Railway Safety Commission

Annual Safety Report, 2012

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REFERENCE DOCUMENTS

Ref.	*Document Title*	*Document ref.*
/1/	Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive or RSD)	OJ L220, 21.6.2004, p.16 (Corrigendum)
/2/	SafeCert Team's contribution to annual NSA report	Version 2.1,10/07/2006
/3/	SafeCert Team's contribution to annual NSA report	Version 3.0, 21/09/2006
/4/	NSA annual report on the development of railway safety Format	NSA Annual Report-Safety-Format 0.0, July 2006
/5/	Directive 2008/110/EC amending Directive 2004/49/EC on safety on the Community's railways	OJ L345, 23.12.2008, p. 62
/6/	Directive 2008/57/EC amending Directive 2004/49/EC on safety on the Community's railways	OJ L191, 18.07.2008, p. 1
/7/	EC Regulation 352/2009 – CSM on risk evaluation and assessment	OJ L108, 29.4.2009, p. 4
/8/	Commission Directive 2009/149/EC amending Directive 2004/49/EC on safety on the Community's railways	OJ L313, 28.11.2009, p. 65

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A BACKGROUND OF NSA ANNUAL REPORT

A 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 2. SUMMARY IN ENGLISH

This annual report for the year 2012 is the seventh 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 the network in service has an extent of 1683 route-km. The extent of network in service did not change in 2012.

Annual train activity increased in 2012 by 1.8%. Safety compares well with that of European railways, with a lower than average level of significant incidents per train-km. Good progress is being made in addressing key risks. No significant accidents were reported for the year 2012.

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

There was no significant new legislation in 2012 with a railway safety dimension.

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B INTRODUCTORY SECTION

1. 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).

This 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 Minister for Transport, Tourism and Sport: the 2012 annual report and the Statement of Strategy for 2012 to 2014 can be found on the RSC website at www.rsc.ie.

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

2. Railway Structure Information (see Annex A)

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, triple or quadruple). The extent of network in service has not changed since 2011. The busy parts of the network are equipped with train protection systems (see Table 1). None of these systems are classified as an 'Automatic Train Protection' as defined by ERA, as protection of danger points is not 'assured'.

Table 1 - Length of lines equipped with train protection systems*

(* Please note that CSI figures reported annually relate to percentage of tracks with ATP in operation.)

Not-equipped (km)	Warning & Stop (km)	Continuous speed supervision (km)	Total lines (km)
1156	474	53	1683

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

2.1 List of Railway Undertakings (RUs) and Infrastructure Managers (IMs)

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.

3. Summary – General Trend Analysis (e.g. trends in the development of railway safety, certification, etc.)

Although there were no fatalities in 2012 as a result of railway accidents, there were five 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.

Iarnród Éireann retained its Safety Authorisation as Infrastructure Manager and Safety Certification Parts A and B as Railway Undertaking. The Railway Preservation Society of Ireland retained a Part A and Part B Certification. Northern Ireland Railways retained its Part B Certification to operate cross-border trains over the Iarnród Éireann infrastructure to Connolly Station, Dublin.

C ORGANISATION

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 four senior technical staff (including the Commissioner), four graduate trainees and two administrative staff at the end of 2012.

The Railway Accident Investigation Unit, as the National Investigating Body (NIB), had three dedicated staff and two seconded 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 organisations. In 2012, the Grant-in-Aid funding amounted to €0.89m. In 2008 the RSC invoked the provision of section 26(1) of the Railway Safety Act 2005 and made regulations to impose a safety levy on each of the Railway Undertakings. These regulations are made annually, and the regulations for 2012 are contained in Statutory Instrument No. 172 of 2012.

The organizational chart for the RSC at the end of 2012 is shown in Annex B.1.

2. Organisational flow

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

D THE DEVELOPMENT OF RAILWAY SAFETY

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 1.

In late 2012, Iarnród Éireann commenced the rollout of installing 'V' boards trackside to assist track inspection personnel check the available sighting distance at user worked level crossings.

The infrastructure manager is also trialing the use of electronic tablet devices to improve the data capture of asset surveys by engineering staff.

On foot of an Improvement Notice, served by the RSC on IÉ, they engaged consultants to conduct a root and branch review of its arrangements for the management of possessions, which should as a minimum include a risk analysis covering the following areas;

- the different types of possession and their usage
- Pre planning of possessions
- The roles of personnel (Signalman, PIC, PICOP, ES, Handsignalmen, TSC, etc)
- How possessions are taken, managed and handed back
- Control of movements of vehicles into, within and from possessions
- The management of late notice additions / amendments to possessions
- Internal communication and recording of same between parties
- The training and competence requirements of key staff involved
- The management of contractors in possessions
- Possession management practices in other countries.

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 248 public road level crossings and 767 private and pedestrian crossings at the end of 2012 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.

User-worked public road level crossings present a high-risk interface between members of the public and the railway, as responsibility for safe use of the level crossing rests with the road user. In May 2012, in response to a safety recommendation from the NIB, the RSC issued a report on its study into the suitability of this type of level crossing, of which 48 existed on the Iarnród Éireann network in 2010. It addressed recommendations to the Government Departments, railway infrastructure manager, and road authorities concerned. The risks associated with user-worked level crossings on public roads make them an obvious target for ongoing and systematic risk mitigation and further safety investment.

In 2012, the RAIU issued three accident investigation reports. A total of 13 recommendations were made, as indicated in Table 2. Initiatives not triggered by RAIU reports are described in Table 3.

Table 2 - Safety Measures Triggered by Accidents/Precursors to these

Accidents/precursors which triggered the measure			**Safety measure decided**
Date	**Place**	**Description of the event**	
14th February 2011	County Galway	Car Strike at Morrough Level Crossing, XG173	IÉ should review the suitability of the signage at user worked crossings on public and private roads, ensuring that human factors issues are identified and addressed.
14th February 2011	County Galway	Car Strike at Morrough Level Crossing, XG173	IÉ should liaise with local authorities where private road level crossings can be accessed from a public road to ensure there is advance warning to road users.
14th February 2011	County Galway	Car Strike at Morrough Level Crossing, XG173	IÉ should ensure that they adopt their own standards in relation to design changes to any PEIO that has the potential to affect safety.
14th February 2011	County Galway	Car Strike at Morrough Level Crossing, XG173	The RSC should ensure that they adopt a formal approach to submissions made by IÉ in relation to design changes to any PEIO that has the potential to affect safety.
29th September	County Laois	Runaway locomotive at Portlaoise Loop	IÉ should review their VMIs for locomotives to ensure

2011			that there are adequate braking tests at appropriate intervals.
29th September 2011	County Laois	Runaway locomotive at Portlaoise Loop	IÉ should adopt a quality control system, for the introduction of new maintenance procedures for locomotives.
29th September 2011	County Laois	Runaway locomotive at Portlaoise Loop	IÉ should review their system for introducing new train drivers' manuals, to ensure that train drivers are fully trained and assessed in all aspects of these manuals.
29th September 2011	County Laois	Runaway locomotive at Portlaoise Loop	IÉ should review their competency management system for train drivers to ensure that all driving tasks are routinely assessed.
18th October 2011	Dublin City Centre	Bearing failure on a train at Connolly Station	IÉ should put in place provisions to assist train drivers with the task of identifying if there is a fault present with an axlebox.
18th October 2011	Dublin City Centre	Bearing failure on a train at Connolly Station,	IÉ should ensure the competency management system for signalmen includes the assessment of HABD related functions they perform.
18th	Dublin	Bearing failure on a	IÉ should put in place formal

October 2011	City Centre	train at Connolly Station,	procedures governing the role of FTS staff in relation to HABDs.
18th October 2011	Dublin City Centre	Bearing failure on a train at Connolly Station	IÉ should ensure that a robust system is put in place for the competency assessment of safety critical rolling stock maintenance staff.
18th October 2011	Dublin City Centre	Bearing failure on a train at Connolly Station,	IÉ should update its competency management system for train drivers to include assessment of their competency in relation to their tasks following a HABD alarm.

Table 3 – Additional safety measures triggered by accidents/precursors to these other than as a result of an NIB investigation

Accidents/precursors which triggered the measure			**Safety measure decided**
Date	**Place**	**Description of the event**	
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ should review instructions given to IÉ personnel with regards to Fouling Points.
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ to review procedures used by signallers to establish a possession.
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ to review instructions controlling CCTV level crossings in possessions
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ to review procedures for ensuring possession management is undertaken in accordance with the Rule Book
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ should review the processes controlling the briefing of staff prior to possessions

29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ should develop a process to deal with known non-compliances
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	Re-Brief staff on the reporting process of incidents
29-31 March 2012	County Kilkenny	Post incident inspection following unsafe occurrences at Lavistown Level crossing.	IÉ safety department should undertake independent review of safety communications for maintenance personnel
04 July 2012	County Louth	Post incident inspection following a derailment at Drogheda depot	IÉ should review the procedures to notify appropriate operations and Infrastructure staff of alterations to possessions
04 July 2012	County Louth	Post incident inspection following a derailment at Drogheda depot	IÉ should brief appropriate Infrastructure maintenance staff on the requirements for establishing a Safe System Of Work in a siding
04 July 2012	County Louth	Post incident inspection following a derailment at Drogheda depot	IÉ should review the processes for planning maintenance work in depot sidings
04 July 2012	County Louth	Post incident inspection following	IÉ should undertake review of Cognifer spring assisted

		a derailment at Drogheda depot	manual points

2. Detailed data trend analysis

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

In particular, possible discontinuity of data series caused by changes introduced by Commission Directive 2009/149/EC /8/ amending Directive 2004/49/EC as regards CSIs and common methods to calculate accident costs should be highlighted (typically from 2010 onwards).

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 experienced 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 prevailing rates on the European network.

With very low levels of data, it is possible to ascertain the safety level but it is difficult to ascertain meaningful trends over a short time scale of seven years.

No significant accidents to persons were recorded for 2012, and no person died as a result of a railway accident.

Although five fatalities were recorded involving rolling stock in motion where self-harm appears to have been a factor, this reflects a general downward trend. It can be difficult to distinguish between accidents resulting from trespass and incidents of suspected suicide. In some cases, the Coroner's Inquest has not yet taken place so the official Verdict is not known. Two trespassers were seriously injured by rolling stock in motion as a result of apparent attempts at self-harm.

Two vehicle drivers were involved in separate accidents at level crossings, but were not seriously injured. One employee was seriously injured in accidental circumstances that did not involve a train.

Although there was an annual increase in the number of unauthorised passing of railway signals at danger, the background rate has dropped very significantly over the past decade. There were no reports of 'wrong side' signalling failures. The number of broken rails on passenger lines remains low. Four track buckle/misalignment events were reported, which is significantly above the norm.

The total number of strikes of railway bridges by heavy goods vehicles continued to decline. 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.

Total passenger journeys in 2012 showed a further drop of 1%, which is symptomatic of the economic downturn. Freight traffic indicated a 12% drop in tonnage carried and a drop of 1% in freight train-km. Although passenger train-km increased by 3%, passenger-km figures decreased by 2%.

Iarnród Éireann has sought to contain the number of running signals passed at danger. The number increased slightly from 6 in 2011 to 8 in 2012 following a significant downward trend. None of these events was classified as critical. No 'wrong side' signalling failures were reported. Performance is illustrated in the following table, Table 4:

Table 4 – Running and Shunt Signals Passed at Danger

	2007	2008	2009	2010	2011	2012
Critical	10	8	0	0	0	0
Serious	13	5	4	1	2	4
Moderate	4	7	11	16	4	3
Minor	5	2	5	5	0	1
Uncategorised	0	0	1	0	0	0
Total	32	22	21	22	6	8

3. Results of safety recommendations

Brief outline on the evidence of the effectiveness of applied measures in respect to accident outcomes:

The RSC as part of its supervision activities on duty holders meets with senior representatives from RUs and IMs to track duty-holder implementation of recommendations deriving from investigation reports from the National Investigation Body (NIB). Historic recommendations from industry safety reviews are also monitored.

Table 5 below indicates the status of NIB generated safety recommendations up to the 31st December, 2012. By way of background, the terms used are defined as follows;

- Open - Feedback from implementer is awaited or actions have not yet been completed.
- Complete - Implementer has advised that it has taken measures to effect the recommendation and the RSC is considering whether to close the recommendation.
- Closed - Implementer has advised that it has taken measures to effect the recommendation and the RSC is satisfied that the work has been completed or it has confidence that the work is being completed and has closed the recommendation.

Table 5 – Status of NIB Generated Recommendations

Year	No. of Reports	No. Of Recommendations			
		Open	Complete	Closed	Total
2006*	**1**	1	3	10	14
2007	**0**	0	0	0	0
2008	**1**	1	2	4	7
2009	**5**	2	2	9	13
2010	**6**	8	9	9	26
2011	**6**	9	8	0	17
2012	**3**	8	4	1	13
Totals	**22**	**37**	**22**	**31**	**90**
			Total Recommendations made to date		**90**

E IMPORTANT CHANGES IN LEGISLATION, REGULATIONS AND ADMINISTRATIVE PROVISIONS

The European Communities (Railway Safety) Regulations SI 61 of 2008 and SI 70 of 2011 updated the Railway Safety Act 2005 to reflect the intent of the Railway Safety Directive as amended. However, full transposition has yet to be achieved.

In 2011, the European Commission expressed its concern regarding anomalies between the Railway Safety Act 2005 and the Railway Safety Directive which had not been adequately addressed by transposition. The main concerns arose because of a conflict in terminology and because the Investigating Body still remains part of the same organisation as the Safety Authority. The national network and its management and operation fall within the scope of application of the Railway Safety Directive transposition. However, because all railways are covered under the Railway Safety Act, the scope of application of Article 2(2) of the Directive is not completely clear-cut within the Act.

The RSC has provided ongoing and comprehensive technical support to the Department of Tourism Transport and Sport throughout the year 2012 to address the issues arising with the Railway Safety Act.

National Safety Rules binding on more than one railway undertaking are available on the ERA database. These 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.

There were no important changes to national legislation and regulation concerning railway safety in 2012.

F THE DEVELOPMENT OF SAFETY CERTIFICATION AND SAFETY AUTHORISATION

1. National legislation – starting dates – availability

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

1.2. The start date for issuing Safety Authorisations was 31 January 2011.

1.3. National Safety Rules binding on more than one railway undertaking are available on the ERA database.

2. Numerical data *(Annex E)*

Numerical data is contained in Annex E

3. Procedural aspects

3.1. Safety Certificates Part A

3.1.1. No Part A Certificates were updated or amended.

3.1.2. There were no cases where the issuing time for Part A Certificates (restricted to these mentioned in Annex E and after having received all necessary information) exceeded the 4 months foreseen in Article 12(1) of the RSD /1/.

3.1.3. There were no requests from other NSAs to verify/access information relating the Part A Safety Certificate of a RU that has been certified in your country but applies for a Part B certificate in the other MS.

3.1.4. There were no issues with the mutual acceptance of the Community-wide valid Part A Safety Certificate.

3.1.5 We do not have a charging fee for Part A Certificates; cost is covered by the safety levy imposed on sector participants.

3.1.6. There were no issues with using the harmonised formats for Part A Safety Certificates, specifically in relation to the categories for type and extent of service.

3.1.7. There were no issues/difficulties for the NSA in application procedures for Part A Safety Certificates.

3.1.8. There were no issues mentioned by RUs when applying for a Part A Safety Certificate.

3.1.9. There was no feedback procedure (e.g. questionnaire) that allows RUs to express their opinion on issuing procedures/practices or to file complaints.

3.2. Safety Certificates Part B

3.2.1. No Part B Certificates were updated or amended.

3.2.2. There were no cases when the issuing time for Part B Safety Certificates (restricted to these mentioned in Annex E and after having received all necessary information) exceeded the 4 months foreseen in Article 12(1) of the RSD /1/.

3.2.3. We do not have a charging fee for Part B Certificates; cost is covered by the safety levy imposed on sector participants.

3.2.4. There were no issues with using the harmonised formats for Part B Safety Certificates, specifically in relation to the categories for type and extent of service.

3.2.5. There were no issues/difficulties for the NSA in application procedures for Part B Safety Certificates.

3.2.6. There were no issues mentioned by RUs when applying for a Part B Safety Certificate.

3.2.7 There was no feedback procedure (e.g. questionnaire) that allows RUs to express their opinion on issuing procedures/practices or to file complaints.

3.3. Safety Authorisations

3.3.1. There were no Safety Authorisations updated or amended.

3.3.2. There were no cases when the issuing time for Safety Authorisations (restricted to these mentioned in Annex E and after having received all necessary information) exceeded the 4 months foreseen in Article 12(1) of the RSD /1/.

3.3.3. There were no issues/difficulties in application procedures for Safety Authorisations.

3.3.4. There were no issues mentioned by IMs when applying for a Safety Authorisation.

3.3.5. There was no feedback procedure (e.g. questionnaire) that allows IMs to express their opinion on issuing procedures/practices or to file complaints.

3.3.6. We do not have a charging fee for Safety Authorisation; cost is covered by the safety levy imposed on sector participants.

G SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS

1. Description of the supervision of RUs and IMs

Supervision activities undertaken on duty holders include audits, inspections and safety meetings. These are planned activities and are conducted on a periodic basis over the validity of the certificate/authorisation as opposed to front-end or rear-end loading when a safety certificate or safety authorisation has been granted or is up for renewal. Thus is any single calendar year a duty holder can expect to have their SMS and/or processes audited, have a selection f their assets inspected for fitness for purpose criteria and be met with a number of times to review on-going safety performance.

To deliver the supervision regimes on each duty holder the RSC has a number of full time deadicated staff. The supervision team comprises a Principal Inspector (Head of Supervision & Enforcement) and essentially three full time Inspectors. In addition, as and when required, external consultants, e.g., rolling stock brake specialists can be engaged to deliver/or assist on certain supervision activities.

2.1 Audits/Inspections/Checklists

In 2012 the RSC undertook the following supervision activities (Audits & Post Incident Inspections) on the main-line RUs and IM.

Iarnród Éireann (Head Quarters - Central Services):

- Special Topic - Annex A NWRM & EWRM

Iarnród Éireann (Railway Undertaking):

- Post Incident Inspection - Locomotive axle bearing failure
- Management of Wheelsets in CME
- Annex S Internal Auditing of the SMS
- Vertical Slice Audit OPS2 (IM Function)
- Post Incident Inspection - Drogheda Derailment

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Iarnród Éireann (Infrastructure Manager):

- Annex S Internal Auditing of the SMS
- Vertical Slice Audit of the Signalling, electrification and Telecommunications department SMS
- The Management of On-Track-Machine Maintenance
- Post Incident Inspection - Incidents at Levistown LC
- Vertical Slice Audit of the New Construction Works Unit's SMS
- The Management of 3rd Party Interfaces to the IÉ Network

The Railway Preservation Society of Ireland (Railway Undertaking):

- Vertical Slice Audit, Whole Business, RPSI
- RPSI Event Planning

In addition to the above RSC Inspectors undertook a number of inspections of level crossings, railway bridges and railway stations and met with each duty holder at least once.

2. Description of the coverage of the legal aspects within the annual reports from the RUs and IMs

This section includes availability of the annual reports before 30 June according to Article 9(4) of the RSD /1/.

2.1 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.

2.2 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 is a broad range of safety initiatives in play leading to a significant number of 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 operational incidents, incidents involving possession management and level crossings and other areas of operational risk.

2.3 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 projects including a continuation of the work developed in the second phase of the railway safety programme.

The annual reports of the combined RU/IM were not received by the due date.

22 internal audits were performed by Iarnród Éireann RU/IM out of 25 that were planned.

Table 6 – Inspections Undertaken in 2012

INSPECTIONS		Issued Safety Certificates Part A	Issued Safety Certificates Part B	Issued Safety Authorisations	Other Activities (please specify)
3. Number of inspections of RUs/IMs for 2012	Planned	11	0	26	0
	Unplanned	16	0	15	0
	Carried out	27	0	31	0

Table 7 – Audits Undertaking in 2012

AUDITS		Issued Safety Certificates Part A	Issued Safety Certificates Part B	Issued Safety Authorisations	Other Activities (please specify)
4. Number of audits of RUs/IMs for 2012	Planned	3	0	5	0
	Carried out	3	0	5	0

H REPORTING ON THE APPLICATION OF THE CSM ON RISK EVALUATION AND ASSESSMENT

RUs and IMs apply the CSM on risk evaluation and assessment through their SMS.

The application of the common safety method (CSM) on risk evaluation and assessment is carried out in accordance with Iarnród Éireann Safety Management Standards IÉ-SMS-13 and IÉ-SMS-14:

- IÉ-SMS-13 Operational or organisational significant changes in 2012;
- 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 in 2012;

1. The RSC had no experience during 2012 regarding;
   - Decisions taken by the proposers on the level of significance of a change (e.g. too lax)
   - Applications of the risk management process by the proposers
   - Involvement of assessment bodies
   - Interface management
2. There is no procedure (e.g. questionnaire) that allow RUs and IMs to express their experiences on the EC regulation on CSM on risk assessment;
3. There has been no revision of NSRs to take into account the EC regulation on CSM on risk assessment.

I ALTERNATIVE MEASURES THROUGH DEROGATIONS REGARDING ECM CERTIFICATION SCHEME (APPLICABLE FROM 2013)

Information on the derogations, decided in accordance with article 14a(8) of Directive 2008/110/EC /5/.

N/A for 2012. In 2012, the RSC was processing an application from Iarnród Éireann to become certified as an ECM.

J NSA CONCLUSIONS ON THE REPORTING YEAR – PRIORITIES

In 2013 the RSC will continue to deliver on its responsibilities under European and National legislation during 2013, and the areas that will be the focus of particular attention are as follows:

- On-going technical support to the DTTAS in the amendment of railway safety legislation to ensure compliance with EU Directives;
- Continuing professional development of graduate engineers so as to avert any shortfall in specialist technical human resources that might impair the RSC in delivering on its obligations under EU and national legislation;
- Completion of the conformity assessment of separate Iarnród Éireann safety management systems (SMS) for IM and RU, and subsequent safety authorisation of IM and safety certification of RU business units;
- Continued work on railway safety and interoperability legislation and technical rules with the objective of achieving complete conformity with EU Directives;
- Legal separation of the RAIU from the RSC so as to fully comply with EU requirements;
- On-going development of processes and procedures in conformity with ISO 17020 requirements to enable RSC achieve accreditation.

During 2013 the RSC will continue to focus on its mission "To advance the safety of railways in Ireland through diligent supervision and enforcement".

K SOURCES OF INFORMATION

RSC Annual Report 2012

L ANNEXES

ANNEX A: Railway Structure Information

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

ANNEX C: CSIs data – definitions applied

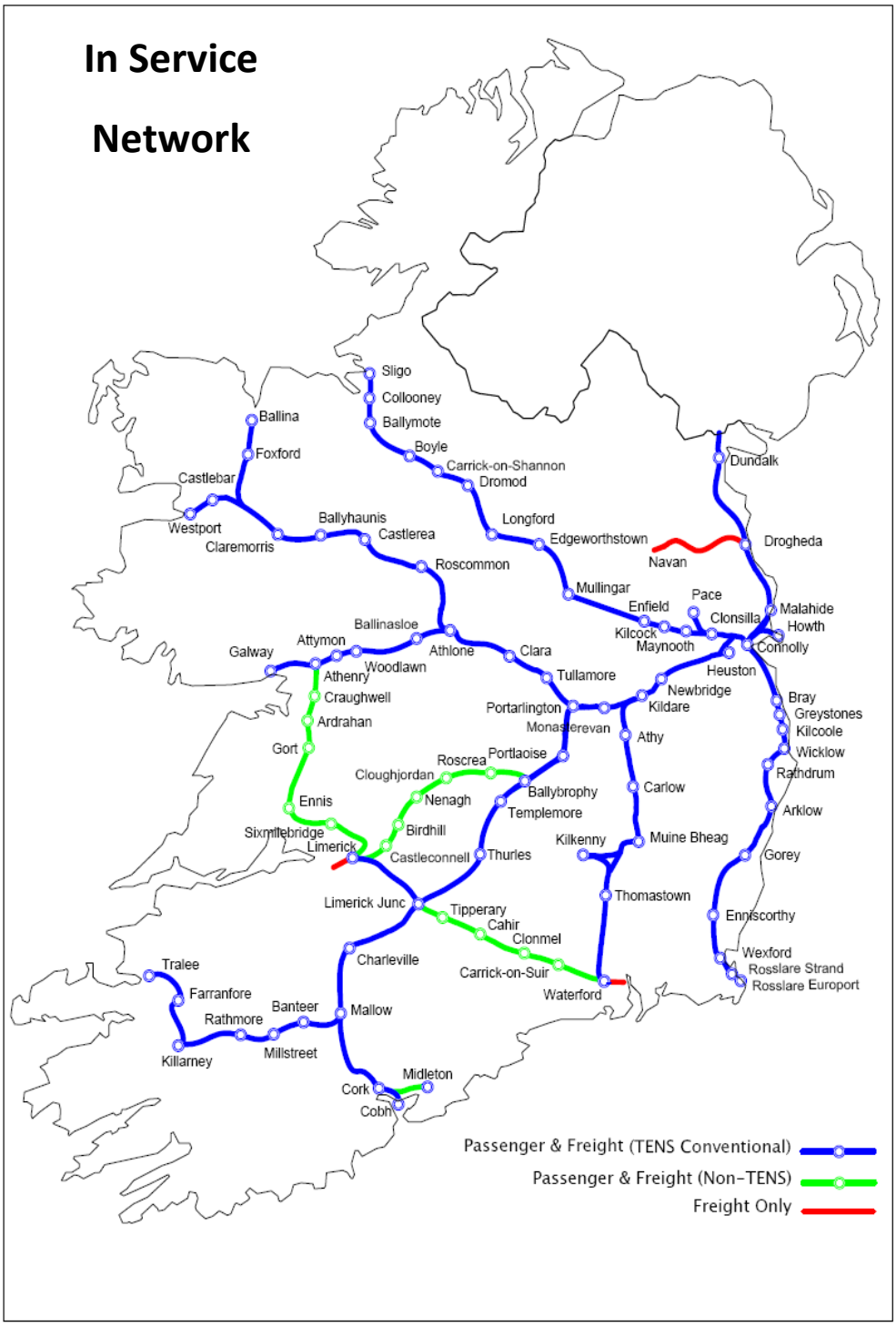
ANNEX D: Important changes in legislation and regulation

ANNEX E: The development of safety certification and authorisation – numerical data

ANNEX A: RAILWAY STRUCTURE INFORMATION

A.1. Network map

The national network in service in 2012 was the same as in 2011.



A.2. List of RUs and IMs

A.2.1. IMs

Table 8 – List of IMs

Name	Address	Website/Network Statement Link	Safety Authorisation (Number/Date)	Start date commercial activity	Total Track Length/Gauge	Electrified Track Length/Voltages	Total Double/Simple Track Length	Total Track Length HSL	TPS equipment	Number of LC	Number of main (light) signals
Iarnrod Eireann Infrastructure	Connolly Station, Amiens St., Dublin 1	www.irishrail.ie	IE 21 2011 0001/ 31.01.2011		2165 km (lines in traffic) gauge 1600mm	99 km 1500v DC	461 km / 1222 km lines in traffic	0	CAWS & ATP	1015 level crossings	1838 running signals 476 shunt signals

Abbreviations:

HSL = High Speed Line (definition according to Directive 2008/75/EC)

ATP = Automatic Train Protection for Dublin suburban rail EMUs

LC = Level Crossing

A.2.2. RUs

Table 9 – List of RUs

Name	Address	Website	Safety Certificate 2001/14/EC (Number/Date)	Safety Certificate A-B (2004/49/EC (Number/Date)	Start date of commercial activity	Traffic Type (freight, etc.)	Number of Locomotives	Number Of Railcars/ Multiple Unit-sets	Number of Coaches/Wagons	Number of train drivers/safety crew	Volume of passenger transport	Volume of freight transport
Iarnrod Eireann	Connolly Station, Amiens St., Dublin 1	www.irishrail.ie		IE 11 2011 0001 dated 31.01.2011 IE 12 2011 001 dated 31/01/2011		Passenger & Freight	50 Diesel (excluding OTMs)	414 DMU 154EMU	81coaches, 450 wagons (incl. mtce. wagons)	508 drivers 10 passenger guards 9 ballast guards	36.919 million passenger journeys	0.567million tonnes

Northern Ireland Railways Company Limited	Railway Preservation Society of Ireland
3 Milewater Road, Belfast BT3 9BG, Northern Ireland	Docklands Innovation Centre 128-130 East Wall Road Dublin 3
	www.steamtrainsireland.com
UK 11 2008 554 IE12 2012 001	IE 11 2011 0002 dated 01/07/2011 IE 12 2011 0002 dated 01/07/2011
Passenger	Passenger
5 Diesel	10 Steam and 4 Diesel
23 class 3000	
9 Mk II coaches 14 Alstom De	48
xx drivers	Drivers provided by Iarnrod Eireann
xx.x million passenger journeys	
0	0

ANNEX B: ORGANISATION CHART(S) OF THE NSA

B.1. Chart: Internal organisation

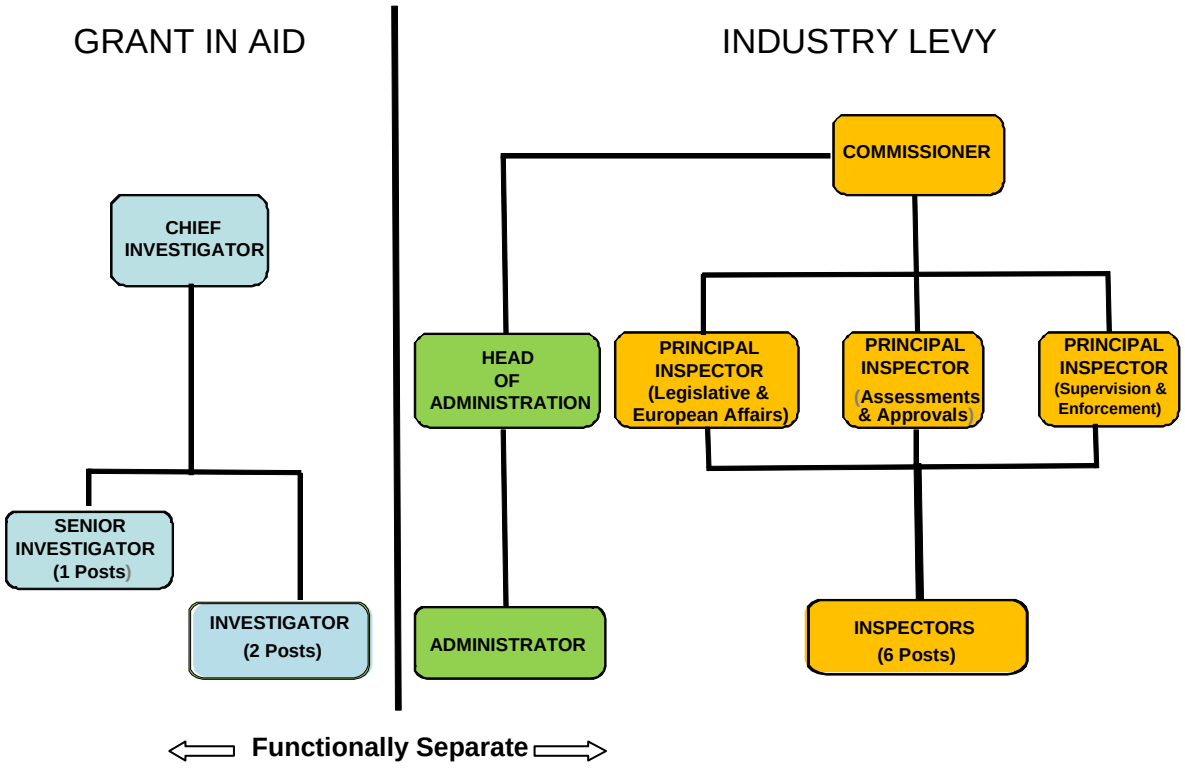


Figure 1 – Internal Organisation

B.2. Chart: Relationship with other National Bodies

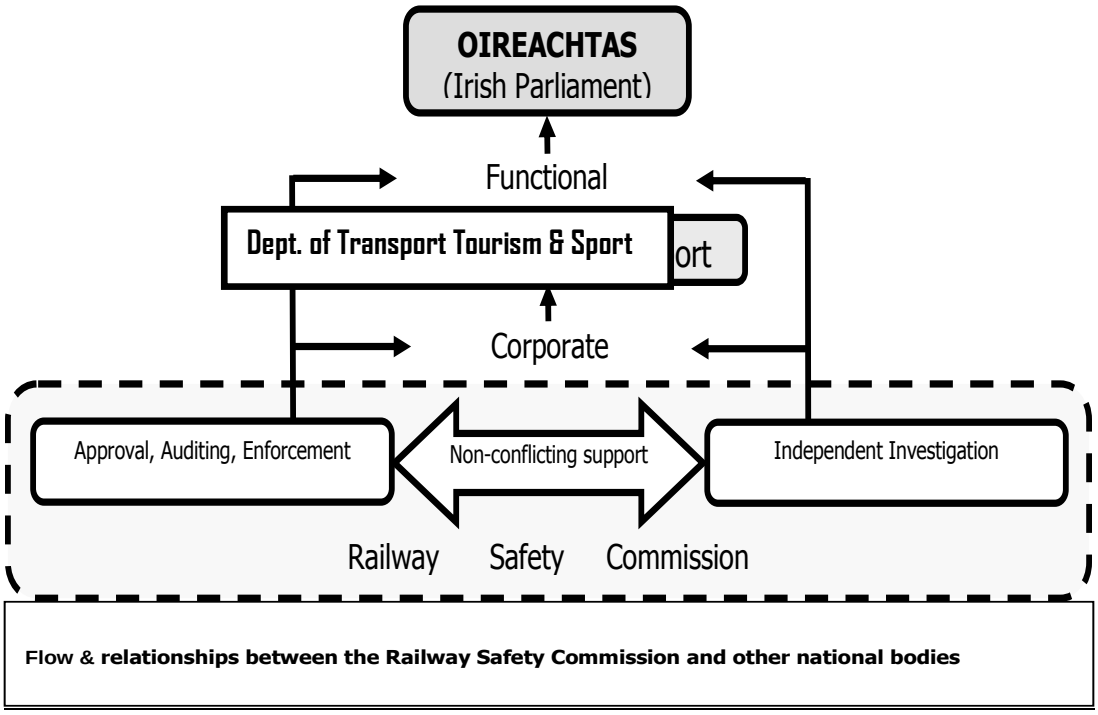


Figure 2 – Relationship with other National Bodies

ANNEX C: CSIs DATA – DEFINITIONS APPLIED

C.1. CSIs Data[1]

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.

Level crossings:

For the purpose of this Report, railway level crossings are classified in accordance with the latest advice from the ERA Safety Performance Working Group. In particular, eighteen level crossings where a

[1] Data in charts are just examples.

semaphore signal is operated by the action of the gate are reclassified as automatic, as the signal protection is not interlocked.

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

CSI	Common Safety Indicator
ERA	European Railway Agency
LC	Level Crossing
m	10^6
bn	10^9
NSA	National Safety Authorities

RS	Rolling Stock
RU/IM	Railway Undertaking and Infrastructure Manager

ANNEX D: IMPORTANT CHANGES IN LEGISLATION, REGULATIONS AND ADMINISTRATIVE PROVISIONS

	Legal reference or Notif-IT code	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 SMS and safety certification of RUs	NONE			
Rules concerning requirements on SMS and Safety Authorisation of IMs	NONE			
Rules concerning requirements for wagon keepers	NONE			
Rules concerning entities				

in charge of maintenance				
Rules concerning requirements for maintenance workshops	NONE			
National safety rules for RUs* and safety rules for other railway actors				
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 RUs, registration systems and requirements	NONE			

on testing procedures				
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 IMs and RUs	NONE			
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness	NONE			

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 authorisation of placing into service infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking,	NONE			

level crossing, platforms, etc.)				

*If there are rules for IMs similar as national safety rules for RUs (type 1, type 4 to type 7 national safety rules in the annex II of the RSD) /1/ these should be reported.

Information on operating rules, staff requirements an accident investigation should include information on national rules for the transport of dangerous goods.

Railway Safety Commission

ANNEX E: THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION – NUMERICAL DATA

E.1 Safety Certificates according to Directive 2004/49/EC

E.1.1 Number of Part A safety certificates issued in the reporting and previous years and remain valid at the end of 2012.

Part A	**Total number of certificates**	**Number of certificates Part A in ERADIS**
Number of existing certificates in ERADIS which were valid at the end of 2012.	5	2
E.1.1. Number of safety certificates Part A issued in the reporting and in previous years and remain valid at the end of year 2012	2	2

E.1.2 Number of Part B safety certificates issued in the reporting and in previous years by Ireland and remain valid in 2012.

Part C		**Total Number of Certificates**	**Number of Certificates Part B in ERADIS**
Number of existing certificates in ERADIS which were valid at the end of 2012.		5	3
E.1.2. Number of safety certificates Part B issued in the reporting and in	Number of certificates Part B, for which the Part A has been issued in your Member-State	2	2

previous years by your member state and remain valid in 2012.	Number of certificates Part B, for which the part A has been issued in another Member-State	1	1

E.1.3 Number of new applications for Part A safety certificates submitted by railway undertakings in 2012

Applications for Part A certificates received in the current reporting year for new certificates or existing certificates which need to be renewed or updated/amended		**A**	**R**	**P**
E.1.3. Number of new applications for Safety Certificates **Part A** submitted by Railway Undertakings in 2012.	New certificates	0	0	0
	Updated/amended certificates	0	0	0
	Renewed certificates	0	0	0

E.1.4 Number of new applications for Part B safety certificates submitted by railway undertakings in 2012.

Applications for certificates Part B received in the current reporting year for new certificates or existing certificates which need to be renewed or updated/amended			**A**	**R**	**P**
E.1.4. Number of new applications for Safety Certificates **Part B** submitted by Railway Undertakings in year 2012	Part A certificates issued in Ireland	New certificates	0	0	0
		Updated/amended certificates	0	0	0
		renewed certificates	0	0	0
	Part A certificates issued in another Member-State	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.1.5 and E.1.6 Number of Part A and Part B safety certificates revoked in current reporting year

Numbers of certificates in ERADIS revoked at the end of 2012.	**Total number of revoked certificates in the year 2012**	**Number of revoked certificates in ERADIS (which were revoked in 2012)**
E 1.5 Number of certificates Part A revoked in the current reporting year	0	0
E 1.6 Number of certificates Part B revoked in the current reporting year	0	0

E.1.7 List of countries where RUs applying for a Part B safety certificate in Ireland have obtained their Part A safety certificate

E.1.7. List of countries where RUs applying for a Safety Certificate Part B in Ireland have obtained their Safety Certificate Part A	
Name of RU	Member-State where Safety Certificate Part A was issued
NIR Translink	UK

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

E.2.1 Number of valid safety authorisations issued to IMs in the reporting year and in previous years and remain valid at the end of 2012.

Please ensure that the information provided in this table is in line with the information provided in section "G. Supervision of Railway Undertakings and Infrastructure Managers "	Total number of safety authorisations		
E.2.1. Number of valid Safety Authorisations issued to Infrastructure Managers in the reporting year and in previous years and remain valid at the end of 2012.	1		

E.2.2 Number of applications for safety authorisations submitted by IMs in 2012.

Guidance: Please provide input on applications for Safety Authorisations received in the current reporting year for new authorisations or existing authorisations which need to be renewed or updated/amended		A	R	P
E.2.2. Number of applications for Safety Authorisations submitted by Infrastructure Managers in year 2012	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.2.3 Number of safety authorisations revoked in the current reporting year

E 2.3 Number of Safety Authorisations revoked in the current reporting year	0

E.3. Procedural aspects – Part A safety certificates

		New	Updated /amended	Renewed
The average time after receiving of the application with the required information and the final delivery of a Safety Certificate **Part A** in year 2012 for Railway Undertakings	N/A			

E.4. Procedural aspects – Part B safety certificates

		New*	Updated /amended	Renewed
The average time after receiving the application with the required information and the final delivery of a Safety Certificate **Part B** in year 2012 for RUs	Where the part A has been issued in your Member-State N/A			

	Where the part B has been issued in another Member-State N/A			

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

E.5. Procedural aspects – safety authorisations

	New*	Updated/Amended	Renewed
The average time after receiving the application with the required information and the final delivery of a Safety Authorisation in year 2012 for IMs.	N/A		

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