



ANNUAL REPORT 2023

AN COIMISIÚN UM RIALÁIL IARNRÓID COMMISSION FOR RAILWAY REGULATION

Commission for Railway Regulation Temple House Temple Road Blackrock A94 Y5W5 County Dublin Ireland

www.crr.ie +353 1 206 8110 info@crr.ie



COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

Contents

- 2 Report of the Commissioner
- 6 Organisational Structure and Role
- 11 Strategy of the Commission for Railway Regulation
- 14 Report of Principal Inspector Authorisation to Place in Service and Conformity Assessment
- 25 Report of Principal Inspector Compliance Supervision and Enforcement
- 40 Report of Head of Corporate Governance and Regulation
- 46 Report on Railway Regulation
- 49 National and European Legislation Framework Developments
- 51 Commissioners Comprehensive Report to the Minister
- 54 Appendices

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

REPORT OF THE COMMISSIONER



To Minister Eamon Ryan, Minister for Transport

Minister,

The Commission for Railway Regulation (CRR) is pleased to submit its annual report for 2023.

This is our final report under our current Statement of Strategy 2021 – 2024. This most recent Strategy included a period of significant change in all workplaces due to the impact of COVID-19. The Commission for Railway Regulation (CRR) prepared an extensive programme of work for 2023 linked to our strategy that encompassed the full scope of our functions as detailed in Section 3 of this report.

The specific activities undertaken are directed by statute and the CRR's own risk assessment of entities and their activity, to ensure the continued safe operation of the railway, tramways, and cableway networks in the State. This included the conformity assessment of safety management systems, the authorisation to place in service of infrastructure subsystems and rolling stock, the licencing of train drivers, the assessment of designated bodies, as well as the ongoing supervision of all entities and enforcement where necessary to ensure compliance.

For the heavy rail and light rail sectors combined, there was a total of 94.2 million passenger journeys. This is an increase of 26.5% on the 2022 figure. While the combined total figure is not yet exceeding the peak passenger journeys pre-pandemic, the upward trend is a significant recovery post the lifting of all pandemic restrictions.

The CRR issued 52 Letters of Acceptance (LoA) under its authorisation to place in service function which related to subsystems, infrastructure, signalling and rolling stock. Included in these were two Stage 2 (Preliminary Design) LoAs relating to Dart+ Costal North and Dart+ West and a Stage 1 (Concept Design) LoA relating to Metrolink. An additional 13 LoAs relating to interim, or service operation of infrastructure were also issued. The strategically important new National Train Control Centre received a Stage 3 (Detailed Design) LoA, as did the European Train Control System (ETCS) Level 1 project covering the Howth Branch, which is essentially the test section for the later implementation on the Drogheda to Greystones corridor, before national rollout. Iarnród Éireann Railway Undertaking had its safety certificate renewed in 2023.

It is a requirement that all train drivers hold a valid licence to operate a train on the network. The train driver's licencing regime is overseen and operated by the CRR and in 2023, 59 new licences were issued.

The CRR developed its 2023 supervision programme with a range of activities designed to ensure that the key criteria of the safety management systems were assessed. This approach included audits, inspections, post occurrence activities, safety performance meetings and the follow up on representations. The extent of these activities is directed based on the risk profile of the entities we regulate. Our overall approach has been, and continues to be based on, support, advice, encouragement, and when necessary, enforcement.

Six audits were completed in 2023, and a further four audits were also commenced. The following outcomes were recorded for five of the audits completed; 12 minor non-compliances recorded, and action was required in relation to a further 18 areas.

3

In 2023, the CRR commenced a total of 45 inspections across all railway organisations and 32 inspections were completed. 10 of these were from inspections commenced in 2022 and the remaining 22 from inspections commenced in 2023. The completed inspections identified one major non-compliance and five minor non compliances. There were a further 23 instances where the CRR required action to be taken by the regulated entity, where there was the potential for non-compliance to arise unless such action was taken.

In 2023, CRR inspectors on two occasions issued a direction to a railway organisation for an Improvement Plan, in accordance with section 76 of the Railway Safety Act 2005, for activity involving, or likely to involve, a risk to the safety of persons. In all cases where the regulated entities are required to take corrective actions the closure of these is monitored by the CRR.

The CRR received five investigation reports from the Railway Accident Investigation Unit (RAIU) in 2023. These reports contained a total of 47 safety recommendations. Safety recommendations from the RAIU are addressed to the CRR as the responsible authority for the oversight of their implementation, and the CRR has directed them to the relevant railway organisation or other body that is required to implement them.

The CRR received 41 representations which raised safety concerns in relation to the rail sector. Eight of these related to safety of infrastructure, eight related to the safety of rolling stock, 2 related to station safety and 11 related to the safety of train operations. Safety of railway working made up a further 12 representations. In addition to these, 16 other requests for information were received from a number of regulatory bodies/agencies. All representations are actioned by the CRR and receive a high degree of priority.

Railway Organisations are required to submit their own individual annual safety reports to the CRR each year. All reports covering 2022 were submitted to the CRR in 2023. The CRR analysed the data received and published its amalgamated Safety Performance Report for 2022 on its website in December 2023. The safety related data that has been provided to date by railway organisations for 2023 is provided within this annual report. As in previous years this data will be compiled with the full safety data for 2023 and published later this year.

The overall safety performance of the Irish heavy railway sector continued to be broadly positive in 2023, when compared to previous years Safety Performance Reports and European statistics.

As the Independent Monitoring Body for the Infrastructure Manager Multi Annual Contract (IMMAC) between larnród Éireann Infrastructure Manager (IÉ-IM) and the Minister for Transport, the CRR reported on a quarterly and annual basis on the performance indicators within the contract. No persistent failure to perform findings were made by the CRR. The CRR engaged with all parties to the contract as part of the commencement of the review of the next IMMAC.

In line with the Code of Practice for the Governance of State Bodies, the oversight and performance delivery agreements 2021 – 2024 between the CRR and the Department of Transport (DoT) were reviewed and adhered to. New agreements were also finalised with the DoT for 2024 – 2026.

The overall funding required for the CRR to carry out its functions in 2023 was &2.793m. The CRR receives most of its annual funding through the statutory levy that it places on the entities that are subject to regulation. In 2023, the levy required was &1.58m. The overall levy increased by approximately 25% in 2023, this was primarily due to increased staff costs and a lower level of reserves that the CRR could offset against the levy compared to 2022. The balance of the annual funding for 2023 was through two other primary sources, Grant in Aid from the DoT which was &0.754m and specific statutory based fees that the CRR may charge for Designated Body recognition, cableway authorisation, and train driver licencing.

To ensure it has a full understanding and awareness of the continued development of the European legal and technical framework governing the operation of the European Rail Network, the CRR were active participants in over 50 meetings chaired by the European Commission, DG-MOVE and the European Railway Agency (ERA). In addition, the CRR continued to provide information on the update of the legislative framework to the regulated entities through their nominated point of contact.

For the first time post COVID, the CRR also hosted a stakeholder forum day with the railway sector. There were over 100 attendees present with representatives from larnród Éireann, Transdev, Rhomberg Sersa Ireland, Northern Ireland Railways, Transport Infrastructure Ireland, the Railway Preservation Society of Ireland, the DoT and the Department for Infrastructure of Northern Ireland. The day focused on SMS Assessment, Infrastructure Approvals, Vehicle Authorisation, and Supervision. The day proved highly valuable as a return to face-to-face meetings and gave an opportunity for the sector to network and share experience.

The CRR continues to ensure that it meets the requirement of the Code of Practice for Governance of State Bodies. The Comprehensive Report to the Minister, required by the Code of Practice, is included in Section 10 of this annual report and covers new public body duties in effect in 2023.

The CRR has a sanction for 17 staff and at the end of 2023, following one retirement and one resignation, the CRR currently has a compliment of 15 staff. Recruitment will take place in 2024.

It is of note, that in December 2023, the CRR were designated by Government as the Competent Authority under the EU Network and Information Security Directive – NIS 2 Directive for Transport – Rail. This is a new area of legislative responsibility, and the CRR is aware that it faces a challenge to develop new competencies to take on this role.

We will continue to have a strong focus to ensure that the CRR operates efficiently and competently. We will continue to work with the sector and stakeholders, to ensure safe and sustainable rail transport that meets the needs of our society.

I acknowledge the professionalism and continued dedication of the Commission's staff that enables the CRR to fulfil our functions. I extend my thanks to each member of the CRR staff and acknowledge their individual continuing commitment, and hard work throughout the year.

Brian Higgisson Commissioner COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

ORGANISATIONAL STRUCTURE AND ROLE





Management team and organisational structure



Brian Higgisson

January - June 2023

Principal Inspector

Service and Conformity





Principal Inspector

and Enforcement



tor	Inspector
tor	Inspector
tor	Inspector
tor	Inspector
	Inspector
	Inspector
	Inspector







Caitríona Keenahan

Higher Executive Officer

Post June 2023



Emmett Davis

Role of the Commission for Railway Regulation (CRR)

The CRR was established on 1st January 2006 under the provisions of the Railway Safety Act (RSA) 2005. An overview of the current functions of the CRR and the legislative framework underpinning these is provided below.

The CRR's primary areas of responsibility under legislation relate to heavy rail, light rail, and cableways. Heavy rail refers to the larnród Éireann Infrastructure Manager network and the Railway Undertakings that operate on it. Heavy rail is regulated both through the RSA 2005 and EU legislation. Light rail refers to the Dublin Light Rail System (LUAS) and is regulated through the 2005 Act. Cableways are regulated through transposed EU legislation.

In addition, the CRR also has a role in relation to heritage railways and more recently, velorail.

Under RSA 2005, the CRR has three principal functions: (a) to foster and encourage railway safety; (b) to enforce this Act and any other legislation relating to railway safety; and (c) to investigate and report on railway accidents and incidents for the purposes of determining compliance with safety management systems and safety targets.

Heavy and light rail

Commission

The Railway Safety Act No 31 of 2005 (as amended) established the Railway Safety Commission (now the CRR). The Act gave three principal functions, as indicated above, relating to rail systems and the powers to fulfil these functions including the use of supervision and enforcement. The principal tasks of the CRR are, (1) the assessment and certification of railway organisations safety management systems, (2) the approval of new/significantly modified railway infrastructure and rolling stock and (3) the ongoing supervision of the application and effectiveness of railway organisations safety management systems.

In relation to tasks 1 and 2 above in the heavy rail domain, it should be noted that most approvals/ authorisations are covered by European legislation (see below). In light rail, the CRR assesses safety management systems and approves new infrastructure and rolling stock in accordance with national legislation, namely the RSA 2005.

Heavy rail

National Safety Authority (NSA)

SI 476 EU (Railway Safety) Regulations 2020 gives effect to Council Directive (EU) 2016/798 (Railway Safety Directive) and under this, the CRR is established as the National Safety Authority (NSA) in the State. This is for the purpose of ensuring compliance with the Directive and associated Regulations, including safety certification and authorisation, maintenance of vehicles, supervision, and enforcement.

SI 477 EU (Interoperability of the Rail System) Regulations 2020 gives effect to Council Directive (EU) 2016/797 (Interoperability Directive) and under this the CRR is established as the NSA competent for the railway system in the State for the purposes of the Directive and these Regulations, including the correct implementation of the Technical Specification for Interoperability (TSI), a significant number of which were updated in 2023, placing on the market interoperability constituents and mobile subsystems, authorisation for placing in service fixed installations, upkeep of the national vehicle register, and supervision and enforcement.

Certification bodies for Entities in Charge of Maintenance (ECM)

SI 476 2020 gives effect to Council Directive (EU) 2016/798 (Railway Safety Directive) and additionally sets out the legal framework for ECMs. People or organisations responsible for the safe maintenance of railway vehicles on the heavy rail network are known as Entities in Charge of Maintenance (ECMs).

Regulation (EU) 2019/779 lays down the detailed provisions on a system of certification for ECMs pursuant to Directive (EU) 2016/798. ECM certification may be performed by an accredited or recognised body or by the NSA.

Regulatory body

SI 249 EU (Regulation of Railways) Regulations 2015 (as amended by SI 398 2020) gives effect to Council Directive EU 2012/34 as amended by EU 2016/2370 on a single European railway area. This established the CRR as the regulatory body for the purpose of appeals or complaints relating to infrastructure capacity, access charges, the network statement and monitoring competition.

Independent monitoring body

The legislative framework for the Regulatory Body function above, also established the CRR as the Independent Monitoring Body for the purpose of monitoring the contractual agreement between larnród Éireann Infrastructure Manager and the Minister, including monitoring the performance of the Infrastructure Manager, arbitration in the event of dispute, approval of the performance monitoring system, and to report to the Minister on its monitoring of performance.

Licensing authority

The legislative framework for the Regulatory Body function above also established the CRR as the licencing authority for the purpose of assessment of licence applications and the issuing of licences to railway undertakings.

Competent authority

SI 399 EU (Train Driver Certification) Regulations 2010 gives effect to Council Directive 2007/59/EC on the certification of train drivers operating locomotives and trains on the railway system in the Community. It established the CRR as the competent authority for the purpose of assessing licence applications and the issuing of licences to train drivers, and the recognition of train driver training and examination centres.

SI 651 EC (Transport of Dangerous Goods by Rail) Regulations 2010 (as amended) gives effect to Council Directive 2008/68/EC (as amended) on the inland transport of dangerous goods. It established the CRR as the competent authority for the purposes of ensuring compliance with Regulations concerning the International Carriage of Dangerous Goods by Rail (RID).

In December 2023, the CRR was designated by Government to be the National Competent Authority for Transport – Rail under EU Directive 2016/1148, concerning measures for a high common level of security of network and information systems across the Union, the Network and Information Security Directive (NIS2). The relevant legislation confirming the functions and to bring this into effect are in the process of being drafted.

Recognition body

SI 477 2020 gives effect to Council Directive (EU) 2016/797 (Interoperability Directive) and under this the CRR is established as the organisation responsible for the recognition of Designated Bodies (DeBo) in the State. A DeBo performs conformity assessment for compliance of new infrastructure and rolling stock against National Rules (NR).

Cableways

Authorising body

SI 543 EU (Cableway Installations) Regulations 2020 gives effect to Regulation (EU) 2016/424 on cableway installations and established the CRR as the body in the State for authorising construction and entry into service of cableway installations or their modification.

Market surveillance authority

SI 543 EU (Cableway Installation) Regulations 2020 also gives effect to Regulation (EU) 2016/424 of the European Parliament and established the CRR as the market surveillance authority for cableway subsystems and components.

Rail entities subject to regulation

The following entities were subject to regulation by the CRR in 2023:

- Iarnród Éireann Infrastructure Manager (IÉ-IM)
- Iarnród Éireann Railway Undertaking (IÉ-RU)
- Transdev (LUAS operator) Railway Organisation
- Rhomberg Sersa Ireland Limited (RSIE)- Railway Undertaking
- Northern Ireland Railways (NIR) Translink- Railway Undertaking
- Transport Infrastructure Ireland (TII) Railway Organisation
- Bord na Móna (BNM) Industrial Railway
- Railway Preservation Society of Ireland (RPSI) Railway Undertaking
- Heritage Railways (seven operational, Appendix E)
- IRD Kiltimagh CLG Kiltimagh Velorail.

Passenger journeys

In 2023, there has been a steady and marked increase in passenger numbers, such that they are nearly back to pre-COVID levels for larnród Éireann at 46.07 million passenger journeys, while Transdev have exceeded previous level with 48.2 million passenger journeys in the year.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

STRATEGY OF THE COMMISSION FOR RAILWAY REGULATION



The CRR's sixth Statement of Strategy (2021 – 2024) under the Railway Safety Act 2005 in 2021 has entered its final year.

In the time frame for this Strategy, actions to drive the policy decisions taken by Government, such as those relating to sustainability and reduced carbon emissions have been actively progressed. The development of the rail transport system, recognising the important role that it plays in quality of life, economic activity, and the environment is challenging but of clear importance.

Strategy 2021-2024

Mission

The CRR is committed to advancing railway safety, through effective regulation, and by fostering and encouraging the continuous improvement in safety management by railway organisations. It advocates the participation of all stakeholders in the further development of Ireland's rail sector so that it is a safe and efficient mode of transport that benefits our society.

Vision

Safe and sustainable railways that provide efficient and convenient transport for society.

Values

- Integrity
 We have moral courage, are honest and responsible in our approach
- Respect
 We respect each other and our stakeholders
- Independence

Our decision making is transparent and free from bias and influence

Excellence

We are diligent, professional and strive for continuous improvement.

Strategic priorities

Priority: rail safety

Regulate and promote the continuous improvement of safety performance by railway organisations.

Priority: rail regulation

Effective regulation and monitoring of the Infrastructure Manager in relation to its funding of and expenditure on asset management and network access.

Priority: support to government

To support government public transport policy initiatives directed at the needs of society by ensuring their safe implementation through effective and efficient regulation.

Priority: communication with stakeholders

Promote awareness and understanding of current and emerging risks and developments in national and European railway legislation and guidance.

Priority: our organisation

Be a high performing organisation delivering quality and value in what we do.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

REPORT OF PRINCIPAL INSPECTOR AUTHORISATION TO PLACE IN SERVICE AND CONFORMITY ASSESSMENT



Authorisation to Place in Service (APIS)

Railway Organisations typically require an 'Authorisation to Place in Service' (APIS) when they want to bring into service or operation new fixed installations such as infrastructure, e.g., a new bridge or station. Similarly, an Authorisation (VA) is required when a railway organisation wishes to bring into service new vehicles (trains). Significant upgrades or renewed assets may also require an APIS.

The requirement for the CRR to perform Authorisation to Place in Service on railway systems is based on European (EU) and National Legislation. The main EU legal requirements are:

- The Interoperability Directive (EU) 2016/797; and
- The Railway Safety Directive (EU) 2016/798.

These are supported by numerous other legal instruments such as Commission Implementing Regulation (EU) 2018/545 establishing practical arrangements for vehicle authorisation and the common safety method for risk evaluation and assessment EU/402/2013.

National requirements are governed by the RSA 2005 as amended. EU and national requirements apply to the heavy rail system while only national requirements apply to the LUAS light rail system, heritage, industrial railways and Velorail systems.

The CRR have produced several guidelines to assist railway organisations when making an application, explaining what is required, and how it should be presented. The principal CRR guidance documents in respect of APIS & VA activities are:

- CRR-G-009 in respect of heavy rail applications; and
- CRR-G-032 in respect of light rail applications.

Most railway projects take several years to become operational. As projects evolve, railway organisations are required to submit applications for approval. The CRR has a 6-stage process for railway organisations to follow, being cognisant of best practice guidance such as standard EN 50126 – railway applications – the specification and demonstration of reliability, availability, maintainability, and safety. The 6 stages of a project's approval path are:

Stage 1 Concept

Stage 2 Preliminary Design

Stage 3 Detailed Design

Stage 4 Testing

Stage 5 Interim Operation

Stage 6 Service Operation REPORT OF PRINCIPAL INSPECTOR AUTHORISATION TO PLACE IN SERVICE AND CONFORMITY ASSESSMENT

Not all projects need to start at concept stage, for example it is typical that new bridges or simple stations commence the process by submitting a combined Stage 1-3 application. Conversely complex projects such as Dart+ or elements of the Cork Area Commuter Rail (CACR) project include 'concept stage' applications.

Following the review of an application for APIS, and provided that the application is complete and valid the CRR will issue a letter of acceptance for that application. In 2023, fifty-two letters of acceptance (49 – Infrastructure/Signalling, 3 Rolling Stock) were issued as part of the APIS process. The full list of letters of acceptance, by project, issued by the CRR in 2023, is provided in Appendix A and further details of a sample of these are provided below. It should be noted that in some instances a project may have been granted an extension to their letter of acceptance owing to elements (typically documentation) not being available by expected delivery dates. Consequently, not every unique letter of acceptance is listed.

APIS - Infrastructure

DART+ Programme

The DART+ Programme comprises a series of projects that will enhance the rail network for Dublin, expanding the heavy rail electrified commuter network from the existing c.50km to c.150km. The following outlines the APIS status of each project as of 31 December 2023.

- DART+ Coastal North involves the extension of electrification from Malahide to Drogheda.
 Following an application from IÉ, a Stage 2 Preliminary Design letter of acceptance was issued in March 2023 in respect of associated battery electric train charging infrastructure at Drogheda.
- DART+ Coastal South involves an upgrade to the electrified line between Dublin Connolly and Greystones. As previously advised in our 2022 report, this upgrade will include removal of existing level crossings, addressing constraints to support increased train frequency and additional turnback facilities. A Stage 1 – Concept letter of acceptance was issued in March 2022.
- DART+ West covers the line to Maynooth and includes city centre enhancements, new electrification and re-signalling installations and other infrastructure upgrades. Following an application from IÉ, a Stage 2 – Preliminary Design letter of acceptance was issued in May 2023.
- DART+ South West covers the electrification of the line between Heuston and Hazelhatch and Heuston to Glasnevin where there is to be an interchange station with Metrolink. Following an application from IÉ, a Stage 1 – Concept letter of acceptance was issued in May 2021.

Metrolink

The Metrolink Project is the planned development of an urban railway service operating between Swords in north Co. Dublin and Charlemont, just south of Dublin city centre. It will link with Dublin Airport, Irish Rail, DART and LUAS stations and other transport modes. Metrolink will provide a segregated, high speed, high capacity, high frequency, modern and efficient public transport service for people travelling along the Swords/Airport to City Centre corridor in Dublin. Following an application from Transport Infrastructure Ireland (TII), a Stage 1 – Concept letter of acceptance was issued in April 2023.

Bridges/platforms/stations

In 2023, the CRR issued eight letters of acceptance (Stage 3 – Detailed Design) to IÉ-IM in relation to new authorisation applications for bridges, platforms, and stations projects. These projects are:

- Kishogue Station maintenance, repairs and revision to façade
- New pedestrian overbridge at Banteer Station OBT20B
- New pedestrian/cycle overbridge in Donabate OBB32B
- New station with pedestrian overbridge at Woodbook on the Shanganagh Junction to Wexford Line
- Redevelopment of Ceannt Station Galway Work Package 1.0
- New road overbridge at Carcur on the Dublin to Rosslare Line OBR419A
- New pedestrian/cycle overbridge at Saunders Bridge Mullingar
- Replacement pedestrian overbridge at Clarin on the Waterford to Limerick Line.

Additionally, the CRR issued letters of acceptance for Stage 5 – 'Interim Operation' for the following more advanced projects:

- New pedestrian overbridge at Gormanstown Station OBB66A
- New station with pedestrian overbridge at Pelletstown on the Dublin to Maynooth line.
- New pedestrian overbridge at Carlow Station OBW65A
- New pedestrian overbridge at Dalkey Station OBR111A
- New pedestrian overbridge at Edgeworthstown Station OBS430A
- New pedestrian overbridge at Ennis Station OBE73E
- New road overbridge on the Dublin to Waterford Line OBW39A
- New platform with pedestrian overbridge at Limerick Junction Station.

Lastly, the CRR issued letters of acceptance for Stage 6 – 'Service Operation' for the following completed projects:

- New road overbridge on the Athlone to Wesport Line OBM779D
- New road overbridge on the Athlone to Wesport Line OBM782M
- New pedestrian overbridge at Edgeworthstown Station OBS430A
- New road overbridge on the Dublin to Waterford Line OBW39A
- New pedestrian overbridge at Ennis Station OBE73E.

REPORT OF PRINCIPAL INSPECTOR AUTHORISATION TO PLACE IN SERVICE AND CONFORMITY ASSESSMENT

National Train Control Centre

larnród Éireann's operations extend to over 2,400 track km, operating approximately 750 passenger trains per day, and currently carrying c. 46.07 million passengers annually. Managing approximately 70% of these train movements is the job of a team of railway professionals working in Centralised Traffic Control (CTC) at Connolly Station. Over recent decades, there have been several evolutions in the technology used to control train movements which have enabled Train Control staff to manage larger areas of the network. However, operations at CTC have reached a point where the building and systems are at operational capacity, and do not support the next level of investment and development.

With the support of government IÉ has built a new National Train Control Centre (NTCC) at Heuston Station and has invested in a modern, modular, fully integrated Traffic Management System (TMS), with the eventual capability to re-control all existing signalling on the IÉ network, and to be scalable to allow for future re-signalling projects to be taken under the control of the NTCC.

Following an application from Iarnród Éireann, a Stage 3 – Detailed Design letter of acceptance was issued in December 2023 for the NTCC Systems Design part of the project.

APIS – Signalling and Telecommunications

Iarnród Éireann Global System for Mobile Communications – Railway (GSM-R)

The railway industry requires a high degree of reliability when it comes to communication between train drivers and train controllers given the safety critical tasks they are executing. This project is key to ensuring that this is facilitated. The project comprises the replacement of the current analogue radio system which is used to provide direct communications between train drivers and controlling signalmen/regulators with GSM-R which is presently the industry norm. Phase 1 which covers the DART fleet and DART infrastructure was authorised in 2019.

Phase 2 fixed installations (trackside) covers the Northern line, Sligo line, Rosslare line and the greater Dublin Area. In February 2022 the CRR issued a Stage 4 – Testing letter of acceptance for fixed installations for this phase and following review of the IÉ-IM's latest submission the CRR issued a Stage 5 – Interim Operation letter of acceptance for the project in October 2023.

larnród Éireann Train Protection System (TPS) – Trackside ETCS Level 1 (Class A)

In 2022, IÉ-IM determined that the installation of a generic European ETCS Level 1 (Class A) signaling system was the preferred solution for the future network wide signaling system. Throughout 2023, the TPS project team has prepared detailed designs, undertaken enabling works, performed engineering tests with a particular focus on:

- Integration of the design solution into the existing railway network
- Fine tuning that design solution. This will be achieved through the installation of trackside ETCS Level 1 equipment on the Howth Branch as a small but representative section of the network
- Developing detailed designs for the track from Greystones through Dublin, Drogheda, Dundalk and on to the Border point with the Northern Irish railway network.

Following review of the IÉ-IM's latest submission, the CRR issued a Stage 3 – Detailed Design letter of acceptance for the DG1 phase of the project which covers the Howth Branch in December 2023.

Under the Interoperability Directive (EU) 2016/797 the majority of railway projects such as the introduction of a new signalling system must comply with Technical Specifications for Interoperability (TSIs). These TSIs define the technical and operational standards which must be met by each subsystem, e.g., infrastructure subsystem or energy subsystem or part of subsystem in order to meet the essential requirements and ensure the interoperability of the railway system of the European Union.

However, under Article 7 of the Interoperability Directive Member States may allow an applicant (a Railway Organisation or other organisation) not to apply one or more TSIs or parts of them in a small number of cases.

In June 2023, as part of this project, the CRR received an application from larnród Éireann for the non-application of TSI requirements relating to testing with two on board systems. Specifically this 'non-application' request related to: "The use of two certified Control-Command and Signalling On-board Subsystems from different suppliers to validate the operational test scenarios", as required by Item 6 of table 6.3 'Conformity assessment requirements for a Trackside Subsystem'.

The CRR, representing the Member State, reviewed this submission ensuring it contained sufficient justification for the request, and specifying the alternative provisions that would be applied. The CRR subsequently made a submission to the European Commission on this and at the time of writing a decision is awaited.

Geashill and Portlaoise signalling investment schemes

For both schemes, a Stage 5 – interim operation – APIS was given by the CRR to IÉ-IM covering the renewal of the interlocking and train detection system at Geashill on the Athlone branch and Portlaoise in 2023.

With the installation complete, testing and commission was successfully concluded. A period of interim operation now follows, allowing the project team to achieve the final completion of all necessary technical documentation which is a prerequisite for applying for permanent (full) operation.

REPORT OF PRINCIPAL INSPECTOR AUTHORISATION TO PLACE IN SERVICE AND CONFORMITY ASSESSMENT

APIS - Rolling Stock

larnród Éireann – additional class 22000 intercity diesel multiple units (ICDMU)

The ICDMU fleet entered service between 2007 and 2012. In 2019, IÉ-RU entered into an agreement with Hyundai-Rotem to supply 41 additional intermediate vehicles known as the 'B2' cars with a provision to extend this up to 101 vehicles by 2026. The original ICDMUs were built to UIC Codes, railway group standards and European standards but were not assessed against TSI requirements.

The B2 cars are based on the design of the existing B1 car and are being adapted to include necessary engineering changes brought about by legal obligations concerning exhaust emissions and providing suitable alternatives for obsolete or unavailable equipment and material. There will also be internal modifications to increase the passenger capacity.

In August 2023, as part of this project, the CRR received an application from larnród Éireann for the non-application of a small number of PRM (Persons of Reduced Mobility) TSI requirements.

The CRR reviewed this submission ensuring it contained sufficient justification for the request, and specifying the alternative provisions that would be applied. The CRR made a submission to the European Commission and at the time of writing a decision is awaited.

As advised in our annual report for 2022, the CRR issued a Stage 3 – Detailed Design letter of acceptance to IÉ-RU in August 2022. Work has continued and IÉ-RU have started to take delivery of new vehicles. Iarnród Éireann applied for Vehicle Authorisation through the ERA One-Stop-Shop (OSS) in October 2023 and it is expected that this stage will be authorised in Q1 of 2024.

New DART (EMU/BEMU fleets)

In 2021, IÉ-RU and Alstom concluded a framework agreement allowing for up to 750 new DART vehicles which may be ordered over a ten-year period. An initial order for 95 vehicles comprising six sets of five-car electric trains and thirteen sets of five-car battery-electric trains was placed. In December 2022, a further order for an additional eighteen sets of five-car battery-electric trains was placed, bringing the current order to a combined total of 185 vehicles.

As advised in our 2022 report, the authorising entity for this new rolling stock is ERA. Pre engagement through the OSS commenced in February 2023 and was concluded in June 2023. During this time the CRR provided assessment in regard to vehicle 'area of use' as part of the ERA authorisation process.

Heritage railways

A heritage railway means a person or organisation who only operates train services or railway infrastructure of historical or touristic interest. There are several heritage railways operating within the state from the Finntown Railway and Difflin Lake railway in the north to the Listowel Lartigue and Waterford & Suir Valley Railway in the south. A full listing is provided in Appendix E.

There was some engagement with the Waterford & Suir Valley Railway regarding proposed new works, but no applications were received from any heritage railway in 2023.

All those heritage railways operating have an approved Safety Management System and a number of these will require re-certification in 2024.

VeloRail

VeloRail (or Rail Biking) is an outdoor leisure and recreational tourism activity that is relatively new to Ireland. It consists of pedal powered passenger carts (railbikes) that travel along a railway line. Due to the nature of railbikes and the associated infrastructure, they fall within the definitions under the RSA 2005 and therefore within the scope of the CRR for acceptance.

The CRR have a suite of guidelines, available to assist those seeking to open a Velorail amenity. These cover developing an SMS, bringing new infrastructure into operation and for bringing railbikes into operation.

Currently there is one operational VeloRail system located in Kiltimagh, Co. Mayo. The CRR issued this velorail with its safety management certificate in March 2023.

A second scheme is under development by Bord na Móna who are looking at developing a Velorail amenity at Lough Boora discovery park in Co. Offaly.

Irish Railway Standards (IRSs)

Irish Railway Standards (IRSs) contain good industry practice and/or National Rules (NRs) on technology/infrastructure specific to the Irish railway system, which is not otherwise contained in national or international standards or legislation. IRSs may, within their scope, be used as an acceptable national means of compliance.

IRSs are developed and maintained with the involvement of all relevant stakeholders The process for this is coordinated by the CRR. IRSs are published by the CRR on its website on behalf of the Irish railway industry (www.crr.ie/publications/irish-railway-standards/). Where a NR is identified within an IRS, prior to publishing, that IRS containing NRs is submitted (notified) to ERA for their examination and upon agreement of the NR(s), is published in accessible registers, namely the Reference Document Database (RDD) and/or Single Rules Database (SRD).

Two new or amended IRSs were published in 2023:

- IRS-304-B: Requirements for Class A ETCS CCO Systems and for RU and IM Operating Rules in the Republic of Ireland
- IRS-305-B: Requirements for Class A ETCS CCT Systems and for IM Operating Rules in the Republic of Ireland (trackside).

Three IRSs were withdrawn in 2023:

- IRS-301-A: Requirements for Class B CCO and CCT Systems in the Republic of Ireland
- IRS-302-A: Requirements for Class B Systems in Republic of Ireland Definition of Air Gap (Interface requirements for CCT and CCO)
- IRS-303-A: Requirements for Class B CCO Subsystems in Republic of Ireland Driver Machine Interface.

They were withdrawn following consultation with the sector.

REPORT OF PRINCIPAL INSPECTOR AUTHORISATION TO PLACE IN SERVICE AND CONFORMITY ASSESSMENT

Guidelines

The CRR publishes, on its website, guidelines on a range of its functions and activities. These cover guidance on developing a safety management system, how to make an application for new works or rolling stock. There are also guidelines covering more specific topics such as railway vehicle numbering and applying for a Train Driver Licence.

In 2023, the following guidelines were produced/updated:

- CRR-G-033-D, Guideline for Application for Acceptance of New Light Rail Works was updated.
 Updates included additional parameters specific to safety in railway tunnels such as emergency response and evacuation and rescue.
- CRR-G-009-H, Guideline on Application for Authorisation and Application for Acceptance for Heavy Rail Fixed Installations and Vehicles was updated. Updates included, removal of superseded/redundant parts, clarifications on acceptance cases, the addition of flowcharts for Vehicle Authorisation/Fixed Installation Authorisation/Acceptance Cases.
- CRR-G-056-A, Guidance for submission of data to the CRR for entry onto the European Register of Authorised Types of Vehicles (ERATV). This was a new guideline prepared to explain to railway organisations the CRR's process for registration of data on the ERATV. Date registered includes the technical characteristics of vehicle, relevant TSIs, the manufacturer's name, dates, etc.

Designation of designated bodies

In accordance with S.I. 477 of 2020 Regulation 16(3), the CRR designate the bodies responsible for carrying out the verification procedure in respect of national rules as a Designated Body (DeBo). In designating such applicants, the CRR use the recognition process per guideline CRR-G-053.

Following successful assessment, the CRR designated 6 organisations as DeBo and in 2023 CRR Inspectors completed a first round of monitoring activities on three of these. Additionally, a modified recognition activity was also completed. In all instances DeBo recognitions were maintained. See table 1 below for details of the activities undertaken.

DeBo	Initial recognition	Modified recognition	Re-recognition	Witnessing	Surveillance
Rina Services S.p.A					
Certifer HHC DRS B.V					
Rail and Transit Verification Denmark ApS					
Certifer SA n					
Ricardo Certification B.V					
TUV Rheinland Rail Certification B.V					

Table 1 DeBo activity in 2023

Entity in Charge of Maintenance (ECM)

ECM certification is in accordance with Commission Implementing Regulation (EU) 2019/779. The system of certification provides evidence of responsibility and traceability of the maintenance undertaken on vehicles. It sets out a certification process that ensures a transparent and structured management system for maintenance functions described in article 14(3) of Directive (EU) 2016/798.

As an ECM certification body, the CRR can provide certification and surveillance. The CRR was not required to undertake any ECM activity during 2023.

Cableways

As the competent authority, the CRR's functions include authorising the construction of a new cableway, and authorisation of its subsequent entry into service or authorisation of significant modifications to an existing cableway.

As advised in our annual report for 2022, the CRR received a submission for a Stage 1 authorisation from Cork County Council for major maintenance works to their Dursey Island Cableway. This closed the cableway for several months as new support towers were constructed, and other works completed.

Following the completion of these works and in accordance with CRR-G-054-A, a Stage 2 application to allow operation was submitted to the CRR by Cork County Council in early 2023. Following the CRR's assessment, an authorisation was granted and the Dursey Island Cableway resumed operation in June 2023.

Safety management system conformity assessment

Conformity Assessment of heavy rail ROs Safety Management Systems (SMS) is carried out in compliance with the Railway Safety Directive (EU) 2016/798 and the RSA 2005 as amended. The specific criteria for assessing conformity are detailed in EU Regulation (EU) 2018/762 establishing common safety methods on safety management system requirements.

Every operational railway organisation must be in possession of a safety authorisation in respect of the Infrastructure Manager or single safety certificates (SSC) in respect of the Railway Undertakings (RUs).

The Railway Safety Directive was transposed in 2020, and 2023 saw the first Irish application to be submitted through the ERA One Stop Shop (OSS) for a SSC, this submission was made by larnród Éireann – Railway Undertaking.

The SSC applicant may choose, either ERA or the CRR (NSA in the Member State) to be the authority responsible for assessing and issuing the SSC. The applicant has this choice when they operate in one Member State only. IÉ-RU selected the CRR as the authorising entity and following several months of engagement and assessment a SSC was issued in March 2023.

Rhomberg Sersa Ireland, the RU that operates and maintains larnród Éireann's fleet of on-track-machines (OTMs) also chose the CRR as the authority responsible for assessing their SMS and issuing the SSC. Again, following several months of engagement and assessment a SSC was issued in July 2023.

National rules to operations TSI

The ERA has informed the CRR that the National Rules (NRs) submitted in July 2020 have not yet had their review completed. The CRR will await a response from the ERA on the current national rules submitted, before progressing further with new draft national rules allowed for in TSI-OPE (EU) 2019/773 Appendix I.

Train driver licensing

All train drivers are required under EU legislation to hold a valid licence to operate a train on the network. Licences are issued subject to the driver meeting requirements set down in European legislation namely: minimum age, basic education, medical examination, occupational psychological fitness, and general professional competence. All licence applications are assessed by the CRR against these criteria.

Based on applications received in 2023, the CRR issued 62 train driver licences. 59 were 'First Issue', 2 were replacement licences and 1 was an update/amendment.

Train driver licences have a validity of 10 years. However, drivers are subject to continuing medical examinations and competency assessment by the RU.

Prescribed body

Under the Planning and Development Act 2001-2020 the CRR is a prescribed body where a development may impact on a railway for heavy rail. This includes railway level crossings, under and over bridges, developments that are in proximity to the railway or have potential to impact on its structural integrity, or endangering or interfering with the safe operation of the railway. This applies both during and after construction.

In 2023, the CRR provided observations on 22 of the planning applications it received as a prescribed body.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT



Supervision of railway organisations is a key activity of the CRR associated with its principal function of enforcing legislation relating to railway safety. It is the CRR's role to supervise the continued application and effectiveness of railway organisations' SMSs.

To fulfil this supervisory function in 2023, a range of activities were undertaken on railway organisations which comprised primarily of the following:

- Audits
- Inspections
- Post occurrence activities (POAs)
- Periodic safety performance review with ROs (SPRMs)
- CRR outcome review with ROs
- RAIU safety recommendations review with ROs/entities
- Periodic recurring meetings with railway organisation personnel including Investigation managers.

CRR supervision in 2023, was both proactive (planned) and reactive (in response to occurrences). Planned activity types consisted of those as outlined above. Resources were applied commensurate with the levels of risk associated with the regulated entities. 2023 saw the availability of the full range of supervision inspection activities with no associated COVID restrictions, which had been in place for previous years. Supervision activities with respect to methods of working now have an embedded hybrid working approach, which includes a mix of in-person and virtual/online engagement.

A total of 260 supervision activities commenced in 2023 and by year end 190 were completed. The remaining activities require on-going work with the respective ROs and will be carried over into 2024. Within 2023, a further 33 supervision activities were also completed which had been commenced in 2022.

Supervision and enforcement

The CRR uses a variety of sources of information to inform it of the overall performance of each RO that it supervises and the overall safety profile of the sector.

The level of supervision on an RO in any year is directed by, but not limited to, a review of previous supervision outcomes, and key performance indicators such as the type and number of accidents, incidents and dangerous occurrences in the preceding year(s), the number of public representations, and the number of safety recommendations by the RAIU. The CRR's own internal analysis of its engagement with an RO, including key input from the lead inspectors assigned to the RO is also central to this process. Planned supervision activities for the future are also proportionate to the size of the ROs operations and the level of risk they are exposed to expose others to.

We employ the ERA principles for supervision, including proportionality, consistency, and transparency together with our own gathered knowledge and understanding of each RO to effectively supervise those we regulate.

Supervision activity may identify issues that need attention. Where issues arise, an inspector may form an opinion that an action is required by the RO. The CRR categorises these outcomes depending on the risk they present, and actions may be agreed with, or directed to, the ROs and their implementation of the actions tracked.

The CRR use the following classification system for these outcomes.

Major Non-Compliance (MaNC): an area of non-compliance with an internal standard, an applicable external standard, or legislation that is evidence of a system failure.

Minor Non-Compliance (miNC): an area of non-compliance with an internal standard, an applicable external standard, or legislation that is evidence of a sporadic lapse in implementation of a system or deviation from a system.

Action Required (AR): an area where potential exists for a non-compliance to occur unless remedial action is taken, or improvement is made, an isolated error that requires correction, or some other issue where, in the opinion of the auditor action is necessary.

Scope for improvement (SFI): an area highlighted where, in the opinion of the Auditor, system or business improvement can be achieved by the organisation. Typically, this is phrased as a recommendation, the merits and implementation of which should be decided by the audited organisation.

Good Practice (GP): an area highlighted which, in the opinion of the Auditor, is good practice within the industry.

Audit Trail (AT): an area that the auditor believes should have further attention, either by inclusion in the programme for future audits (but not necessarily an external audit item) or by some other means.

Implementation of audit, inspection, and post occurrence inspection outcomes

In the course of supervision activities, CRR inspectors form opinions based on evidence that led to findings which can in turn lead to recommendations (outcomes). Where this is the case the relevant RO is advised of the outcome. The implementation of actions by the RO to address these outcomes is monitored by the CRR. In 2023, inspectors issued a total of 67 trackable outcomes (non-compliance and action required), where the CRR inspectors track their implementation. Of these, 20 were non-compliances with either a legislative or SMS requirement, the remaining 47 were raised by inspectors when they considered preventative action to be necessary.

The following presents an overview of the CRR's supervision activity for 2023.

Compliance auditing (pro-active supervision)

During 2023, the CRR commenced the audits listed in the following table:

Table 2 CRR audits commenced in 2023

Railway organisation	Title of audit	Conducted
RSIE	Accident Investigation & Emergency Preparedness – Annex II Criteria P, Q & R etc	April 2023
RPSI	Criteria J, K, P and S	April 2023
IÉ-IM	Support, Operations and Performance Evaluation within the SET Department	October 2023
IÉ-RU	TSI-OPE requirements	October 2023
NIR	NIR Risk Evaluation/Identification (Criterion A)	October 2023

During 2023, the CRR completed the audits listed in the following table:

Table 3

CRR audits completed and outcomes in 2023

Railway organisation	Title of audit	MaNC	miNC	AR	SFI	GP	AT
RSIE	RSIE Audit: Accident Investigation & Emergency Preparedness – Annex II Criteria P, Q & R etc	0	3	6	2	0	1
TDLR	TDLR SMS Audit – Elements F N Q Accident Investigation	0	1	1	1	1	4
IÉ-IM	Accident Investigation and Emergency Preparedness	0	0	3	2	0	1
IÉ-RU	CME Management of Fleet Risk Registers – (Criterion A)	0	2	3	7	1	2
IÉ-RU	Management of Safety Information (CSM 1158/2010 Annex II Criterion O, P)	0	3	4	10	1	1
TDLR	Internal Auditing	0	3	1	4	0	1
Total		0	12	18	26	3	10

As indicated above six audits were completed in 2023. Separate to these a further four audits were commenced in 2023, and all of these four audits with the exception of the IÉ-RU audit on TSI-OPE requirements are well advanced with draft audit reports to be issued to the relevant ROs (RPSI, IÉ-IM and NIR) in early 2024. The audit on TSI-OPE started in late 2023, and hence is at an earlier stage of progression.

Each of the finalised audits have produced outcomes, as detailed in the table, to address findings that in the opinion of the CRR inspector required actions from the relevant RO. CRR inspectors maintain engagement with the ROs to ensure that the actions required are progressed.

Specifically, for audits completed in 2023, inspectors identified the following outcomes: 12 miNCs, 18 ARs and 26 SFIs.

For the completed audits, all required action plans to be prepared by the RO in order to resolve the issues identified, apart from the audit on Accident Investigation and Emergency Preparedness of IÉ-IM. The required action plans have been submitted by all ROs following the lead auditor requests. Work is ongoing by the ROs to address the 2023 finalised audit outcomes.

Inspections

In 2023, the CRR commenced a total of 45 Inspections across all ROs. These inspections ranged from more limited 1-day inspections of assets, to more detailed inspections which can take up to 20-days to complete. The full list of 2023 commenced supervision inspections by the CRR is included within Appendix G Table 16. A number of supervision inspections which were commenced in 2022, were completed in 2023. The full list of completed supervision inspections by the CRR is included within Appendix G Table 17, this accounted for 10 supervision inspections.

A number of CRR inspections completed in 2023 identified non compliances against the ROs and in these instances an Action Plan was requested from the relevant ROs. The following inspections undertaken by the CRR required Action Plans to be developed by the RO:

- Inspection of Driver Competence Management TDLR
- Decision Support System Level Crossing Inspection IÉ-IM
- Inspection of NIR Fleet Maintenance Facilities NIR
- Fintown Inspection Fintown Heritage Railway.

These non-compliances related to the ROs safety management system documentation, or other areas that were assessed as not posing an immediate risk to the safety of persons. The ROs concerned are implementing agreed corrective and preventative actions from these inspections.

The full range of outcomes from the inspections completed in 2023, against each of the railway organisations are detailed below:

Table 4

Table 5

Inspections completed, and outcomes made in 2023

Railway organisation	No. of inspections	No. of inspections with outcomes	MaNC	miNC	AR	SFI	GP	AT
IÉ-IM	9	5	0	1	4	12	0	2
IÉ-RU	7	3	0	0	10	6	0	4
RSIE	3	1	1	0	1	0	0	1
RPSI	1	1	0	0	0	0	0	1
NIR	1	1	0	1	0	2	0	2
TDLR	7	4	0	1	3	3	0	0
BNM	1	1	0	0	2	2	0	0
Heritage	4	3	0	2	5	16	1	0
Total	33	19	1	5	25	41	1	10

Post Occurrence Activity

(reactive supervision to accidents or incidents)

In 2023, CRR inspectors completed a total of 49 POAs. Of these, 10 were started in 2022, but completed in 2023.

These resulted in outcomes which are indicated in the table below.

Railway								
organisation	No. of POAs	with outcomes	MaNC	miNC	AR	SFI	GP	AT
IÉ-IM	17	2	0	1	3	3	0	3
IÉ-RU	17	1	0	1	0	0	0	0
TDLR	12	2	0	2	2	2	0	0
BNM	3	0	0	0	0	0	0	0
Total	49	5	0	4	5	5	0	3

Completed post occurrence activities during 2023 from notifiable occurrences and outcomes

The CRR received 70 notifications relating to accidents, incidents or dangerous occurrences and mobilised to a number of these in the days following the notification in order to undertake follow up activities. A total of 51 related to the IÉ network, 14 related to the light rail network, 2 related to RSIE, 3 involved BNM occurrences, and there were no formal notifications relevant to heritage railways. Some POAs from occurrences notified in 2023 will involve further follow up into 2024.

Tragically, in 2023, there were 11 fatal occurrences on the national railways where the fatal injury involved a train in motion, and where trespass or misadventure were involved. All of these occurred on the larnród Éireann heavy rail network. The number of fatalities, for this category, falls within the 10-year data range by comparison. The IÉ period figures for these fatal injuries are consistently reviewed at the SPRMs with the IÉ-IM and IÉ-RU. The CRR is aware that the IÉ-IM and IÉ-RU established a working group to review any additional mitigations that could be put in place.

In 2023, there were five instances of broken rails on the lÉ network. Of note was a broken rail occurrence near Emly LC XC164 on the 22nd of February 2023, and also a broken rail was found at Newbridge on the 23rd of February 2023. Both of these were associated with different rail processes. The Emly broken rail was caused due to issues with the site welding processes and the Newbridge broken rail was due to a fracture through a flash butt welded joint. The CRR have been advised of the additional risk mitigations developed, and periodic updates were provided on the lÉ technical investigations for these failures. The figure of 5 broken rails within a calendar year is outside of the previous 10 years of recorded broken rail data. The figure itself does appear as an outlier as the broken rail record for 2022 was no instances. As a result of the notable increase, this is an area that was highlighted within 2023 and an area to be reviewed and monitored further within 2024 by the CS&E team. The RAIU completed the following investigation report which is of relevance in relation to these 2023 occurrences:

- Broken rail, Newbridge, County Kildare, 23rd of February 2023.

The RAIU also have an investigation underway which is also of note in relation to these broken rail events:

IÉ broken rail (thermit weld) near Emly level Crossing (XC164) on the 22nd of February 2023.

Further notifications to highlight during 2023, with respect to the heavy rail sector as a grouping are:

- Near miss involving CCE member of staff and train on the 3rd of March 2023
- Clonnydonnin near miss with track maintenance worker on the 12th of October 2023
- Near miss with per way member of staff in Bray Head Tunnel 4 of 6th of December 2023.

All three occurrences took place during 'red zone' working, which is when train services are in operation, and under slightly different circumstances may have resulted in serious injuries to the member of staff or potentially a fatality. IÉ-IM are reviewing methods that may allow for a potential reduction in red zone working to be undertaken. This area has been periodically updated within SPRMs with IÉ-IM and will continue as an area for attention.

The detail of the trends in fatality and injurty statistics is contained in Appendix D Table 11.

In the light rail sector there were two occurrences of note. These involved tram breaches of non-energised sections by TDLR, which had the potential to place those working within these isolations at risk. The CRR are reviewing the details with TDLR management in order to determine which risk mitigations are being developed and implemented in order to prevent re-occurrence.

In 2023, the CRR continued its updated POA process. All notifiable occurrences are now subject to review on a weekly basis via a post occurrence activity review committee (POARC). Each notified occurrence is reviewed, with a decision made as to whether further inspection is required. If it is considered that there is unlikely to be a SMS compliance issue, or where investigation will not provide further learning, then the CRR will ensure that the ROs themselves complete the statutory investigation that they are required to complete.

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT

In any instance where safety was deemed to be at risk, the CRR sought the necessary assurances that mitigation measures had been put in place by the relevant organisation for each specific occurrence. The RAIU conducts its own independent investigations of accidents/incidents to determine their cause and the CRR has regard to these investigations.

Enforcement

Part 7 of the RSA 2005 provides the CRR with powers of enforcement. These powers range from requesting an Improvement Plan, where an activity may involve a risk to the safety of persons, to serving an Improvement Notice for a contravention of the provisions of the RSA 2005 or a Prohibition Notice where an activity may involve an immediate and substantial risk to the safety of persons. The CRR also has the power in extreme cases to revoke a Safety Authorisation or Safety Certification or make an application to the High Court to seek an order for restriction or prohibition of operations.

The CRR aims to work with ROs and seek voluntary compliance rather than immediately engage in enforcement action. Its inspectors endeavour to be proportionate in their response to findings and failings which is in line with European practice. However, on occasion, enforcement may be required. In 2023, CRR inspectors requested a total of 2 Improvement Plans from ROs. A summary of these is presented below.

Improvement plans requested in accordance with Section 76 of the RSA 2005 145/22-POA SPAD at Cork CE442

This direction for an improvement plan was issued to IÉ-IM where they were found to be non-compliant with an EU regulation relating to 2018/762 Annex II Section 4.4.3 which falls under information and communication. This is in relation to the briefing of safety related information to safety critical staff.

227/22-I RSIE inspection of control room management

This direction for an improvement plan relating to a major non-compliance, was issued to RSIE. This outcome was in relation to RSIE OTM drivers undertaking train movements without having had their Fitness for Duty independently confirmed by an appropriate competent person, contrary to S. 36 of the Railway Safety Act 2005.

Improvement notices served in accordance with Section 77 of the RSA 2005

No improvement notices were served in 2023. An extension of time was granted to an existing Improvement Notice served on IÉ-RU, relating to their Drugs and Alcohol policy. IÉ-RU have taken some action, however, what is outstanding is a legislative change that currently rests with the DoT to progress.

Prohibition notices served in accordance with Section 78 of the RSA 2005 No prohibition notices were served in 2023.

RAIU safety recommendations

The RAIU has the function of carrying out investigations of accidents and incidents that occur on the heavy, light, heritage and industrial (only at public interfaces) railways in Ireland. The purpose of its investigations is to establish cause and not apportion blame. Its reports make safety recommendations which are intended to ensure the avoidance of similar accidents/incidents in the future.

Based on the evidence of its investigations, safety recommendations may be made by the RAIU. These are typically directed at the ROs or other third party who may have had a responsibility under legislation. In addition, its recommendations are addressed to the CRR as the responsible NSA. The CRR thereafter have a responsibility for the oversight of the implementation of the safety recommendations by the entity to which they have been directed. The status of current safety recommendations issued by the RAIU is detailed in Appendix C Table 10.

In 2023, the RAIU issued 5 investigation reports resulting in 47 safety recommendations being addressed to the CRR. These were duly considered and the CRR directed these to the relevant ROs or entity best placed to respond to the safety recommendation.

Carriage of dangerous goods by rail

The CRR is the competent authority under Statutory Instrument (SI) 651 (as amended) clause 4(1) EC (Transport of Dangerous Goods by Rail) Regulations 2010.

The CRR continues to ensure provision of an examination and certification service for dangerous goods safety advisors (DGSA). This service is contracted to the Chartered Institute of Logistics and Transport (CILT) and the contract for this service was renewed in 2023.

Rhomberg Sersa Ireland (RSIE)

RSIE completed their fourth full year of operation in 2023, having taken over the On-Track-Machine (OTM) fleet maintenance & operation contract on behalf of IÉ-IM in July 2019. RSIE completed a total of 96,635 train km on the network in 2023, which was a slight increase from 2022 (circa 6%).

CRR Inspectors met with key management on three occasions in 2023, at which their safety performance was reviewed. Safety initiatives and other continuous improvement tasks were also discussed within these meetings.

RSIE had two notifiable occurrences in 2023. These were:

- Double SPAD @ Sallins HK167 & HK168
- Possession Management Occurrence at Dromod.

Both of these occurrences are being followed up at present by the CRR.

One audit was undertaken on RSIE in 2023:

Accident Investigation & Emergency Preparedness – Annex II Criteria P, Q & R.

In addition to the audit undertaken on RSIE in 2023, the CRR also undertook 3 inspections. These were the following activities:

- SUP Feedback report to CA/APIS for RSIE
- Review of maintenance and operations of MPV790
- RSIE Driver Medicals Check.

These activities resulted in RSIE being advised of 4 non-compliances and 6 ARs. All noncompliance outcomes which require action in a specific timeline have either been addressed or are well advanced. All other outcomes (6 Actions Required from 2023) are being actively tracked by CRR inspectors.

Bord na Móna (BNM)

BNM own and operate an industrial railway used for the transport of peat. The CRR supervise BNM where their railway infrastructure interfaces with public roads, i.e., at level crossings and bridges over/under the railway.

BNM's milled peat operations continue to decrease significantly and consequently their level of operations are reducing. Nonetheless, BNM safety performance was subject to review by the CRR. BNM now have 28 operational road level crossings which is a significant decrease from the previous year, where 54 were operational.

The CRR commenced and completed one inspection on BNM in 2023, which focused on level crossing decomissioning and those remaining in use. The CRR sampled a number of these level crossings as part of this activity. On conclusion of the activity, 2 ARs and 2 SFIs were formed which were issued to BNM. One SPRM was also held.

The CRR were notified of 3 occurrences on the BNM network in 2023 which were as follows:

- Wagon derailment at Level Crossing 37-12
- Wagon derailment at Ballahart Level Crossing
- Wagon derailment at Bloomhill Level Crossing.

Heritage Railways

The CRR monitors the operations of a small number of self-contained heritage railways. In 2023, the following heritage railways were subject to supervision:

- Cavan and Leitrim Railway, Dromod, Co Leitrim who carried 7,500 passengers in 2023
- Difflin Lake Railway, Oakfield, Raphoe, Co Donegal who carried 40,603 passengers in 2023
- Fintown & Glenties Railway, Co Donegal who carried 3,660 passengers in 2023
- Irish Steam Preservation Society (ISPS), Stradbally. Co Laois who carried 5,312 passengers in 2023
- Listowel Lartigue Monorail, Co Kerry who carried 4,449 passengers in 2023
- Waterford & Suir Valley Railway (W&SVR) Kilmeaden Co Waterford who carried 28,747 passengers in 2023
- Connemara Heritage Railway Inspection, Maam Cross, Connemara who did not carry passengers in 2023 but aim to carry passengers in 2024.

Site inspections were undertaken on all heritage railway operators. This involved the inspection of assets, observation of operations, and meetings with management and operational staff to review their compliance with their approved safety management systems.

In the case of Difflin Lake Railway, a special inspection of their Christmas services was also undertaken along with their primary main inspection.

All other heritage railway providers received one primary inspection, so 8 inspections of heritage operators were undertaken in 2023. The 5 completed inspections had the following outcomes:

- Fintown & Glenties Heritage Operator Inspection: An action plan was issued in 2023 to address the 2 miNCs and 3 ARs formed from this inspection activity
- ISPS Stradbally Operator Inspection: 2 ARs and 11 SFIs were formed from this inspection activity and issued to ISPS NGR.

The activities completed in 2023 on the Cavan and Leitrim railway and Difflin Lake Railway did not form trackable outcomes, only SFIs were formed for the Difflin Lake Railway Inspection.

Railway Preservation Society of Ireland (RPSI)

The RPSI is the only heritage railway to operate on the IÉ-IM network and as a consequence is subject to a higher level of supervision than the standalone heritage railways who operate on their own separate infrastructure. After two years of RPSI being non-operational (2020 and 2021) their passenger numbers at 13,369 in 2023 are very much back to pre-COVID operation levels.

The CRR commenced 6 primary supervision activities on the RPSI in 2023. These were as follows:

- An RPSI SPRM in 2023
- An inspection on the RPSI's March specials services
- An audit on RPSI's SMS in relation to criteria J, K, P and S
- A periodic meeting with the RPSI Safety Officer
- An inspection on the RPSI's Seabreeze or other service with site sampling
- An inspection of a Santa special service including rolling stock and general operations/ crowd management.

IRD Kiltimagh CLG - Kiltimagh Velorail

Velorail is an outdoor leisure and recreational tourism activity, it consists of pedal powered passenger cars (railbikes) that travel along a section of railway.

In IRD Kiltimagh CLG's first year of operations they carried 2,500 passengers. They were subject to supervision, involving inspection of assets, observed operations, and meetings with key management staff to review their compliance with their approved safety management systems.

A subsequent site visit was also undertaken to review the braking performance of the rail bikes including some on site sampling.

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT

Industry alerts

The CRR receive railway sector safety alerts from both ERA and the RAIU. In 2023, three safety alerts were received from ERA.

The first of these was in relation to a derailment that occurred on the 8th of December 2022 in the Czech Republic which had a linkage to a similar occurrence which took place on the 7th of September 2018. This alert was issued on the 13th of March 2023.

The second of these safety alerts related to a vehicle with wheel diameters known by the ETCS on board which were significantly smaller than the actual real time physical wheel diameters on the Swiss network. As a result the vehicle stopped over 200m beyond its real target when the calculated safe maximum front end reached the virtual end of authority. This alert was issued on the 20th of July 2023.

The third of these was in relation to the failure of a wheel of a freight train consist traveling from Chiasso to Basel on the 10th of August 2023. The safety alert was issued on the 2nd of October 2023.

Representations

In 2023, the CRR received 57 representations relating to a range of heavy and light rail infrastructure and operational matters.

Of these, 16 were requests for information that were received from other regulatory bodies/ agencies rather than concerns about services or safety. Of the remaining representations, 2 related to safety of stations, 8 related to safety of infrastructure, 8 related to the safety of rolling stock, 11 related to the safety of train operations and 12 related to safety of Railway Working.

In relation to information requests from other regulatory bodies, these included queries on technical inspection of rail machinery, European Train Driver Licences, GSM-R voice cab radio, train driver competence and level crossing methodology.

In relation to safety of infrastructure representations received, these included concerns raised in relation to the structural condition of overbridges, track condition and railway boundaries.

In relation to safety of train operations received, these included a concern over a heritage railway's shunting activity, overcrowding on an IÉ train, delays on a heritage service and delays attributed to infrastructure issues on the main line.

In relation to safety of stations received, these included issues with an elevator door defect at Ranelagh, the light rail network and air pollution levels within heavy rail stations.

In relation to safety of rolling stock received, these included carriage bogie concerns relating to a heritage railway, an EGV door defect and the performance of LUAS tram doors.

The CRR gives a high degree of attention to any representation concerning railway safety made by railway staff, railway passengers, members of the public, or others. As indicated only a limited number had potential safety implications. All of these have been followed up through inspection and direct engagement with the relevant railway organisations.

See Appendix D Figure 9 for representation trends.

Safety performance

In addition to on-site activities such as inspections and audits, CRR engage with key management from the ROs that are supervised. As detailed previously, the following channels of communication exist periodically with ROs, outside of primary supervision activities such as audits, inspections and post occurrence activities:

- Periodic safety performance review meetings (SPRMs)
- CRR outcome review meetings
- RAIU safety recommendations review meetings
- Periodic recurring meetings with RO personnel as required (i.e., Investigation managers etc.).

Central to this engagement is the continuous review of the safety performance and reviews of key performance indicators and metrics which feed into the annual supervision programme. Several safety performance indicators including collisions, derailments, fires on rolling stock, SPADs, infrastructure failures/defects are recognised indicators of safety performance.

In 2023, 4 safety performance review meetings were held with IÉ-IM, IÉ-RU, and Transdev. Additionally, a further 3 separate meeting were held with Transdev 'Engineering' given that Transdev now operate and maintain the LUAS trams and infrastructure.

Three meetings were also held with RSIE (the On-Track-Machine operator), two meetings with NIR (Translink), one with BNM and one with the RPSI. For heritage railways, which operate independently, the main inspection activity is merged with a meeting with the heritage railways main management teams.

During this engagement, the railway organisations are subject to review by the CRR and are required to demonstrate how they are effectively managing safety and risk associated with their operations. Moreover, the railway organisations must provide details of their own internal audits and investigations after accidents and incidents, together with plans and actions taken to prevent reoccurrences and develop process improvements.

SPADs on the heavy rail network

In an operational context the number of SPAD occurrences decreased slightly on the larnród Éireann rail network (12 in 2022 v 11 in 2023). The overall trendline over the past 10 years is showing a decreasing trend. See Appendix D Figure 4.

Collisions with animals on the heavy rail network

The total number of collisions for all categories from 2014 to 2023 are provided in Appendix D Figure 3 and Table 12. While there is an evident increase in the number of collisions, 124 in 2023 compared to 90 in 2022, the relevant sub groups driving the increase are train collision with large animal on the line, and train collision with other obstacles on the line. Period summary data is provided by both IÉ-IM and IÉ-RU to the CRR, where the primary reason for the increase is due to an increase in impacts with deer. Boundary fencing which is used as a primary control for livestock is not as efficient against deer. For the other subgroup of train collision with other obstacles on the line a smaller increase is evident but is still contributory to the overall increase; these instances are generally as a result of anti-social behaviour. CRR are aware of IÉ-IM's additional proposed risk mitigations in this area and are under periodic review.

Train derailments on the heavy rail network

There were three train derailments in 2023, with all of these occurring in IÉ sidings, relative to 4 total derailments in 2023. The infrastructure within sidings would not be maintained to as high a standard as to mainline infrastructure, and these derailments would also all be low speed derailments in the vast majority of cases, at manually operated hand points. The trend in train derialments since 2014 is shown in Appedix D Figure 5.

Near misses on the heavy rail network

As previously indicated, there were a number of occurrences in 2023 where near misses took place with IÉ staff. These events were as follows:

- Near miss involving CCE member of staff and train
- Clonnydonnin near miss with track maintenance worker
- Near miss with per way member of staff in Bray Head Tunnel 4.

While there were no injuries to any of the staff involved in these occurrences, there was potential for the consequences to be more severe. The CRR are reviewing these occurrences, with a particular focus on the later occurrences.

SPAS/SPAD occurrences on the LUAS network

SPAS/SPAD events occur on the LUAS network, albeit the signalling system doesn't automatically identify these with the exception of 3 locations (Sandyford Stop-Depot Entrance, Broombridge Depot Entrance and the Cookstown interchange) where there is detection. The vast majority of the network relies on the tram driver to self-report that they passed a signal at stop (SPAS). 2023 data shows that these events remained broadly in line with performance in 2022, but significantly up from 2021, and broadly in line with performance observed in 2017 and 2018. The annual number of SPAS by trams since 2014 is shown in Appendix D Figure 7.

Each SPAD/SPAS event is reviewed by a CRR inspector with a relevant TDLR staff member to ensure that sufficient causal investigation is undertaken and that TDLR manage the related safety risk. TDLR senior management also meet periodically by the CRR to review SPAD/SPAS trend in detail, to ensure TDLR are undertaking sufficient actions to address undesirable trends.

An RAIU report, Trend Investigation into SPAS on the LUAS Network – RAIU report No 2022 – R003 into SPAS/SPADs events, detailed several recommendations for the light rail sector and stakeholders are currently engaged in taking actions to address the requirements contained within those recommendations.

Overall context

In 2023, the overall safety performance of the Irish heavy railway sector was assessed as being in the main positive, both when compared against previous years and against European statistics.

In a European context, Ireland's safety performance would be considered very good. However, one significant accident would completely change the performance metrics due to the size of Ireland's network. Hence the focus on continual improvement with all ROs, and proactive supervision activities are a continual focus.

Nevertheless, Ireland has consistently been among the member states that have the lowest fatality rates. It should also be noted that there have been no passenger fatalities in Ireland during this period and the fatalities that have been reported are a result of trespass/misadventure.

Separately, the CRR publishes its annual statistical report providing a detailed analysis of railway safety performance in Ireland. This report for 2023, as with previous reports, will be published later in the year to facilitate receipt of complete validated year data from all ROs. The Safety Performance Report of 2022 was published in 2023, and is available on the CRR website.

Some of the key safety performance data for ROs available at the time of publication of this annual report are presented within Appendix D.

NSA monitoring

As reported in previous annual reports, the CRR were audited in late 2020 as part of a threeyear audit cycle of all member state NSAs by the ERA. This audit evaluated how the NSA was performing its functions relating to railway safety and was concluded in mid-2021 with the publication of the ERA's findings. While the main finding stated that the CRR is established and organised in a manner that allows the authority to perform supervision activities and to manage the competences of its staff, it did identify a number of deficiencies that required attention.

The CRR has continued to address the ERA's recommendations and the actions that the CRR had identified to the ERA in our related action plan have been completed.

The CRR have been informed that they will be audited by ERA in Q3 of 2024 within the planned ERA 2nd audit cycle of NSAs.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

REPORT OF HEAD OF CORPORATE GOVERNANCE AND REGULATION



Corporate governance and administration

The CRR is compliant with the Code of Practice for the Governance of State bodies, as published by the Department of Public Expenditure and Reform, NDP Delivery and Reform.

Finance

Funding for the CRR is provided in part by a Safety Levy on the various ROs and in part by an Exchequer Grant.

In addition, the CRR may charge a fee for a range of its activities, specifically:

- Fees charged for Designated Body (DeBo) recognition S.I. No. 176/2021 European Union (Interoperability of the Rail System) (Designated Bodies) (Fees) Regulations.
- Fees charged to the ERA as the national safety authority where the ERA is the assessment body for single safety certificate or vehicle authorisation – Regulation EU 2018/764 as amended by Regulation EU 2021/1903.
- Fees charged for the authorising of construction and entry into service of cableway installations or their modification – SI 543 EU (Cableway Installations) Regulations 2020.
- Fees charged for the issuing or renewal of train driver licences SI 399 EU (Train Driver Certification) Regulations 2010.

The CRR, with the consent of the Minister for Transport and the Minister for Finance, may make regulations imposing a levy on railway organisations. The Regulations for 2023 were contained in Statutory Instrument No.267 2023. The application of funds by the CRR is illustrated below.

Table 6

Application of funds by the CRR

	2022 (€ million)	2023 (€ million)
Budget	2.583**	2.793
Exchequer Grant	0.730	0.754
Levy Requirement	1.25	1.587
Operating costs	2.25	*
Surplus	0.323	*

* Full Accounts for 2023 are subject to audit by the Comptroller and Auditor General

** Note the difference between the 2023 Budget and the Exchequer Grant and Levy was covered by DeBo, Cableway authorisation, Train Driver Licence fees, and CRR reserve funds.

The CRR annual audited accounts are published on our website separately to this report. The 2022 C&AG audited financial statement was published on 8 December 2023.

Total CRR staff remuneration

Employee salary breakdown.

Table 7 Employee salary breakdown

Salary pay scale ra	ange	Number of	employees	
From	То	2022	2023	
€60,000	€69,999	3	0	
€70,000	€79,999	8	9	
€80,000	€89,999	-	0	
€90,000	€99,999	-	1	
€100,000	€109,999	-	-	
€110,000	€119,999	3	1	
€120,000	€129,999	-	1	
€130,000	€139,999	-	-	
€140,000	€149,999	_	-	
€150,000	€159,999	1	-	
€160,000	€169,999	_	1	

A breakdown of total employee remuneration over €60,000, in increments of €10,000 is disclosed as required by DPER circular 13/2014.

In 2023, the Commissioners remuneration was €165,143.

Irish language commitment

The CRR is committed to implementing the relevant parts of the Official Languages Act 2003 (as amended 2021). CRR signage and stationery are currently in both Irish and English. Our Annual Report, Financial Statement and Statement of Strategy are all available in Irish on our website. The CRR has a dedicated email address for correspondence regarding the Official Languages Act.

Freedom of Information (Fol)

The CRR is included among the organisations listed under the Freedom of Information Act 2014 and is committed to conforming to the principles of this Act. In 2023, there were 10 Fol requests received, two of which was granted, five were part granted and three were withdrawn. Details of these requests and information previously released by the CRR under Fol can be viewed on the Fol Disclosure Log on our website.

Customer charter

The Customer Service Charter is available on the CRR's website. This charter describes the level of service a customer can expect to receive from the CRR.

CRR governance arrangements with the Department of Transport (DoT)

The CRR has in place the required oversight agreement and performance delivery agreement in line with the Code of Practice. Both agreements were subject to review and update with the DoT in 2023. Based on these agreements the CRR and the DoT met formally on a quarterly basis to keep each party advised on relevant developments in the areas of corporate governance, transport policy and legislation. In 2023, CRR provided the DoT with its quarterly and annual performance delivery report as per the performance delivery agreement.

New Agreements for the period 2024 - 2026 were also agreed and finalised.

Railway Safety Advisory Council

Members of the Railway Safety Advisory Council (RSAC) were appointed by the Minister in 2022 in line with Part 8 of the Railway Safety Act 2005 for a period of 3 years. In quarter 4 of 2023, a new chairperson of the council was appointed by the Minister.

The CRR would like to express its thanks and appreciation to Frank Dawson, the previous chairperson, for his commitment to railway safety and his work with the RSAC. The functioning of the Council continued to be assisted by the CRR through the provision of facilities, including the provision of a virtual meeting platform to facilitate meetings and administrative support. No recommendations were made to the CRR by the Council in 2023.

Report under the Protected Disclosures Act 2014 (as amended 2022)

Under the Protected Disclosures Act 2014 (as amended 2022) every public body is required to publish a report on the number of protected disclosures made to the public body in the preceding year and the action taken (if any) in response to the protected disclosures. In 2023, the Head of Corporate Governance and Regulation in the CRR, as the prescribed person under the Protected Disclosures Act 2014, did not receive any protected disclosures from parties external to or within the Commission. The CRR have submitted their annual report on protected disclosures to the Department of Transport for 2023.

The CRR have in place both internal reporting channels and procedures and external reporting channels and procedures for protected disclosures.

Data protection

During 2023, the CRR continued to keep up to date its policies, systems, and procedures, to ensure compliance with the requirements of data protection legislation. In 2023, the CRR did not receive any data protection requests.

Section 42 Irish Human Rights and Equality Commission Act 2014

Consistent with our core values, the CRR is committed to meeting our obligations under the Human Rights and Equality Commission Act, 2014. Section 42 of that Act establishes a positive duty on public bodies to promote equality, prevent discrimination and protect the human rights of all those with whom they engage, staff, service-users, and stakeholders alike.

In 2023, the Commission continued to action the recommendations of the internal CRR working group and implement our Public Sector Equality and Human Rights Duty through the three-step process of assess, address and report. Specifically, a number of internal Policies were reviewed and updated to ensure they reference human rights and equality where necessary. On-line learning tools such as the IHREC eLearning were made available to staff. Overall, 7 of the 9 issues identified in our first action plan have been completed.

Human rights and equality will continue to be addressed under a quarterly review with all staff. This engagement will also be integrated into our next Strategy Statement 2024-2027.

Accessibility

Public sector bodies in Ireland must ensure their websites and mobile applications are accessible to everybody, including people with disabilities. The European Union (Accessibility of Websites and Mobile Applications of Public Sector Bodies) Regulations 2020 came into force on 23 September 2020.

An accessibility audit on the corporate website (www.crr.ie) was conducted based on the NDA, monitoring report and accessibility improvements continue to be implemented based on the outcomes.

The CRR also published its accessibility statement on its website in 2023.

Prompt payments

It is the policy of the CRR to ensure that all payments are made promptly. Every effort, consistent with proper financial procedures, is being made to ensure that all suppliers are paid within the required time frame, in accordance with best practice. The CRR publishes quarterly reports of compliance on its website and are uploaded for 2023.

Access to information on the environment

The European Communities (Access to Information on the Environment) Regulations 2007 (S.I. No. 133 of 2007) gives legal rights to those seeking access to information on the environment from public authorities. The CRR did not receive any requests under Access to Information on the Environment legislation in 2023.

Report on the CRR Climate Action Mandate 2023

The Public Sector Climate Action Mandate outlined in Climate Action Plan 2023 (CAP23) published on 21 December 2022, is the second annual update to Climate Action Plan 2019 (CAP19). CAP23 details the Public Sector Climate Action Mandate

The mandate sets out requirements for action and reporting relating to our Targets, People, Ways of Working, and Building and vehicles. The approach to this is detailed in the CRR's Climate Action Roadmap 2023, which is published on our website (Climate Action Roadmap). The Roadmap has been prepared using the template for a small public body within the SEAI guidance.

We have made progress in aspects of our environmental performance with a downward trend in consumption of energy and resources against a background of increased staff numbers and activities.

We aim to continually improve our environmental performance, and in doing so prevent pollution and encourage environmental awareness. As one tenant in a multioccupancy building, we aim to influence and encourage change by the landlord to reduce energy use and increase energy efficiency.

In 2022, the most recent SEAI score card available, our Energy Performance Indicator (EnPI) was 5,442 against a target of 11,833. Overall, our EnPI was 2.9% better that 2021, 77% better that the energy efficiency baseline and 54% better that the 2030 target. In relation to our Total Primary Energy Requirement (TPER) 2022 based on thermal, electricity and transport we are 56.6% better that the 2009 baseline.

The CRR has implemented a Governance Structure to support its actions, including the appointment of a Climate and Sustainability Champion, Energy Performance Officer and Green Team.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

REPORT ON RAILWAY REGULATION



Railway regulation

Licencing authority of railway undertakings

The CRR is the Licensing Authority responsible for assessing applications for and granting a licence to a railway undertaking in the State. A railway undertaking cannot operate a rail service without a licence. For the assessment, the railway undertaking applying for a licence must demonstrate to the Licensing Authority, before the start of its activities, that it will at any time be able to meet the requirements relating to good repute, financial fitness, professional competence and cover for its civil liability. The licence of itself does not entitle the railway undertaking access to the railway infrastructure.

Licences must be renewed every five years and a register of issued licences is published on the CRR website.

No licences were due for renewal and no new applications for railway undertaking licences were received in 2023.

Independent monitoring body

The functions of the CRR as the Independent Monitoring Body are to monitor the performance of the IÉ-IM in respect of its obligations under the IMMAC; to arbitrate where a dispute arises between the parties as to the requirements for compliance with the contract; to approve the performance monitoring system developed by IÉ-IM and to advise the Minister of any persistent failure-to-perform trends of the IÉ-IM.

On 3rd March 2023, the CRR issued its IMMAC Annual Report to the Minister for 2022.

Key findings of the report included the following:

- Overall, there were no significant variances for the year, and the outturn was slightly higher than expected for 2022 against the forecast, mainly driven by the CCE Department
 - CCE Dept Higher than expected at 4% additional spend
 - SET Dept no significant variances
 - IMO Dept no significant variances
 - Systems (SMS & Asset) Dept slightly lower than expected out turn with a 6% underspend
- Supplementary Funding from DoT
 - In 2022 IÉ-IM received Supplementary Funding of €98.32m which was directed to the Foynes Freight Line, TPS, APRW and the Nenagh Branch Line, (with €10.6m carried over into 2023 for Foynes and TPS).

Regulatory body

Appeals and complaints

The CRR received no appeals or complaints as the Regulatory Body in 2023.

Network statement

The CRR closed out its review of the Network Statement as published by larnród Éireann Infrastructure Manager (IÉ-IM), which was to determine if its contents are in accordance with S.I. No. 249 of 2015, European Union (Regulation of Railways) Regulations 2015 and S.I. No. 398 of 2020, European Union (Regulation of Railways) (Amendment) Regulations 2020.

A final report was issued to the IÉ-IM in January 2023, noting the co-operation of IÉ-IM in the completion of this review, and that the CRR are satisfied that IÉ-IM have taken action to address the identified action points.

The Irish language version of the 2023 Network Statement was published in May 2023, and IÉ-IM have committed to publishing all future Network Statements in both English and Irish going forward.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

NATIONAL AND EUROPEAN LEGISLATION FRAMEWORK DEVELOPMENTS



National railway legislation framework

The following are the developments in the national legislative framework in 2023.

S.I. No. 267 2023 – Railway Safety Act 2005 (Section 26) Levy Order 2023

This placed the annual levy on the railway organisations in the State for 2023, which funded the CRR activities related to its functions as per Section 26 of the Railway Safety Act 2005.

In relation to the continuing development of legislation, the CRR has a function under Section 72 of the RSA 2005 to keep legislation under review. In this context the CRR continued its engagement with the DoT in 2023, when and as requested, on proposed amendments to the RSA 2005.

European railway legislation framework

The continued development of the legal and technical framework governing the operation of the European Rail Network requires extensive engagement by the European Commission, DG-MOVE and the ERA with member states and other stakeholders. To ensure an understanding and awareness of the continued development of the legal and technical framework governing the operation of the European Rail Network, the CRR were active participants in over 50 meetings chaired by the European Commission, DG-MOVE and the ERA.

The TSI revision package 2023 is a set of amendments to the Technical Specifications for Interoperability (TSI) that was adopted by the Railway Interoperability and Safety Committee on March 30, 2023. The package came into effect on September 28, 2023, and includes changes to the TSIs ENE, INF, LOC&PAS, NOI, OPE, PRM, and WAG, as well as a recast of the TSI CCS. Also of note is the continuing work at European level on the revision of the Train Drivers Directive and the Common Safety Method Assessment of Safety Level Performance, which may reach conclusion in 2024.

In 2023, we continued to participate in the Railway Interoperability and Safety Committee (RISC) as a member state nominee and as technical support to the DoT. We also participated in the DG MOVE European network of rail Regulatory Bodies. We continued in our role as the Member State representative on the ERA Management Board.

The CRR is a member of the Network of National Safety Authorities where the core objective is to conduct an active exchange of views and experience for the purpose of harmonising decision-making criteria. The CRR participated in all plenary meetings of this forum in 2023.

The CRR also continued its involvement in a number of prioritised ERA topic specific working groups.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023

COMMISSIONERS COMPREHENSIVE REPORT TO THE MINISTER



As Commissioner, I acknowledge the Commission for Railway Regulation's responsibility for ensuring that an effective system of internal control is maintained and operated.

This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform has been in place in the CRR for the year ended 31 December 2023 and up to the date of approval of the financial statements.

The CRR has a risk management policy which sets out its risk appetite, the risk management processes in place and details the roles and responsibilities of staff in relation to risk. The policy is available to all staff who may alert management on emerging risks and control weaknesses.

The CRR has implemented a risk management system which identifies and reports key risks and the management actions being taken to address and, to the extent possible, to mitigate those risks. A risk register is in place which identifies the key risks facing the CRR. These have been identified, evaluated, and graded according to their significance. The register has been reviewed and updated by the Management Team on a quarterly basis in 2023.

I confirm that a control environment containing the following elements is in place:

- procedures for all key business processes have been documented;
- financial responsibilities have been assigned at management level with corresponding accountability;
- there is an appropriate budgeting system with an annual budget which is kept under review by senior management;
- there are systems aimed at ensuring the security of the information and communication technology systems;
- there are systems in place to safeguard the assets;

and

I confirm that the following ongoing monitoring systems are in place:

- key risks and related controls have been identified and processes have been put in place to monitor the operation of those key controls and report any identified deficiencies;
- reporting arrangements have been established at all levels where responsibility for financial management has been assigned; and
- there are regular reviews by senior management of periodic and annual performance and financial reports which indicate performance against budgets/forecasts.

I confirm that the CRR has the appropriate procedures in place to ensure compliance with current procurement rules and guidelines. Matters arising regarding controls over procurement are highlighted under internal control issues below.

I confirm that the CRR has procedures to monitor the effectiveness of its risk management and control procedures. The CRR's monitoring and review of the effectiveness of the system of internal control is informed by the work of our internal audit, the external audit and the senior management within the CRR.

A Code of Conduct and Ethics is in place for employees.

Government policy on the pay of Chief Executives and all State Body employees is being complied with. Details of the salary of the Commissioner are published in the Annual Report and Financial Statements.

I confirm that the CRR has a protocol for the provision of information to members of the Oireachtas by State Bodies under the aegis of Government Departments in line with Circular 25/2016.

There have been no significant post balance sheet events.

The CRR is compliant with the Government travel policies.

The CRR is compliant with the asset disposal procedures.

The CRR is in compliance with all relevant tax laws.

The CRR is adhering to the Public Spending Code.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2023





Appendix A APIS stage letters of approval

Table 8 Letters of Acceptance issued in 2023

	Concept	Preliminary design	Detailed design	T & C	Interim operation	Service
APIS stages	1	2	3	4	5	6
Infrastructure – Iarnród Éireann						
Overbridge (OBM779D) Athlone to Westport Line						
Overbridge (OMB782M) Athlone to Westport Line						
Pedestrian Overbridge (OBB66A) at Gormanstown Station						
DART+ Coastal North (BEMU Infrastructure)		•				
ETCS level 1 Trackside Equipment Drogheda-Greystones & Howth		•				
Signalling – Portlaoise						
Pedestrian overbridge (OBW65A) with lifts at Carlow Station					•	
Pedestrian overbridge (OBR111A) with lifts at Dalkey Station						
Pedestrian Overbridge (OBS430A) at Edgeworthstown Station					•	
Pedestrian overbridge (OBE73E) with lifts at Ennis Station					•	
Kishogue Station – Renewal/Upgrade			•			
Fixed Installations for DART+ West						
Pedestrian Overbridge (OBT20B) with lift at Banteer Station			•			
Pedestrian/cycle overbridge (OBB32B) in Donabate, Dublin.			•			
Overbridge (OBW39A) Dublin to Waterford Line						
Pedestrian Overbridge (OBS430A) at Edgeworthstown Station						
New platform, footbridge and lifts at Limerick Junction Station					•	
New Station – Woodbrook						
Ceannt Station Galway Redevelopment						

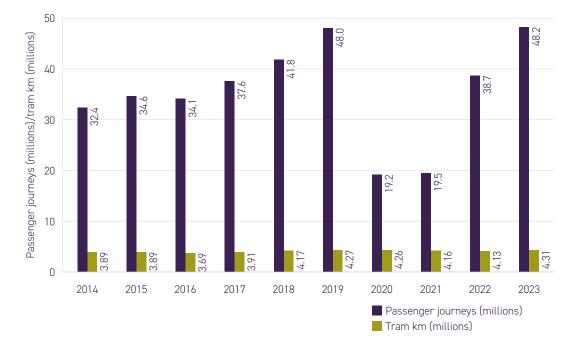
55

	Concept	Preliminary design	Detailed design	T & C	operation	Service
APIS stages	1	2	3	4	5	6
Overbridge (OBW39A) Dublin to Waterford Line						
Overbridge (OBR419A) Dublin to Rosslare line						
Pedestrian and Cycle Overbridge Dublin to Sligo line						
Replacement pedestrian overbridge Waterford to Limerick Line			•			
ETCS level 1 Trackside Equipment Howth Branch						
National Train Control Centre Systems						
GSM-R CCT – Phase 2						
New Station – Pelletstown						
Signalling – Geashill						
Pedestrian overbridge (OBE73E) with lifts at Ennis Station						
Infrastructure – other						
Velorail Kiltimagh, Infrastructure						
Veolrail, Bord na Móna, Infrastructure	1.					
Metrolink, TII						
Dursey Island Cable Car Tower Structures & associated works (Stg 1)						
Dursey Island Cable Car Tower Structures & associated works (Stg 2)						
Rolling Stock – Iarnród Éireann						
Track Recording Vehicle						
IÉ-RU Class 22000 Intercity RailCar – B2 Car				•		
On Track Crane – Type KRC-500						

Appendix B Passenger numbers on the heavy and light rail systems 2023







57

Appendix C CRR outcomes (recommendations) made to railway organisations

The following tables present the status of CRR outcomes made to railway organisations. These are typically made following audits, inspections or after conducting a post occurrence activity linked to accidents or incidents.

Progress continued to be made in 2023 with respect to the closure of CRR outcomes. While some figures appear high in the 'Open' category this does not mean no action has been undertaken or no development has been made. Continual periodic outcome review meetings are undertaken with railway organisations by the CRR in order to develop and progress outcomes. In 2023, a notable element of work was undertaken to progress outcomes made by CRR inspectors which resulted in a total of 109 CRR outcomes being closed. Of these, 39 were either Major non compliances or minor non compliances and the remaining 70 closed outcomes were Actions required.

	Ор	en	FI	ER	Subn	nitted	Closed	
Activity	ARs	NCs	ARs	NCs	ARs	NCs	ARs	NCs
CRR outcomes for IÉ-IM								
Audit	9	4	7	5	1	1	267	79
Inspection	57	18	3	0	2	0	29	7
Post Occurrence Activity	20	9	14	3	5	2	98	20
CRR outcomes for IE-RU								
Audit	19	13	6	5	3	0	124	49
Inspection	25	7	2	0	2	2	53	16
Post Occurrence Activity	4	2	5	0	0	0	31	9
CRR outcomes for Transdev								
Audit	28	7	24	3	1	0	60	9
Inspection	7	5	3	2	0	0	15	1
Post Occurrence Activity	8	3	2	0	1	0	6	2
CRR outcomes for NIR								
Audit	5	2	0	0	0	0	3	2
Inspection	0	1	0	0	0	0	2	0
Post Occurrence Activity	0	1	0	0	0	0	4	1

Table 9

Status of CRR outcomes as of 31 December 2023

APPENDICES

Op	en	FI	ER	Subn	nitted	Closed	
ARs	NCs	ARs	NCs	ARs	NCs	ARs	NCs
9	5	3	1	0	0	29	12
10	0	0	3	0	0	9	7
0	0	0	0	0	0	0	0
4	3	0	0	0	0	0	0
6	0	0	0	1	0	1	0
2	0	0	0	0	0	0	0
5	0	0	0	1	0	30	3
14	0	0	0	0	0	11	0
0	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0
16	4	1	2	0	0	43	31
0	0	0	0	0	0	1	3
	ARs 9 10 0 10 0 4 6 2 14 6 2 14 0 14 0 0 16	9 5 10 0 0 0 4 3 6 0 2 0 5 0 14 0 0 0 0 0 14 0 0 0 14 0 0 0 14 0 0 0 14 0 0 0 0 0 16 4	ARs NCs ARs ARs 9 5 3 10 0 0 10 0 0 0 0 0 4 3 0 4 3 0 2 0 0 5 0 0 14 0 0 0 0 0 14 0 0 0 0 0 0 0 0 14 0 0 0 0 0 14 0 0 0 0 0 15 0 0	ARs NCs ARs NCs 9 5 3 1 10 0 0 3 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 1 3 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 2	ARs NCs ARs NCs ARs 9 5 3 1 0 10 0 0 3 0 0 0 0 3 0 0 0 0 0 0 0 4 3 0 0 0 1 4 3 0 0 1 1 4 3 0 0 1 1 2 0 0 0 1 1 5 0 0 0 0 1 14 0 0 0 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ARs NCs ARs NCs ARs NCs 9 5 3 1 0 0 10 0 0 3 0 0 10 0 0 3 0 0 0 0 0 3 0 0 10 0 0 3 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 14 3 0 0 0 0 0 12 0 0 0 0 0 0 14 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0	ARs NCs ARs NCs ARs NCs ARs 9 5 3 1 0 0 29 10 0 0 3 0 0 9 10 0 0 3 0 0 9 10 0 0 3 0 0 9 10 0 0 0 0 0 9 10 0 0 0 0 0 9 10 0 0 0 0 0 9 10 0 0 0 0 0 0 10 11 2 0 0 0 1 0 30 114 0 0 0 0 0 2 2 114 0 0 0 0 0 2 3 115 0 0 0 0 <

RAIU safety recommendations

The implementation of safety recommendations made by the RAIU is monitored by the CRR. The CRR formally issue RAIU recommendations to railway organisations or other entities and then track the implementation of these recommendations.

The status categories for RAIU recommendations for tracking purposes are:

Open/in progress

Feedback (Evidence) from Railway Organisation (or another party) is awaited or actions have not yet been completed.

Submitted

The Railway Organisation (or other party) has made a submission to the CRR, advising that it has taken measures to affect the recommendation and next step is for the CRR to review the submission and make a determination on whether or not the recommendation can be closed or if the recommendation needs to be recategorised.

FER (Further Evidence Requested)

The CRR has reviewed a submission (or further submission) but considers that further evidence is necessary to close the safety recommendation. It is possible that there is multiple iterations of further evidence required/multiple iterations of reviews in order to close the safety recommendation.

Closed

The CRR has reviewed a submission (or further submission) and is satisfied that the safety recommendation has been addressed.

Table 10

RAIU safety recommendations

		No. of recommendations											
Year	No. of reports	Open	Submitted	FER	Closed	Total							
2014	6	0	0	1	25	26							
2015	2	0	0	0	4	4							
2016	3	6	0	2	12	20							
2017	1	0	0	2	7	9							
2018	1	1	0	1	7	9							
2019	4	9	1	5	21	36							
2020	4	6	0	8	4	18							
2021	7	15	0	10	11	36							
2022	3	15	0	1	0	16							
2023	5	43	2	1	1	47							
Total		95	3	31	92	221							
Total recor	nmendations made					221							

Appendix D Safety indicator statistics

Table 11 Iarnród Éireann fatality and injury statistics

'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	Trend
nger fat	al inju	iries								
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
	nger fat 0 0	nger fatal inju O O O O O O	nger fatal injuries	nger fatal injuries	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nger fatal injuries 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Fatal injury to third party at a level crossing involving a train	0	0	0	0	0	0	1	0	0	0	
Fatal injury to third party at a level crossing not involving a train	0	0	0	0	0	0	0	0	0	0	
Fatal injury to employee at a level crossing due to train in motion	0	0	0	0	0	0	0	0	0	0	
Fatal injury to employee due to train in motion (other than at a level crossing)	0	0	0	0	0	0	0	0	0	0	
Fatal injury to employee not due to train in motion	0	0	0	0	0	0	0	0	0	0	

Railway infrastructure: employee fatal injuries

Fatal injury to employee at a level crossing due to train in motion	0	0	0	0	0	0	0	0	0	0	
Fatal injury to employee due to train in motion (other than at a level crossing)	0	0	0	0	0	0	0	0	0	0	
Fatal injury to employee not due to train in motion	0	0	0	0	0	0	0	0	0	0	

				'18	'19	'20	'21	'22	'23	Trend
uries t	o othe	er pers	sons							
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	1	0	^
6	2	5	12	9	4	7	5	6	11	\searrow
l injur	ies to	passe	ngers							
0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	
45	48	79	57	74	76	42	32	62	65	\sim
18	15	31	33	46	38	9	0	30	45	<u> </u>
	0 6 Il injur 0 45	0 0 0 0 6 2 1 injuries to 0 0 0 0 45 48	0 0 0 0 0 0 6 2 5 0 0 0 0 0 0 0 0 0 45 48 79	0 0 0 0 6 2 5 12 It injuries to passengers 0 0 0 0 45 48 79 57	0 0 0 0 0 0 0 0 0 0 6 2 5 12 9 Injuries to sevente sevent	0 0 0 0 0 0 0 0 0 0 0 0 0 6 2 5 12 9 4 Injuries to passengers 0 0 0 0 0 0 10 0 0 0 0 0 0 10 0 0 0 0 0 0 10 0 0 0 0 0 0 45 48 79 57 74 76	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6 2 5 12 9 4 7 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 45 48 79 57 74 76 42	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6 2 5 12 9 4 7 5 0 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 45 48 79 57 74 76 42 32	0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 6 2 5 12 9 4 7 5 6 Injuries to passengers 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 45 48 79 57 74 76 42 32 62	0 0

Third party at level crossing injury involving a train	0	0	0	0	1	1	0	0	0	1	
Level crossing user injury not involving a train	0	0	0	0	1	1	2	1	2	2	

Railway infrastructure: non fatal injuries to other persons

Injury to customer or visitor to premises	205	146	192	321	199	288	122	96	172	223	\checkmark
Injuries to other persons including unauthorised persons	0	1	2	6	0	2	0	0	2	3	\bigwedge

APPENDICES

Category	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	Trend
Railway operations: non fat	al emp	loyee	injurie	es							
Employee lost time accident involving train movement or train accident	21	3	1	15	13	7	8	0	0	20	\bigvee
Employee lost time accident while working on railway not due to train in motion	43	32	30	30	13	35	16	8	11	11	\searrow
Railway infrastructure: nor	n fatal e	mploy	/ee inj	uries							
Employee lost time accident involving train movement or train accident	0	0	0	0	0	0	0	0	0	0	
Employee lost time accident while working on railway not due to train in motion	25	6	23	22	26	24	20	33	20	20	
Employee lost time accident while working at level crossing not due to train in motion	2	0	3	1	1	0	3	0	2	2	\sim
Entity in charge of mainten	ance ar	nd ma	intena	nce w	orksho	ops: no	on fata	al emp	loyee	injuri	es
Employee lost time accident involving train movement or train accident	0	0	0	0	0	0	0	0	0	0	
Employee lost time accident while working on railway not due to train in motion	18	13	11	10	12	15	4	11	7	5	\searrow

Figure 3 Total number of train collisions by year



Table 12 Train collision statistics by year by category

Category	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	Trend
		10	10		10		20	21		20	
Train collision with passenger or goods train on running line	0	0	0	0	0	0	0	0	0	0	
Train/railway vehicle collision in station or possession movement	1	1	1	2	1	1	4	1	4	0	mulif
Train collision with a motor vehicle at a level crossing	2	0	0	3	1	2	1	0	0	1	r hter
Train collision with pedestrian at a level crossing	0	0	0	0	0	0	0	0	0	0	
Train collision with attended gates at a level crossing	0	1	0	0	0	0	0	0	0	0	1
Train collision with road vehicle obstructing the line (not at a level crossing)	0	1	1	0	0	0	0	0	0	0	11
Train collision with other obstacle on the line	29	1	31	25	23	8	29	27	27	34	Lhi.III
Train collision with large animal(s) on the line	9	29	35	23	11	11	38	46	59	89	ul
Total	41	33	68	53	36	22	72	74	90	124	III

Signals Passed At Danger (SPADs)

A SPAD is defined as having occurred when a train passes a stop (red) signal without authority. SPADs are a particular precursor event that the CRR monitors at its supervisory meetings with IÉ-RU. The trend in recent years has seen a decline in these precursors and is visible within the dotted trendline within the figure below.

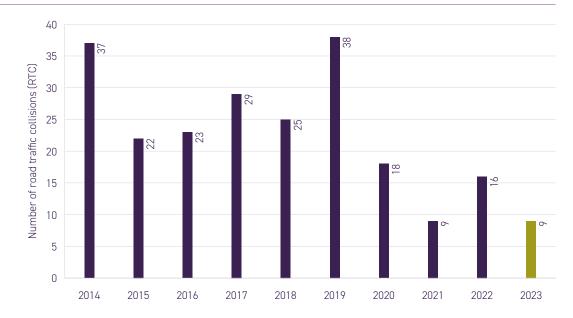


Train derailments

Train derailments remain at low levels, with all those occurring in 2023 taking place in sidings.



Figure 5



Road traffic accidents involving trams

Figure 6 Road traffic accidents (collisions) involving trams by year

Signals Passed at Stop (SPASs) and SPAD events

SPAS/SPAD events occur on the LUAS network, 2023 data shows that these events remained broadly in line with performance in 2022 but significantly up from 2021.

A recent RAIU report: Trend Investigation into Signals passed at stop on the LUAS Network – RAIU report No 2022 – R003 published on the 21st of October 2022 into these SPAS/SPADs events detailed several recommendations for the light rail sector, and stakeholders are currently engaged in taking actions to address the requirements contained within those recommendations.



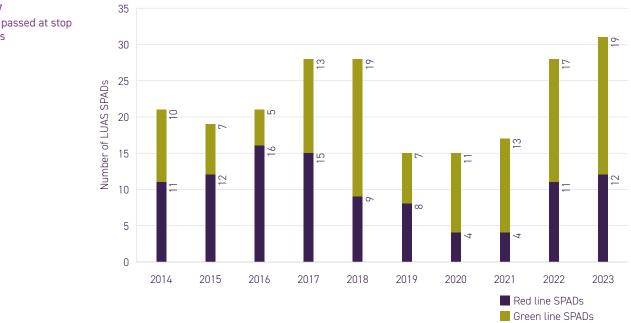


Figure 7 Signals passed at stop by trams

Tram derailments

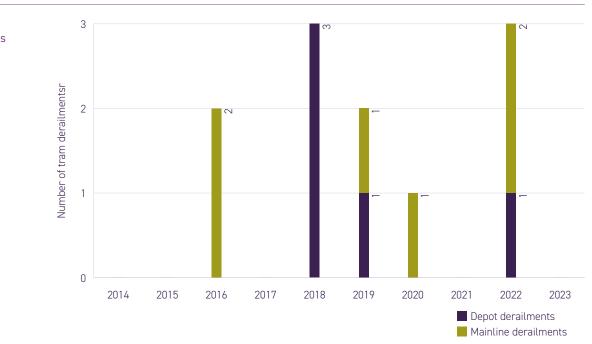


Figure 8 Tram derailments

Public representations

Public and railway staff representations received in 2023, by category.



Appendix E Safety certificates

Heritage railways

Table 13 Heritage railways with a current safety certificate

The Difflin Light railway is a private narrow-gauge railway, 4.5km long, in the grounds of Oakfield Park Demense, Raphoe, Co Donegal.
Cumann Traenach na Gaeltacht Lair is a narrow-gauge railway 4.8km long. The railway runs from Fintown to a point known as a 'Head of Lake'.
The Irish Steam Preservation Society Narrow Gauge Railway marketed as the Stradbally Woodland Express is located in the woodlands of Stradbally Hall Estate. It is a narrow-gauge railway 800m long.
The Lartigue Mono Railway, LMR, consists of Three distinct areas make up the railway, these are, the Main site, the Museum and the Original site. Within the main site is located the railway itself.
The Waterford and Suir Valley Railway is a narrow-gauge railway between Kilmeadan Station and Bilberry, Waterford city. It runs on a section of the abandoned Waterford to Mallow railway line. The length of the railway is 10km.
The Cavan & Leitrim Railway is a narrow-gauge railway 0.8km long. The railway runs from Dromod station to a point approximately 90 meters from the Mohill-Dromod road on the original track of the Cavan & Leitrim Railway
The Connemara heritage railway operates on an isolated narrow gauge track approximately 400m long.

Table 14 Heritage railways that do not hold a current safety certificate						
Tralee-Dingle Steam Railway Co Ltd Town Hall Prince's Quay Tralee Co Kerry	The Tralee-Dingle Railway is a narrow-gauge railway of 3km in length and runs from Ballyard Station at Tralee to Blennerville Station. The railway runs along the line of the closed Tralee to Dingle railway line.					
West Clare Railway Co Ltd Moyasta Junction Kilrush	The West Clare Railway is a narrow-gauge railway, operating over 4km of track. The railway in centred on the former station at Moyasta, near Kilrush Co Clare where the original station house has been restored to a museum. The line in use runs over the original track bed of the West Clare Railway.					
Lullymore Heritage & Discovery Park Ltd Lullymore Rathangan Co Kildare	Lullymore Heritage Railway is a 1km looped journey through rehabilitating cutaway peatlands.					

Velorail operators

Table 15

Velorail operators with a current safety certificate

IRD Kiltimagh CLG – Velorail Station Road Kiltimagh County Maigh Eo F12YE09 IRD Kiltimagh CLG – Velorail are utilising approximately 8km of track at total and the course length to pedal on the railbikes is approximately 1hr 15mins.

Appendix F Supervision inspection activities

Table 16 Supervision inspection activities commenced in 2023

No	Supervision inspection name	Railway entity
1	SUP Feedback to CA RSIE	RSIE
2	Level Crossing Decommissioning and Remaining Use	BNM
3	IÉ-IM DSS level Crossing inspection	IÉ-IM
4	Cavan Leitrim Railway	C&LR
5	Driver Competence Management	TDLR
6	Track Walk	TDLR
7	SET Signalling Cabins	IÉ-IM
8	DIR incident 75966 – ICR Wheel Sizes	IÉ-RU
9	March Specials Inspection	RPSI
10	Broombridge and Castleknock inspection to address outstanding audit trails	IÉ-IM
11	Station inspection Ballyhaunis	IÉ-RU
12	Bridge inspection OBM 740 Ballyhaunis	IÉ-IM
13	Station inspection Claremorris	IÉ-RU
14	NIR Fleet Maintenance Facilities	NIR
15	Charlemont Settlement Data – Review of 2022/Q1 2023 RPS/TDLR Data	TDLR
16	Tunnel Inspections	IÉ-IM
17	Major Station Inspections	IÉ-RU
18	Difflin Lake Railway Inspection	DLR
19	Belgard A05 SPAS Inspection	TDLR
20	Station Inspections – B&F Focus – 15 No stations	IÉ-IM
21	W&SVR 2023 Inspection	W&SVR
22	Event Planning – Bray Air Show	IÉ-RU
23	Track Walk	TDLR
24	Annual Inspection	ISPS
25	Seabreeze or Other	RPSI
26	Fintown Heritage Railway Inspection	Fintown
27	CME Concession Management (Drogheda & Fairview) Depots	IÉ-RU
28	Internal Monitoring, Internal Auditing & Accident Investigation	NIR
29	Lartigue Monorail	LMR
30	Annual Inspection – New Operator	VELO
31	TDLR 401 Fleet inspection ALARP	TDLR
32	Trackwalk Broombridge to SSG	TDLR

No	Supervision inspection name	Railway entity
33	Review of maintenance and operations of MPV790	RSIE
34	NSA-IE Annual report	ERA
35	Emergency Planning and Response	TDLR
36	Review of TDLR Overspeed trend	TDLR
37	Safety Related Competence Review	IÉ-IM
38	Safety Related Competence Review	IÉ-RU
39	Santa Special	RPSI
40	IE-RU Train Driver medical and competency Check	IÉ-RU
41	Track Walk Red Line Heuston – Point	TDLR
42	Connemara Heritage Railway Inspection	CON
43	RSIE Driver Medicals Check	RSIE
44	Design, Preparation and Operating of Rolling Stock for NIR Services on the IÉ-IM Network	NIR
45	Difflin Lake Railway Santa Express inspection	DLR

Table 17

Supervision inspection activities completed in 2023 that were commenced in 2022

No	Supervision inspection name	Railway entity
1	IÉ-IM NWRM Review	IÉ-IM
2	IOD Signalling Projects 2014-2019	IÉ-IM
3	Fintown 2022 Main inspection	Fintown
4	Difflin Lake Railway 2022 Main Inspection –	DLR
5	Drogheda Wheel Lathe	IÉ-RU
6	Control Room Management	RSIE
7	ISPSNGR Heritage Railway Inspection (Stradbally Woodland Railway)	ISPS
8	ECP Inspections	IÉ-IM
9	Train Driver License inspection	IÉ-RU
10	IÉ-IM CSI Data collection inspection	IÉ-IM

Appendix G Glossary

	Authorization to Diagonia Compile
APIS	Authorisation to Place in Service
BNM	Bord Na Móna
CACR	Cork Area Commuter Rail
CILT	Chartered Institute of Logistics and Transport
CRR	Commission for Railway Regulation
CTC	Centralised Traffic Control
DART	Dublin Area Rapid Transit
DeBo	Designated Body
DGSA	Dangerous Goods Safety Advisor
DLR	Difflin Lake Railway
DoT	Department of Transport
ECM	Entity in Charge of Maintenance
EFTA	European Free Trade Association
ERA	European Railway Agency
ETCS	European Train Control System
EU	European Union
Fol	Freedom of Information
GSM-R	Global System for Mobile Communications – Railway
ICDMU	Intercity Diesel Multiple Units
IÉ-IM	larnród Éireann Infrastructure Manager
IÉ-RU	larnród Éireann Railway Undertaking
IMMAC	Infrastructure Manager Multi Annual Contract
IRS	Irish Railway Standards
LCC	LUAS Cross City
NIR	Translink Northern Ireland Rail
NIS2	Network and Information Security Directive
NR	National Rules
NSA	National Safety Authority
OSS	One Stop Shop
ОТМ	On Track Machine
POA	Post Occurance Activity
RAIU	Railway Accident Investigation Unit
RISC	Railway Interoperability and Safety Committee
RO	Railway Organisation
RPSI	Railway Preservation Society of Ireland
RSA	Railway Safety Act
RSIE	Rhomberg Sersa Ireland
RU	Railway Undertaking
SEAI	Sustainable Energy Authority of Ireland
SMS	Safety Management System
SPAD	Signal Passed at Danger

SPAS	Signal Passed at Stop
SPRM	Safety Performance Review Meeting
SSC	Single Safety Cerificate
TDLR	Transdev Dublin Light Rail
TII	Transport Infrastructure Ireland
TPS	Train Protection System
TSI	Technical Specification for Interoperability
USAN	Urgent Safety Advice Notice



The CRR is grateful to Neil Dinnen for permission to use his copyright images in this report

Commission for Railway Regulation Temple House Temple Road Blackrock A94 Y5W5 County Dublin Ireland www.crr.ie +353 1 206 8110 info@crr.ie

