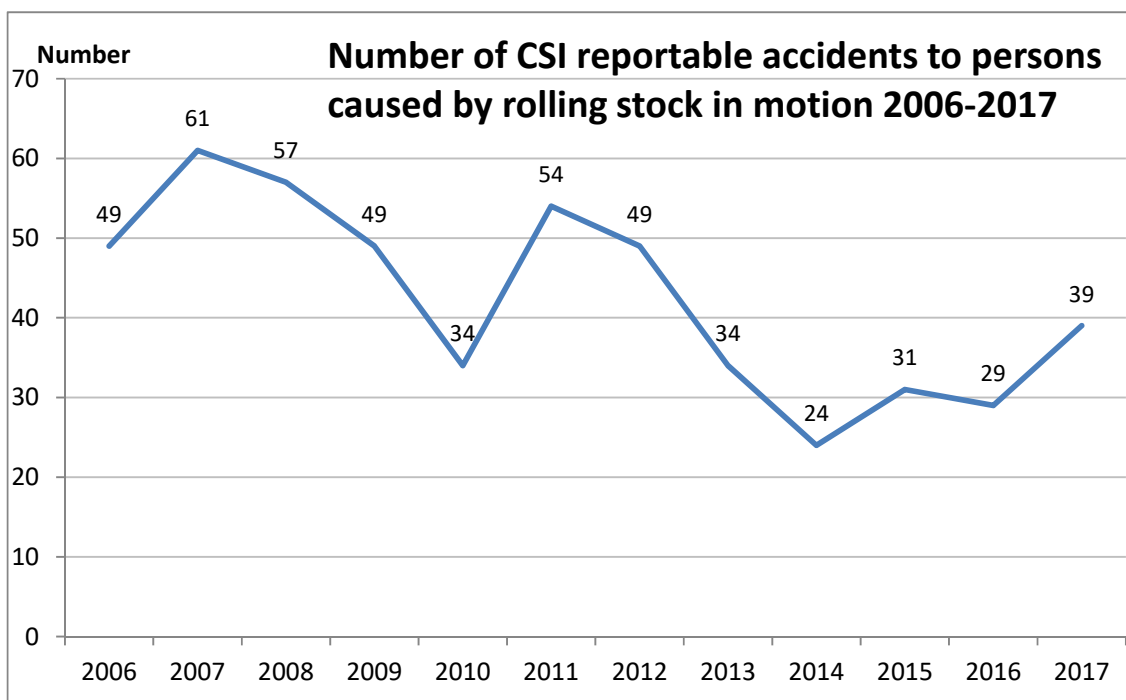
CSI reportable level crossing accidents



21. The number of reportable level crossing accidents remained unchanged in 2017. Of the 10 accidents, five resulted in pedestrian fatalities and three were collisions with a vehicle.

22. Given the risks level crossings pose to members of the public, this is a concerning development and ORR remains focused on the continued risk posed by level crossings on the railway. We are conscious that much of the risk is based around user behaviour.

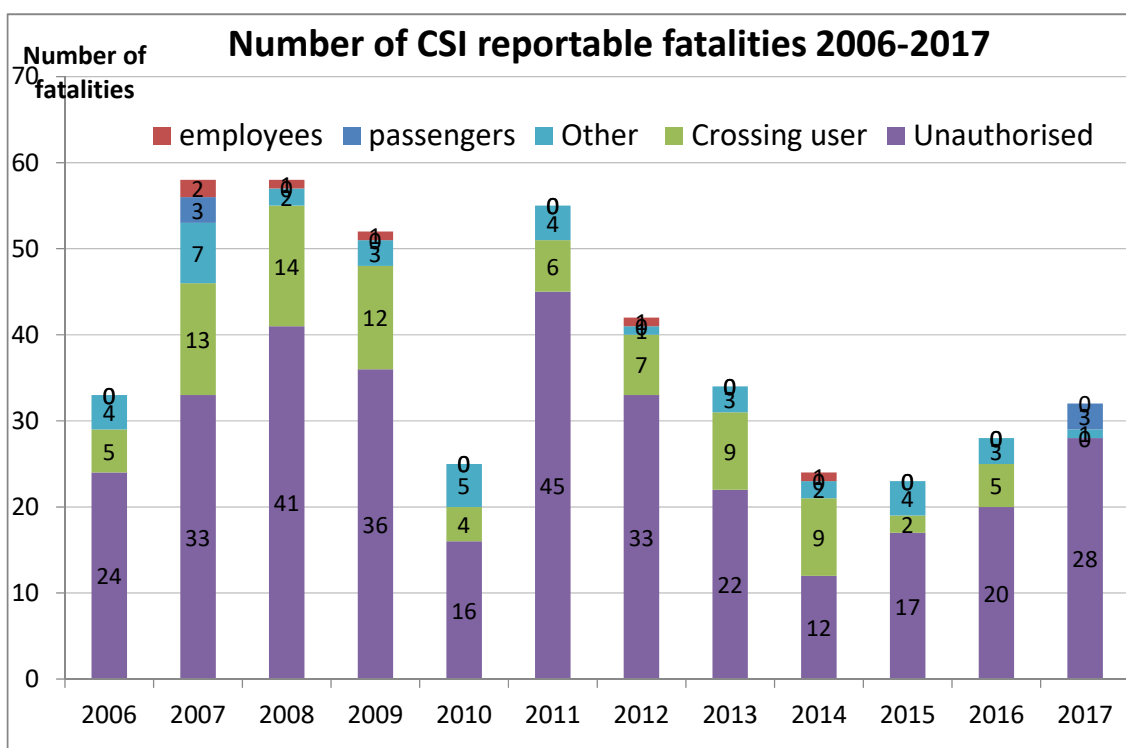
CSI reportable rolling stock in motion accidents



23. The number of rolling stock in motion accidents increased significantly from 29 to 39. This is the highest figure since 2012.

24. Of the number of accidents, 32 led to fatalities, 28 of which were unauthorised persons. There were also three passenger fatalities related to rolling stock in motion accidents.

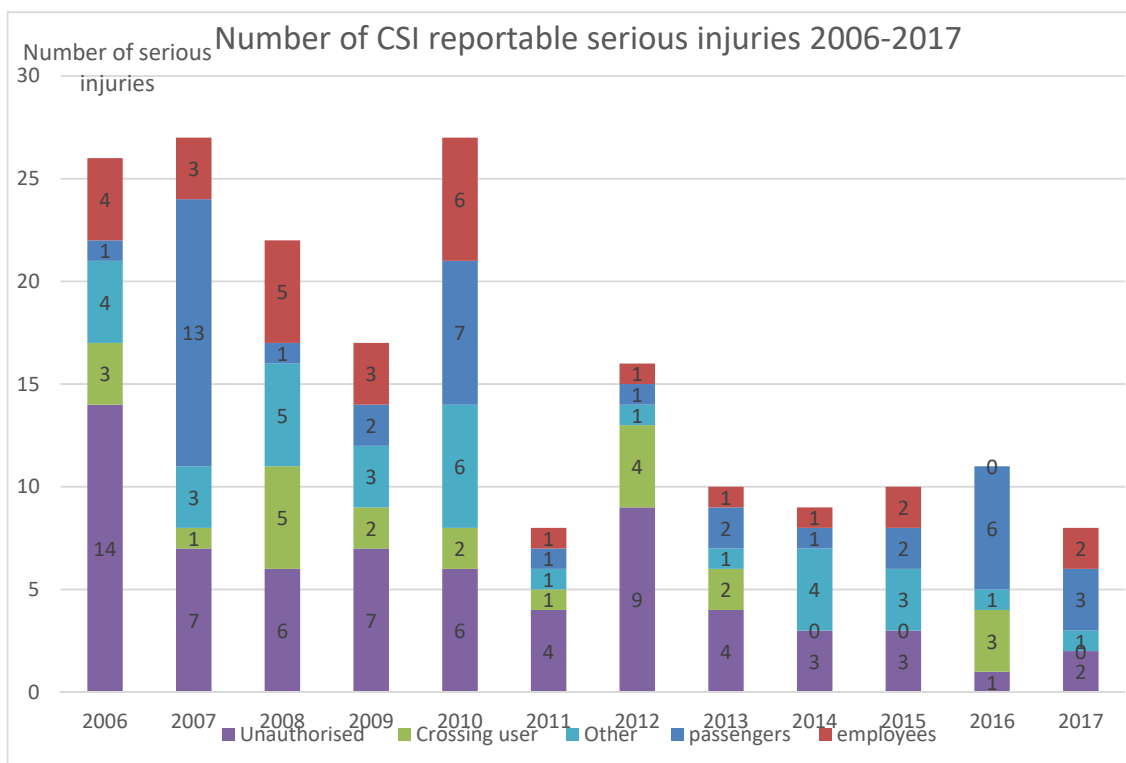
CSI reportable fatalities



25. In 2017, the number of fatalities increased from 28 to 32. It was the third consecutive increase and reverses a declining trend during the first half of the decade. The vast majority of CSI reportable fatalities continue to be unauthorised users. For the first time in a decade there were passenger fatalities. For the third year in succession, there were no worker fatalities.

26. The three 'other' incidents all involved trains striking persons at stations or on the track.

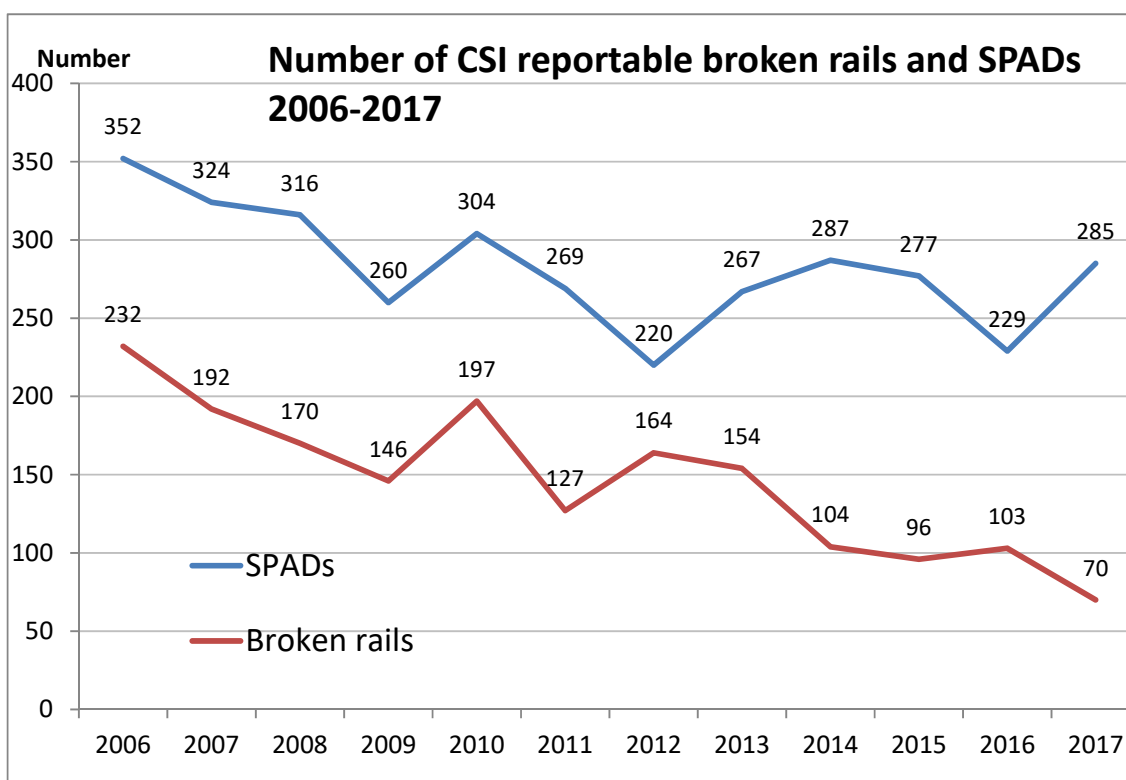
CSI reportable serious injuries



27. There were 8 CSI reportable serious injuries in 2017, the joint lowest number on record. Key facts were:

- Of the three serious injuries to passengers all involved moving vehicles, including one person who was struck by a train.
- There were two serious injuries to workers both involving rolling stock in motion
- Two unauthorised persons suffered serious injuries after being struck by a train.

CSI reportable broken rails and SPADS

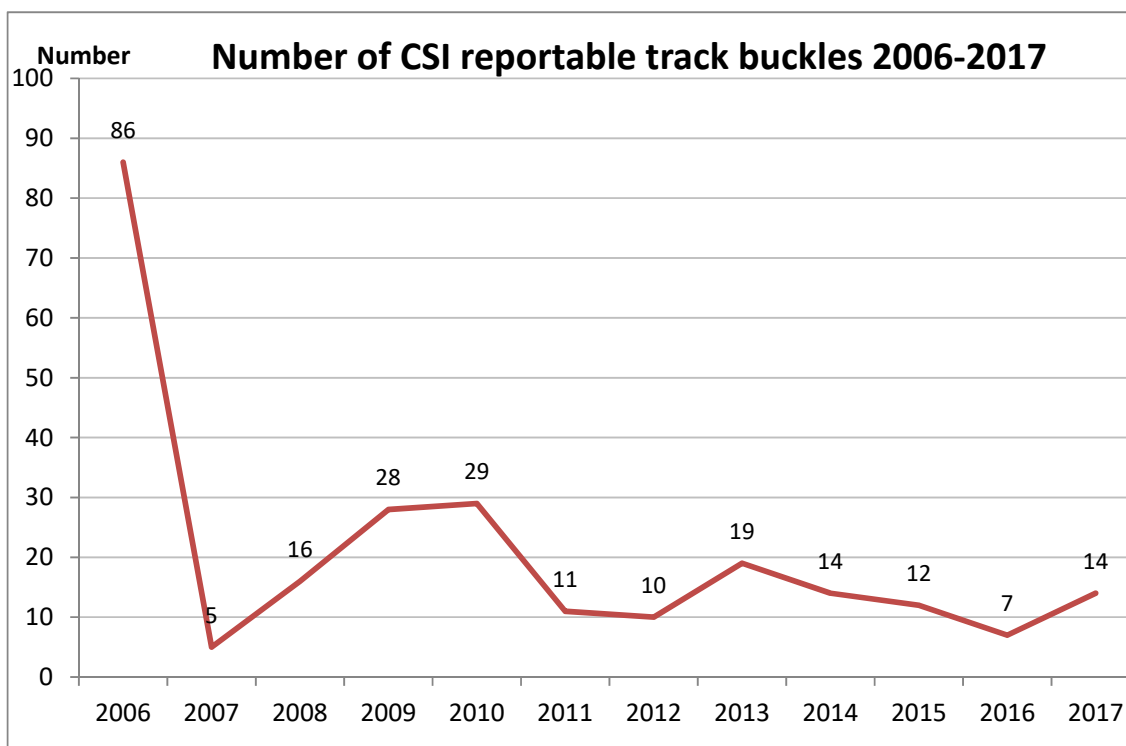


28. There were 70 broken rails in 2017, which is the lowest on record by a considerable margin. As with 2015 and 2016, this might be a reflection of the relatively mild temperatures, which compares to a prolonged period of cold temperatures experienced during some previous years, especially in 2010.

29. The continued roll out of automatic ultrasonic inspection by Network Rail has been a key driver in identifying damaged rails before they break.

30. The number of SPADs increased considerably to 285 incidents, the highest since 2014. This may reflect growing congestion on the main line railway, one of Europe's busiest. The rail sector is producing a strategy for reducing SPAD risks as the UK's mainline network moves towards automatic train control (ATC) through the implementation of the European Train Control System (ETCS).

CSI reportable track buckles



31. The number of track buckles doubled in 2017 to the highest level since 2014. This reverses a steady decrease in incidents since 2014.

32. Track buckles are partly due to the degree and prevalence of hot weather. In 2006 for example the UK recorded its highest ever average monthly temperature in July of that year and one of its warmest summers on record resulting in a very high number of incidents. In summer 2017 there were a larger number of days above 20c compared to previous years.

Automatic train protection

33. There are 15,498 route Km of track in the UK.

34. 244 km of railway is fitted with ERTMS.

Level Crossings

35. There are approximately 5939² level crossings on the GB mainline as of April 2018.

| Level Crossing type | Number |
|--|--------|
| Active with automatic user-side warning | 284 |
| Active with automatic user-side protection | 0 |
| Active with automatic user-side protection and warning | 552 |
| Active with manual user-side warning | 0 |
| Active with manual user-side protection | 307 |
| Active with manual user-side protection and warning | 523 |
| Passive | 4273 |
| <i>Total</i> | 5939 |

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² RSSB Annual Safety Performance Report: <https://www.rssb.co.uk/Library/risk-analysis-and-safety-reporting/annual-safety-performance-report-2017-18.pdf>

4. Safety Certification and Authorisation

Status on the number and issue of certifications and authorisations in 2017

36. In the calendar year 2017, ORR processed and issued the following:

- New Part A Safety Certificates – 3
- New Part B Safety Certificates – 3
- New Safety Authorisations – 2
- Updated / Amended Part A Safety Certificates – 2
- Updated / Amended Part B Safety Certificates – 5
- Updated / Amended Safety Authorisations – 1
- Renewed Part A Safety Certificates – 17
- Renewed Part B Safety Certificates – 17
- Renewed Safety Authorisations - 6

Outcomes of discussions of supervision results with other NSAs in the context of certification/authorisation where appropriate.

Northern Ireland

37. In 2017, ORR carried out supervision activity on behalf of the Department for Infrastructure Northern Ireland. The supervision topic chosen was signalling maintenance with Northern Ireland Railways.

38. The supervision activity covered the competence management arrangements for those performing signalling maintenance tasks and the effectiveness of the maintenance undertaken on the signalling equipment.

39. The final supervision report was issued to Northern Ireland Railways on 10 November 2017 and copied to the Department for Infrastructure Northern Ireland, the body acting as the safety authority for railways in Northern Ireland. ORR provided agreement to the Northern Ireland NSA that the report could be also be shared with the NSA for the Republic of Ireland.

Channel Tunnel

40. In 2017, ORR also provided Inspector resource to the CTSA to assist with supervision activity for those railway undertakings and infrastructure managers that operate in the Channel Tunnel. ORR had many discussions with EPSF who provided similar resource from the French side for supervision activity of the organisations referred to.

Changes to strategy and procedure

41. No changes were made to ORR's strategy and procedures for assessing safety certificate and safety authorisation applications during the period that this report covers.

Exchange of information between the ORR and sector

42. As part of the process for applying for safety certificates and safety authorisations, ORR meets with applicants to discuss the application, assessment processes and agree timescales for submission of applications. As part of the assessment, ORR will meet with applicants to discuss matters raised and agree mechanisms for closure.

43. Liaison meetings are held quarterly between ORR Inspectors and RUs/IMs. The meetings provide an opportunity for duty holders to advise of any potential changes to their operations or organisation and discuss the impact these have on their existing safety certificate or safety authorisation.

44. To facilitate the safety certificate and safety authorisation application process, ORR provides guidance documents and informal advice to railway undertakings. This helps the applicant submit the correct documentation in the required format, reducing the administrative burdens for both the applicant and ORR. If there are major changes to assessment processes ORR has in place, workshops will be held with RU's and IM's to outline these.

5. Supervision

Strategy

45. ORR publishes a strategy for regulation of health and safety risks³. This sets out how ORR set its priorities and targets its activities. ORR has a vision of zero workforce and industry-caused passenger fatalities, with an ever decreasing overall safety risk.

46. Having identified the main risk areas, ORR considers which should be its priorities i.e. those on which ORR should focus its attention as an NSA. This does not mean that ORR does nothing with the other risks; we will still carry out work on other risks by conducting investigations of incident and complaints, monitoring the risk profile of each sector and will add other areas of risk to our collective inspection programmes if we feel it is warranted

47. It is important to recognise that the risks are prioritised from our perspective as NSA. All risks, irrespective of their priority to us as NSA, must be controlled by the companies (whether RU, IM, ECM, suppliers, entities in charge of maintenance etc.) that create them.

48. An important part of our prioritisation process is to “horizon-scan” and anticipate new and emerging risks, or existing risks where we can foresee that they may change in their importance.

49. Underpinning ORR’s prioritisation is a scorecard that is used to analyse the risks and give some ranking. This approach takes account of a range of issues, such as:

- How well the industry is managing the risk and whether we have confidence that performance will be sustained;
- The enforcement history - i.e. are we intervening more or less over time;
- How well the industry is managing the risk and whether we have confidence that performance will be sustained;
- Likely public, political and media concern; and
- Whether we are best placed to make a difference.

Competence

50. In line with the CSM supervision, ORR has an auditable competence management system.

51. The Inspector Competence Management System (CMS) is comprised of the following elements:

- recruit staff with existing skills or potential to develop them;
- assess training needs of new starters;

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³ The latest version is available via ORR’s website:

http://orr.gov.uk/_data/assets/pdf_file/0018/17019/health-and-safety-regulatory-strategy.pdf

- deliver training;
- assess competence;
- set annual performance and development objectives;
- monitor performance;
- continual professional development/refresher training; and
- audit and review the CMS.

Decision-making and enforcement

52. ORR sets out the decision-making criteria used to monitor, promote and enforce compliance with the regulatory framework and the procedure for establishing those criteria in the Enforcement Policy Statement⁴ and associated enforcement management model⁵. ORR inspectors will use these policies and apply their discretion and judgment in deciding what enforcement action may be appropriate.

53. This statement sets out how ORR will use its powers under the Health and Safety at Work etc. Act 1974 (HSWA), to enforce compliance with both health and safety law and other relevant non-H&S legislation for which ORR is the enforcing authority, such as the law on interoperability and accessibility for people of reduced mobility. The enforcement of licence obligations is dealt with separately under ORR's economic enforcement policy and penalties statement⁶.

54. When carrying out an investigation into a possible breach of health and safety law, ORR will seek to determine:

- causes;
- whether there has been a breach of legislation;
- whether action has been taken or needs to be taken to prevent a recurrence of an incident and / or to secure compliance with the law;
- lessons to be learnt and whether there is a need to review the law and industry guidance; and
- what response is appropriate in respect of any breach of the law.

55. ORR inspectors have a range of tools at their disposal to secure compliance with the law and to ensure a proportionate response when carrying out inspections and investigations. Inspectors may offer duty holders information and advice, both face to face and in writing. This may include warning a duty holder that in the opinion of the inspector, they are failing to comply with the law.

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⁴ http://orr.gov.uk/_data/assets/pdf_file/0016/5650/hsa-enforcement-policy-statement.pdf

⁵ <http://orr.gov.uk/what-and-how-we-regulate/health-and-safety/health-and-safety-enforcement>

⁶ http://orr.gov.uk/_data/assets/pdf_file/0018/4716/economic-enforcement-statement.pdf

56. Where there is a choice of remedy or enforcement mechanism available ORR is likely to consider:

- the remedies at its disposal;
- the likely effectiveness of each remedy;
- the speed of resolution;
- cost; and
- any other factors relevant to the specific case.

57. ORR uses the HSE Enforcement Management Model when deciding what enforcement action may be appropriate for breaches of health and safety law, and a separate, supplementary process for other non-risk areas such as interoperability and accessibility.

58. ORR has also a number of powers available under which it can take enforcement action (including HSWA, Network Rail's network licence, operator licences and specific powers within the relevant non-Health and Safety legislation) and will consider, using the principles of regulatory enforcement set out in the enforcement policy statement, the most effective, efficient and expeditious solution in the light of its legal obligations.

59. The ultimate purpose of ORR's enforcement policy is to ensure that duty holders manage and control risks effectively, thus preventing harm.

Supervision planning

60. ORR uses the Risk assessment and risk ranking (RARR) tool to identify and prioritise significant railway health and safety risks when considering supervision activities.

61. This assessment process helps ORR focus resources on the highest identified risks where we believe we can make the greatest impact to reduce risk and to achieve railway duty-holder compliance with GB health and safety legislation. By doing this, we aim to achieve our strategic objective of high performing regulation through proportionate, risk-based regulation.

62. The outcome is an industry wide assessment of risk. The key component is how much influence we have to drive improvement in risk control, refer to 'Regulator's ability to influence the risk' section. The outcome of this part of the assessment informs the planning of our proactive activities.

63. ORR's reactive and monitoring activities capture other risks and provide intelligence on the risk profile. This could highlight any risks that may be missing and the possibility for additional strategic chapters.

64. The data is reviewed annually, each autumn, taking into consideration changing risk profiles and new intelligence. Changes in the assessments are recorded and the revised data informs our activities for the following business year.

Identification of Significant Risks

65. ORR gathers and analyses knowledge from our own and the industry's experience to identify areas of significant risk. To do this we use information from a variety of sources including, but not limited to:

- mainline accident and incident data collected in the Rail Safety and Standards Board's (RSSB) Safety Management Information System (SMIS) and analysed using their Safety Risk Model (SRM) and Precursor Indicator Model (PIM);
- Network Rail's periodic Safety, Health and Environment Performance (SHEP) report;
- London Underground's safety and environment database (LUSEA) and analysis using their Quantitative Risk Assessment (LUQRA) model;
- accident and incident data reported to us under the Reporting of Injuries Diseases and Dangerous Occurrences Regulations (RIDDOR);
- the Rail Accident Investigation Branch (RAIB) investigation findings;
- intelligence from our permissioning, audit, inspection, investigation and enforcement activities;
- informed peer-reviewed opinion from specialist experts; and
- intelligence from EU and other international developments.

Prioritised Risks

66. ORR approach is to focus our resources on identified risks where we believe we can have the greatest impact to reducing risk. The Pareto 80/20 principle, 80% of the effects come from 20% of the causes, is applied to give this focused approach.

67. An important part of our prioritisation process is also to anticipate new and emerging risks or existing risks where we can foresee that they may change in their importance.

How the Risk Assessment and Ranking (RARR) Process works

68. We use a quasi-Delphi⁷ type approach to:

- Risk assess sub-topics identified in each strategic chapter.
- Determine the adequacy of controls in place.
- Determine if the risks will change or remain as they are.
- Determine scope ORR has to influence improvements.
- Determine public / external perception of the risks.

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⁷ A forecasting method based on the results of questionnaires sent to a panel of experts. Several rounds of questionnaires are sent out, and the anonymous responses are aggregated and shared with the group after each round. The experts are allowed to adjust their answers in subsequent rounds. <http://www.investopedia.com/terms/d/delphi-method.asp>

Coordination and cooperation with European NSAs

69. As noted in other sections, ORR has in place an agreement with the Channel Tunnel Safety Authority (CTSA, the NSA for the Channel Tunnel) for coordinated activities for inspection and auditing of railway undertakings that operate on both the UK mainline and the Channel Tunnel. The CTSA advises the Intergovernmental Commission (IGC) on safety matters.

70. Joint inspections are carried out by inspectors from ORR and the French NSA (EPSF). A contract for reimbursement exists for ORR to charge relevant costs for work done for the CTSA back to Eurotunnel.

71. If an ORR inspector is working for the CTSA, he or she will make informal contact with the relevant ORR account holder for the railway undertaking operating on the UK mainline.

72. In addition, joint coordinated supervision meetings are held annually in the autumn with the French, Belgian and Dutch NSAs who oversee the Eurostar service. The objective of these discussions is to share high-level supervision planning activities and to evaluate coordination where necessary.

73. ORR is also looking to develop its staff and share best practice in supervision through staff exchanges with other NSAs. I

74. ORR has also some cooperation arrangements with Northern Ireland as described in Annex A.

Findings and measures taken in 2017

75. Results and outcomes of our supervision activities targeted at infrastructure managers and Railway Undertakings are discussed in ORR's annual reports covering 2016/17-2017/18⁸.

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⁸ http://orr.gov.uk/_data/assets/pdf_file/0007/28348/annual-health-and-safety-report-2017-18.pdf
http://orr.gov.uk/_data/assets/pdf_file/0020/25229/annual-health-and-safety-report-july-2017.pdf

6. Implementation of major EU projects

76. This section discusses some of the work ORR has undertaken on implementing key EU projects: The 4th Railway Package; Common Safety Method for Risk Assessment; and the Common Safety Method for Monitoring. It does not address the impact of the UK leaving the European Union.

The 4th Railway Package (Technical Pillar)

77. The preparation for the 4th Railway Package follows on from active participation in the legislation's development by ORR over multiple years. ORR staff have been involved across a number of Agency work streams in developing arrangements and processes covering the core Technical Pillar activities of Vehicle Authorisation, Single Safety Certificates and ERTMS Trackside approval. ORR has also participated in One-Stop Shop workshops and contributed valued feedback.

78. The Department of Transport (DfT), the UK's transport ministry, has notified the European Commission that the UK will require an additional year to complete implementation as permitted by the Directive. We therefore plan to bring all regulations into force by June 2020 subject to the developments over the UK's exit from the EU. ORR is therefore working towards implementing by this date.

79. ORR has had, and continues to hold, a number of high-level discussions with representatives of the UK rail sector over progress being made on the technical pillar. ORR is ensuring that the UK rail sector is sufficiently informed and prepared for any changes as part of the 4RP, including the use of the OSS, which all applicants will be required to employ once the legislation comes into force. As the UK's only passenger RU which will be legally required to obtain a SSC and VA from the Agency, ORR has been engaging in detail with Eurostar to ensure they are aware of future processes and requirements.

80. ORR has been a member of the NSA Network Subgroup on Cooperation Agreements, chairing this group until Summer 2017. The subgroup has a mandate to develop a common framework governing the practical and legal arrangements of NSA-Agency cooperation, a legal requirement of the 4th Railway Package. ORR remains on target to negotiate bilaterally with the Agency and sign by the June 2019 deadline.

CSM on Risk Assessment

81. ORR is in continuous dialogue with RUs, IMs and Assessment Bodies concerning the experience of applying the CSM Risk Assessment. Based on this return of experience, we regularly update our guidance on the CSM, most recently re-publishing it in 2018.

82. ORR has developed relaxed criteria for assessment bodies the UK and these are set out in Annex 3 of the **CSM RA guidance** on our website. This means any proposer or assessment body wishing to use the relaxed criteria may do so without further recourse to us. This guidance is updated regularly in consultation with industry to ensure it reflects revisions to the CSM and more broadly remains fit for purpose.

83. ORR has also published a Railway Guidance Document (RGD) on the relationship between the CSM and other risk assessment requirements⁹.

84. As with all CSMs, RUs and IMs must comply with the CSM-RA as part of their SMS, which is assessed as part of safety certification approval and supervision activities.

CSM Monitoring

85. Application of the CSM for Monitoring has been embedded into ORR's maturity assessment tool of a SMS, RM3, which is discussed in section x.

86. The Rail Safety and Standards Board (RSSB), representing industry, has produce a short guide on the CSM for Monitoring¹⁰

87. ORR is presently working with RSSB to establish coordination with the new Agency Safety Alerts systems. This is to ensure the UK's National Incident Reporting system links effectively with SALT and avoids unnecessary duplication.

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⁹ http://orr.gov.uk/_data/assets/pdf_file/0016/6028/rgd-2013-06.pdf

¹⁰ <http://www.rssb.co.uk/NP/Documents/CSM%20Regulation%20A4%20Leaflet.pdf>

7. Changes in legislation

Railway Safety Directive

88. Table 1 below illustrates details of legislation transposing the Railway Safety Directive into UK law.

Table 1

| Amendments to the Railway Safety Directive | Transposed (Y/N) | Legal reference | Date of entry into force |
|--|--|--|--------------------------|
| Directive 2008/57/EC | Yes | The Railways (Interoperability) Regulations 2011 [S.I. 2011/3066] | 6 January 2012 |
| Directive 2008/110/EC | Yes | The Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2011 [S.I. 2011/1860] | 26 August 2011 |
| Directive 2009/149/EC | Yes | The Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2011 [S.I. 2011/1860] | 26 August 2011 |
| Directive 2014/88/EU | Yes | The Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2015 [S.I. 2015/1917] | 11 December 2015 |
| Directive 2016/798 | In progress (due to be transposed by 16 June 2020) | | |

Changes in legislation and regulation

89. Table 2 below shows the relevant changes in legislation and regulation concerning railway safety in 2017.

Table 2

| Legislation and regulation | Legal reference | Date of entry into force | Description of change | Reasons for the change |
|---|--|--------------------------|--|--|
| The Ionising Radiations Regulations 2017 | The Health and Safety (Enforcing Authority for Railways and Other Guided Transport Systems) Regulations 2006 ¹¹ | 1st April 2006 | The Ionising Radiations Regulations 2017 amends the Health and Safety (Enforcing Authority for Railways and Other Guided Transport Systems) Regulations 2006 to transfer enforcement responsibility from the UK rail safety regulator (the Office of Rail and Road) to the UK nuclear safety regulator (the Office for Nuclear Regulation) | The Office of Rail and Road has general responsibility for the enforcement of safety regulations governing the carriage of all types of dangerous goods on the railway but the Office for Nuclear Regulation is specifically responsible for the policy governing the transport of radioactive material by rail. |

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¹¹ <https://www.legislation.gov.uk/uksi/2006/557/contents/made>

8. Safety Culture

90. ORR develops its approach to safety culture as part of a wider safety strategy. This can be found under our 'Strategic Risk Chapters', which are publically available on our website. This includes new initiatives.

91. http://orr.gov.uk/_data/assets/pdf_file/0005/23927/safety-strategy-chapter-13.pdf

Annex A: Northern Ireland

92. This section of the report covers the railway system in Northern Ireland for the period 1 January 2017 to 31 December 2017. The Department for Regional Development (DRDNI) acts as the National Safety Authority (NSA) in Northern Ireland, although ORR represents the Department in relations with ERA.

93. The Department for Regional Development was established by article 3(1) of the Departments (Northern Ireland) Order 1999. From 9 May 2016 the functions of the Department for Regional Development transferred to the Department for Infrastructure. The Department for Infrastructure was established by virtue of section 1(6) of the Departments Act (Northern Ireland) 2016.

94. Translink is the brand name of the integrated public transport operation of Northern Ireland Railways (NIR) as well as Citybus, and Ulsterbus.

95. NIR operates a fully integrated system, acting as both IM and RU. DRDNI assist NIR in operating rail services and provides funding to maintain and develop the rail infrastructure and rolling stock.

96. There are no metro, tram or other light rail systems in Northern Ireland, nor is there any privately owned railway infrastructure on which NIR services run.

97. There are a number of heritage and tourist railways in Northern Ireland which are privately owned and run, mainly using dedicated track. They do not provide passenger services for the travelling public and do not receive funding from the Department.

98. All railway undertakings in Northern Ireland, including heritage railways, are required to comply with safety regulations. 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.

The Safety Authority for Northern Ireland

99. In Northern Ireland the Safety Authority for the purpose of implementing the Railway Safety Management Regulations (Northern Ireland) 2006, (hereafter known as the “Safety Management Regulations”) is the Department. The Department’s key responsibilities as Safety Authority are:

- To ensure that NIR 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 “Safety Management Regulations”.

100. The Safety Authority duties are managed by the Department’s Transport Policy, Strategy and Legislation Division. The Department’s role as NSA 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 their co-operation arrangements;
- Assess whether safety is being achieved by inspecting duty holders’ SMS and assessing available safety information and data;
- 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.
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Development of railway safety in Northern Ireland

101. The purpose of the Railway Safety Management Regulations (Northern Ireland) 2006 was to harmonise safety standards on the NI Railway Network.

102. Part 2 and regulation 18 of the Regulations implement Directive 2004/49/EC on safety on the Community’s railways and amending Council Directive 95/18/EC on the licensing of transport undertakings and Directive 2001/14/EC on the allocation of infrastructure capacity and the levying of charges for use of infrastructure and safety certification (“the Railway Safety Directive”), except in relation to access to training facilities, placing in service of in–use rolling stock and accident and incident investigation.

103. Part 2 of the Regulations contains prohibitions in relation to the operation of trains or vehicles on any railways in Northern Ireland and the management and use of infrastructure unless a person has established and is maintaining a safety management

system and in specified cases has a safety certificate in relation to the operation of vehicles or a safety authorisation in relation to the management and use of infrastructure. Part 2 also makes provision in relation to the requirements for a safety management system and the issuing, amendment and revocation of safety certificates and authorisations and for the giving of notices to the Department.

104. Part 3 provides for general duties on any railway operators subject to the duties in Part 2 to carry out risk assessment, co-operate with each other and certain other persons and to prepare an annual safety report to the Department. It makes provision in relation to annual reports to the European Railway Agency and for the issuing, keeping and public inspection of documents.

105. Part 4 makes provision in relation to the carrying out of safety critical work on any railways. It imposes obligations on those controlling the carrying out of such work to ensure that it is only carried out by fit and competent persons, and that safety-critical work is not carried out by workers at risk of being fatigued.

106. Part 5 makes provision for appeals in relation to decisions relating to safety certificates and authorisations, for transitional provisions in relation to compliance with the provisions of regulations (3)(1) and (2), for the granting of exemptions and for a defence in relation to the safety verification requirements in regulation 4.

107. The Railways (Safety Management) Regulations (Northern Ireland) 2006 were amended from 30 June 2016 in order to implement European Commission Directive 2014/88/EU. This Directive made minor and technical amendments to the definition of some of the common safety indicators and to the related methodology to calculate the economic costs of accidents.

Common Safety Indicators

108. NIR have provided the required CSI data for 2017 as transport operator in NI. The CSI data has been aggregated at a UK level and includes data for both Great Britain and Northern Ireland (see section C and annex A).

Rail Accident Investigation Branch

109. The Rail Accident Investigation Branch (RAIB) established by the Railways and Transport Safety Act 2003 is established on a UK-wide basis.

110. In 2017 there were no reported incidents in Northern Ireland by RAIB.

Safety authorisations

111. No updated, amended or part authorisations were issued in 2017. The Department continues to work closely with NIR on the development of their application for authorisation.

Supervision of RUs and IMs

112. 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 NSA is the Department.

113. The Department also continues to work closely with its counterpart in the Irish Republic, the Department of Transport and the Railway Safety Commission as well as the two railway operators on the island, NIR and Irish Rail, on all EU issues and mutual railway safety matters as they impact on the shared service between Belfast and Dublin. DRDNI also works closely with the Department for Transport (DfT) in Great Britain and ORR on European issues.

Conclusions

114. Safety performance on the Northern Irish mainline rail network remained at a high standard in 2017. European safety data showing that Northern Ireland has one of the safest railways in Europe.

111. Northern Ireland has historically a low level of serious rail incidents. This situation was maintained during 2017, with no reportable fatalities or serious injuries



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