



2013 ANNUAL SAFETY REPORT to ERA

Railway Safety Commission

The National Safety Authority for Railways in Ireland



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Reference documents

| Ref. | Document Title | Document ref. |
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| /1/ | Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive) | OJ L220, 21.6.2004, p.16 |
| /2/ | Directive 2008/110/EC amending the Railway Safety Directive | OJ L345, 23.12.2008, p. 62 |
| /3/ | Commission Regulation (EU) No 1077/2012 on a CSM for supervision | OJ L320, 17.11.2012, p. 3 |
| /4/ | Commission Regulation (EC) No 352/2009 on the adoption of a CSM on risk evaluation and assessment | OJ L108, 29.4.2009, p. 4 |
| /5/ | Commission Implementing Regulation (EU) No 402/2013 on the CSM for risk evaluation and assessment and repealing Regulation (EC) No 352/2009 | OJ L121, 3.5.2013, p. 8 |
| /6/ | Commission Directive 2009/149/EC amending the Railway Safety Directive as regards Common Safety Indicators and common methods to calculate accident costs | OJ L313, 28.11.2009, p. 65 |

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(Cover photo by courtesy of Neil Dinnen)

Abbreviations

| | |
|--------------|---------------------------------------------|
| AB | Assessment Body |
| CSI | Common Safety Indicator |
| CSM | Common Safety Method |
| CST | Common Safety Target |
| DeBo | Designated Body |
| ECM | Entities in charge of maintenance |
| ERAIL | European Railway Accident Information Links |
| IM | Infrastructure Manager |
| MS | Member-State |
| NIB | National Investigation Body |
| NoBo | Notified Body |
| NRV | National Reference Value |
| NSA | National Safety Authority |
| NSR | National Safety Rule |
| RSC | Railway Safety Commission |
| RSD | Railway Safety Directive |
| RU | Railway Undertaking |
| SPAD | Signal Passed at Danger |

A. INTRODUCTION

A.1 The purpose, scope and other addressees of this report¹

Article 18 of the Railway Safety Directive 2004/49/EC requires the Railway Safety Commission (RSC), as National Safety Authority, to publish an annual report each year concerning its activities in the preceding year and to send it to the European Railway Agency by 30 September at the latest.

The report shall contain information on:

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

The scope of this report is the 1600mm gauge national railway system in the Republic of Ireland. This report is addressed to the ERA, the Minister for Transport, Tourism and Sport, the NIB, the RUs, the IM and the ECMs.

¹ The report should indicate the intended addressees besides the Agency, especially at national level: Ministry of Transport, NIB, Regulatory Body, Competition Authority, RUs, IM(s), ECMs, NoBos, DeBos, associations of passengers, etc.

A.2 Significant organisational changes affecting the NSA²

The organisational chart of the RSC in year 2013 is shown in figure 1 below.

Due to an embargo on public sector recruitment, the six positions of Inspector within the NSA were occupied by trainee graduate engineers and one position of Investigator within the NIB was occupied by an engineer, all of whom were on fixed term temporary contracts.

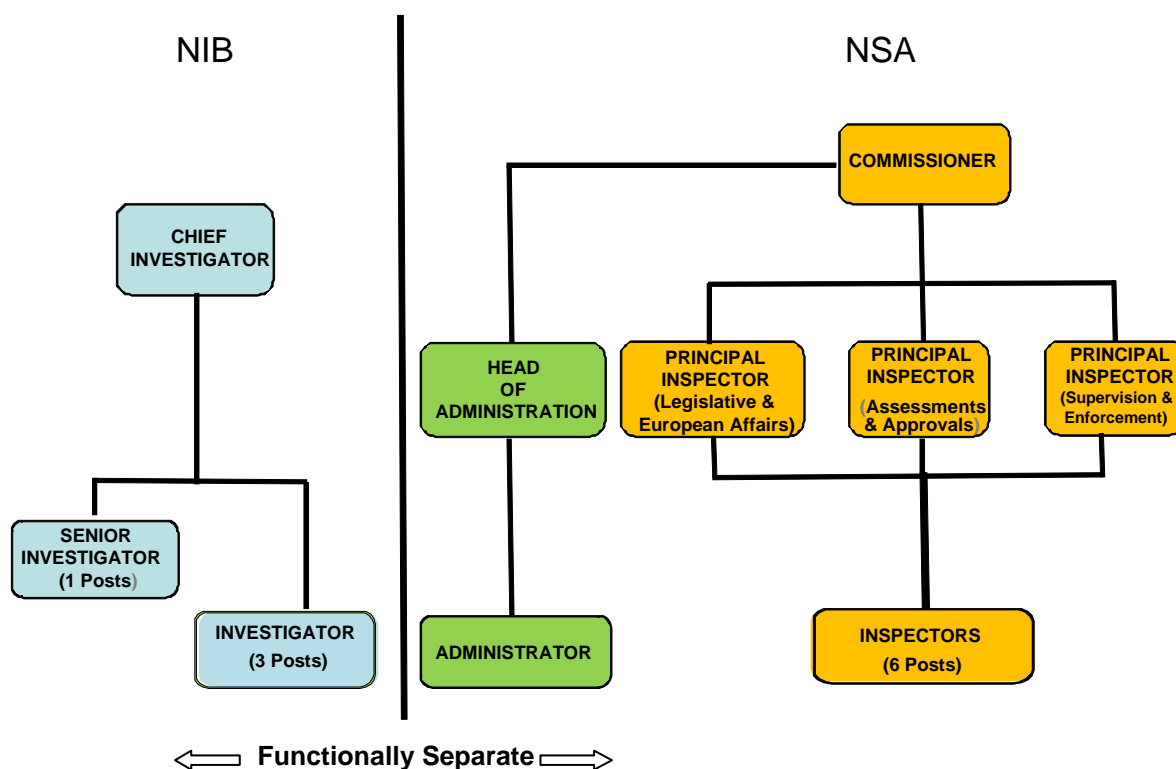


Figure 1: Staffing of the RSC in 2013

² Significant organisational changes may be internal (creation of new departments, different allocation of tasks amongst departments, etc.) or external, such as modifications in the institutional relationship with the Ministry of Transport or other public authorities (NIB, Regulatory Body, etc.). This information should only be reported if there are organisational changes compared to the previous year.

B. OVERALL SAFETY PERFORMANCE AND STRATEGY

B.1 Main conclusions on the reporting year³

The Irish network carries only 0.45% of total EU railway traffic, and accident rates per million train-km are low. For this reason, it is not possible to pick up any trend in the CSI accidents as the dataset is too small. For example, there were only three significant accidents in 2013, i.e.

- one where a trespasser was killed on the railway,
- one where an intending passenger on a platform fell and was struck and seriously injured by a train, and
- one where a passenger train derailed (without casualties) at the site of a landslip, causing the railway line to be closed for 6 ½ hours.

CSI incident data indicates a significant increase in reports of wrong-side signalling failures and signals passed at danger in 2013, reversing the downward trend reported for previous years. Three critical SPAD incidents occurred in 2013, indicating a need for national action in the area of train control, signalling and telecommunications.

B.2 National safety strategy, programmes and initiatives⁴

The fifteen-year Railway Safety Investment Programme resulted in investment of 1.6 billion euro in the railway network in Ireland. For example, 210 million euro was invested in level crossings, with the result that the number of passive level crossings per route-km decreased by 45%, and 65% of the active level crossings were upgraded to remotely supervised full-barrier rail-side protected mode. Significant work was done to improve and protect the railway line and its supporting structures, and to install systems and provide dedicated personnel to support modern safety management structures within the railway administration. The current railway safety investment programme concluded in 2013.

Work is ongoing to improve the legal framework and increase the maturity level of safety management both in the railway industry and in the NSA.

B.3 Review of the previous year⁵

In March 2012, the RSC commissioned independent consultants to conduct a review of circumstances that may inhibit early identification of critical safety information during an investigation of an accident or incident. This review was completed in December 2013, and the

³ National safety targets deriving from national safety strategy/programmes/plans (if available); EU safety targets stemming from CSTs/NRVs.

⁴ Information on the main elements of the national safety strategy/programme/initiatives (if available), and a brief evaluation of current safety programmes and initiatives and information on future programmes and initiatives (if available at Ministry, NSA and IM levels).

⁵ Information on the safety performance and the most important results of (internal) audits, inspections and other feedbacks (e.g. the experience of the certification work).

RSC then appointed an independent chairperson to oversee implementation of the recommendations made in the report.

The conformity assessments of safety management systems (SMS) for the newly separated Infrastructure Manager (IM) and Railway Undertaking (RU) business divisions of Iarnród Éireann (IÉ), i.e., Safety Authorisation of IÉ-IM and Safety Certification of IÉ-RU, were delivered in March 2013.

The year 2013 saw on-going development of processes and procedures in conformity with ISO 17020 requirements to enable RSC achieve accreditation. Corrective actions, required to address findings arising from a cross-audit of the RSC by the European Railway Agency (ERA), were implemented during 2013. Progress was reviewed by ERA in a follow-up audit conducted in Q4, 2013, which resulted in positive outcomes for the RSC.

In regard to safety of Iarnród Éireann infrastructure, seven landslip and rock fall events and the catastrophic structural failure of a station canopy affecting the operation of the railway line were reported for year 2013, significantly up from the four similar events reported for the previous year. Although this appears to be part of a cyclic trend, it has nevertheless raised concerns regarding the impact of abnormal weather on the railway infrastructure. Further to its March 2011 audit of railway cuttings and embankments, the RSC continued to pursue implementation of its recommendations made to IÉ.

B.4 Focus-areas for the next year⁶

During 2014, the RSC will undertake a review of the risks associated with the current IÉ signalling and telecommunications systems. This review aims to identify those areas where risk reduction measures, such as installation of ATP, are required, thereby informing prioritisation of future safety investment in Ireland's railway system.

The RSC will focus on the further development of the professional competency of its staff. It will further develop processes and procedures in conformity with ISO 17020 requirements with a view to attaining accreditation. It will roll out ECM certification for all Iarnród Éireann passenger and locomotive fleets. It will provide ongoing support to the Department of Transport, Tourism and Sport in the finalisation of regulations for railway accident investigation in harmony with the Railway Safety Directive, and in the development of functions for economic regulation of railways.

⁶ *Indicating the key-areas on which the NSA will focus, related to the reported activities.*

C. DEVELOPMENTS IN SAFETY PERFORMANCE

C.1 Detailed analysis of the latest recorded trends

The CSIs⁷ for Ireland are available on the E-RAIL website. The following is an analysis of eight-year trends related to CSIs and national safety indicators:

1. Number of fatalities/serious injuries (total and relative to train-km).

As indicated in B.1, traffic levels and accident rates are low. Casualty rates are low to the extent that it is difficult to outline any trends in the data. Please see charts in Annex A.

2. Number of significant accidents (total and relative to train-km).

The number of significant accidents remains at a low point in comparison to previous years. The trend is positive when viewed over the period of eight years.

3. Number of precursors to accidents.

The number of precursor events has increased in relation to previous years. An increase in Signals Passed at Danger is the subject of some concern. Graphs for total Precursors, Wrong Side Failures and SPADs are included in Annex A.

In regard to wrong side failures, there was a large increase in reported incidents. These mainly related to loss of detection at track circuits due to rail-head contamination between October and December. Please see graph in Annex A.

Following a generally downward trend since the year 2006, the rate of SPADs was up significantly for signals passed at danger, as outlined above. The RU has attempted to address operational causes through training and supervision. A safety review of train control, signaling and telecommunications will be undertaken by the RSC in 2014. Please see graph in Annex A.

The trend in bridge strikes (a national safety indicator) has declined noticeably since the year 2006 when national construction activity was at its record highest point. There was a slight increase for 2013. Much work has been done by all stakeholders to ensure the trend does not increase as construction activity increases after record lows. Please see graph in Annex A.

4. Cost of significant accidents.

Fortunately, there have been very few significant accidents on the Irish network over the five year period 2009-2013. About one trespasser was killed by railway vehicles in motion on the railway each year. In 2010, two people died in separate accidents at level crossings. The most significant railway accident in recent years occurred in 2009, where a major viaduct collapsed and the main line was closed for an extensive period, with a cumulative cost of almost 19 million euro.

5. Technical safety of infrastructure and its implementation, management of safety.

⁷ CSIs as defined in Annex I to RSD /1/ and in Appendix to Annex I (Commission Directive 2009/149/EC) /6/.

There has been no change in % of tracks with Train Protection Systems (TPS) or Automatic Train Protection (ATP) over the past five years. A limited type of ATP is only available on 99 track-km (4.6%) of the Iarnród Éireann network. A further 900 track-km (41.6%) of the network is equipped with a TPS called the Continuous Automatic Warning System (CAWS), but the remaining 1,166 track-km (53.8%) of the network is not yet equipped with any form of TPS or ATP system.

The number of level crossings on the active network was reduced by 11% from 1069 to 963 over the five year period 2009-2013. An extra 48 pedestrian-only level crossings were added to the list, making a total of 1011 level crossings in year 2013. The remaining AHB level crossings on the system were upgraded to rail-side protected full-barrier level crossings.

The CSIs relating to the management of safety are rather tenuous. In general, the RUs and IM normally achieve the audit targets which they set out for themselves. Iarnród Éireann IM completed 8 audits and Iarnród Éireann RU completed 12 audits in 2013.

C.2 Results of safety recommendations⁸

In 2013 the Railway Accident Investigation Unit (RAIU) published investigation reports relating to two occurrences that took place in 2012. The 2012 investigations were a collision between a tractor and a train at a user worked level crossing, and an unplanned initiation of fog signals (detonators) in the cab of a train which led to a train driver sustaining minor injuries. The former resulted in four safety recommendations while the latter resulted in three safety recommendations. These are listed in the table below.

| Safety recommendation | Safety measure | Status of implementation |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IÉ should close, move or alter the level crossing in order to meet the required viewing distances in IÉ's technical standard CCE-TMS-380 Technical Standard for the Management of User Worked Level Crossings. | July 2013 Whistle boards have been relocated and mirrors have been fitted. The local authorities have put warning notices on the public road. September 2014. CCE submit documents and advise that they believe recommendation is complete | Complete – Implementer has advised that it has taken measures to effect the recommendation and the RSC is considering whether to close the recommendation. |
| IÉ should review their systems of managing level crossings that fail to meet the viewing distances in IÉ technical standard CCE-TMS 380 Technical Standard for the Management of User Worked Level Crossings to ensure that any mitigation measure that is introduced is effective at reducing the risk to level crossing users. | No information received from implementer | Open / In progress – Feedback from implementer is awaited or actions have not yet been completed. |
| IÉ should audit their LCRM system, to ensure it correctly identifies high risk level crossings; and identifies appropriate risk mitigation measures | September 2014. CCE submit documents and advise that they believe recommendation is complete | Complete – Implementer has advised that it has taken measures to effect the recommendation and the RSC is |

⁸ The list may be exhaustive or present a selection of the most relevant recommendations received.

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| for individual level crossings. | | considering whether to close the recommendation. |
| IE staff who may be required to contact the emergency services should have the appropriate information readily available to them in order to give clear instructions to the emergency services in order that they can attend accident sites in a prompt manner. This information should then be updated in IE's Rule Book. | No information received from implementer | Open / In progress – Feedback from implementer is awaited or actions have not yet been completed. |
| IE-RU should ensure that their procurement and quality control processes verify that fog signals received are of the correct specification as those ordered. | September 2014. IE-RU advised that "The process for ordering and the use of fog signals was reviewed after the occurrence. Following this review the only supplier of fog signals is Clayton Penistone and they supply only one type of detonator UN0493". However no evidence has been submitted. Await supporting documents. | Open / In progress – Feedback from implementer is awaited or actions have not yet been completed. |
| IE-RU should introduce appropriate procedures and standards for the safe issue, storage and transportation of fog signals. | September 2014. IE-RU have installed a fixed contained in the cab of all trains where fog signals are now stored. | Complete – Implementer has advised that it has taken measures to effect the recommendation and the RSC is considering whether to close the recommendation. |
| IE-RU drivers should receive adequate training and or briefing in the safe handling of fog signals. | September 2014. IE-RU have briefed drivers on the storage and use of fog signals. They have also added material to the driver training programme. | Complete – Implementer has advised that it has taken measures to effect the recommendation and the RSC is considering whether to close the recommendation. |

Table 1 – Implementation of safety measures triggered by safety recommendations

C.3 Measures implemented not in relation to safety recommendations⁹

| Area of concern | Description of the trigger | Safety measure introduced |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Over-crowding on some rolling stock services owing to rationalisation of IE train fleets | Multiple public complaints received | Safety Authority inspections and internal monitoring by railway undertaking |
| Factors inhibiting the RU in the timely performance of its technical investigation into the circumstances surrounding a railway accident or incident. | Concerns raised by RU. | Safety Authority completed a review of circumstances that may inhibit early identification of critical safety information during an investigation of an accident or incident. |

Table 2 – Safety measures not triggered by safety recommendations

⁹ A list of the most important safety measures introduced by the NSA and information on the underlying reasons for their application.

D. SUPERVISION¹⁰

D.1 Strategy and plan(s)

The RSC's Supervision Programme fulfils the supervision function of the RSC in a professional and efficient manner. This is achieved through the development of supervision plans, one for each railway organisation operating in the Republic of Ireland. These annual plans include audits, inspections and meetings with the RUs and IMs commensurate to the level of risk to which they are exposed, or which they expose others to.

This supervision programme formally arranges the RSC's activities to supervise the safety performance of the RUs & IMs operations. The following railway organisations were subject to RSC supervision in 2013:

- Iarnród Éireann – Railway Undertaking
- Iarnród Éireann – Infrastructure Manager
- Railway Preservation Society of Ireland

The RSC's supervision is risk based, so railway organisations that expose passengers, staff and the public to risk are supervised more closely. The RSC targets activities that it considers to give rise to the greatest risks and primarily undertakes audits of their SMS, checking that it is effective and is being implemented.

To assist in the development of annual supervision plans, the RSC use a variety of inputs that include:

- Statistical tracking of accidents, incidents and dangerous occurrences
- NIB reports and safety recommendations
- Public or other complaints
- Previous RSC supervision findings and outcomes

Each railway organisation's annual plan is a live document and can change. All changes to annual plans are recorded with justification for the change. Notable changes in 2013 included:

- Supervision activity of the State railway undertaking following multiple complaints by the public regarding the levels of crowding on trains.
- Supervision activity of the State railway undertaking following the reporting of a wrong side door failure during passenger service.

D.2 Human resources

Essentially, of the six Inspectors available within the NSA, four are needed to give full-time support the Principal Inspector for Supervision and Enforcement to deliver the RSC's annual supervision programme.

¹⁰ The application of the CSM on supervision [Commission Regulation (EU) No 1077/2012] /3/ remains voluntary until 07-06-2013. The reporting on points D.1 and D.3 to D.5 is voluntary until that date.

D.3 Competence

All Inspectors involved in undertaking supervision activity on behalf of the RSC are competent engineers with relevant experience supplemented by further academic qualifications. A number of Inspectors are professionally Chartered Engineers. All six RSC inspectors are currently undertaking MSc studies at the University of Birmingham, UK in addition to numerous bespoke training courses. All training records are maintained and any competencies requiring refresher training are captured and managed appropriately.

D.4 Decision-making¹¹

The Railway Safety Act 2005, as amended, provides for enforcement activity. The RSC applies the principles for national safety authority supervision and additionally applies a principle of escalation, allowing it to strive to achieve compliance without resorting to enforcement. However, on occasions where non-compliance is identified, an Improvement Plan is requested or an Improvement Notice is served. Furthermore, should a risk be identified that is considered to be immediate and substantial an RSC Inspector may serve a Prohibition Notice. Persons in receipt of notices have a statutory right of appeal. The RSC's criteria regarding decision-making are publically available in guidance on the website, www.rsc.ie. The following enforcement activities were initiated in 2013:

1. Improvement Plan requested from Iarnród Éireann – Infrastructure Manager following a topic audit finding deficiencies in their management of structures.
2. Improvement Plan requested from Iarnród Éireann – Railway Undertaking following an accident to a member of the public who fell on-board a train when the grab-rail adjacent to a door gave way.
3. Improvement Plan requested from Iarnród Éireann – Infrastructure Manager following an SMS audit finding deficiencies in their accident/incident investigation processes.
4. Improvement Plan requested from Iarnród Éireann – Infrastructure Manager following a topic audit finding deficiencies in their application of technical management system insofar as it related to managing line-side vegetation.
5. Improvement Plan requested from Iarnród Éireann – Infrastructure Manager following an SMS audit finding deficiencies in their competence management of staff following long terms absences.
6. Improvement Plan requested from Iarnród Éireann – Railway Undertaking following a topic audit finding deficiencies in their rolling stock maintenance activities.

D.5 Coordination and cooperation¹²

The Memorandum of Understanding entered into with the Health & Safety Authority (Labour Inspectorate) remained in place. In 2013 a Memorandum of Understanding was established with the Department for Regional Development in Northern Ireland, which is the NSA. In that context, the RSC met with its Northern Ireland counterparts on two occasions, sharing information on plans for supervision of cross border service providers.

¹¹ *Decision-making criteria on how the NSA monitored, promoted and enforced compliance with the regulatory framework and on the procedure for establishing those criteria, and main complaints submitted by RUs and IMs on decisions taken during supervision activities and the replies given by the NSA.*

¹² *Agreements in force during the reporting year with NSAs from other MS for coordinated supervision activities and a summary of the content of those agreements, and cooperation arrangements in force during the reporting year with other NSA and their practical use.*



D.6 Findings from measures taken

Whenever the RSC identifies non-compliance, enforcement activity commences. This may be either requesting an Improvement Plan or serving an Improvement Notice. The RSC define non-compliance as follows:

Major Non Compliance (MaNC): an area of non-compliance with a Railway Organisation internal standard, an applicable external standard, or legislation that is evidence of a system failure. In such cases it is typical for the RSC to serve an Improvement Notice.

Minor Non Compliance (miNC): an area of non-compliance with Railway Organisation internal standard, an applicable external standard, or legislation that is evidence of a sporadic lapse in implementation of a system or deviation from a system. In such cases it is typical for the RSC to request an Improvement Plan.

In 2013, 18 non-compliances were identified and the five tables in annex B summarise these.



E. CERTIFICATION AND AUTHORISATION

E.1 Guidance¹³

In 2013, the RSC published Guideline RSC-G-030-A: Application Guide for Safety Certification/Authorisation.

E.2 Contacts with other NSAs

1. There were no requests from other NSAs asking for information on a Part A certificate of a RU certified in Ireland applying for a Part B certificate in the other MS.
2. There were no requests to other NSAs asking for information on a Part A certificate of a RU certified in the other MS applying for a Part B certificate in Ireland.

E.3 Procedural issues

There were no cases when the issuing time for Safety Certificates or Safety Authorisations (after having received all necessary information) exceeded the 4 months foreseen in Article 12(1) of the Railway Safety Directive.

E.4 Feedback¹⁴

There is no mechanism allowing RUs or IMs to express opinions on issuing procedures/practices or to file complaints and a summary of the opinions and complaints presented and the actions undertaken by the NSA. However, the RSC at all times works together with the applicant to ensure a clear understanding of requirements and to speedily resolve any issues that arise.

¹³ Information on the issuing, publication and possible update of guidance by the NSA on how to obtain Part A/B certificates and authorisations.

¹⁴ information on existing mechanisms – e.g. questionnaire – allowing RUs or IMs to express opinions on issuing procedures/practices or to file complaints and a summary of the opinions and complaints presented and the actions undertaken by the NSA.



F. CHANGES IN LEGISLATION

F.1 Railway Safety Directive /1/

The European Union (Railway Safety) Regulations, SI No. 444 of 2013, were published on 29th November 2013. This set of Regulations correctly transposes the Railway Safety Directive and amend the Railway Safety Act 2005 in a way that maintains national rules for railway systems that are outside the scope of the transposition.

The status of the transposition of the amendments to the RSD at the end of the reporting year is shown in table 1 of annex C.

F.2 Changes in legislation and regulation¹⁵

Table 2 of annex C indicates the relevant changes in the national regulatory framework (legislation and regulation) concerning railway safety during the reporting year.

¹⁵ Table 2 of annex C describes relevant changes in legislation and regulation during the reporting year. The changes may relate to:

- How the NSA carries out the tasks described in Article 16(2) of the RSD /1/
- How the MS intends to achieve the goals described in Article 4 of the RSD /1/
- The implementation of other EU requirements in national legislation concerning railway safety.

The legal reference indicates where to find the provision: which part of a law (i.e. articles) is relevant. The title, body, date of adoption and ID number are indicated and abbreviations explained. It is specified if the change relates to a new law or to an amendment to existing legislation.

Besides the reasons for introducing the changes, additional information may be provided on the entities that triggered the process (if different from the NSA), the consultation phase, etc.



G. APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT¹⁶

G.1 NSA experience

1. Decisions taken by the proposers on the level of significance of a change (e.g. too lax)

The RSC is satisfied that the RUs and IM apply the CSM on risk evaluation and assessment through a safety validation process in accordance with their safety management system.

2. Applications of the risk management process by the proposers

For the evaluation of change, the CSM on risk evaluation and assessment is applied in accordance with Iarnród Éireann Safety Management Standards IÉ-SMS-13 and IÉ-SMS-14:

- IÉ-SMS-13 Operational or organisational significant changes;
- IÉ-SMS-14 - Significant technical changes affecting vehicles or significant changes concerning structural subsystems where required by Article 15(1) of Directive 2008/57/EC /6/ or by a TSI.

As part of the RSC's proactive supervision of duty holders, the RSC met quarterly with the principal Infrastructure Manager and Railway Undertaking operating in the Republic of Ireland. The purpose of this meeting was to review and monitor duty holders safety performance in the preceding quarter. A standing item presented by the duty holder and subsequently discussed at these meetings was the duty holder's management of change insofar as the change related to plant, equipment, infrastructure, operations or organisation.

The principal IM and RU have an approved SMS that includes a description of procedures and methods to carry out risk evaluation and implement risk control measures whenever a change of the operating conditions or new material imposes new risks, (Commission Regulations (EU) No 1158/2010 and 1169/2010, Annex II, criterion M). The RSC can and do review the duty holders' management of change.

In 2013 the RSC met with both the IM and RU and were advised of numerous changes that included:

- Adjacent Line Open (ALO) Working
- Tralee Bypass temporary level crossing
- 2-4 carriage DARTs
- Dublin city centre re-signalling Phase 3&4
- Points heater system

Having presented these changes and provided a high-level overview of them the RSC selected two 'changes/projects' and formally requested the submission of the supporting validation documentation.

¹⁶ The application of the CSM on risk evaluation and assessment [Commission Regulation (EC) No 352/2009] /4/ remained voluntary until 1 July 2012 with respect to operational or organisational significant changes. The reporting on the application of the CSM was voluntary until that date.

Commission Implementing Regulation (EU) No 402/2013 /5/ on the CSM for risk evaluation and assessment repeals Regulation (EC) No 352/2009 /4/ with effect from 21 May 2015.



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An RSC Inspector then reviewed the submission to check if the duty holder had undertaken a risk evaluation in accordance with their approved SMS.

In 2013 the RSC reviewed the following changes/projects:

- increased frequency of coupling and uncoupling of EMUs while in running;
- Monard Viaduct Remedial Works

In both the above 'changes' the safety validation process was found to be applied correctly and in accordance with the duty holder's SMS.

The CSM on risk evaluation and assessment was used in the Authorisation for Placing in Service (APIS) of the following projects:

- INF – Upgrade - Pearse Station Redevelopment – Package 2
- RST – OTM - Continuous Action Plain Line Tamper, Plasser & Theurer 09-2X IR
- RST – PAS - Upgrading of the Mk 3 Generator Van to a Mk 3 DDF Generator van
- RST – OTM - Ultrasonic Testing Wagon, type IE460 (on track machine), Sperry SRS205
- RST – PAS - Forming of flexible formations of Type IE 22000 Diesel Multiple Units.

3. Involvement of Assessment Bodies

For each APIS project reviewed, a safety assessment report was provided which included a statement of independence of the Assessment Body.

4. Interface management

This matter is dealt with in each case by the proposer with the cooperation of the relevant rail-sector actors through the application of their respective SMSs.

G.2 Feedback from stakeholders¹⁷

The CSM on risk assessment is integrated into the RU's and IM's safety validation processes, and they provide a quarterly update to the NSA. The RSC also carried out an anonymous online survey of all supervised duty holders in 2013 which expressly asked for their feedback and opinions.

G.3 Revision of NSRs to take into account the EC regulation on CSM on risk evaluations and assessment

The Regulation applies directly to the Member State and to all nominated actors, e.g., RU, IM, ECM, NoBo and DeBo. There is no national rule to define whether a change is significant or not.

¹⁷ Existing procedures – e.g. questionnaire – allowing RUs and IMs to express their experiences on the EC regulation on CSM on risk evaluation and assessment and a summary of the experiences presented and possible actions undertaken by the NSA.



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H. DEROGATIONS REGARDING ECM CERTIFICATION SCHEME

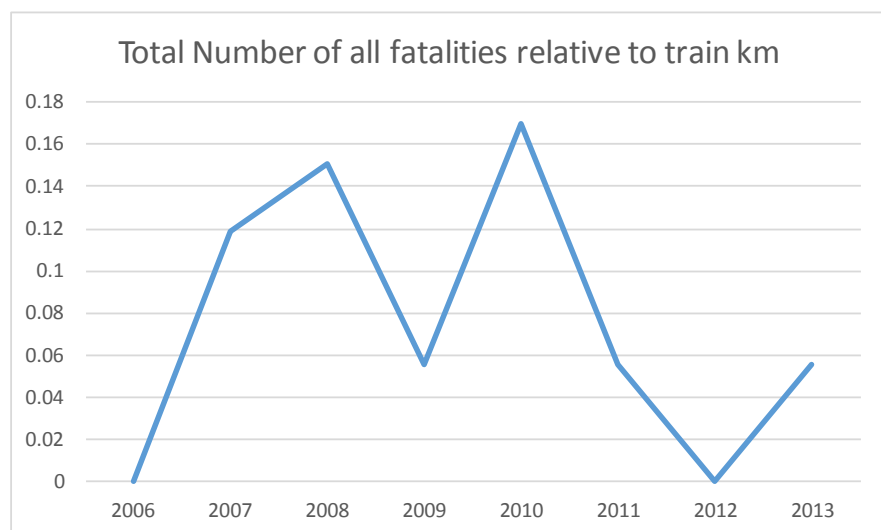
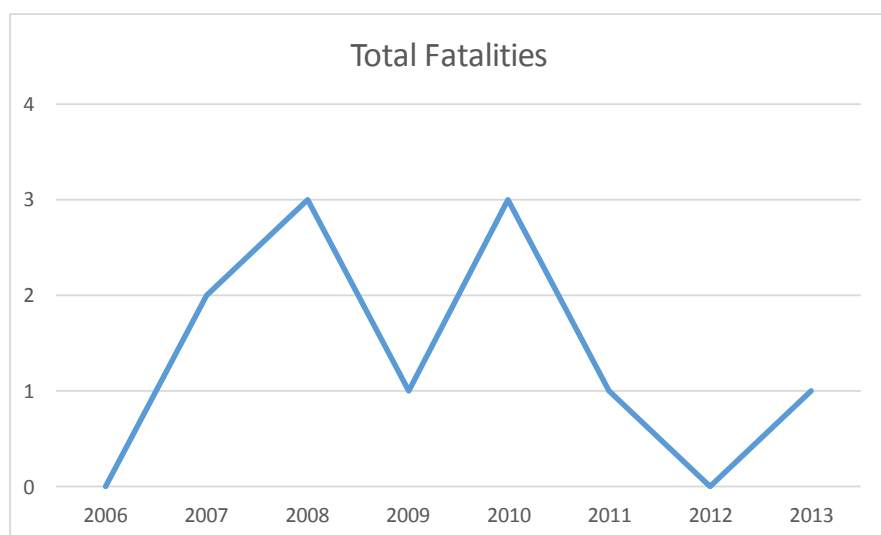
All freight wagons have certified ECM. There were no derogations in year 2013 to the ECM certification scheme, decided in accordance with article 14a(8) of Directive 2008/110/EC /2/.



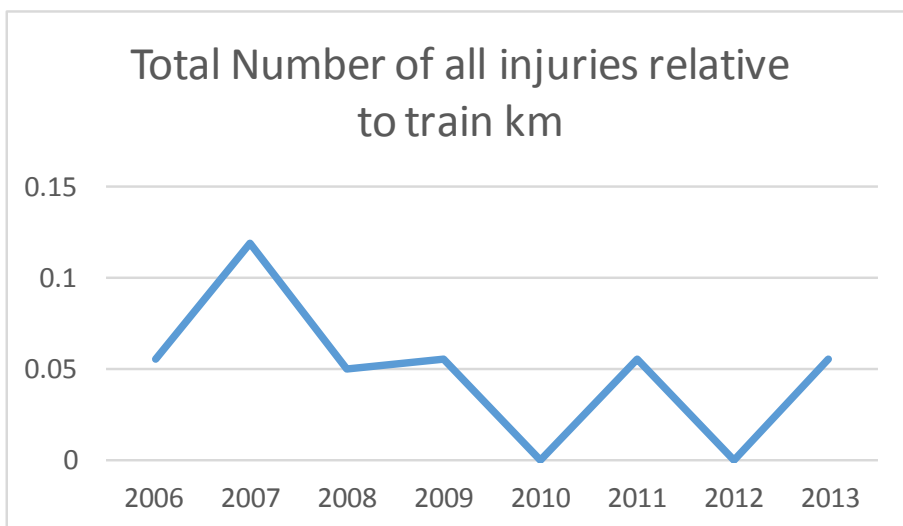
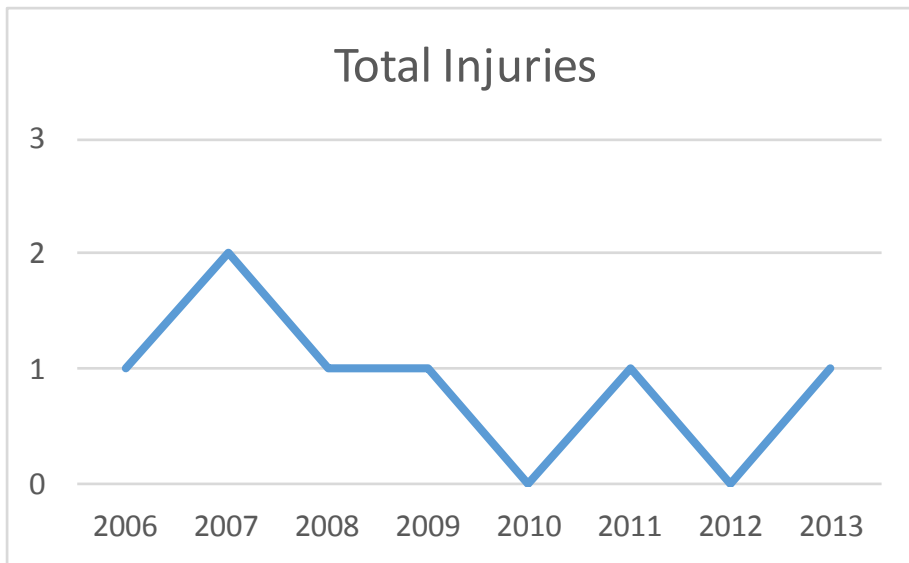
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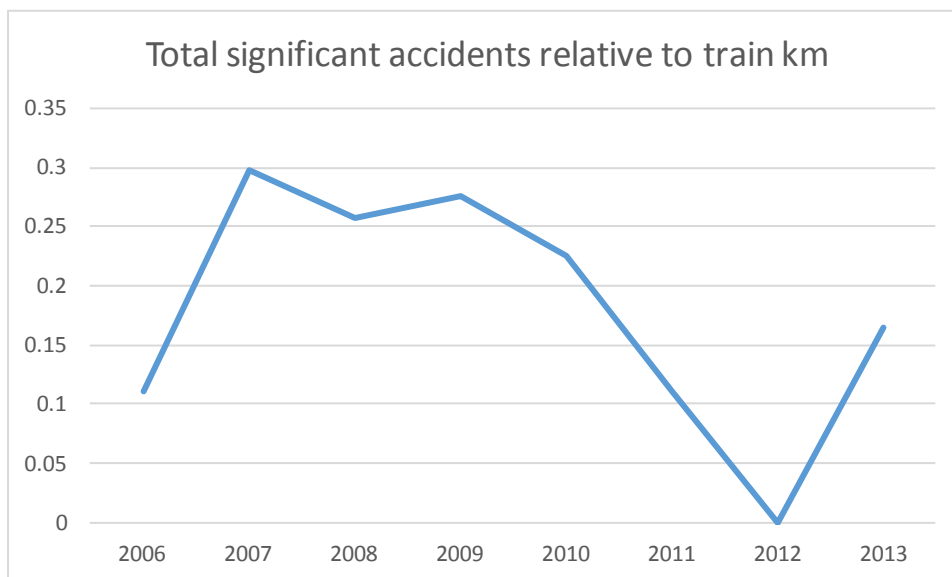
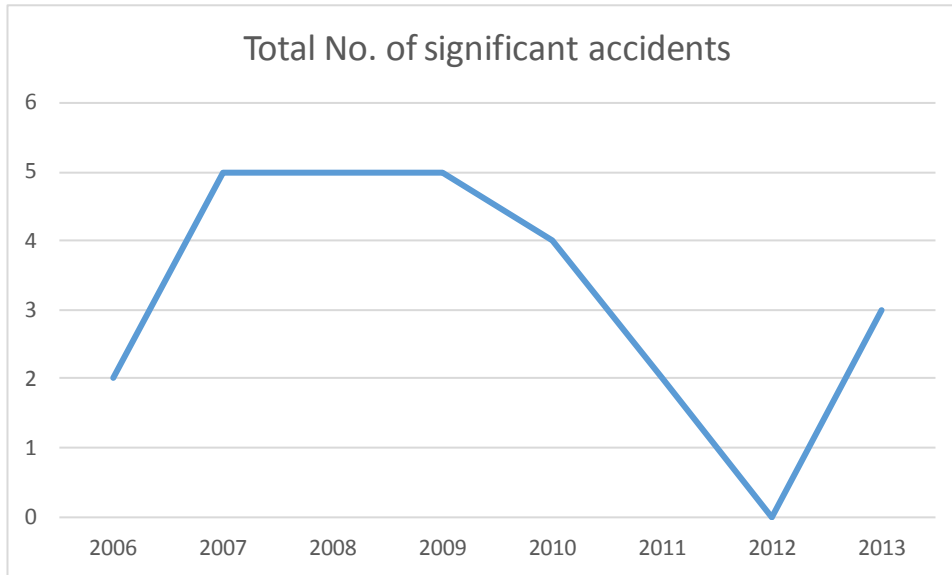
ANNEX A - COMMON SAFETY INDICATORS¹⁸ AND NATIONAL INDICATORS

CSIs data charts



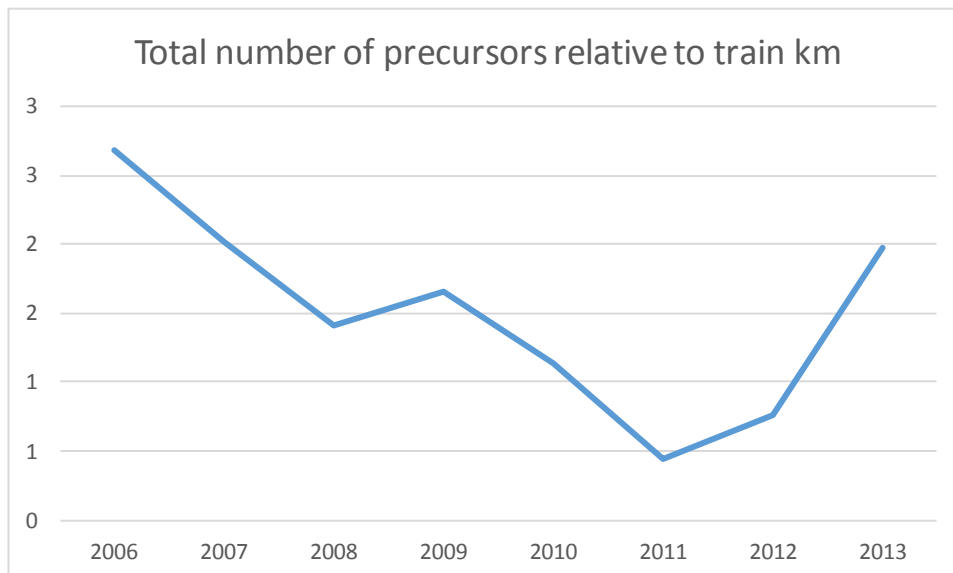
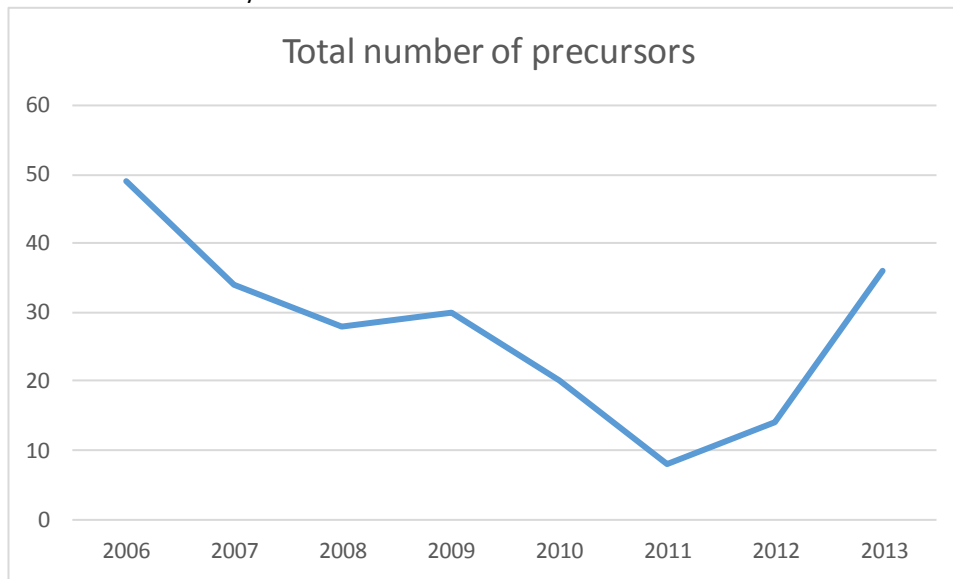
¹⁸ Please refer to Appendix of Annex I of the RSD /1/ as modified by Commission Directive 2009/149/EC /6/.





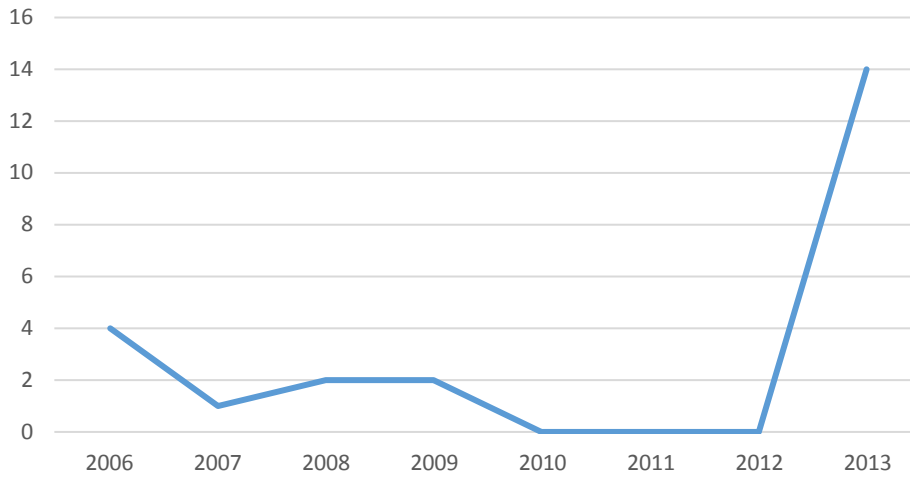


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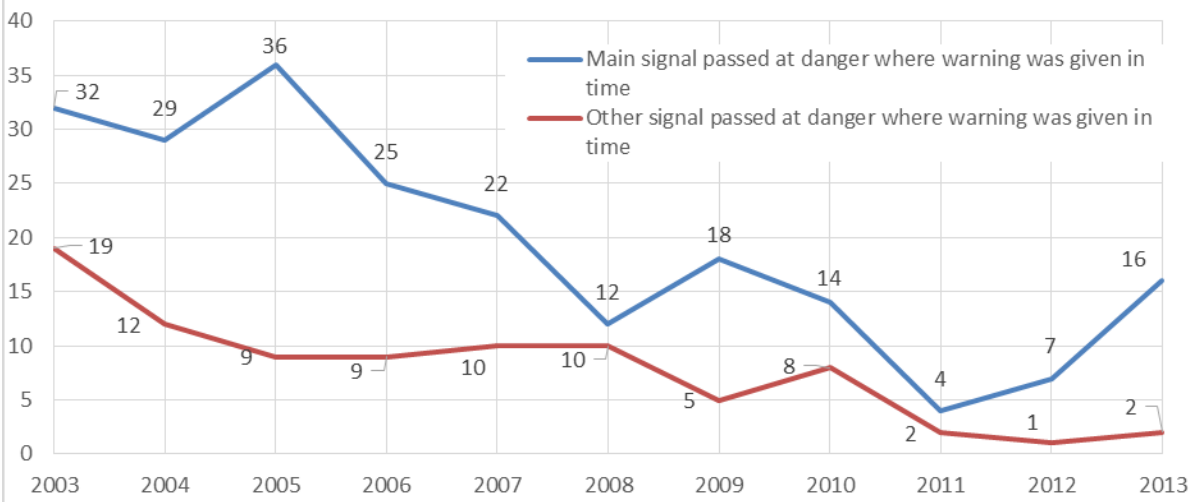




Wrong Side Signalling Failures

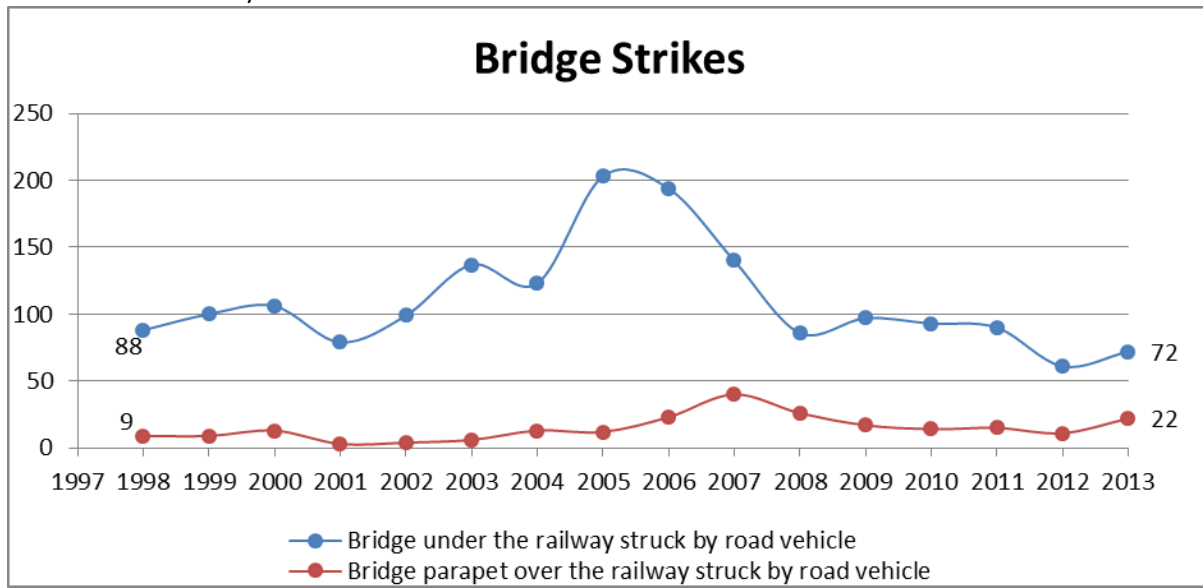


Signal Passed at Danger





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ANNEX B - CHANGES IN LEGISLATION

Table 1

| AMENDMENTS TO RSD | Transposed (Y/N) | Legal reference | Date of entry into force |
|----------------------------------------|---------------------|-----------------|--------------------------------|
| Directive 2008/57/EC | Yes | SI 419 of 2011 | 13/08/2011 |
| Directive 2008/110/EC | Yes | SI 70 of 2011 | 23/02/2011 |
| Commission Directive 2009/149/EC | Yes | SI 70 of 2011 | 23/02/2011 |



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Table 2

| LEGISLATION AND REGULATION | Legal reference | Date of entry into force | Description of change | Reasons for the change |
|----------------------------------------------------------------------------------------|------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concerning the NSA | SI 444 of 2013 | 30/11/2013 | Clarification of role and powers of inspectors | Terms and definitions used in the Railway Safety Directive clashed with those used in national law. European Commission required amended transposition. |
| Concerning NoBos, DeBos, ABs, third party entities for registration, examination, etc. | | | | |
| Concerning RUs/IMs/ECMs | SI 444 of 2013 | 30/11/2013 | Clarification of requirements in regard to safety certification of RUs and ECMs and safety authorisation of IMs | Terms and definitions used in the Railway Safety Directive clashed with those used in national law. European Commission required amended transposition. |
| Implementation of other EU requirements (if concerning railway safety) | SI 444 of 2013 | 30/11/2013 | Clarification how the MS intends to achieve the goals described in Article 4 of the RSD | European Commission required amended transposition. |

Annex C – NSA Audit of RUs and IM - findings of non-compliance

| RSC Audit of – Iarnród Éireann's Management of Bridge Structures |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Report Issued : 11/04/2013 |
| Non-compliance with CCE-TMS-420, 3.4: Mentoring Insufficient evidence was available to demonstrate that IÉ have implemented a consistent mentoring programme for structural inspectors in accordance CCE-TMS-420. |
| Non-compliance with CCE-STR-STD-2100, 5.3.2 Special Inspection General Requirements Insufficient evidence was available to demonstrate that IÉ have a comprehensive list of structures requiring special inspections and their relevant risk ratings in accordance with CCE-STR-STD-2100 clause 5.3.2.3. |
| Non-compliance with CCE-STR-STD-2100, section 6. Inspection Frequencies Insufficient evidence was available to demonstrate that IÉ have met the requirements of CCE-STR-STD-2100 section 6.1.1 Inspection frequencies. |
| Non-compliance with CCE-SMS-008, Clause 4.6.2 Compliance Verification Insufficient evidence was available to demonstrate that IÉ have met the requirements of CCE-SMS-008 section 4.6.2, Compliance Verification. |
| Non-compliance with CCE-TMS-402, section 4.2.6.4 Insufficient evidence was available to demonstrate that IÉ have met the requirements of CCE-TMS-402 section 4.2.6.4. |

| RSC Audit - An audit of Iarnród Éireann's Safety Management System, Annex II Q & R, accidents and emergency planning |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Report Issued : 31/05/2013 |
| Non-compliance with Railway Safety Act section 53(6). Legislation requires duty holders complete internal investigation in an expeditious manner as soon as practicable but in any event no later than 6 months after the date of the accident. This has not been achieved on more than 1 occasion with no apparent reason for the significant delay. |
| Non-compliance with Commission Regulation (EU) No 1158/2010 Appendix II R.1 The evidence presented does not adequately demonstrate that a document exists that identifies credible emergencies, nor are there adequate mechanisms in place to identify new ones. |
| Non-compliance with Commission Regulation (EU) No 1158/2010 Appendix II R.3 and sections 3.3.1.2, 3.4 and 4.2.1 of IÉ-SMS-012 The evidence presented does not demonstrate, adequately, that all roles associated with emergency planning and response have been identified (appointed) or explained (briefed). Appropriate training has not been provided and Job Description and Safety Responsibility Statements do not reflect the individual's responsibilities as a result of being appointed Departmental Emergency Planning Officer. |
| Non-compliance with Commission Regulation (EU) No 1158/2010 Appendix II R.5. IÉ-SMS-012 and OPS-SMS-2.2 do not adequately describe how resources and means have been allocated and how training requirements have been identified The evidence presented does not demonstrate that thought has been given to what the required resource is in terms of people and recovery equipment, in relation to emergency preparedness. There appeared to be an uncoordinated approach to IEIO training with Districts managing their own requirements rather than it being managed centrally. |

RSC Audit of - Iarnród Éireann's Management of Vegetation

Report Issued : 06/11/2013

Non Compliance with CCE-TMS-381 Clause 4.3.4 recording of Annual Survey. No evidence was available to demonstrate that the annual vegetation survey was undertaken and/or recorded as required by the standard. Subsequently, it was not evident that the STSE reviewed the results of the survey in accordance with Clause 4.2.3.1

Non Compliance with CCE-SMS-008 Clause 4.6.2 Compliance Verification. No evidence was available to demonstrate a programme of compliance verification is undertaken in all divisions.

RSC Audit - An audit of Iarnród Éireann's Safety Management System Annex II, Criterion N. (Training and Competence)

Report Issued : 31/05/2013

04/13-A-miNC 1 Non-compliance with Commission Regulation (EU) No 1169/2010 Appendix N1 (f)

The evidence present does not demonstrate adequately that a consistent process within IÉ-IM is present to manage competence following long term absence.

RSC Audit of - Iarnród Éireann's Rolling Stock Brake Maintenance and Testing Regime

Report Issued : 09/12/2013

01/13-A-MaNC 01 - Brake System maintenance periodicities for Intercity DMUs
CME-TMS-316 must be applied for extension of heavy maintenance periodicities and the associated maintenance documentation. Any changes classified as significant are subject to the CSM on Risk Assessment and Evaluation, Commission Regulation (EC) No. 352/2009. Such significant changes must then be submitted to the relevant safety authority for authorisation.

01/13-A-miNC 1 - Minor non-compliance closure from previous CME audit
The two minor non-compliances, 04/11-A-miNC 2 and 04/11-A-miNC 6 from a 2011 audit are still open nearly 2 years after being raised. These issues were still evident with the CME department during this audit.

01/13-A-miNC 02 - Competency System for use of Contractors on IÉs trains
Arrangements should be put in place to ensure that contractors provide suitably competent staff to undertake safety critical work on IÉs trains, as detailed in CME-SMS-001, Section 5.7.4.3

01/13-A-miNC 3 - Brake Isolations and Staff briefing
Up to date brake actuator isolation procedures must be issued for Mk IV coaches, and staff must be fully briefed. Records must be kept of staff briefings. This is non-compliant with the process detailed within the CME-SMS-001, Section 5.7.4.3.

01/13-A-miNC 04 - BCU software modification, commuter DMU fleet and the ICRs
The management of this engineering change must be reviewed and made compliant with CME-TMS-316, Section 4. The operator must also be informed of changes to the dynamic braking system when implemented.

01/13-A-miNC 05 - Lack of formal Risk Assessment, non-compliant with
Throughout the audit the lack of formal risk assessments as per CME-TMS-316 and RU-SMS-014 has been identified as a major issue as they are qualitative in the majority of the cases and in some cases, re brake software updates, are not reviewing the software integrity level of the system.

END OF REPORT