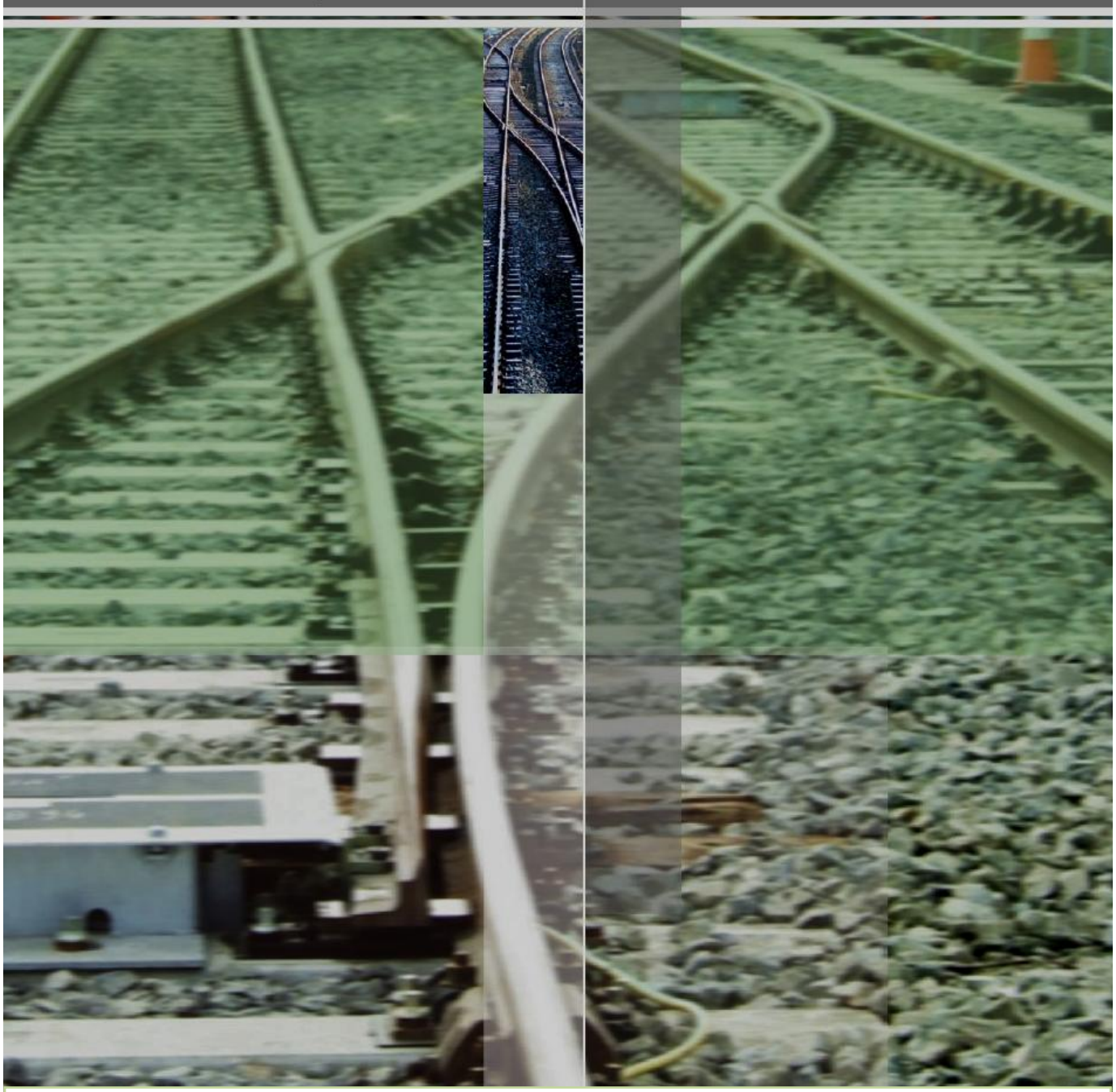
RSC

Railway Safety Commission

ANNUAL REPORT TO ERA FOR YEAR 2011



The Railway Safety Commission is the National Safety Authority for Railways in Ireland

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A. SCOPE AND SUMMARY

A.1.1. Scope of the report

Article 18 of the Railway Safety Directive 2004/49/EC requires the 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.

A.1.2. Summary in English

This annual report for the year 2011 is the sixth annual report to the ERA, of the Railway Safety Commission which is the designated National Safety Authority (NSA) for Ireland. The report specifically covers the process of safety regulation of the interoperable Irish national railway network.

The national network is connected via the Dublin-Belfast line to the railway system of Northern Ireland, which falls under the jurisdiction of the United Kingdom. The national network is low density and is relatively lightly used. It has a track gauge of 1600mm and has an extent of 1683 route-km. The extent of network in service did not change in 2011.

Annual train activity increased in 2011 by 2.1%. Safety compares well with that of European railways, with a lower than average level of significant incidents per train-km. There is good progress in addressing key risks. The total number of strikes of railway bridges by heavy goods vehicles continued to decline, as did the number of unauthorised passing of railway signals at danger. However, there was an increase in reports of 'wrong side' signalling failures. The number of broken rails on passenger lines decreased and no track buckles were reported. One person died on the railway and one was seriously injured in accidental circumstances.

Formal investment in safety is continuing, with emphasis on safety management systems and human performance development. Improvement of level crossing safety remains a priority.

New legislation with a railway safety dimension included the following:

- S.I. No. 70/2011 — European Communities (Railway Safety) Regulations 2011
- S.I. No. 419/2011 — European Communities (Interoperability of the Rail System) Regulations 2011.

A.1.3. Introduction to the report

The Railway Safety Commission (RSC) is the National Safety Authority (NSA) for railway safety in Ireland. This is the sixth annual report from the RSC to the European Railway Agency (ERA). Previous annual reports to the ERA and the Statement of Strategy for 2009 to 2011 can be found on the RSC website at www.rsc.ie .

The report is produced for the benefit of the ERA and other NSA's who are interested in safety performance and making comparisons on regulatory issues. An annual report is also produced by the RSC for the Department of Transport, domestic railway industry stakeholders and the general public.

This report specifically covers the process of safety regulation of the interoperable Irish railway network. This network has a track gauge of 1600mm. It is interoperable with the railway system in Northern Ireland, which falls under the jurisdiction of the United Kingdom.

A.1.4. Railway Structure Information

A.1.4.1. Network map

The national network is low density and relatively lightly used. The network extent is 1683 route-km and 2165 track-km, 27% of which is multiple track (double or quadruple). The extent of network in service has not changed since 2010.

A copy of the national railway network map is shown in Annex A.1.

A.1.4.2. List of Railway Undertakings and Infrastructure Managers

Details of the Infrastructure Manager and the principal Railway Undertaking are shown in Annex A.2. Iarnród Éireann is the infrastructure manager of the interoperable railway network in Ireland. Iarnród Éireann is also the principal operator on the railway network, and it jointly operates a regular passenger service between Dublin and Belfast in Northern Ireland, in partnership with NIR-Translink. The Railway Preservation Society of Ireland is also a certified Railway Undertaking.

A.1.5. Summary – General Trend Analysis

A.1.5.1. Development of Railway Safety

There was one fatal accident involving rolling stock in motion on the railway during the course of 2011, with six further fatalities in circumstances indicating self-harm as a factor. This again highlights the area of risk that remains difficult to control, i.e., the interface between the railway and the general public.

A.1.5.2. Safety Certification and Authorisation

During 2011 Iarnród Eireann received Safety Authorisation as Infrastructure Manager and Safety Certification Parts A and B as Railway Undertaking. The Railway Preservation Society of Ireland received a Part A and Part B Certification. Northern Ireland Railways applied for a Part B Certification to operate trains between Belfast and Dublin Connolly.

B. ORGANISATION

B.1.1. Introduction to the organisation

The RSC mission is to advance the safety of railways in Ireland through diligent supervision and enforcement.

The RSC, established in January 2006, is the National Safety Authority (NSA) and embodies a functionally separate Railway Accident Investigation Unit (RAIU).

The National Safety Authority responsibility was handled by five technical staff (including the Commissioner) and two administrative staff at the end of 2011.

The Railway Accident Investigation Unit, as the National Investigating Body (NIB), had four dedicated staff to carry out independent causal investigations of railway accidents.

The RSC is a small, specialist technical organisation staffed with professional engineers supported by a two-person administrative team. A flat reporting structure promotes and facilitates the free-flow of information and ideas, encouraging consultation and creative thinking. Not only does this enable the RSC to meet the requirements of the work programme set out in its business plan, but it also provides the flexibility needed to respond effectively to immediate and unforeseen work demands.

Funding for the RSC is provided in part by the Department of Transport by a Grant-in-Aid and in part by a levy on the railway undertakings. In 2011 the Grant-in-Aid funding amounted to €1m. In 2008 the RSC invoked the provision of section 26(1) of the Railway Safety Act 2005 and made regulations to impose a levy of each of the Railway Undertakings. These regulations are made annually, and the regulations for 2011 are contained in Statutory Instrument No. 120 of 2011.

The organizational chart for the RSC at the end of 2011 is shown in Annex B.1.

B.1.2. Organisational flow – relationship between the NSAs and other national bodies

A diagram showing the flow and relationships between the NSA and other national bodies may be seen in Annex B.2 of this report.

C. THE DEVELOPMENT OF RAILWAY SAFETY

C.1.1. Initiatives to maintain/improve safety performances

The most significant safety measures decided in the Member State during the reporting year are reported here. If these measures have had as a trigger accidents or precursors to these, they are reported as in Table D.1.1.1.

The railway safety investment programme stems from the need to address the significant deficiencies in the Iarnród Éireann railway system first identified in an independent review conducted in 1998.

The Railway Safety Programme 2009 – 2013 is the third and final phase of a fifteen-year programme. It builds on the achievements that resulted from the Railway Safety Programmes 1999 – 2003 and 2004 – 2008, and makes a case for further investment and improvement in the railway network.

The scope of work for the third five-year Programme 2009-2013 focuses on completing renewal work on high risk degraded assets such as track and level crossings while prioritising most critical work elements from other categories such as structures, fencing and buildings.

In safety risk terms, railways are particularly vulnerable where they interface with roadways. On the Iarnród Éireann active network there were 252 public road level crossings and 766 private and pedestrian crossings at the end of 2011 and about twelve hundred bridges over or under public roads. Iarnród Éireann's stated aim of the investment is to upgrade level crossings to ensure that they meet the required standards for signage and sighting distances, and the installation of protective 'bash-beams' and other measures to reduce the severity and frequency of bridge strike incidents.

In 2011, the RAIU issued six accident investigation reports. A total of 16 recommendations were made, as indicated in table D.1.1.1.

Initiatives not triggered by RAIU reports are described in table D.1.1.2.

Table D.1.1.1 - Safety measures triggered by accidents or accident precursors

Accidents/precursors which triggered the measure			**Safety measure decided**
Date of Issue	Place	Description of the event	
19 January 2011	Laois Depot, Portlaoise	Derailment of DUM in Laoise Train-care Depot on 20/01/2010	Iarnród Éireann should ensure that the risks relating to use of spring assisted manual points are identified and that appropriate control measures are implemented based on the risks identified;
19 January 2011	Laois Depot, Portlaoise	Derailment of DUM in Laoise Train-care Depot on 20/01/2010	Iarnród Éireann should ensure that the Signal Sighting Committee is informed when train drivers report difficulties viewing a signal and the Signal Sighting Committee should verify that the reported difficulties are addressed effectively.
5 May 2011	Connolly Station, Dublin	Secondary suspension failure on a train at Connolly Station on 07/05/2010	IÉ should ensure all work in rolling stock maintenance depots is carried out in accordance with its control process.
5 May 2011	Connolly Station, Dublin	Secondary suspension failure on a train at Connolly Station on 07/05/2010	IÉ should review its process of managing the hazard log in relation to the Class 29000s to ensure the adequacy of this process and verify that implementation of closure arguments in the hazard log is effective.
5 May 2011	Connolly Station, Dublin	Secondary suspension failure on a train at Connolly Station on 07/05/2010	IÉ should evaluate the risks relating to failure of the centre pivot pin to perform its function due to over-inflation of the secondary suspension and determine if any design modifications are required to avoid future failures.
27 June 2011	Buttevant, Co. Cork.	Gate Strike at Buttevant Level Crossing (XC 219) on 02/07/2010	IÉ should identify similar manned level crossings where human error could result in the level crossing gates being opened to road traffic when a train is approaching; where such level crossings exist, IÉ should implement engineered safeguards, where appropriate;
27 June 2011	Buttevant, Co. Cork.	Gate Strike at Buttevant Level Crossing (XC 219) on 02/07/2010	IÉ should review its risk management process for manned level crossings to ensure that risks are appropriately identified, assessed and managed to ensure that existing level crossing equipment is compliant with criteria set out in IÉ's signalling standards, where appropriate.

18 July 2011	Sixmilebridge, Co. Limerick	Fatality at user operated level crossing XE039 on the Limerick to Claremorris line	IÉ should ensure that risk assessments are produced for all user worked LCs to identify all hazards specific to particular LCs.
18 July 2011	Sixmilebridge, Co. Limerick	Fatality at user operated level crossing XE039 on the Limerick to Claremorris line on 27/06/2010	IÉ should review their documentation on the measurement of viewing distances at existing user worked LCs to ensure that the viewing distances provide sufficient views of approaching trains to allow LC users cross safely.
18 July 2011	Sixmilebridge, Co. Limerick	Fatality at user operated level crossing XE039 on the Limerick to Claremorris line on 27/06/2010	IÉ should review their procedures for the management of accidents to ensure that communication with the emergency services is clear and provides the necessary information to locate an accident site without undue delay and access it by the most appropriate point.
4 October 2011	Stanleys No. 2 - 8 miles country side of Roscommon	Road vehicle struck at level crossing XM096, County Roscommon on 02/09/2010	IÉ should put in place a formal process for identifying and communicating with known users of user worked LCs.
4 October 2011	Stanleys No. 2 - 8 miles country side of Roscommon	Road vehicle struck at level crossing XM096, County Roscommon on 02/09/2010	IÉ should review the effectiveness of its signage at user worked LCs and amend it where appropriate, taking into account the information provided in the LC user booklet. The review should include the information on the use of railway signals, what to do in case of difficulty when crossing the railway and ensuring the signage is illustrated in a clear and concise manner, taking into account current best practice and statutory requirements.
4 October 2011	Stanleys No. 2 - 8 miles country side of Roscommon	Road vehicle struck at level crossing XM096, County Roscommon on 02/09/2010	IÉ should update its risk management system to ensure that interim control measures are put in place where longer term controls to address risks require time to implement.
4 October 2011	Stanleys No. 2 - 8 miles country side of Roscommon	Road vehicle struck at level crossing XM096, County Roscommon on 02/09/2010	IÉ should review how it determines the safe crossing time for user worked LCs to ensure the safe crossing time allows adequate time for movements and includes a safety margin, over and above the crossing time.
4 October 2011	Stanleys No. 2 - 8 miles country side of Roscommon	Road vehicle struck at level crossing XM096, County Roscommon on 02/09/2010	IÉ should review its use of disused rail as fencing at user worked LCs to ensure it cannot potentially increase the severity of a collision and where this is the case, replace the disused rail with appropriate fencing.
19 October 2011	Castlebar, Co. Mayo	Car Strike at Knockaphunta Level Crossing, XM250 on 24/10/2010	IÉ should upgrade the Level Crossing to ensure that the operation of the Level Crossing is not reliant on any direct action by the level crossing user.

Table D.1.1.2 - Safety measures (or voluntary measures) with other triggers than accidents/precursors

Description of the area of concern	Description of the trigger	Safety measure decided
none		

C.1.2. Detailed data analysis

C.1.2.1. Trend Analysis

This paragraph contains the analysis of trends related to all categories of CSIs. Moreover, the possible reason for these trends is reported.

The scope of the statistics, the definitions applied and the status of CSIs reported on the E-RAIL system are shown in Annex C.

There are very few significant accidents on the Irish network, both in terms of the numbers of accidents and the rate of accidents per train-km. Accident rates are generally similar to rates in Great Britain, and significantly lower than prevalent rates on the European network.

With very low levels of data, it is possible to ascertain the safety level but not possible to ascertain meaningful trends over a short time scale of six years.

Two significant accidents to persons were recorded for 2011. A trespasser was killed as he crossed the railway in the path of a non-stopping passenger train. The victim was intoxicated and the Coroner gave a finding of accidental death. The other accident involved an unaccompanied young boy who fell between an arriving train and the platform while running alongside the train and incurred serious injury. Six fatalities were recorded involving rolling stock in motion where self-harm appears to have been a factor.

It remains difficult to distinguish between accidents resulting from trespass and incidents of suspected suicide.

Total passenger journeys in 2011 showed a further drop of 2%, which is symptomatic of the economic downturn. Freight traffic indicated a rise of 14% in tonnage carried and a rise of 5% in freight train-km. Although passenger train-km increased by 3%, Passenger-km figures decreased by 2%.

In 2011, 80 bridges under the railway and 9 bridges over the railway were struck, an overall decrease of 16% when compared to the previous year.

Iarnród Éireann has sought to contain the number of running signals passed at danger. The number dropped from 14 in 2010 to 6 in 2011. None of these events was classified as critical. Although 4 ‘wrong side’ signalling failures were reported, these were attributed to rail-head contamination rather than to a signalling system fault. Performance is illustrated in the following table D.1.2.1:

Table D.1.2.1: Running and shunt signals passed at danger

	2007	2008	2009	2010	2011
Critical	10	8	0	0	0
Serious	13	5	4	1	2
Moderate	4	7	11	16	4
Minor	5	2	5	5	0
Uncategorised	0	0	1	0	0
Total	32	22	21	22	6

C.1.2.2. Number of accidents;

In 2011, two significant accidents were reported, one of which were fatal and six suspected suicides occurred.

C.1.2.3. Number of fatalities;

Seven fatalities involving rolling stock in motion were reported, of which one occurred in accidental circumstances.

C.1.2.4. Number of injuries;

One significant injury was reported.

C.1.2.5. Number of precursors to accidents

Precursors for 2011 are reported in Annex C.

C.1.2.6. Cost of all accidents

Data are only available for the cost of significant property damage accidents.

C.1.2.7. Technical safety of infrastructure and its implementation, management of safety

Data for 2011 are reported in Annex C.

C.1.3. Results of safety recommendations

The RSC continues to track duty-holder implementation of recommendations deriving from investigation reports and from the ongoing process of industry safety review that commenced in 1998.

The benefits of implementation of these recommendations are assessed by an industry-owned predictive model. The model was established in the year 2003, and reflects a steady reduction in network safety risk since then.

D. IMPORTANT CHANGES IN LEGISLATION AND REGULATION

D.1.1. The Safety Directive

In the Safety Directive it is stated that important changes in legislation and regulation concerning railway safety should be reported, e.g.,

- implementation of EU requirements in national legislation;
- important changes of the national railway legislation and regulation.

In Annex D of this report, a list of possible legislation and regulation is described which should be reported if these are changed essentially.

The Railway Safety Directive is implemented through the Railway Safety Act, 2005, as amended by the European Communities (Railway Safety) Regulations, SI No. 61 of 2008 and SI No 70 of 2011.

S.I. No. 70/2011 — European Communities (Railway Safety) Regulations 2010, were signed into law on 17 February 2010. The purpose of these Regulations was to implement Directive 2008/110/EC and 2009/149/EC which amended Directive 2004/49/EC. The regulations establish the Railway Safety Commission as the competent authority for implementing these regulations and place obligations on railway undertakings, infrastructure managers and entities charged with maintenance.

S.I. No. 419/2011 — European Communities (Interoperability of the Rail System) Regulations 2011, were signed into law on 11 August 2010 to implement Directive 2008/57/EC. These Regulations apply to the national railway network managed by Iarnród Éireann-Irish Rail. The regulations establish the Railway Safety Commission as the competent authority for implementing these regulations and place obligations on railway undertakings, infrastructure managers and other stakeholders.

E. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION

E.1.1. National legislation – starting dates – availability

Starting date for issuing Safety Certificates (Article 10 of Directive 2004/49/EC)

The start date for issuing Safety Certificates was 31 January 2011.

Starting date for issuing Safety Authorisations (Article 11 of Directive 2004/49/EC)

The start date for issuing Safety Authorisations was 31 January 2011

Availability of national safety rules and legislation to Railway Undertakings and Infrastructure Managers

National Safety Rules binding on more than one railway undertaking were notified in 2009 and are available on the ERA database. The safety rules are primarily derived from national legislation. The legislation dating from 1922 onwards is published by the Government Publications Office and may be downloaded from the website http://www.irishstatutebook.ie. Older legislation is not currently in publication, but copies of Public Acts may be obtained from the Department of Transport on request.

E.1.2. Numerical data (Annex E)

Progress of the safety certification and safety authorisation process is indicated in Annex E.

E.1.3. Procedural aspects

Safety Certificates Part A

E.1.3.1. Reasons for updating/amending Part A Certificates (e.g. variation in type of service, extent of traffic, size of company)

Two Part A Certificates were issued in 2011. These were a first issue.

E.1.3.2. Main reasons if the mean issuing time for Part A Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than 4 months

No delays were experienced in 2011.

E.1.3.3. Requests for information from other National Safety Authorities for information on a Railway Undertaking certified in your country and applying to them for a Part B certificate

No requests of this nature were received in the year 2011.

E.1.3.4. Summary of problems with the mutual acceptance of the Community wide valid Part A Certificate.

No problems were experienced in 2011.

E.1.3.5. NSA Charging fee for issuing a Part A Certificate (Yes/No – Cost).

Charges are indirectly recovered through an industry levy.

E.1.3.6. Summary of the problems with using the harmonised formats for Part A Certificates, specifically in relation to the categories for type and extent of service

No problems of this nature were experienced.

E.1.3.7. Summary of the common problems/difficulties for the NSA in application procedures for Part A Certificates.

No problems were experienced in 2011

E.1.3.8. Summary of the problems mentioned by Railway Undertakings when applying for a Part A Certificate

No problems were experienced in 2011.

E.1.3.9. Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Railway Undertakings are facilitated through published guidance, and through direct meetings with the RSC. The practice of the RSC is to facilitate applications as much as possible. A Railway Undertaking may appeal first to the RSC and further to the High Court should it be refused safety certification.

Safety Certificates Part B

E.1.3.10. Reasons for updating/amending Part B Certificates (e.g. variation in type of service, extent of traffic, lines to be operated, type of rolling stock, category of staff, etc.)

Two Part B Certificates were issued in 2011. These were a first issue.

E.1.3.11. Main reasons if the mean issuing time for Part B Certificates (restricted to these mentioned in Annex E and after having received all necessary information), was more than 4 months

No delays were experienced in 2011

E.1.3.12. NSA Charging fee for issuing a Part B Certificate (Yes/No – Cost)

Charges are indirectly recovered through an industry levy.

E.1.3.13. Summary of the problems with using the harmonised formats for Part B Certificates, specifically in relation to the categories for type and extent of service

No problems were experienced in 2011.

E.1.3.14. Summary of the common difficulties for the NSA in application procedures for Part B Certificates.

No problems were experienced in 2011.

E.1.3.15. Summary of the problems mentioned by Railway Undertakings when applying for a Part B Certificate

No problems were experienced in 2011.

E.1.3.16. Feedback procedure (e.g. questionnaire) that allows Railway Undertakings to express their opinion on issuing procedures/practices or to file complaints

Scheduled meetings with Railway Undertakings provide the opportunity to express opinions on issuing practices and procedures. Any complaints are directed to the Commissioner for initial consideration of the adequacy of process and delivery. The Railway Undertaking can then appeal to the High Court should it be refused safety certification.
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Safety Authorisations

E.1.3.17. Reasons for updating/amending Safety Authorisations

One Safety Authorisation was issued in 2011.

E.1.3.18. Main reasons if the mean issuing time for Safety Authorisations (restricted to these mentioned in Annex E and after having received all necessary information), was more than 4 months

No delays were experienced in 2011.

E.1.3.19. Summary of the regular difficulties in application procedures for Safety Authorisations

No problems were experienced in 2011.

E.1.3.20. Summary of the problems mentioned by Infrastructure Managers when applying for a Safety Authorisation

No problems were experienced in 2011.

E.1.3.21. Feedback procedure (e.g. questionnaire) that allows Infrastructure Managers to express their opinion on issuing procedures/practices or to file complaints

The Infrastructure Manager is facilitated through published guidance, and through direct meetings with the RSC. The practice of the RSC is to facilitate applications as much as possible. The Infrastructure Manager may appeal first to the RSC and further to the High Court should they be refused safety authorisation.

E.1.3.22. NSA Charging fee for issuing a Safety Authorisation (Yes/No – Cost)

Charges are indirectly recovered through an industry levy.

F. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

F.1.1. Description of the Supervision of Infrastructure Managers and Railway Undertakings

F.1.2. Audits/Inspections/Checklists

F.1.2.1. Use

F.1.2.2. Audits/inspections carried out by the NSA staff/third parties/both

The RSC's supervision programme derives from the following areas:

- The need to supervise railway undertakings and infrastructure managers continued application of their safety management systems in accordance with Commission Regulations 1158/2010 and 1169/2010;
- Industry safety concerns, typically arising from accidents and incidents;
- Complaints and representations by, or on behalf of, passengers.

The RSC's principal supervision activity is auditing railway undertakings and infrastructure managers SMSs. These audits are supplemented by more detailed 'Process' Audits, sample inspections of assets and regular safety performance review meetings with management personnel from the respective organisations.

During 2011 a number of inspections of Iarnród Éireann were carried out focussing on:

- Railway bridges;
- Level crossings;
- Stations and station conditions.

Where the occasion permitted, inspectors took the opportunity to travel in locomotive cabs to assess operations and the condition of the permanent way. In 2011, a substantial proportion of the network was seen in this way.

The scenes of a number of railway incidents were inspected, including;

- An axle journal bearing failure to a locomotive in service,
- A site where a bridge over water was damaged following a period of heavy railfall,
- a collision between a train and a road vehicle at a level crossing
- the station where a person whose hand became trapped in the door and was dragged along the platform by a train

F.1.2.3. NSA manpower available (Number, % of NSA staff involved)

Two inspectors left the RSC in 2010, but they could not be replaced due to a Government embargo on recruitment. This loss has impacted on the ability of the RSC to address its supervision workload. With just 4 inspection staff, excluding the Railway Safety Commissioner, and continued involvement in regulatory development and the approvals of new infrastructure, rolling stock and safety management systems, the equivalent of only 1.5 members of RSC staff was dedicated to supervision activity and the RSC was obliged to outsource a number of audits in 2011.

In 2011, RSC supervision of the principal RU and IM in the state included both SMS and Process audits, inspections of assets and formalised supervision meetings. Two process audits were completed and these focused on;

- Competence Management of Command & Control Room Signalling Staff
- The management of Cuttings & Embankments

F.1.2.4. Economical aspects (Costs,…)

The cost of audit and supervision is recovered indirectly through the industry levy.

F.1.2.5. Vigilance aspects/Sensitive points to follow-up by the NSA

No problems were experienced in 2010.

F.1.3. Legal aspects within annual reports of Infrastructure Managers and Railway Undertakings

The European Communities (Railway Safety) Regulations 2008 transposed the requirements of Article 9 of the Safety Directive (EC) 2004/49/EC. This places a legal obligation on Infrastructure Managers and Railway Undertakings to submit their annual safety reports concerning the previous calendar year by 30th June.

F.1.3.1. Availability of Reports:

The Iarnród Éireann report was due in June 2012 but finalised in September 2012.

F.1.3.2. Safety Targets and Safety Plans – Iarnród Éireann

Iarnród Éireann is working to Key Performance Indicators (KPIs) set down under the railway safety investment programme 2009-2013.

F.1.3.3. Organisation's Corporate Safety Targets 2011

The railway organisation's corporate safety targets are met through a number of programmes, particularly phase three of the Railway Safety Investment Programme (2009 – 2013); the implementation of recommendations arising from the "Review of Railway Safety"; the Network Wide Risk Model and the Enterprise Wide Risk Management register.

In summary, there are over 200 safety initiatives in play leading to more than of 500 actions. These are focussed on improving the implementation of the Safety Management System, i.e., improving structures, standards, systems, training, equipment and special initiatives for improving competency and, in particular, reduction of Signals Passed at Danger (SPADs), incidents involving possession management, level crossings and other areas of operational risk.

F.1.3.4. Railway Safety Programme 2009 – 2013

Principal aspects of the programme focus on improvements of the company's Safety Management System and Human Performance Development over a range of 28 projects. Special attention and detailed updating on key or slow moving projects and reporting to the DoT has led to continued progress being made on these programmes, a continuation of the work developed in the second phase of the railway Safety programme.

F.1.4. Safety Indicators – Iarnród Éireann

F.1.4.1. Network Wide Risk Model

The Network Wide Risk Model (NWRM) was used to assist the Department of Transport's evaluation of the third Railway Safety programme by estimating the safety benefits expected to accrue from the implementation of that project.

The new Level Crossing Risk Model (LCRM) was utilised during the year to assist in the prioritisation of level crossing risk mitigation works.

F.1.4.2. Enterprise Wide Risk Management Register

The Enterprise Wide Risk Management register (EWRM) continued to be reviewed, updated and monitored.

F.1.5. Safety Audits – Iarnród Éireann

F.1.5.1. Safety Audit

In 2011, the audit unit had a target to conduct 19 audits. The unit achieved 95% of its target, carrying out a total of 18 audits. These covered the following areas:

- Stations & Premises (2)
- Lineside & Platform Safety (1)
- Staff Assault (1)
- Competency Assessment (2)
- Contractor Management (1)
- SPAD Management (1)
- New Works (2)
- CCE & SET OHSAS (2)
- Information Management Weekly Circular & NIR (2)
- OHLE Isolation Management (1)
- Level Crossings (2)
- Train Fires (1)

F.1.6. Particular Risks – Iarnród Éireann

No report was received on observations on deficiencies and malfunctions of railway operations and infrastructure management that might be relevant for the safety authority.

F.1.7. Number of inspections of RUs/IMs for 2011

A number of inspections were carried out in 2011 that included planned cab-rides (17) and assets or processes (18). As the Railway Undertaking and Infrastructure Manager are both integrated within the Iarnród Éireann organisation, monitoring has not been split between the RU and IM. The following is the number of inspections carried out in 2011:

INSPECTIONS	Safety Certificate Part A	Safety Certificate Part B	Safety Certificate 2001/14	Safety Authorisations	Other Activities (To specify)
planned	1	17	0	13	0
unplanned	0	4	0	0	6
carried out	1	21	0	13	4 Incident follow-up site Inspections

F.1.8. Number of audits of RUs/IMs for 2011

Two planned process audits were carried out in 2011, see G.1.2.3 for further detail.

AUDITS		Safety Certificate Part A	Safety Certificate Part B	Safety Certificate 2001/14	Safety Authorisations	Other Activities (To specify)
Number of audits of RUs/IMs for 2011	planned	0	1	0	1	0
	carried out	0	1	0	1	0

F.1.9. Summary of the corrective safety measures/actions following these audits/inspections

During 2011, the RSC formally requested 6 'Improvement Plans', 5 as a result of audit findings and 1 as a result of a post-incident inspection. Improvement plans are requested in accordance with section 76 of the Railway Safety Act 2005 where non-compliances are identified during audits or inspections.
The Railway Undertaking and Infrastructure Manager submitted plans which were accepted by the RSC. The implementation of these plans is monitored as part of the RSC's ongoing supervision activity.

F.1.10. Complaints from IM('s) about RU('s) related to their Safety Certificate conditions

No complaints were received by the RSC.

F.1.11. Complaints from RU('s) about IM('s) related to their Safety Authorisation conditions

No complaints were received by the RSC.

G. REPORTING ON THE APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT

A safety standard to implement the requirements of Commission Regulation No 352/2009 was submitted by Iarnrod Eireann to the RSC as part of their application for Safety Certificates Part A and B and Safety Authorisation in December 2010.

G.1.1. NSA experiences

Iarnród Éireann applied the Common safety Method on Risk Evaluation and Assessment through its revised safety management system during 2011.

G.1.2. Experience on the decisions taken by the proposers on the level of significance of a change (e.g., too lax)

None.

G.1.3. Experience on the applications of the risk management process by the proposers

None.

G.1.4. Experience on the involvement of assessment bodies

None.

G.1.5. Experience on the interface management

None.

G.1.6. Is there a procedure to allow RUs and IMs to express their experiences on the EC regulation on CSM on risk assessment

No.

G.1.7. Revision of NSRs to take account of the EC regulation on CSM on risk assessment

The pre-existing National Rule requires a risk assessment but does not prescribe the method. The Common Safety Method on risk evaluation and assessment became binding on the national network from 19th July 2010, but it will be a voluntary code of practice for light railways, metros and heritage railways.

H. NSA CONCLUSIONS ON THE REPORTING YEAR – PRIORITIES

H.1.1. Conclusion

This is the sixth year of operation for the Railway Safety Commission as an independent agency within the European railway safety regulatory framework and further progress has been made towards conformance with the requirements of the Railway Safety Directive 2004/49/EC. In terms of European safety indicators, the Irish railway sector continues to perform well.

H.1.2. Priorities

To build further on its good industry safety record, the RSC's organisational priorities remain as follows:

- Extend the monitoring and supervision regime;
- Work with industry stakeholders to ensure the most effective implementation of the railway safety regulatory framework;
- Ensure full implementation of EU railway safety legislation.

I. SOURCES OF INFORMATION

Annual Report of the Railway Safety Commission – RSC – February 2012

Statistical Report to the Central Statistics Office (Annex H statistics) – Iarnród Éireann – May 2011

Annual report to the Railway Safety Commission – Iarnród Éireann – September 2012

Structure for the Content of the NSA Annual Report (NSA AR Template EN 2009 v14_9) – ERA – August 2009

Guideline for the Use of the Template (NSA AR Guideline EN 2009) – ERA – August 2009

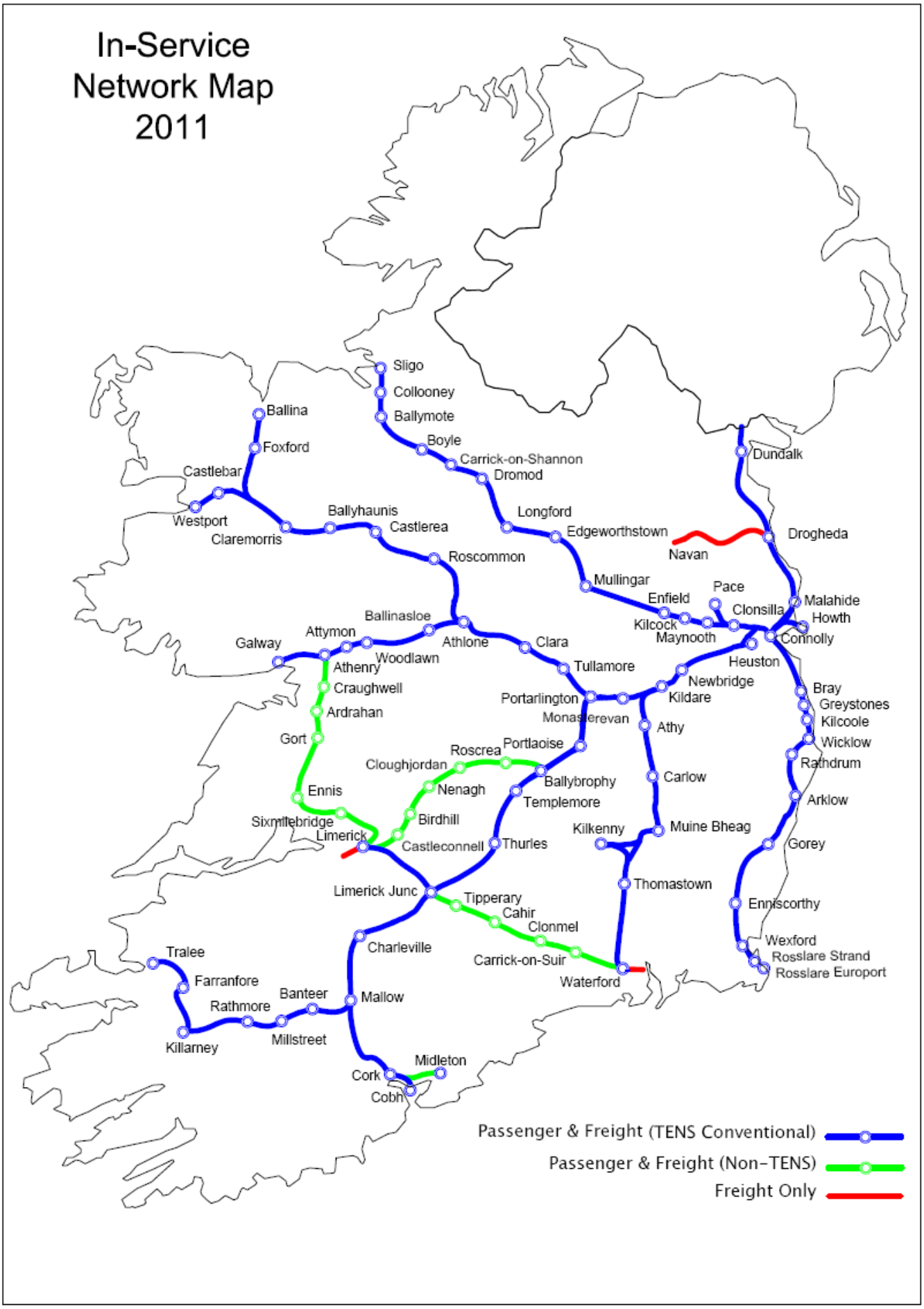
Railway Safety Programme (Final Report) – Iarnród Éireann – June 2009

J. ANNEXES

ANNEX A: Railway Structure Information
ANNEX B: Organisation chart(s) of the National Safety Authority
ANNEX C: Common Safety Indicator (CSI) data; Definitions used; Abbreviations
ANNEX D: Important changes in legislation and regulation
ANNEX E: The development of safety certification and authorisation – Numerical Data

ANNEX A: Railway Structure Information

A.1. Network map



A.2. List of Railway Undertakings and Infrastructure Managers

A.2.1. Infrastructure Manager(s)

Name	Iarnród Éireann
Address	Connolly Station, Amiens St., Dublin 1
Website	www.irishrail.ie
IE 21 2011 0001	31/01/2011
Start Date Commercial Activity	
Total Track Length / Gauge	2165 km (lines in traffic) gauge 1600mm
Electrified Track length / Voltage	99 km 1500v DC
Total Double/Single Track Length	461 km / 1222 km lines in traffic
Total Track Length HSL	None
ATP Equipment Used	CAWS & ATP
Number of LC	1018
Number of Signals	2343

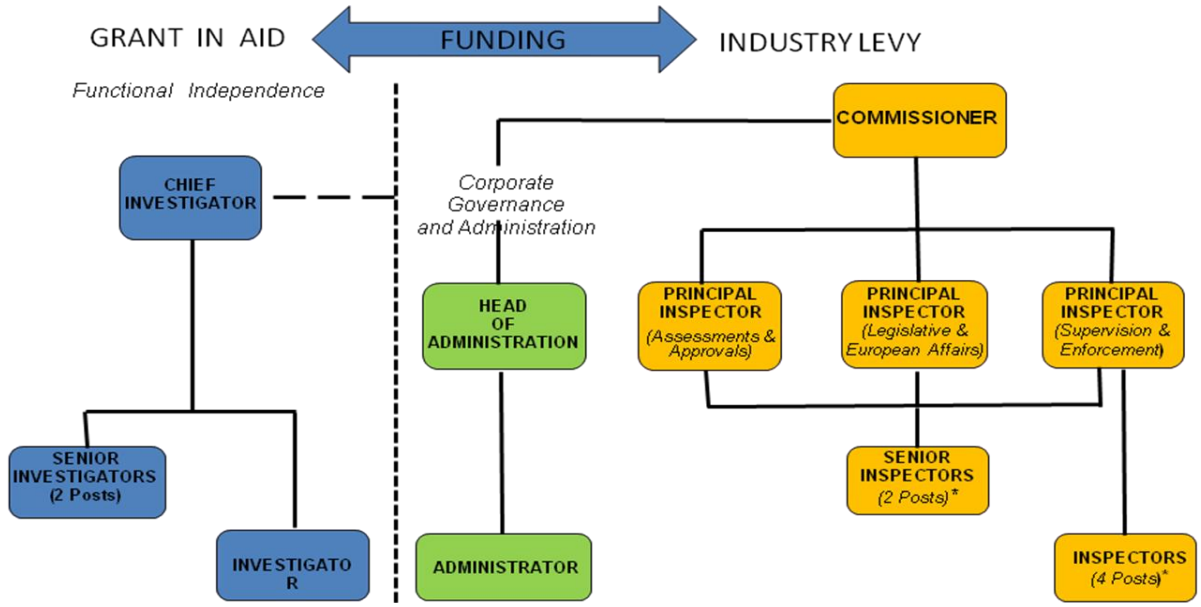
A.2.2. Railway Undertaking(s)

Name	Iarnród Éireann	Railway Preservation Society of Ireland
Address	Connolly Station, Amiens St., Dublin 1	Docklands Innovation Centre 128-130 East Wall Road Dublin 3
Website	www.irishrail.ie	www.steamtrainsireland.com
Safety Certificate Part A	IE 11 2011 0001 dated 31/01/2011	IE 11 2011 0002 dated 01/07/2011
Safety Certificate Part B	IE 12 2011 001 dated 31/01/2011	IE 12 2011 0002 dated 01/07/2011
Start Date Commercial Activity		
Traffic Type	Passenger & Freight	Passenger
Number of Locomotives	52 (excluding OTMs)	10 Steam and 4 Diesel
Number of Railcars / Multiple Unit Vehicle	357 DMU Vehicles 154 EMU Vehicles	
Number of Coaches / Wagons	81 coaches 254 wagons (including maintenance wagons)	48 coaches
Number of Train Drivers / Safety Crew	518 drivers	Provided by Iarnród Éireann
Volume of Passenger Transport	37.4 million passenger journeys	Occasional
Tonnes of Freight Transport	0.645 million tonnes (not validated)	Nil

ANNEX B: Organisation chart(s) of the National Safety Authority

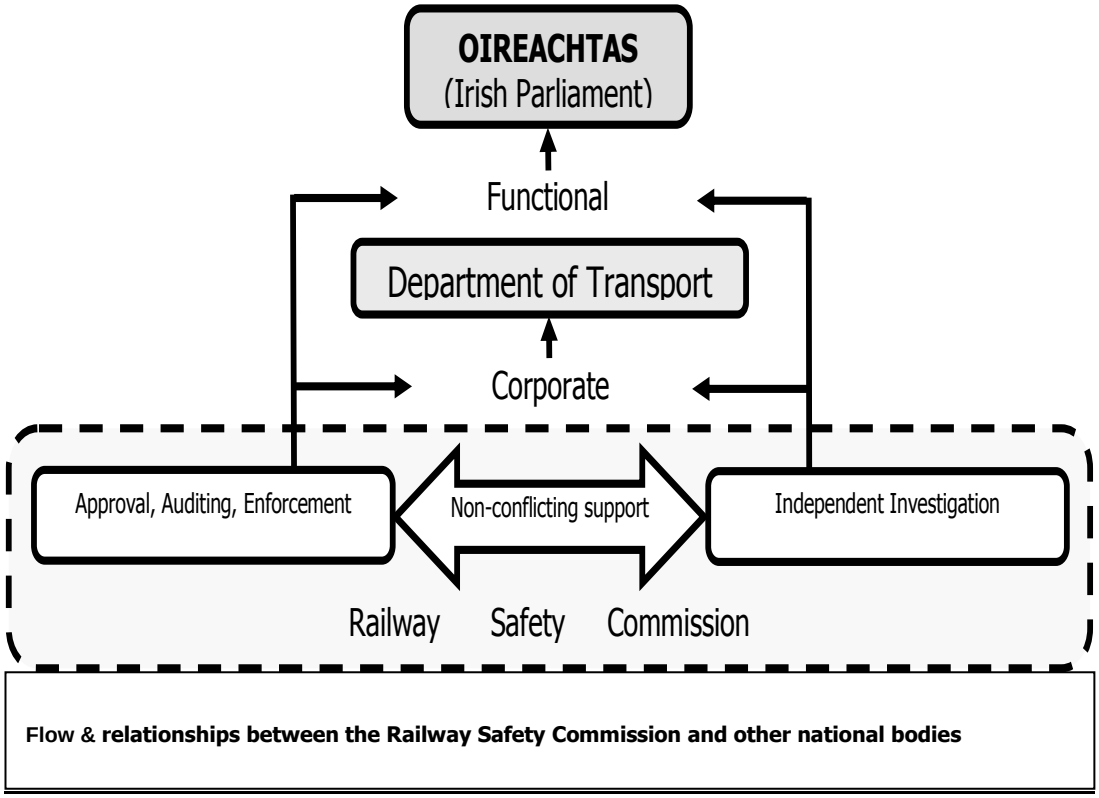
B.1. Chart: Internal organisation

RAILWAY SAFETY COMMISSION ORGANISATIONAL STRUCTURE



* The RSC is depleted in staff, currently lacking the two Senior Inspectors and three of the Inspectors.

B.2. Chart: Relationship with other National Bodies



Flow & relationships between the Railway Safety Commission and other national bodies

ANNEX C: CSI data and Definitions applied

C.1. CSI Performance reports

Please see the published statistics on the E-RAIL website of the ERA, http://erail.era.europa.eu/

C.2. Definitions used in the annual report

C.2.1. Definitions to be applied:

The definitions used in this report correspond with the definitions outlined in Annex I to the Directive 2004/49/EC as revised by Directive 2009/149/EC and explained by the ERA in its Guidance.

C.2.2. National definitions

The original Directive 2004/49/EC lays down in Annex I, point 6:
"Definitions
The reporting authorities may use nationally applied definitions of the indicators and methods for calculation of costs when data according to this Annex are submitted. All definitions and calculation methods in use shall be explained in an Annex to the annual report described in Article 18."

Broken Rails:
For the purpose of this Report, reports of broken rails refer to broken rails on running lines and sidings but do not refer to fractured fishplates.

Buckled Rails:
For the purpose of this Report, reports of buckled rails refer to track misalignments requiring immediate blockage of the line or a speed restriction of 5 miles per hour.

Suicides:
The CSI statistical report to ERA asks for data on suicides and accidental deaths. In regard to 'cause of death', the competent national authority is the Coroner.

However, deaths resulting from "accidents to persons caused by rolling stock in motion" do not always result in a Coroner's Verdict of accidental death or suicide. To avoid 'second-guessing' the Coroner, while maintaining a reasonable level of statistical integrity, the RSC currently reports to ERA as follows:

- deaths with a verdict of 'suicide' are reported as 'suicide', and
- deaths with a verdict of 'death by misadventure' or 'accidental death' are collectively reported as 'accidental death';
- deaths with a verdict of 'open verdict' or where verdict is unclear are reported as either 'accidental' or 'suicide', after taking into account the initial report and consulting the Coroner where necessary.

Signals Passed at Danger:
The term 'Signals passed at danger' applies to running signals and shunt signals passed at danger.

C.3. Abbreviations

ATP	Automatic Train Protection;
BLN	10^9
CSI	Common Safety Indicator
ERA	European Railway Agency
IÉ	Iarnród Éireann – Irish Rail
IM	Infrastructure Manager
HSL	High Speed Line (Definition acc. Directive 96/48/EC);
LC	Level Crossing
MLN	10^6
NIB	National Investigating Body for railway accidents
NSA	National Safety Authorities
RS	Rolling Stock
RSC	Railway Safety Commission
RU	Railway Undertaking

ANNEX D: Important changes in legislation and regulation:

	Legal reference	Date legislation comes into force	Reason for introduction (Additionally specify new law or amendment to existing legislation)	Description
General national railway safety legislation	NONE			
Legislation concerning the national safety authority	NONE			
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	NONE			
National rules concerning railway safety				
Rules concerning national safety targets and methods	NONE			
Rules concerning requirements on safety management systems and safety certification of Railway Undertakings	NONE			
Rules concerning requirements on safety management systems and Safety Authorisation of Infrastructure Managers	NONE			
Rules concerning requirements for wagon keepers	NONE			
Rules concerning requirements for maintenance workshops	S.I. No. 70/2011 — European Communities (Railway Safety) Regulations 2010,	Signed into law on 17 February 2010.	To implement Directive 2008/110/EC and 2009/149/EC which amended Directive 2004/49/EC.	The regulations establish the Railway Safety Commission as the competent authority for implementing these regulations and place obligations on railway undertakings, infrastructure managers and entities charged with maintenance.

Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between Railway Undertakings, registration systems and requirements on testing procedures	S.I. No. 419/2011 — European Communities (Interoperability of the Rail System) Regulations 2011,	Signed into law on 11 August 2010	To implement Directive 2008/57/EC	These Regulations apply to the national railway network managed by Iarnród Éireann-Irish Rail. The regulations establish the Railway Safety Commission as the competent authority for implementing these regulations and place obligations on railway undertakings, infrastructure managers and other stakeholders.
Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	NONE			
Rules laying down requirements on additional internal operating rules (company rules) that must be established by the Infrastructure Managers and Railway Undertakings	NONE			
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification				
Rules concerning the investigation of the accident and incidents including recommendation	NONE			
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	NONE			
Rules concerning requirements for autorisation of placing in service the infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level crossing, platforms, etc.)	S.I. No. 419/2011 — European Communities (Interoperability of the Rail System) Regulations 2011,	Signed into law on 11 August 2010	To implement Directive 2008/57/EC	These Regulations apply to the national railway network managed by Iarnród Éireann-Irish Rail. The regulations establish the Railway Safety Commission as the competent authority for implementing these regulations and place obligations on railway undertakings, infrastructure managers and other stakeholders.

ANNEX E: The development of safety certification and authorisation – Numerical Data

E.1. Safety Certificates according to Directive 2001/14/EC

Number of Safety Certificates issued according to Directive 2001/14/EC, held by Railway Undertakings in year 2011	being licensed in Member State	0
	being licensed in another Member State	0

E.2. Safety Certificates according to Directive 2004/49/EC

		New	Updated / amended	Renewed
E.2.1. Number of valid Safety Certificates Part A held by Railway Undertakings in the year 2011	being registered in Member State	2	0	0
	being registered in another Member State	0	0	0

		New	Updated / amended	Renewed
E.2.2. Number of valid Safety Certificates Part B held by Railway Undertakings in the year 2011	being registered in Member State	2	0	0
	being registered in another Member State	0	0	0

			A	R	P
E.2.3. Number of applications for Safety Certificates Part A submitted by Railway Undertakings in year 2011	being registered in Member State for	new certificates	1	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	being registered in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

			A	R	P
E.2.4. Number of applications for Safety Certificates Part B submitted by Railway Undertakings in year 2010	being registered in Member State for	new certificates	1	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0
	being registered in another Member State for	new certificates	0	0	0
		updated / amended certificates	0	0	0
		renewed certificates	0	0	0

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

E.2.5. List of countries where RUs applying for a Safety Certificate Part B in your Member State have obtained their Safety Certificate Part A:

No application received in 2011.

E.3. Safety Authorisations according to Directive 2004/49/EC

	New	Updated / amended	Renewed
E.3.1. Number of valid Safety Authorisations held by Infrastructure Managers in the year 2011 being registered in your Member State	1	0	0

		A	R	P
E.3.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2011 being registered in your Member State	new authorisations	0	0	0
	updated / amended authorisations	0	0	0
	renewed authorisations	0	0	0

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

E.4. Procedural aspects – Safety Certificates part A

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part A in year 2011 for Railway Undertakings	being registered in your Member State	One month *	0	0
	being registered in another Member State	0	0	0

E.5. Procedural aspects – Safety Certificates part B

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part B in year 2010 for Railway Undertakings	being registered in your Member State	One month *	0	0
	being registered in another Member State	0	0	0

E.6. Procedural aspects – Safety Authorisations

		New	Updated / amended	Renewed
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Authorisation in year 2010 for Infrastructure Managers	being registered in your Member State	One month *	0	0
	being registered in another Member State	0	0	0

* Most of the queries are raised and responded to during the pre-application phase