



ANNUAL REPORT 2024

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 2024

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
- 44 Report of Head of Corporate Governance and Regulation
- 50 Report on Railway Regulation
- 53 National and European Legislation Framework Developments
- 56 Commissioners Comprehensive Report to the Minister
- 59 Appendices

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

REPORT OF THE COMMISSIONER



To Minister Darragh O'Brien, Minister for Transport

Minister,

The Commission for Railway Regulation (CRR) is pleased to submit its annual report for 2024.

In 2024, the CRR published its new Statement of Strategy 2024-2027 (SoS). Our SoS has been developed in consultation with our various stakeholders and in consultation with our own staff. This annual report, is therefore, the first report under the new strategy. In developing this strategy, the CRR has taken full account of both national and European policies, strategies and plans relating to transport as well as the additional relevant legislative framework. Specifically, the Commission has developed its new strategy in the context of the current and planned significant expenditure on both railway infrastructure and rolling stock.

As a public body, the CRR has a range of corporate responsibilities in relation to our operation, and the functions that we perform. An understanding and continued review of our corporate responsibilities, including those in the Code of Practice for the Governance of State Bodies, has been central to our operation in 2024. This has included the update and amendments to our Oversight Agreement and Performance Delivery Agreement with the Department of Transport (DoT). 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 2024.

The CRR has a sanction for 17 staff, which allows it to fulfil its existing functions. In 2024, the CRR applied for sanction for an additional three staff to enable it to fulfil the additional functions that it will be required to undertake in the coming years under the Critical Entities Resilience (CER) Directive, the Network and Information Security (NIS2) Directive and the Artificial Intelligence Act (AIA).

The CRR has three sources of funding available to it. The primary one is the annual statutory levy that the CRR places on the railway organisations that it regulates. The CRR also receives Grant in Aid from the DoT and in addition the CRR may charge fees for several of its functions. In 2024, the total projected funding requirement of the CRR was €2.556m. This was secured through a levy of €1,590m, Grant in Aid of €625K, fees for services and the existing reserve funds.

The CRR operates within a legislative framework that is based on national and European legislation. The general legislative framework in relation to both heavy and light rain remained relatively stable in 2024. 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 20 meetings chaired by the European Commission (EC), 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 points of contact.

The CRR have been assigned several new responsibilities and expect further responsibilities to be delegated to it in 2025 as new European Legislation comes into force.

In relation to the CER Regulations the CRR is now, under SI 559 2024, the competent authority in relation to transport rail for heavy and light railways. The CRR has also been advised that it is to be the competent authority under the NIS2 Directive, this designation is still to be finalised, however the CRR has commenced its engagement with entities that will be subject to regulation. The CRR has also been fully engaged in the National Cyber Security Centre (NCSC) Competent Authority Forum established to transition from NIS 1 to NIS 2. The CRR as the market surveillance body relating to cableways will also have additional responsibility under the AIA.

The specific functions undertaken by the CRR are statute based. The CRR's own risk assessment of entities and their level of activity direct our activity to ensure the continued safe operation of the railway, light rail, heritage and industrial railways and cableways in the State. This includes the conformity assessment of safety management systems, the authorisation to place in service of infrastructure subsystems and rolling stock, the licencing of train drivers and railway undertakings, assessment of designated bodies, as well as the ongoing supervision of all entities and enforcement where necessary to ensure compliance. We also carry out separate regulatory functions including the monitoring of the Infrastructure Managers Multi Annual Contract with the Minister.

The continued increase in passenger numbers on both heavy and light rail to an all time high was noted in 2024, with larnród Éireann and Luas having 50.66 and 54.2 million passenger journeys respectively.

The CRR issued 57 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 a concept LoA in relation to Metrolink and 15 Detailed Design LoA, which included a Cork Area Commuter Rail Kent Station through platform and a Limerick-Foynes track installation. Further LoA's included 1 Testing LoA in relation to GSM-R fixed installation infrastructure, 11 Interim Operation LoA, which included a new platform at Limerick Junction, a new station and pedestrian overbridge at Pelletstown, GSM-R compatible radios for class 29000, 22000 2600 and 2800, and 12 Service Operation LoA's which included 9 overbridges.

In 2024, five heritage railways required re-certification of their previously approved Safety Management System (SMS). In addition, there was pre-engagement with both the RPSI and Transdev on their respective SMS re-certifications due in early 2025.

The CRR's 2024 annual supervision workplan had the full suite of supervision activities available to it and via these activities verify that the various railway organisations SMSs are being implemented. These activities included audits, inspections, post occurrence activities, safety performance meetings and the follow up of representations. The focus and extent of use of these activities on any regulated entity is based on their risk profile. Our overall approach has been and continues to be based on, support, advice, encouragement, and when necessary, enforcement.

Three audits were completed in 2024, and there are a further five active audits which are yet to be completed. In relation to the three completed audits the outcomes included 16 minor non-compliances, and action was required in relation to a further 20 issues.

In 2024, the CRR commenced 52 inspections across all railway organisations and 54 inspections were completed. 15 of these were from inspections commenced in 2023. The completed inspections identified two major non-compliances and 16 minor non compliances. There were a further 40 instances where the CRR required action to be taken by the regulated entity, in areas where there was the potential for non-compliance to arise unless such action was taken. This represents a notable increase over 2023 in areas of non-compliance or where action was required.

In 2024, CRR inspectors on five occasions took formal enforcement action, issued a direction to a railway organisation for an Improvement Plan, 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.

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 2024, 73 new licences were issued.

A railway undertaking cannot operate without a valid licence. Licenses are valid for a 5-year period. 1 licence expired in 2024, a new licence application was received, assessed and a new licence was issued in October.

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 an extensive review of the next IMMAC.

The CRR received 3 investigation reports, and one Urgent Safety Advise Notice from the Railway Accident Investigation Unit (RAIU), which between them contained 14 safety recommendations. These were fully considered by the CRR and then directed for the attention of the relevant railway organisation or other body that is required to implement them.

The CRR received 22 representations which raised safety concerns in relation to the rail sector. Two of these related to safety of infrastructure, 8 related to the safety of rolling stock and 7 related to the safety of train operations. Safety of railway working made up a further 12 representations. In addition to these, 17 other requests for information were received from several regulatory bodies/agencies. All representations are actioned by the CRR and receive a high degree of priority.

In 2024, the overall safety performance of the Irish heavy railway sector was assessed as being in the main quite positive. This positive assessment is based on previous years comparative data including common safety indicators and European statistics.

The CRR is subject to independent audit by the European Union Agency for Railways (ERA). These audits operate on a three-year cycle and in 2024, the CRR was audited as part of the second three-year audit cycle. The audit commenced in March 2024 with the provision of information and documentation to the audit team by the CRR. This was followed by an on-site activity in September 2024. A draft report was issued in November 2024, and the final agreed report is expected to issue in March 2025.

The CRR Climate Action Roadmap has been updated to reflect the Government Climate Action Plan 2024 and associated Public Sector Mandate. The CRR Energy Performance Indicator is showing a 77% positive change, and on this basis has reached its 2030 target. In relation to greenhouse gasses the reduction of fossil CO_2 emissions continues to be a challenge, however our total CO_2 showed a 33% reduction over our baseline against the target of 51% required by 2030.

We 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 that in line with our mission, our railways are safe, secure, accessible and sustainable through effective and efficient regulation.

No organisation can function effectively without a committed and dedicated staff. I wish to acknowledge the professionalism and continued dedication of the Commission's staff which enables the CRR to fulfil its extensive range of functions. I extend my sincere thanks to each member of staff.

I would also like to thank Minister Ryan and Department of Transport staff for their engagement and support throughout the year.

Brian Higgisson Commissioner COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

ORGANISATIONAL STRUCTURE AND ROLE



Management team and organisational structure



Brian Higgisson



Anthony Byrne Authorisation to Place in Service and Conformity



Emmett Davis Principal Inspector Compliance Supervision and Enforcement



Caitríona Keenahan Governance and

or	Higher Executive Officer
	Executive Officer



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 2005 Act 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, velorail and cableways.

Most recently, the CRR, under SI 559 2024 has been given additional responsibilities under the Resilience of Critical Entities Regulations.

Under the Railway Safety Act 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 Railway Safety Act, 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 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), placing on the market interoperability constituents and mobile subsystems, authorisation for placing in service fixed installations, 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.

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 functions 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).

SI 559 2024 (EU) Resilience of Critical Entities Regulations gives effect to Directive (EU) 2022/2557 on the resilience of critical entities. In this SI the CRR was designated the competent authority in relation to the transport/rail sector as it related to railway organisations and infrastructure managers and also the public transport sector as it relates to light rail.

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 2024:

- Iarnród Éireann Infrastructure Manager (IÉ-IM)
- Iarnród Éireann Railway Undertaking (IÉ-RU)
- Transdev (LUAS operator) Railway Organisation (RO)
- Rhomberg Sersa Ireland Limited (RSIE) Railway Undertaking (RU)
- Northern Ireland Railways (NIR) Translink Railway Undertaking
- Transport Infrastructure Ireland (TII) Railway Organisation
- Bord Na Mona (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 2024, there has been a continuing steady increase in passenger numbers, with larnród Éireann at 50.66 million passenger journeys, a new all-time high, and Transdev is also at an all-time high with 54.2 million passenger journeys in the year. See Appendix B Figure 1 and 2 for 10-year trends.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

STRATEGY OF THE COMMISSION FOR RAILWAY REGULATION



The CRR's new Statement of Strategy (2024 – 2027), issued under the Railway Safety Act 2005, was submitted to the Minister in June 2024 and published on our website.

In developing this strategy, the CRR has taken full account of both national and European policies, strategies and plans relating to transport as well as the additional relevant legislative framework. Specifically, the Commission has developed its new strategy in the context of the current and planned significant expenditure on both railway infrastructure and rolling stock. We actively sought the opinion of our key stakeholders in the preparation of this strategy. We received submissions from all the major stakeholders which were given careful consideration and have helped direct the development of this new strategy. We thank all our stakeholders for their active engagement.

Strategy 2024-2027

Mission

To ensure safe, secure, accessible and sustainable railway systems through effective and efficient regulation.

Vision

Safe and sustainable railways at the heart of public transport and economic development.

Values

Integrity We are trustworthy and honest in all our activities.

Respect

We value and understand the positive impact of diversity of opinion.

Independence

We take responsibility for our decisions which are evidence based, fair and consistent.

Professionalism

We strive for excellence and the continuous development of our expertise.

Pragmatism

We recognise the challenges faced by our stakeholders and are solution driven whilst ensuring legislative requirements are met.

Strategic priorities

Strategic priorities: As part of this statement of strategy we have identified 5 strategic priority areas with key supporting actions that will be a focus over the life of this strategy.

Priority: safe, secure and sustainable railways

Ensuring through regulation and encouragement that safety, security and sustainability are central to rail transport as part of the public transport network, protecting members of the public, employees and those who interface with the rail network.

Priority: our people and our organisation

Our people are our most valuable asset, and we will promote continuous improvement within our organisation by supporting our staff and encouraging their personal development.

Priority: promoting highest standards

Creating an awareness within the rail sector of changes to the regulatory framework, standards and guidance to support best practice.

Priority: effective market regulation

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

Priority: our communication

Listening, communicating and engaging effectively with all our stakeholders.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

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



National and European legislation requires that when railway organisations wish to bring into service or operation new fixed installations such as infrastructure, e.g., a new bridge or station, they must make a submission to the CRR for 'Authorisation to Place in Service' (APIS). Similarly, in the case of certain upgrades or renewed assets, an APIS is required.

Likewise, in the case of bringing into service new vehicles (trains) a Vehicle Authorisation (VA) is required.

From a European perspective the main EU legal requirements are:

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

These Directives 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 Railway Safety Act 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 legislative framework is complex, particularly the Interoperability Directive, and its supporting Technical Specifications for Interoperability (TSIs), which detail specific requirements to be met in respect of the various railway subsystems, e.g., infrastructure, energy, control command and signalling, etc.

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

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

The application process developed by the CRR is based on industry best practice, underpinned by I.S. EN 50126 – railway applications – the specification and demonstration of reliability, availability, maintainability and safety. It is a 6-stage process, while some stages may be combined depending on the complexity of the project. 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

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 2024, fifty-seven letters of acceptance (56 – Infrastructure/Signalling, 1 Rolling Stock) were issued as part of the APIS process.

Through the European Railway Agency's authorisation portal, known as the One-Stop Shop (OSS), the CRR were involved in two authorisations. The first of these was in relation to the fitting of onboard ETCS Level 1 equipment to the 22000 Fleet (A1 Cabs). This authorisation is being led by the ERA with input from the CRR on 'Area of Use' aspects. The second was the authorisation of 41 new Inter City Rail (ICR) (class 22000) carriages.

The full list of letters of acceptance, by project, issued by the CRR in 2024 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

There is unprecedented investment in our railways. Iarnród Éireann, Transport Infrastructure Ireland (TII) and the National Transport Authority (NTA) are engaged in numerous high-priority projects some of which are outlined here.

Cork Area Commuter Rail (CACR)

The NTA, in partnership with both Cork City and County Councils and TII finalised the ambitious Cork Metropolitan Area Transport Strategy 2040. The CACR programme is the heavy rail element of CMATS, and aims to deliver increased train capacity and frequency, improved connectivity and a more sustainable transport network.

The CACR Programme is being progressed through several separate but interrelated projects which will be delivered in specific work packages. Work has already commenced on the following:

Kent Station Through Platform

The construction of which will facilitate through running services from Mallow to Cobh/ Midleton. A stage 3 Letter of Acceptance was issued in March 2024.

- Signalling and Communications Upgrade
 To facilitate the proposed capacity and service frequency increases.
- Glounthaune to Midleton Twin Track

The upgrading of the Glounthaune to Midleton line to a twin track configuration. A stage 3 Letter of Acceptance was issued in August 2024 for the advance works element that included utilities diversion, cable route installations, some cutting and embankment works, etc.

Additional work packages covering new stations, track works, and a new depot are at an early stage, and will be developed further in the coming years. As yet they do not require Letters of Acceptance.

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 Dec 2024.

- DART+ Coastal North involves the extension of electrification system from Malahide to Drogheda. Some enabling works took place in 2024 along with developing the 'Detailed Design' for the charging infrastructure. A formal Stage 3 submission covering the Detailed Design is expected in Quarter 1 2025.
- DART+ Coastal South involves an upgrade to the electrified line between Dublin Connolly and Greystones. While still at an early stage of development, in 2024, CRR Inspectors met with the larnród Éireann Project Team responsible for a related project referred to as the Wicklow Capacity Enhancement Project which would essentially replicate what is being done at Drogheda at Wicklow Station, facilitating enhanced services to the growing catchment area of Wicklow Town and its surrounds.
- DART+ West covers the line to Maynooth and includes city centre enhancements, new electrification and re-signalling installations and other infrastructure upgrades. The CRR did not receive any submissions for this scheme in 2024.
- DART+ Southwest covers the electrification of the line between Heuston and Hazelhatch and Heuston to Glasnevin where there is to be an interchange station with Metrolink. In late 2024, An Bord Pleanála approved the Railway Order application for this project excluding the construction of a new rail depot which will now be a separate project. The CRR did not receive any submissions for this scheme in 2024.

Metrolink

The Metrolink Project aims to provide a segregated, high capacity, high frequency, modern and efficient public transport service for people travelling along the Swords/Airport to City Centre corridor in Dublin. An updated stage 1 Letter of Acceptance in respect of the 'concept stage' was issued in February 2024. A second Public Consultation on MetroLink opened in August 2024 and it is anticipated that a decision will be made by An Bord Pleanála in 2025. CRR Inspectors met with TII officials on numerous occasions in 2024 in anticipation of a Stage 2 – Preliminary Design submission later in 2025.

Bridges/platforms/stations

In 2024, the CRR issued 20 letters of acceptance to IÉ-IM in relation to new authorisation applications for bridges, two for a new platform/platform extension and four for new/upgraded station projects. It should be noted that some projects may have received more than one letter of acceptance in the year, for example Pelletstown Station received a letter of acceptance for interim operation and later in the year for full service.

Stage 3 - Detailed Design Letters of Acceptance were issued for:

- CACR Work Package 1 Infrastructure, Kent Station Through Platform
- Robertstown Viaduct UBF(BF)18 Renewal
- Limerick to Foynes line refurbishment scheme Work Package 3 Track Installation
- New footbridge (OBT47A), lifts, etc., at Rathmore Station, Co. Cork
- New footbridge (OBG20B), lifts, etc., at Maynooth Station, Co. Kildare
- New road overbridge (OBF9A) at 21 miles, 1033 yards on the Limerick to Foynes line
- New road overbridge (OBF23A) at 12 miles, 1441 yards on the Limerick to Foynes line
- New road overbridge (OBF16B) at 10 miles, 1218 yards on the Limerick to Foynes line
- CACR Work Package 3 Advanced Works
- New footbridge (OBW39A), lifts, etc., at Athy Station, Co. Kildare
- Rathdrum Station: addition of lift to footbridge (OBR180) at 91 miles, 1500 yards on the Dublin to Rosslare line
- New pedestrian overbridge (OBY1A) at 1 mile, 70 yards on the Cork to Midleton line.

Stage 5 – Interim Operation Letters of Acceptance were issued for the following more advanced projects:

- New platform at Limerick Junction with pedestrian overbridge including lifts and stairs.
- New footbridge, lifts, etc., at Dalkey Station, Co. Dublin
- New Railway Pedestrian Overbridge, OBB66A, at Gormanstown Station
- New station with pedestrian overbridge at Pelletstown on the Dublin Maynooth line
- Replacement of existing overbridge OBN77 on the Ballybrophy to Killonan Junction line
- CACR Work Package 1 Kent Station Through Platform Signalling elements
- Maintenance and repairs to the existing Kishogue station and revision of the façade cladding to enable the station to go into operation.

Stage 6 – Service Operation were issued for the following completed projects:

- New pedestrian overbridge (OBW65A) with lifts at Carlow Station
- New overbridge 25 yards west of OBC414B located at 168 miles, 689 yards Cork to Midleton line
- New footbridge, lifts, etc., at Dalkey Station, Co. Dublin
- New Railway Pedestrian Overbridge, OBB66A, at Gormanston Station
- New footbridge, lifts, etc., at Little Island Station
- Replacement of existing overbridge OBN77 on the Ballybrophy to Killonan Junction line
- New footbridge (OBT20B), lifts, etc., at Banteer Station
- Replacement pedestrian overbridge on the Waterford to Limerick Railway line at 62 miles, 470 yards
- New station with pedestrian overbridge at Pelletstown on the Dublin Maynooth line
- Maintenance and repairs to the existing Kishogue station and revision of the façade cladding to enable the station to go into operation.

National Train Control Centre

Work at the new National Train Control Centre (NTCC) at Heuston Station continued throughout 2024, with building fit-out and installation of the control room hardware taking place. Work also continued developing the Traffic Management System (TMS) which will take control of all existing signalling on the IÉ network. CRR inspectors have been in regular contact with the Iarnród Éireann Project Team and their submission in respect of Stage 4 – Testing, commenced in Quarter 3 2024, and the assessment is expected to conclude in Quarter 1 2025.

APIS - Signalling and telecommunications

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

A key part of safe train operation is the ability for the control centre to communicate with train drivers and vice versa. The existing communication system uses an analogue radio system and this project will replace this with GSM-R which is presently the industry norm.

There are two related tasks (sub-projects) running in parallel to deliver this overall project. The first covers infrastructure being installed trackside and the second part is equipment being installed on the trains. Both sub-projects are further broken down into phases given the complexity of the task and the numerous different train fleets that exist.

In 2024, the CRR issued letters of acceptance for Stages 4 and 5 for both infrastructure and onboard train equipment.

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

In conjunction with the mobile communications system described above, and in advance of the new Dart Fleet entering into service, the existing signalling system is being replaced with the European Train Control System Level 1 (Class A). Throughout 2024, the TPS project team continued to prepare its detailed design, undertook enabling works, performed engineering tests and learned from its work already completed on the Howth Branch (DG1) in 2023/24.

In December 2024, the CRR issued a Stage 3 – Detailed Design Letter of Acceptance for the DG2-DG6 phase of the project, which covers the section of line between Drogheda and Greystones Howth Branch.

Under the Interoperability Directive (EU) 2016/797, most 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 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 a Member State, may make a submission to the EC, on behalf of an applicant (a Railway Organisation or other organisation) not to apply one or more TSIs or parts of them on a temporary or permanent basis.

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. The CRR, representing the Member State, reviewed this application and submitted it to the EC for a decision. In May 2024, the EC decided positively and approved the non-application.

Vehicle Authorisation (VA) - Rolling stock

The same European legislation referenced above also requires that when Railway Organisations wish to bring into service new vehicles (trains) a Vehicle Authorisation (VA) is required. Similarly, in the case of certain modifications to rolling stock VA is required. For vehicles such as trams, heritage or industrial railway rolling stock 'letters of acceptance' are required in accordance with the Railway Safety Act.

Below is an overview of current vehicle and rolling stock projects and their status.

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 CRR authorised these vehicles through the ERA OSS in February 2024.

As advised in our 2023 annual report, 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 for the non-application, and in March 2024 the EC approved the application.

Iarnród Éireann - Class 22000 Intercity Diesel Multiple Units (ICDMU)

As part of the national roll out of the new ETCS signalling system (referenced above) it is necessary to add corresponding hardware and software to the ICDMU train fleet so that the signalling system can communicate with the trains. Iarnród Éireann have commenced engagement with the ERA seeking a New Authorisation for an already authorised vehicle type for 3 vehicle types. These are:

- Class 22000 DMU A22 Vehicle No. 22201
- Class 22000 DMU B Vehicle No. 22401
- Class 22000 DMU A33 Vehicle No. 22301.

This is a staged process, and the initial stage referred to as the 'Pre-Engagement Baseline' was completed by the ERA supported by the CRR in July 2024. Further submissions are expected in 2025.

New DART (EMU/BEMU fleets)

In 2021, IÉ-RU and Alstom concluded a framework agreement allowing for up to 750 new DART vehicles (units) to be ordered over a ten-year period. To date a combined total of 185 vehicles have been ordered with the first train arriving in Ireland in late 2024. For the next year larnród Éireann will conduct a rigorous testing regime before they go into passenger service in 2026. The authorising entity for this new rolling stock is the ERA with the CRR responsible for the 'Area of Use' aspects. Submissions are expected in 2025.

Heritage railways

A heritage railway means a person or organisation who only operates train services or railway infrastructure of historical or touristic interest.

There was engagement with Difflin Lake Railway as they made submissions in respect of two new platforms. There were also discussions with the Waterford & Suir Valley Railway regarding proposed new works, and a new steam locomotive that they have been gifted.

Several heritage railways needed their Safety Management System recertified in 2024 and further details may be found in the section of this report on Safety Management System Conformity Assessment.

VeloRail

VeloRail (or rail biking) remains a relatively new leisure activity in Ireland. It consists of pedal powered passenger carts (railbikes) that travel along a disused and refurbished old railway line. Due to the nature of railbikes, and the associated infrastructure, they fall within the definitions under the Railway Safety Act 2005 and, therefore, within the scope of the CRR for acceptance.

Currently there is one operational VeloRail system located in Kiltimagh, Co. Mayo. CRR issued this VeloRail with its safety management certificate in March 2023. A second scheme is now under construction by Bord na Mona at Lough Boora discovery park in Co. Offaly. A Letter of Acceptance permitting construction of the necessary rail infrastructure was approved in October 2024.

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 the ERA for their assessment and upon acceptance 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 2024:

- 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).

A new IRS on Vehicle Gauging is at an advanced stage with considerable effort by the stakeholder group taking place in 2024. It is expected that this standard will be published in 2025.

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

Guidelines

The CRR publishes guidelines on a range of its functions and activities, these include guidance on developing a SMS, and how to make an application for new works or rolling stock. The full range of guidance can be seen on our website at www.crr.ie/publications/guidelines/.

In 2024, the following guidelines were updated:

- CRR-G-51-A, Guidance to the Railway Undertaking Licensing Application Process (v3).
 Minor updates made.
- CRR-G-034-C, Guideline on the application for a Safety Assessment of New Infrastructure Works on Isolated Heritage or Velo Railways.
 - This update was undertaken to include VeloRail infrastructure/operations and to update the document format.
- CRR-G-053-C, Guidance for CRR Designation/Recognition of Designated Bodies in Ireland (IE-DeBos).

Update included the notification of use of version 2 of the ERA assessment scheme and requirements in relation to changes in legal name or status of the IE-DeBo.

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, these bodies are called Designated Bodies (DeBos). In designating such applicants, the CRR use the recognition process per guideline CRR-G-053.

Six organisations have been designated as an IE-DeBo to date. No monitoring activities took place in 2024 but are scheduled for 2025.

The CRR did receive a further IE-DeBo application in 2024, and the assessment of same is set to commence in early 2025.

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. However, the CRR has not been called upon to undertake any ECM activity in the past 5 years. Consequently in 2024, the CRR initiated engagement with the DoT and the Irish National Accreditation Board (INAB) to have an alternative scheme, allowed for under European legislation, that is accreditation based. Agreement has been reached that going forward INAB will fulfil the accreditation role for ECM certification bodies.

22

Cableways

The CRR was not required to undertake any authorisation activity related to cableway installations in 2024.

In 2024, the CRR were advised by the Department of Enterprise Trade and Employment that it was to be confirmed as the Market Surveillance Authority under the EU Artificial Intelligence Act in the context of its market surveillance role in relation to cableways.

Safety Management System conformity assessment

Every operational railway organisation must be in possession of either a safety authorisation in respect of the Infrastructure Manager (IM), a single safety certificate in respect of the Railway Undertakings (RUs) or a Safety Management Certificate in respect of other national railway organisations, i.e., light rail schemes or heritage railways.

To obtain such certification, the railway organisation must make an application, after which their SMS is assessed. This is either carried out in compliance with the Railway Safety Directive (EU) 2016/798 in respect of RUs and IMs or the Railway Safety Act 2005, as amended, for national railway organisations. This assessment of conformity checks the railway organisations SMS against numerous criteria (requirements). The specific criteria for assessing conformity are detailed in EU Regulation (EU) 2018/762, establishing common safety methods on SMS requirements. These requirements are mandatory for applications under the Railway Safety Directive (RSD) but have been adopted with some adaptions for national safety management certificate applications under the Railway Safety Act.

In 2024, five heritage railways required re-certification of their previously approved SMSs. These were:

- Cavan & Leitrim Railway
- Difflin Lake Railway
- Fintown & Glenties Railway
- Irish Steam Preservation Society (ISPS)
- Listowel Lartigue Mono-railway.

In addition, the CRR engaged with both the RPSI and Transdev on their respective SMS re-certifications which are due in early 2025.

National rules to operations TSI

In May 2024, the ERA completed their review of the national rules previously submitted by the CRR into their single rules database (SRD). Four of the five rules received a negative assessment for inclusion in SRD, as they related to duties placed on individuals and offences which are not regulated at EU level, and therefore they did not require notification and could remain in national legislation. The remaining national rule relating to alcohol limits was notifiable and was resubmitted and accepted in the SRD.

Train driver licensing

European legislation requires that all train drivers must be in the possession of a valid licence to operate a train on the European network. Licences are issued subject to the driver meeting specific criteria that include, minimum age, basic education, medical examination, occupational psychological fitness, and general professional competence.

The CRR is the Competent Authority in Ireland in respect of train driver licensing and all licence applications must be submitted to the CRR for processing. Applications are assessed by the CRR against the above stated criteria.

Based on applications received in 2024, the CRR issued 74 train driver licences. 73 were 'First Issue', with the remaining 1 being a replacement licence.

Train driver licences have a validity of 10 years. However, drivers are subject to continuing medical examinations and competency assessment by their employer, the Railway Undertaking, e.g., larnród Éireann.

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 2024, the CRR received a total of 47 planning applications. All were reviewed and observations/ comments were made on 23 of them.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT



Supervision of railway organisations is a key activity of the CRR and is associated with its principal functions under the Railway Safety Act of 2005. Within the Compliance, Supervision and Enforcement Department of the CRR a key element of Supervision is the role to assess the continued application and effectiveness of railway organisations' approved SMS's.

To fulfil this supervisory function in 2024 a range of activities were undertaken on railway organisations which comprised primarily of the following:

- Audits
- Inspections
- Post occurrence activities (POA's)
- Periodic safety performance review with R0's (SPRM's)
- CRR outcome reviews with R0's
- RAIU safety recommendations reviews with addressed entities
- Periodic recurring meetings with railway organisation management personnel (examples: Safety Compliance Manager, Investigations Manager, etc.).

In 2024, a total of 14 regulated ROs were under the CRR's remit for potential supervision activities. This supervision was both proactive (planned) and reactive (in response to occurrences). Planned activity types consisted of those as detailed above. Resources were applied commensurate with the levels of risk associated with the regulated entities. 2024 saw the availability of the full range of supervision inspection activities. With respect to the methods of working the CRR now have a well-established approach of hybrid working, which includes a mix of in-person and virtual/ online engagement to facilitate all activities.

A total of 241 supervision activities commenced in 2024 and by year end 147 were completed. The remaining activities require on-going work with the respective railway organisations and will be carried over into 2025. Within 2024 a further 50 supervision activities were also completed which had been commenced in advance of 2024.

Compliance, supervision and enforcement

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

The level of supervision on a RO in any year is directed by, but not limited to, a review of previous supervision outcomes, a review of 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 CRRs 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 evaluation process. Planned supervision activities for the future are also proportionate to the size of the RO's 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 railway organisation 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 railway organisation. The CRR categorises these outcomes depending on the risk they present, and actions may be agreed with, or directed to, the railway organisations and their implementation of these actions are then 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 were, in the opinion of the inspector, 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 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 2024, inspectors issued a total of 98 trackable outcomes (non-compliance and action required), where the CRR inspectors track their implementation. Of these, 34 were non-compliances with either a legislative or SMS requirement, the remaining 64 were raised by-inspectors when they considered preventative action to be necessary.

The following presents an overview of the CRR's supervision activity for 2024.

Compliance auditing (pro-active supervision)

During 2024, the CRR completed the audits listed in the following table:

Table 1 CRR audits completed in 2024 and associated outcomes

Railway organisation	Title of audit	MaNC	miNC	AR	SFI	GP	AT
RPSI	RPSI Audit on Criteria J, K, P and S	0	2	4	4	0	0
IÉ-IM	Support, Operations and Performance Evaluation within the SET Department	0	6	9	4	4	2
TDLR	Management of Fleet Maintenance	0	8	7	10	0	0
Total		0	16	20	18	4	2

During 2024, the CRR has also been progressing the following active audits which are at varying stages of progression:

Table 2 CRR Compliance, Supervision and Enforcement Department active audits on railway organisations

Railway organisation	Title of audit
RSIE	Audit Operational Planning and Control (including HoF)
IÉ-RU	CME Audit of Heavy Maintenance
IÉ-IM	Possession Management and Management of Contractors (RRV's)
NIR	NIR Risk Evaluation/Identification (Criterion A)
IÉ-RU	TSI-OPE requirements

As indicated above, three audits were completed in 2024. Separate to these completed audits, 5 further audits are in various stages of progress across all the various ROs.

Each of the finalised 2024 audits have produced outcomes, as detailed in Table 1 above, to address findings that in the opinion of the CRR inspector required actions from the relevant RO. CRR inspectors maintain engagement with the relevant ROs to ensure that the outcomes required are progressed.

Specifically for audits completed in 2024 inspectors identified the following outcomes: 16 miNC's, 20 AR's and 18 SFI's.

For the completed audits in 2024, all required action plans to be prepared by the various ROs. The required action plans have been submitted by all railway organisations following the lead auditor requests. Railway organisations continue to address the 2024 finalised audit outcomes. Periodic outcome review meetings take place with ROs to progress CRR outcomes.

Inspections

In 2024, the CRR commenced a total of 52 Inspections across all ROs. These inspections also included summary reports to the Conformity Assessment and Application to Place in Service Department (7 No in total). Inspections ranged from refined single railway asset inspections to more detailed topic inspections which can take up to 20 days to complete. The full list of 2024 commenced inspections is included in Appendix F Table 14. In total, 15 supervision inspections which were commenced in 2023 were completed in 2024 and these are included in Appendix F Table 15.

A number of CRR inspections completed in 2024 identified non compliances against the ROs and in these instances where there was a contravention or failure to comply with a provision of the Act either a direction for an Improvement Plan or an Improvement Notice was served on the relevant ROs. The following inspections required enforcement action:

- Cavan & Leitrim Annual Inspection Cavan & Leitrim Heritage Railway (Improvement Plan issued)
- Seabreeze Inspection Railway Preservation Society of Ireland (Improvement Plan issued)
- Chief Mechanical Engineer Concession Management (Drogheda & Fairview Depots) Inspection – IÉ-RU (Improvement Plan issued)
- IÉ-RU Train Driver Medical Competency Check IÉ-RU
 (Letter to serve an Improvement Notice issued initially but downgraded to Issuing of Improvement Plan due to IÉ-RU immediate actions).

The non-compliances from CS&E inspections related to issues with SMS documentation, issues identified against the requirements of the EU Directives, issues identified against the requirements of the Common Safety Methods which were assessed by inspectors as activity involved or is likely to involve a risk to the safety of persons. The ROs concerned are implementing agreed corrective and preventative actions.

Several other CRR inspections completed in 2024 identified non compliances related to issues with SMS documentation, including the requirements of EU directive, and the requirements of the Common Safety methods which were assessed by inspectors as not posing an immediate risk to the safety of persons. The following inspections undertaken by the CRR required Action Plans to be developed and provided to the CRR by the relevant RO:

- Internal Monitoring, Internal Auditing and Accident Investigation Northern Ireland Railways (Action Plan issued)
- Lartigue Monorail Inspection Lartigue Monorail (Action Plan issued)
- Emergency Planning and Response Transdev (Action Plan issued)
- Santa Special Railway Preservation Society of Ireland (Action Plan issued).

The ROs concerned are implementing agreed corrective and preventative actions from the issuing of the action plans associated with these inspections.

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT

The full range of outcomes from the inspections concluded in 2024 against each of the railway organisations are detailed below.

Table 3

Inspections completed and associated outcomes made from inspection activities completed in 2024

Railway organisation	No. of inspections	No. of inspections with outcomes	MaNC	miNC	AR	SFI	GP	AT
IÉ-IM	11	6	0	0	5	11	0	3
IÉ-RU	16	10	2	3	10	5	0	3
RSIE	2*	1	0	0	2	1	0	0
RPSI	5	3	0	2	2	2	0	3
NIR	1	1	0	4	2	11	0	2
TDLR	5	4	0	4	6	10	0	2
BNM	1	0	0	0	0	0	0	0
Heritage**	12	7	0	3	13	17	0	7
ТІІ	1	0	0	0	0	0	0	0
Total	54	32	2	16	40	57	0	20

* One dual inspection of IÉ-RU/RSIE was credited to RSIE in summation table.

**Velorail inspections are included within the Heritage section of this table.

Post Occurrence Activity (reactive supervision to accidents or incidents)

In 2024, CRR inspectors completed a total of 61 Post Occurrence Activities (POA). Of these, 21 were started in 2023 but completed in 2024.

As part of POAs, the CS&E department undertake periodic meetings with railway organisations investigations managers. These review areas such as, initial investigation remits, additional occurrence details post notification, details of interim investigations recommendations, etc. In addition, for post occurrence activities targeted, resources may be assigned due to the level of risk of an occurrence or where there is potential compliance issues identified from initial occurrence assessment. These resulted in outcomes which are indicated in the table below.

Table 4

Completed Post Occurrence Activities during 2024 and associated outcomes

Railway organisation	No. of POAs	No. of POAs with outcomes	MaNC	miNC	AR	SFI	GP	AT
IÉ-IM	30	2	0	0	0	0	0	2
IÉ-RU	11	2	0	1	0	2	0	3
TDLR	17	0	0	0	0	0	0	0
RSIE	1	0	0	0	0	0	0	0
Heritage	2	0	0	0	0	0	0	0
Total	61	4	0	1	0	2	0	5

78 post occurrence activities were commenced in 2024. The vast majority of these started via a formal notification from the relevant RO. For other occurrence groupings, for example, Signals Passed At Danger (SPADs), these occurrences are notified via a reporting letter to the CRR. An assessment of each SPAD received is undertaken. For a number of notifiable occurrences in 2024 CS&E inspectors mobilised to site in the days and weeks following the relevant occurrence in order to undertake follow up activities.

In relation to overall POAs, a total of 54 related to IÉ-IM or IÉ-RU, 1 related to the RPSI, and 1 related to Rhomberg Sersa all of these on the heavy rail network. In addition, 20 related to the light rail network, and 2 related to heritage railways.

Tragically, in 2024 there were 12 fatal occurrences on the national railways where the fatal injury involved a train in motion, and where trespass or misadventure were involved. All 12 fatal occurrences took place on the larnród Éireann heavy rail network. The number of fatalities, for this category, falls within the 10-year data range by comparison. However, it is noted that the number of fatalities is at the very upper end of the 10-year data range. Within the past 10 years there has only been one other occasion where this number of fatalities has been matched. The 2023 figure of 11 fatalities also leads to a localised increase for these two data years within the overall 10-year range.

IÉ-IM and IÉ-RU established a working group in 2023 to review potential mitigations that may have merit to implement. The outputs and updates from these periodic working group meetings are provided to the CRR at the railway organisations Safety Performance Review Meetings (SPRMs). There are potential linkages with the all-time passenger journey high of 50.66m for 2024 on the heavy line network, socio-economic factors, etc., with the recent high fatality rates however the CRR continues to review these factors.

There were four instances of broken rails on the IÉ network. Broken rail instances have a potential high severity consequence and are also a key Common Safety Indicator (CSI) for monitoring. With 5 reported broken rails in 2023 and 4 reported broken rails in 2024 the localised trend for broken rails is increasing based off a 5-year trend line analysis. A significant factor in this is that the 2023 reporting figure is an associated 10 year high for recorded broken rails. The CS&E department continue to engage with IÉ-IM on this topic to review the processes in place for thermit welding (site-based welding). Follow up engagement has also taken place in relation to linked RAIU recommendations in relation to recent broken rail events from 2023 namely the broken rail event at Emly LC XC164 of the 22nd of February 2023 and the broken rail event at Newbridge of the 23rd of February 2023.

In Quarter 4 2024, further follow up and review meetings with the Chief Civil Engineer (CCE) (IÉ-IM) took place in relation to:

- Broken Rail Failed thermit weld Kilcornan Limerick of the 09/12/2024
- Broken Rail Rail Break 89 ¼ MP Sligo Line of the 04/11/2024.

Both occurrences took place on the mainline hence were higher potential consequence events. The main areas under review with IÉ-IM are process reviews associated with both thermit and flashbutt welding and review of potential additional risk controls.

Further notifications aside from those referenced above to highlight during 2024 with respect to the heavy rail sector were as follows:

Embankment slip near OB004 (near Pheonix Park Tunnel) of the 09/02/2024 (IÉ-IM)

This occurrence led to unsafe operational conditions where a translational slip failure of an embankment took place which in turn fouled the mainline. The conditions which lead to this event were ultimately the contractor acting outside of the stipulated conditions of planning. CS&E has engaged IÉ-IM in relation to the occurrence and in relation to 3rd party works management.

Derailment and overturning of RRV near Tullamore of the 13/06/2024 (IÉ-IM)

During an absolute possession an RRV overturned and fell down an embankment. In the process of installing strail mats the RRV destabilised and overturned. The RAIU at present have an active investigation underway in relation to this occurrence.

RRV collision with Person In Charge (PIC) Cork of the 12/09/2024 (IÉ-IM)

This occurrence took place during an absolute possession on the Cork to Cobh and Midleton lines. An IÉ-IM member of staff was undertaking the role of person in charge of an RRV (PIC-RRV) when he was struck from behind by an RRV. The RAIU issued an Urgent Safety Advice Notice in relation to this occurrence (USAN) which contains 4 USAN Safety Recommendations. IÉ-IM have commenced making submissions to the CRR to address these recommendations.

ICR detachment of cardan shaft of the 24/11/2024 (IÉ-RU)

This occurrence in relation to the detachment of a cardan shaft took place at Lisduff on the 24th of November 2024. The detachment had the potential to lead to a high severity derailment event as the ICR was travelling on the mainline at line speed. Following the event, modifications were implemented across all spare, retrofit and hybrid powerpacks (total 65). The POA involved extensive engagement between IÉ-RU and CS&E to review real time the associated risk to operations of the ICR fleet.

Also, within the heavy rail sector the following occurrence took place with RSIE which was of note:

RSIE staff injury Ballinasloe of the 16/10/2024

An RSIE staff member sustained injuries due to falling from a height when working on an On Track Machine satellite element. The occurrence itself has led to the CS&E department of the CRR identifying issues with RSIE operational risk assessments and these are currently being reviewed as part of this POA with RSIE.

All heavy rail key occurrences such as those referenced above have the potential to be raised with higher level management within periodic Safety Performance Review (SPRM) meetings with the railway organisations.

In the light rail sector, the following occurrences took place in 2024 which were of note:

Tram in dead OCS section Broombridge depot of the 03/06/2024

This occurrence took place when a tram was going into the sanding shed. An external event resulted in power to the overhead catenary system being lost. The primary issue being that there was no knowledge that the power was lost by supervisors within the control room. The controller was fully aware that the overhead catenary system had become de-energised.

Bond cable issue and associated pantograph damage – Green line of 20/07/2024 This bond cable issue led to associated pantograph damage and associated delays. This occurrence was followed up at the periodic SPRM platform with the TDLR management team. TII as infrastructure owner would also have had a significant input into reviews that occurred due to this damage introduced in relation to this fault.

Possession protection breach occurrence - Red Cow Depot of 22/07/2024

This occurrence took place within a possession and was the result of a possession protection breach – temporary traffic cones were being utilised rather than established signage and controls. Following the occurrence a review of additional controls with respect to lock out tag out, etc., was undertaken. The SPRM platform is commonly used to review these occurrences, and it is possible for lead inspectors to raise key occurrences as advanced agenda items.

In 2024, the CRR continued utilising its POA review process. All notifiable occurrences were subjected to review on a weekly basis via a post occurrence activity review committee (POARC). Each notified occurrence is reviewed following the gathering of as much initial information as possible to determine 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. The CRR also undertakes regular periodic review meetings with the investigations managers of each RO where required to review real time updates on any investigation activity that it requires.

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.

In the heritage rail sector, the following occurrences took place in 2024 which were of note:

Derailment at Maam Cross of 16/12/2024

During the 'Santa Services' at Maam Cross, a derailment took place on narrow gauge rail. There were no injuries reported. A review of the security of fixings/source of derailment is now underway as part of the investigation, being conducted by the Heritage Railway with the assistance of a consultant. The derailment itself would have been at low speed for this isolated heritage network.

Enforcement

Part 7 of the RSA 2005 provides the CRR with powers of enforcement. These powers range from directing 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 Act 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 2024, CRR inspectors issued directions for 5 Improvement Plans from ROs, and 1 letter of an intention to serve an Improvement Notice, a requirement of the Improvement Notice process, which was subsequently downgraded to an Improvement Plan (included in the total number of 5 improvement plans above) based on the ROs immediate actions implemented. A summary of these is presented below.

Improvement plans requested in accordance with Section 76 of the RSA 2005 30/24-I Cavan and Leitrim Annual Inspection

The direction for an improvement plan was issued to the Cavan and Leitrim heritage railway in relation to a minor non-compliance where the RO was found to be non-compliant in relation to the undertaking of internal auditing of their Safety Management System.

65/24-I Seabreeze Inspection - Railway Preservation Society of Ireland

This direction for an improvement plan relating to a minor non-compliance was issued to RPSI. This outcome was in relation to the safety of persons in the operation of the railway. The RPSI was assessed to be non-compliant with the Railway Safety Act 2005, due to stewards being observed with heads outside of open drop lights during train movements and due to train movements being observed with the generator van door open and staff hanging out of the generator van.

122/23-I CME Concessions Management (Drogheda and Fairview) Depots Inspection

This direction for an improvement plan was in relation to a major non-compliance which was issued to IÉ-RU. This non-compliance related to the management of concessions for vehicles being against Section 36 of the Railway Safety Act 2005. Vehicles were found to be in service without appropriate risk mitigations in place, and as such, without the associated risks being as low as reasonably practicable (ALARP).

230/23-I IÉ-RU Train Driver Medical and Competency Check

An initial letter was issued to IÉ-RU with the intention of serving an Improvement Notice. It was identified that a major non-compliance existed regarding compliance with the requirements for medical examinations, in relation to licences and in the undertaking of periodic checks to maintain the validity of the licence or associated certificate.

Following the immediate actions after the issuing of the letter of intention to serve an improvement notice the CRR went down the route of directing the submission of an improvement plan to resolve this major non-compliance.

113/23-POA Platform Train Interface Injury Connolly Platform 5

This direction for an improvement plan was in relation to a minor non-compliance which was issued to IÉ-RU.

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

As referenced above, one letter was issued to IÉ-RU in relation to 230/23-I detailing the intention to serve an improvement notice but following immediate actions undertaken by IÉ-RU this was addressed via a direction for an improvement plan.

An extension of time was granted to an existing Improvement Notice served on IÉ-RU, relating to their Drugs and Alcohol policy. IÉ are currently awaiting a response from the Public Transport Regulation Division who are reviewing the documentation submitted by IÉ of March 2024 and as such the extension by granted by CS&E on the Improvement Notice CRR-L-077/004 to June 2025.

Prohibition notices served in accordance with Section 78 of the RSA 2005 No prohibition notices were served in 2024.

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 RO or other third party who may have had a responsibility under legislation. In addition, its recommendations are addressed to the CRR as the responsible National Safety Authority. 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.

In 2024, the RAIU issued 3 investigation reports, and one Urgent Safety Advise Notice (USAN) resulting in 14 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 2022. The duration of this contract for services is 5 years, and hence runs until the end of 2027.

Both the Department of Justice and the Environmental Protection Agency also have roles in relation to specific Classes of Dangerous Goods. The CRR engaged with both agencies in relation to the potential for the issuing of a single Dangerous Goods Safety Advisor training certificate covering all Classes. This approach has to date not been possible in the context of the current legislation.

An approved inspection body was appointed by the CRR under Regulation 9(4) of SI 651 2010 EC (Transport of Dangerous Goods by Rail) Regulations. This appointment was for the scope defined in the Irish National Accreditation Board Schedule of Accreditation.

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT

Rhomberg Sersa Ireland (RSIE)

RSIE completed their fifth full year of operation in 2024, having taken over the On-Track-Machine (OTM) fleet maintenance and operation contract on behalf of IÉ-IM in July 2019. RSIE completed a total of 94,095 train km on the network in 2024 which was a slight decrease from 2023 (circa 2.6%).

CRR Inspectors met with key management on three occasions in 2024 at which their safety performance was reviewed. Multiple safety initiatives and other continuous improvement tasks were also discussed within these meetings. A notable focus with RSIE in 2024 was progression of CRR open outcomes.

One audit had commenced on RSIE in 2024:

- RSIE Audit Operational Planning and Control (Including HOF).

Work on this audit continues into 2025 with the audit being significantly progressed at the end of 2024. In addition to the audit underway on RSIE in 2024, the CRR also commenced 1 inspection in 2024. This inspection focused on:

- Integration of Human Factors in Vehicle Maintenance.

Work continues on this inspection by CS&E in 2025.

The following activities commenced in 2023 were completed in relation to RSIE in 2024:

- Possession Management Occurrence at Dromond
- Review of Maintenance and Operations of MPV 790.

For RSIE in total within 2024 two AR's and one SFI were issued. All non-compliance outcomes which require action in a specific timeline have either been addressed or are well advanced. All other outcomes 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 have responsibility for the supervision of 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 wind down significantly and consequently their level of operations have continually reduced. BNM now have no operational road level crossings, in 2023, there were 28. From recent discussions at the end of 2024 with BNM there is potential for some of these previously active level crossings to be reactivated to facilitate equipment movements.

The CRR commenced and completed one inspection on BNM in 2024 and the inspection focused on:

 Inspection of AHB Crossing in Derrygreenah and all other active gates available for decommissioning with public road interface.

On conclusion of the activity, there were no associated outcomes. Due to decommissioning, no SPRM was held but an update was received from the BNM Health and Safety Manager during Quarter 4 2024.

The CRR were not notified of any occurrences on the BNM network in 2024.

Heritage railways

The CRR monitors the operations of a number of self-contained heritage railways. In 2024, the following heritage railways had the potential to be subject to activities by the CS&E department of the CRR:

- Cavan and Leitrim Railway, Dromod, Co Leitrim who carried 5,000 passengers in 2024
- Difflin Lake Railway, Oakfield, Raphoe, Co Donegal who carried 44,237 passengers in 2024
- Fintown & Glenties Railway, Co Donegal who carried 6,139 passengers in 2024
- Irish Steam Preservation Society, Stradbally. Co Laois who carried 6,050 passengers in 2024
- Listowel Lartigue Monorail, Co Kerry who carried 4,119 passengers in 2024
- Waterford & Suir Valley Railway (W&SVR) Kilmeaden, Co Waterford who carried 27,318 passengers in 2024
- Connemara Heritage Railway Inspection, Maam Cross, Connemara who carried 264 passengers in 2024.

Overall, for isolated heritage networks a total number of 93,127 passengers were carried in 2024. This figure is a moderate increase from the 2023 total figure of 90,231 passengers.

Site inspections were undertaken on six heritage railway operators (see below). 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.

- Cavan and Leitrim Annual Inspection
- ISPS Annual Inspection
- Lartigue Monorail Annual Inspection
- Fintown heritage Railway Annual Inspection
- Difflin Lake Railway Inspection
- Waterford & Suir Valley Annual Inspection.

The only active heritage railway not inspected was the Connemara heritage railway which commenced taking passengers at the end of Q4 2024. Of the inspections undertaken 3 were fully completed and have the following outcomes:

- Cavan & Leitrim Annual Inspection Improvement Plan Issued 1 minor non-compliance, 3 AR's formed and 4 SFI's
- ISPS Annual Inspection formed no outcomes
- Lartigue Monorail Inspection formed 1 Action Required and 4 SFI's.

Work continues into 2025 on the other open heritage railway inspections.

Railway Preservation Society of Ireland (RPSI)

The RPSI is the only heritage railway to operate on the IÉ-IM network, and consequently, is subject to a higher level of supervision than the standalone heritage railways who operate on their own separate infrastructure. RPSI carried 13,413 passengers in 2024.

The CRR commenced 3 activities on the RPSI in 2024. These were as follows:

- Seabreeze Inspection
- RPSI SPRM
- Midlander Inspection.

The Seabreeze Inspection resulted in the issuing of a direction for an Improvement Plan to RPSI in relation to this minor non-compliance. There was a further 2 AR's issued and 1 SFI as part of this inspection. For the Midlander Inspection there were no associated outcomes.

IRD Kiltimagh CLG - Kiltimagh Velorail

In 2024, IRD Kiltimagh CLG's second year of operations they carried 2,900 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 SMS.

In relation to the 2024 inspection no trackable outcomes were issued but 2 SFI's were issued by the CRR as a result.

Industry alerts

The CRR receive railway sector safety alerts from both ERA and the RAIU. In 2024, five safety alerts were received from ERA. All the safety alerts were cascaded to the relevant heavy rail technical contact points by the CRR. A synopsis of these is as follows:

- Subject: rolling stock wheel
 Equipment: abnormality by assembly of wheelsets by Alstom Reuschling Service GmbH & Co.
 KG Update for other NSA to alert issued 05th July 2024
- Subject: rolling stock other
 Equipment: damages (cracks) of beam welds in the joints of container wagons Sggrss 80' and Sggrss 90' series
- Subject: rolling stock wheel
 Equipment: damages to internal roller bearings, manufactured in 2023
- Subject: rolling stock wheel
 Equipment: wheelsets assembled by ALSTOM Reuschling Service GmbH&Co. KG, Hattingen (Germany)
- Subject: rolling stock wheel
 Equipment: JNS broken wheels: application of immediate risk control measures to wheels of comparable wheel types BA390, Db-004sa, RI 025

Representations

The CRR received 39 representations relating to a range of heavy and light rail infrastructure and operational matters.

Of the 39 representations received, 17 were requests for information received from other regulatory bodies/agencies rather than complaints about services or safety concerns. Of the remaining representations, 2 related to safety of infrastructure, 8 related to the safety of rolling stock, 7 related to the safety of train operations and 5 related to safety of railway working.

In relation to Information requests from other regulatory bodies these included queries on:

- CER and NIS 2 Directives
- Irish Railway Standards
- Accident Investigations
- Light Rail Platform Gaps for Design Purposes
- Minimum Radius Curves for RRVs.

Representations on the safety of infrastructure includes concerns in relation to the safety of structures adjacent to the operational railway/embankment stability and a concern in relation to a pedestrian bridge with corrosion/potential delamination reported.

In relation to safety of train operations received, these included concerns regarding overcrowding of an IÉ service, delays attributed to infrastructure issues on the main line, to a fire that took place on a IÉ service, and a platform train interface accident at Roscommon station and concerns over heritage railway communications during services. For light rail, these where concerns over encroachment on a Luas tram stop, a representation in relation to Luas tram services and in relation to removal of trams from service.

There were no representations received in relation to safety of stations.

In relation to representations on safety of rolling stock these included concerns regarding the LUAS, wiring modifications to RPSI carriages, unbalanced carriage running on RPSI trains, a door partially open on the Enterprise, IÉ record keeping on maintenance records for rolling stock, a reported issue in relation to the performance of a DART door and regarding public safety on IÉ trains.

The CRR gives a high degree of attention to any representation received relating to 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 where necessary.

See Appendix D Figure 9 for representation trends.

REPORT OF PRINCIPAL INSPECTOR COMPLIANCE SUPERVISION AND ENFORCEMENT

Safety performance

In addition to on-site activities such as inspections and audits, the CRR engage with key management from the ROs that are supervised, and the following channels of communications are undertaken at regular intervals outside of primary supervision activities:

- Periodic safety performance review meetings (SPRM's)
- CRR outcome review meetings
- RAIU safety recommendations review meetings
- Periodic recurring meetings with railway organisation personnel as required (i.e., investigation managers, etc.).

Central to this engagement is the continuous oversight of the safety performance, including reviews of key performance indicators and other metrics all of which feed into the annual supervision plans.

Several safety performance indicators such as collisions, derailments, fires on rolling stock, SPADs, infrastructure failures/defects, etc., are recognised indicators of safety performance. In 2024, four SPRM's were held with IÉ-IM and IÉ-RU, and three SPRM's with Transdev. Additionally, separate meetings were held with Transdev 'Engineering' given Transdev now both operate and maintain the LUAS trams and infrastructure which are now via a standalone recurring format and as required in relation to post occurrence activities. Three SPRM's were also held with RSIE, two with NIR (Translink) and one with the RPSI. For heritage railways, which operate independently, the main inspection activity is typically merged with a meeting however separate SPRM's were held with RPSI and the Irish Steam Preservation Society (ISPS). Specific additional meetings (outside of SPRM's) were held with Connemara Heritage Railway at Maam Cross in advance of them starting to carry members of the public.

Heavy rail network

SPADs on the heavy rail network

In an operational context, the number of SPADs equalled the previous year's SPAD occurrences on the larnród Éireann rail network at 11 in total. The overall trendline over the past 10 years from 2015 to 2024 is showing a decreasing incidence, this is seen as positive overall reduction in the medium to longer term. See Appendix D Figure 4.

Collisions with animals on the heavy rail network

Figure 3 within Appendix D shows the total number of collisions for all categories from 2015 to 2024. While there is an evident increase in the number of collisions, 158 in 2024 compared to 124 in 2023, the relevant subgroups 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, and this is constantly under review by the CRR. The primary reason for the increase is due to an increase in impacts with deer. IÉ-IM are reviewing additional potential measures that could be developed in addition to previous measures to mitigate these recent increases. 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 because of anti-social behaviour. CRR are aware of IÉ-IM's additional proposed risk mitigations in this area and IÉ do actively visit local schools in areas where increased anti-social behaviour on the railway can be trending. These additional mitigation measures are under constant review by the CRR.

Train derailments on the heavy rail network

There were three train derailments in 2024, with all of these occurring in IÉ sidings. There were also three 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 and mostly at manually operated hand points. Hence these derailments in sidings are of a much lower potential severity. See Appendix D Figure 5 for 10-year trends.

Fatal injuries involving a train in motion on the heavy rail network

As referenced previously in this report, tragically in 2024 there were 12 fatal occurrences on the national railways where the fatal injury involved a train in motion, and where trespass or misadventure were involved. All these fatal occurrences took place on the larnród Éireann heavy rail network. The number of fatalities, for this category, falls within the 10-year data range by comparison. However, it is noted that the number of fatalities is at the very upper end of the 10-year data range. Within the past 10 years there has only been one other occasion where this number of fatalities has been matched. The 2023 figure of 11 total fatalities also leads to a localised increase for these two data years within the overall 10-year range.

Broken rails - Heavy rail network

As previously referenced within this report there were four instances of broken rails on the IÉ network. Broken rail instances have a potential high severity consequence and are also a key Common Safety Indicator (CSI) for monitoring. With five reported broken rails in 2023 and four reported broken rails in 2024 the localised trend for broken rails is increasing based off a 5-year trendline analysis. A significant factor in this is that the 2023 reporting figure is an associated 10-year high for recorded broken rails. The CS&E department continue to engage with IÉ-IM on this topic to review the processes in place for thermit welding (site-based welding) and for flash butt welding.

Light rail network

SPAS/SPAD occurrences on the LUAS network

Trams are controlled by line-side signals. These signals consist of an array of light-emitting diodes (LEDs) that illuminate in specific patterns depending on the signal being conveyed to the driver.

A 'proceed' means it is safe to travel through a junction of some kind, whilst a stop 'signal' means it is not safe for a tram to proceed through a junction. There are well over 100 junctions on the network controlled in this way. It is a common design for light railway systems in Europe.

In recent years the number of times a driver has proceeded past a signal when the signal is at stop (SPAS) has been increasing from historic lows between 2019 and 2021. There were 28 in 2022 and 31 in 2023, however a reduction to 25 has been recorded in 2024 (See Appendix D Figure 7). This reduction is likely related to several factors. TDLR have advised that they have undertaken several initiatives towards reducing errors at signals, improving management of the operational environment, and reviewing incidents where stop signals were passed without permission to reduce probability of recurrence. The CRR has also increased its activity in this area in response to worsening performance by engaging with Transdev regarding their analysis of causation and ensuring investigation activities are effective. As Transdev will be renewing their SMS in 2025, new safety management of the human and organisational factors that may contribute to undesirable safety performance.

These factors are especially important in the operational aspects of railway safety, where ergonomics and organisational culture are known to influence safety performance. A related 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 also made several recommendations related to this topic. Stakeholders are currently engaged in taking actions to address the requirements contained within those recommendations. Work also continues in the CRR regarding their implementation.

In addition, each SPAD/SPAS event is reviewed by a CRR inspector with a relevant TDLR staff member to ensure that sufficient causal investigation is undertaken.

Overall context

In 2024, the overall safety performance of the Irish heavy railway sector was assessed as being in the main quite positive when compared to the available data the CRR has collated and analysed from 2006. This positive assessment is evident 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 for the CS&E department. These proactive supervision activities are in full alignment with the ERA requirements.

An exception with respect to European data is in relation to the CSI of broken rails. However, as referenced within this report all broken rails are currently being reported to ERA for the full lÉ network and this needs to be reviewed and categorised out into broken rails for mainline and then into broken rails for sidings. Following that an overall review of previous metrics versus European benchmark figures for EU states does need to be undertaken. The reasoning for the differentiation is that mainline broken rails for operational services have much more potential high consequence events.

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, 12 in total are all as 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 2024, as with previous reports, will be published later in the year to facilitate receipt of complete validated year data from all railway organisations. The Safety Performance Report of 2023 was compiled in 2024 and will shortly be available on the CRR website.

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

NSA monitoring

Under Article 33 of the Regulation (EU) 2016/796 on the European Union Agency for Railways and decision N°274¹ of the Management Board, the ERA is granted the task to monitor "the capacity of national safety authorities to execute tasks relating to railway safety and interoperability" and "the effectiveness of the monitoring by national safety authorities of safety management systems".

As part of the second three-year audit cycle, of all member state NSA's, the CRR were audited by ERA in 2024.

The scope of the audit included:

- EU legal framework for NSA organisation focus on implementation of CRR's action plan from the first audit cycle
- EU legal framework for Safety Certification with the 4th Railway Package
- EU legal framework for Safety Authorisation with the 4th Railway Package
- EU legal framework for Vehicle Authorisation for placing on the market and vehicle type authorisation
- EU legal framework for the Authorisation for the Placing in Service of fixed installations
- EU legal framework for NSA supervision focus on implementation of CRR's action plan from the first audit cycle
- EU legal framework for promoting the safety regulatory framework
- EU legal framework for NSA tasks on Train Drivers' Directive.

The audit commenced in March 2024 with the provision of information and documentation, in line with the request of the audit team. This was followed by an on-site activity in September 2024. A draft report was issued by the ERA audit team in November 2024, to which the CRR responded including its initial action plan for the draft findings of the audit. The final agreed report is expected to be issued in March 2025.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

REPORT OF HEAD OF CORPORATE GOVERNANCE AND REGULATION



44

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.

Finance

Funding for the CRR is provided in part by a Safety Levy on the various railway organisations 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
- Fees charged to the ERA as the national safety authority where the ERA is the assessment body for single safety certificate or vehicle authorisation
- Fees charged for the authorising of construction and entry into service of cableway installations or their modification
- Fees charged for the issuing or renewal of train driver licences
- Fees charged for the licencing of railway undertakings.

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 2024 were contained in Statutory Instrument No.237 2024. A summary of the CRR financial position in 2024 is shown below.

	2024 €	2023 €
Income		
State Grant	554,885	682,687
Levy Income	1,590,035	1,587,123
DeBo Income	6,750	7,781
Other Income	18,354	18,456
Deferred Retirement Benefit Funding	389,000	236,000
	2,559,024	2,532,047
Expenditure		
Administration Costs	(2,488,869)	(2,600,192)
Technical Consultants	(98,492)	(109,924)
Surplus/(Deficit) for the year before appropriations	(28,337)	(178,069)
Transfer (to)/from Capital Account	32,991	31,106
Surplus/(Deficit) for the year after appropriations	4,654	(146,963)
Balance brought forward at 1 January	1,072,335	1,219,298
Balance carried forward at 31 December	1,076,989	1,072,335

*Full accounts for 2024 are subject to audit by the Comptroller and Auditor General.

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

Total CRR staff remuneration

Table 5 Employee salary

Salary pay scale range			
То	2024	2023	
€69,999	1	0	
€79,999	4	9	
€89,999	4	-	
€99,999	_	1	
€109,999	1	-	
€119,999	_	1	
€129,999	2	1	
€139,999	_	-	
€149,999	_	_	
€159,999	_	-	
€169,999	_	1	
€179,000	1	-	
	 €69,999 €79,999 €89,999 €99,999 €109,999 €119,999 €129,999 €139,999 €139,999 €159,999 €159,999 €169,999 	€69,999 1 €79,999 4 €89,999 4 €99,999 - €109,999 1 €109,999 - €119,999 - €129,999 2 €139,999 - €149,999 - €159,999 - €159,999 - €169,999 -	

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

In 2024, the Commissioners remuneration was €172,253.

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 2024, there were four FoI requests received, one of which was granted, two were part granted, and one was withdrawn. Details of these requests and information previously released by the CRR under FoI can be viewed on the FoI Disclosure Log on our website, www.crr.ie/corporate-governance/.

Customer charter

The Customer Service Charter is available on the CRR's website. This charter details 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 with DoT in line with the Code of Practice. Both agreements were subject to review and update with the DoT in 2024. 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 2024, the CRR provided the DoT with its quarterly and annual performance delivery report as per the performance delivery agreement.

DOT agreed with the Commission that it is exempt from the requirement to establish an internal audit unit and an audit and risk committee. The exemption is due to the small size of the CRR and the absence of a Board of Directors, from where membership of such a Unit and Committee would be drawn.

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 2024, the Council met once in fulfilment of their obligations under Part 8 of the Railway Safety Act 2005.

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 2024.

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 2024, the Head of Corporate Governance and Regulation in the CRR, as the prescribed person, received two protected disclosures from parties external to the Commission.

These were initially treated as potential Protected Disclosures under the Act. Relevant staff of the CRR undertook appropriate investigations of the matters involved.

In both cases, the CRR determined after assessment that the reports made did not qualify as a protected disclosure within the meaning of the Act.

No internal protected disclosures were received. The CRR have submitted their annual report on protected disclosures to the DoT for 2024.

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

Data protection

During 2024, the CRR continued to keep up to date its policies, systems, and procedures, to ensure compliance with the requirements of data protection legislation. In 2024, the CRR did not receive any data protection requests.

A dedicated email address (DPO@crr.ie) is in place to facilitate data protection queries.

Section 42 Irish Human Rights and Equality Commission Act 2014

The CRR is committed to ensuring that there is a culture of respect for Human Rights and Equality (HRE) among our staff and for the people to whom we provide services and acknowledges its public sector duty under Section 42 of the Irish Human Rights and Equality Commission Act 2014.

In 2022, a working group was established within the CRR to plan and implement our Public Sector Equality and Human Rights Duty through the three-step process of Assess, Address and Report.

Policies and procedures	Procurement Policy Review	Complete
	Anti-Bullying and Sexual Harassment Policy Review	Complete
	Procedure for drafting CRR documentation to be made to include guidance on the Public Sector Duty	Complete
	Policy to be drafted for facilitation of illness or disability of staff within their roles	On-going
Capacity of management	Course on the Public Sector Duty for all staff to complete	Complete
and staff	Bias Awareness training	Planned
	Cross Team Discussion	On-going
	Learning from leaving interviews	To be initiated

The following is a summary of the Actions identified and their status.

In 2024, 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.

Human rights and equality will continue to be addressed under a quarterly review with all staff.

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 in 2020.

The CRR used the NDA Simplified Review for 2024 to assess its website. The CRR has no mobile applications. New publications are designed to be accessible. It is noted that most issues being highlighted in the review relate to older documents on the site and these are being replaced during document review and update.

The CRR reviewed its accessibility statement on its website in 2024.

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 2024 showing 100% of payment made within the 15-day deadline.

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 2024.

Report on the CRR Climate Action Mandate 2024

The Public Sector Climate Action Mandate outlined in the Climate Action Plan 2024 (CAP24) was approved by Government in May 2024. It is the third annual update to Ireland's Climate Action Plan 2019 (CAP19). One of the key performance indicators effective 2025-2030 is the review of Public Sector Climate Action Mandate annually and the update of Climate Action Roadmaps in line with the updated mandate.

The updated mandate retains the 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 2024, 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 strive to continually improve our environmental performance, and in doing so prevent pollution and encourage environmental awareness. As one tenant in a multioccupancy building, which is currently undergoing extensive review and upgrade, we have engaged with the landlord in 2024 with the aim of determining the options of reducing our greenhouse gas emissions as well as increased energy efficiency.

In the 2023 SEAI Public Sector Annual Report, the most recent on record at the time of writing, the CRR Energy Performance Indicator is showing a 77% positive change, and on this basis has reached its 2030 target. In relation to greenhouse gasses the reduction of fossil CO_2 emissions continues to be a challenge as we are a tenant in a building where the heating system is gas based. In relation to our total CO_2 emissions, we have achieved a 33% reduction over our baseline against the target of 51% required by 2030.

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. The Climate Action Roadmap and Reduce Your Use – Energy Awareness are quarterly standing items on the monthly staff meeting agenda.

The CRR has complied with Circular 01/2020 by recording the carbon emissions associated with official air travel, valued these based on domestic Carbon Tax and paid the required amount (€279) into the Climate Action Fund.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

REPORT ON RAILWAY REGULATION



51

Railway regulation

Licensing 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 are valid for 5 years and a register of issued licences is published on the CRR website.

One licence expired in 2024, the relevant entity made a new licence application which was assessed by the CRR and a new licence issued in October 2024.

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 the 1st of March 2024, the CRR issued its IMMAC Annual Report to the Minister for 2023.

Key findings of the report included the following:

Overall, there were no significant variances for the year, but the outturn was slightly higher than expected, +0.8%, against the revised forecast for 2023. Higher spends in the CCE and the Signal, Electric, Telecoms (SET) Departments were largely balanced out by underspends in the Infrastructure Manager Operations (IMO) and Systems Departments respectively.

- CCE Department 1.7% additional spend
- SET Department 1.3% additional spend
- IMO Department 3.9% underspend
- Systems (SMS and Asset) Department 4.4% underspend.

Supplementary funding from the DoT: in 2023, IÉ-IM received Supplementary Funding of €30.6m which was directed to the Foynes Freight Line and TPS (with €4.1m of this carried over into 2024).

The CRR engaged extensively with the DoT in their review of the IMMAC 2020-2024 contract.

Regulatory body

Economic equilibrium test

Following an exchange of views in relation to the Economic Equilibrium test (EET) at the European Network of Rail Regulatory Bodies (ENRRB), the CRR undertook a review of the Member State requirements as per SI398 2020, which give effect to EU Directives 2012/34/EU, 2016/2370 and Commission Implementing Regulation 2018/1795.

Under SI398 2020, one of the CRR's functions relates to the determination of whether the economic equilibrium of a Public Service Contract (PSC) is compromised by the exercise of the right of access to railway infrastructure by a Railway Undertaking (RU) who intends to operate a new rail passenger service. A new rail passenger service, as defined in Article 3 of Implementing Regulation 2018/1795, means a rail passenger service designed to be operated as a regular time-tabled service, that is either entirely new, or that implies a substantial modification of an existing rail passenger service, in particular in terms of increased frequencies of services or increased number of stops, and which is not provided under a PSC.

Article 33 of SI398 2020 provides that the CRR, as the regulatory body, may determine that it is necessary to limit the right of access to new railway passenger services when one or more PSC cover the same route, or an alternative route, if the exercise of this right would compromise the economic equilibrium of a PSC. This determination will be based on an Economic Equilibrium Test (EET), an objective economic analysis with pre-determined criteria.

The CRR has developed the Guidance on the Equilibrium Test Process CRR-G-057 document and the forms in relation to the notification for a proposed new rail passenger service, and the request form for an EET which have been made available on the CRR website at www.crr.ie

Appeals and complaints

The CRR received no appeals or complaints as the Regulatory Body in 2024.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

NATIONAL AND EUROPEAN LEGISLATION FRAMEWORK DEVELOPMENTS



National railway legislation framework

The following are the developments in the national legislative framework in 2024.

S.I. No. 237 2024 - Railway Safety Act 2005 (Section 26) Levy Order

This placed the annual levy on the railway organisations in the State for 2024, which funded the CRR activities related to its functions as per Section 26 of the Railway Safety Act 2005.

SI 559 2024 EU (Resilience of Critical Entities) Regulations

Transposes Directive EU 2022/2557 and came into effect in October 2024. For further detail, see under European Railway Legislation Framework below.

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 2024, 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 EC, DG-MOVE through the Railway Interoperability and safety Committee (RISC) 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 20 meetings chaired by the EC and the ERA.

Both the CRR as the National Safety Authority and DoT as the Member State attend RISC. Proposed changes and updates to the legislative framework are reviewed, discussed and agreed at RISC. In 2024, the focus has been on requests from the EC to ERA to develop an agreed structure for the future TSI revisions. In addition, ERA have been requested to initiate preliminary steps for a mandate for the revision of the Common Safety Methods.

A specific TSI revision in 2024 focuses on the Telematics TSI which combines the current TAP and TAF TSI's into a single framework. This work is ongoing into 2025.

In 2024, the CRR continued its participation in ENRRB and 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 2024.

Directive (EU) 2022/2557 on the resilience of critical entities, sets obligations on Member States to take specific measures aimed at ensuring that services which are essential for the maintenance of vital societal functions or economic activities, within its scope, have enhanced resilience and ability to provide services. SI 559 2024 EU (Resilience of Critical Entities) Regulations transposes this Directive and came into effect in October 2024. The SI designates the CRR as the competent authority for two sectors as follows:

- Transport-rail relating to infrastructure managers and railway undertakings as defined in SI 249 2015 EU (Regulation of Railways)
- Transport-public transport for public service operators as defined in Article2(d) of EU Regulation 1370/2007 for services provided on a railway.

Directive (EU) 2022/2555 on Network Information Security (NIS2) deals with measures for a high common level of cybersecurity across the Union with a view to improving the functioning of the internal market. The Directive requires Member States to adopt national cybersecurity strategies and to designate or establish competent authorities, cyber crisis management authorities, single points of contact on cybersecurity and computer security incident response teams. Supervisory and enforcement obligations are also included. In December 2023, the CRR were advised that it had been designated by Government to be the National Competent Authority for Transport – Rail under this Directive. Transposition of the Directive is anticipated to be in 2025. While the CRR has as yet no official function, pending transposition, it has informally engaged with entities that are likely to come within its remit. The CRR is also participating in the National Cyber Security Centre National Competent Authority Forum established to assist the transition from NIS1 to NIS2.

Regulation (EU) 2024/1689 lays down harmonised rules on artificial intelligence. The purpose of this Regulation is to "improve the functioning of the internal market and promote the uptake of human-centric and trustworthy artificial intelligence (AI), while ensuring a high level of protection of health, safety, fundamental rights enshrined in the Charter, including democracy, the rule of law and environmental protection, against the harmful effects of AI systems in the Union and supporting innovation". One of the measures to achieve this is through market monitoring and market surveillance, governance and enforcement. The CRR has been advised that its market surveillance authority function, as it relates to cableways under (SI 543 2020), will also now include functions under (EU) 2024/1689. The Implementing Regulations to give effect to this are expected in 2025.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

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 DPENDR has been in place in the CRR for the year ended 31 December 2024 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 fully reviewed in January and updated by the Management Team on a quarterly basis thereafter for 2024.

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 CRRs 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.

The CRR is compliant with Circular 1/2020 in relation to offsetting greenhouse gas emissions associated with official travel.

COMMISSION FOR RAILWAY REGULATION ANNUAL REPORT 2024

APPENDICES



Appendix A APIS Stage Letters of Acceptance

Table 6 Letters of Acceptance issued in 2024

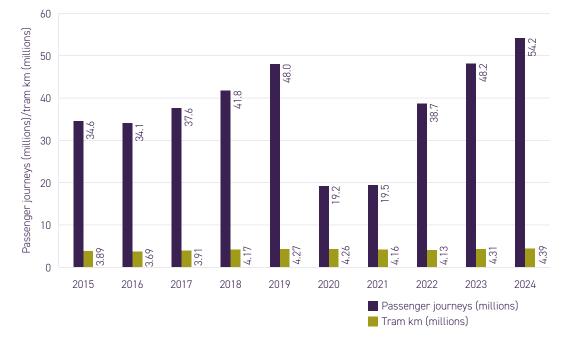
	Concept	Preliminary design	Detailed design	T & C	Interim operation	Service
APIS Stages	1	2	3	4	5	6
Infrastructure – Iarnród Éireann						
Cork Area Commuter Rail (CACR) Kent Station Through Platform			•			
Robertstown Viaduct UBF(BF)18 Renewal						
Limerick to Foynes line – Track Installation			•			
New footbridge (OBT47A) at Rathmore Station, Co. Cork			•			
New footbridge (OBG20B) at Maynooth Station, Co. Kildare			•			
New road overbridge (OBF9A) at 21 miles, 1033 yards on the Limerick to Foynes line			•			
New road overbridge (OBF23A) at 12 miles, 1441 yards on the Limerick to Foynes line			•			
New road overbridge (OBF16B) at 10 miles, 1218 yards on the Limerick to Foynes line						
CACR Work Package 3 – Advanced Works			•			
New footbridge (OBW39A) at Athy Station, Co. Kildare			•			
Rathdrum Station: New Lift						
Upgrade of IÉ-IM network CCT & INF, section DG2-DG6 Drogheda- Greystones, with ETCS level1			•			
New pedestrian overbridge (OBY1A) at 1 mile, 70 yards on the Cork to Midleton Line					•	
CACR – Signalling, Kent Station Through Platform			•		•	
GSM-R IM Fixed Installations Phase 3A Infrastructure				•	•	
New platform at Limerick Junction with pedestrian overbridge including lifts and stairs.					•	

	Concept	Preliminary design	Detailed design	T & C	Interim operation	Service
APIS Stages	1	2	3	4	5	6
New footbridge, lifts, etc., at Dalkey Station					•	
New Railway Pedestrian Overbridge, OBB66A, at Gormanstown Station					•	
Geashill 2022 Signalling Investment Scheme – Upgrade/Renewal					•	
New station with pedestrian overbridge at Pelletstown					•	
Portlaoise 2022 Signalling Investment Scheme					•	
Replacement of existing overbridge OBN77					•	
Maintenance and repairs to the existing Kishogue Station					•	
New pedestrian overbridge (OBW65A) with lifts at Carlow Station						÷
New overbridge 25 yards west of OBC414B located at 168 miles, 689 yards Cork to Midleton Line						
New footbridge, lifts, etc., at Little Island Station						
Replacement of existing overbridge OBN77 at 41 miles, 1315 yards Ballybrophy to Killonan Junction Line						÷
New footbridge (OBT20B), lifts, etc., at Banteer Station						
Replacement pedestrian overbridge on the Waterford to Limerick Railway Line at 62 miles, 470 yards.						÷
Infrastructure – Other						
Metrolink						
Veolrail, Bord na Móna, Infrastructure			•			
Difflin Lake Railway – Castle Halt Platform			•			•
Difflin Lake Railway – Butlers Cross Platform						
Rolling Stock – Iarnród Éireann						
GSM-R compatible cab radios for the Class 29000, 22000, 2600 and 2800						

Appendix B Passenger numbers on the heavy and light rail systems 2024







Appendix C CRR outcomes (recommendations) made to railway organisations

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

Progress continued to be made in 2024 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 taken or no development has been made. Continual periodic outcome review meetings are held with railway organisations to develop and progress outcomes. In 2024, a notable element of work was undertaken to progress outcomes which resulted in 76 outcomes being closed. Of these 76 CRR outcomes 12 were either MaNC or MiNC and the remaining 64 closed outcomes were AR.

Table 7

Status of CRR outcomes as of 31 December 2024

Open			ER	Submitted		Closed	
ARs	NCs	ARs	NCs	ARs	NCs	ARs	NCs
10	8	8	8	6	0	269	79
47	16	8	2	8	0	37	8
15	2	13	5	5	3	104	24
9	9	5	4	5	1	133	53
14	5	1	1	6	2	67	18
3	2	4	0	0	1	33	9
13	11	27	3	12	4	68	9
6	7	4	3	1	1	20	1
4	2	0	0	2	1	11	2
4	2	0	0	0	0	4	2
2	4	0	0	0	1	2	0
0	0	0	0	0	1	4	1
	10 47 15 9 14 3 3 13 6 4 4 2	10 8 47 16 15 2 9 9 14 5 3 2 13 11 6 7 4 2 2 4	10 8 8 47 16 8 15 2 13 9 9 5 14 5 1 3 2 4 13 11 27 6 7 4 4 2 0 4 2 0 2 4 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 8 8 8 6 0 269 47 16 8 2 8 0 37 15 2 13 5 5 3 104 9 9 5 4 5 1 133 14 5 1 1 6 2 67 3 2 4 0 0 1 33 13 11 27 3 12 4 68 6 7 4 3 1 1 20 4 2 0 0 2 1 11 4 2 0 0 2 1 11

	Op	ben	FE	ER	Subn	nitted	Closed	
Activity	ARs	NCs	ARs	NCs	ARs	NCs	ARs	NCs
CRR outcomes for RPSI								
Audit	9	2	0	0	1	0	30	3
Inspection	16	2	0	0	0	0	11	0
Post Occurrence Activity	0	0	0	0	0	0	2	0
CRR outcomes for RSIE								
Audit	6	0	4	1	2	5	29	12
Inspection	9	0	1	2	1	0	10	8
Post Occurrence Activity	0	0	0	0	0	0	0	0
CRR outcomes for BNM								
Audit	4	3	0	0	0	0	0	0
Inspection	6	0	0	0	1	0	1	0
Post Occurrence Activity	2	0	0	0	0	0	0	0
CRR outcomes for Heritage								
Audit	0	0	0	0	0	0	0	0
Inspection	14	2	1	3	9	2	49	33
Post Occurrence Activity	0	0	0	0	0	0	1	3

RAIU safety recommendations

The CRR issue RAIU recommendations to railway organisations or other entities and then track their implementation.

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 re-categorised.

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 are 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 8

RAIU safety recommendations

		No. of recommendations										
Year	No. of reports*	Open	Submitted	FER	Closed	Total						
**	19	0	0	0	73	73						
2010	4	1	0	0	25	26						
2014	6	0	0	2	26	28						
2016	3	6	0	2	12	20						
2017	1	0	0	1	8	9						
2018	1	1	0	1	7	9						
2019	4	6	3	6	21	36						
2020	4	4	2	6	7	19						
2021	7	8	6	9	13	36						
2022	3	8	7	1	0	16						
2023	5	29	12	1	5	47						
2024	3	13	1	0	0	14						
Total*	61	76	31	29	197							
Total RAIU	Recommendations ma	de*				333						

* USAN's are not referenced within as 'reports' in accordance with RAIU referencing system however the USAN recommendations are included within the table above for the relevant years USANs were issued by the RAIU.

**All RAIU recommendations from 2006, 2007, 2008, 2009, 2011, 2012, 2013 and 2015 are closed in full.

Appendix D Safety indicator statistics

Table 9 Iarnród Éireann fatality and injury statistics

Category	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Trend
Railway operations: passenger fatal injuries											
Fatal injury to passenger due to a train accident, not at level crossing	0	0	0	0	0	0	0	0	0	0	
Fatal injury to passenger due to a train accident at level crossing	0	0	0	0	0	0	0	0	0	0	
Fatal injury to passenger travelling on a train, other than in train accident	0	0	0	0	0	0	0	0	0	0	
Fatal injury to passenger attempting to board or alight from train	0	0	0	0	0	0	0	0	0	0	

Railway infrastructure: third party fatal injuries

Fatal injury to third party at a level crossing involving a train	0	0	0	0	0	1	0	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	

APPENDICES

Category	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Trend
Railway operations: fatal in	juries t	o othe	er pers	sons							
Fatal injury due to train in motion not at level crossing	0	0	0	0	0	0	0	0	0	0	
Fatal injury to customer or visitor, no train involved	0	0	0	0	0	0	0	1	0	0	^
Fatal injury involving train in motion on railway or level crossing where trespass or suspicious death was indicated	2	5	12	9	4	7	5	6	11	12	\sim
Railway operations: non fat	al injur	ries to	passe	engers							
Injury to passenger travelling on train due to a railway accident not at level crossing	0	0	0	0	0	0	0	0	0	0	
Injury to passenger travelling on train due to railway accident at level crossing	0	0	0	0	0	0	0	0	0	0	
Injury to passenger attempting to board or alight from train	48	79	57	74	76	42	32	62	65	54	\sim
Injury to passenger travelling on train, other than due to a railway accident	15	31	33	46	38	9	0	30	45	51	\sim
Railway infrastructure: thir	d partv	non f	atal ir	iuries							
Third party at level crossing injury involving a train	0	0	0	1	1	0	0	0	1	0	
Level crossing user injury not involving a train	0	0	0	1	1	2	1	2	2	0	
Railway infrastructure: non	fatal ir	njuries	s to ot	her pe	rsons						
Injury to customer or visitor to premises	146	192		199	288	122	96	172	223	234	\sim
Injuries to other persons including unauthorised persons	1	2	6	0	2	0	0	2	3	3	<u></u>

67

Category	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Trend
Railway operations: non fatal employee injuries											
Employee lost time accident involving train movement or train accident	3	1	15	13	7	8	0	0	20	18	<u></u>
Employee lost time accident while working on railway not due to train in motion	32	30	30	13	35	16	8	11	11	12	~~
Railway infrastructure: non	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	6	23	22	26	24	20	33	20	20	18	/
Employee lost time accident while working at level crossing not due to train in motion	0	3	1	1	0	3	0	2	2	2	$\wedge \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Entity in charge of maintena	ance ar	nd ma	intena	nce w	orksho	ops: no	on fata	al emp	loyee	injurie	25
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	13	11	10	12	15	4	11	7	5	12	\sim

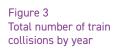




Table 10 Train collision statistics by year by category

Category	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	Trend
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	2	1	1	4	1	4	0	3	muld (
Train collision with a motor vehicle at a level crossing	0	0	3	1	2	1	0	0	1	0	http://
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	1	0	0	0	0	0	0	0	0	0	
Train collision with road vehicle obstructing the line (not at a level crossing)	1	1	0	0	0	0	0	0	0	0	II
Train collision with other obstacle on the line	1	31	25	23	8	29	27	27	34	64	.m.ml
Train collision with large animal(s) on the line	29	35	23	11	11	38	46	59	89	91	aull
Total	33	68	53	36	22	72	74	90	124	158	uff

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 Safety Performance Review Meetings (SPRM's) 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. This trend continues for 2024 with the total number of SPADs at 11 for the year.

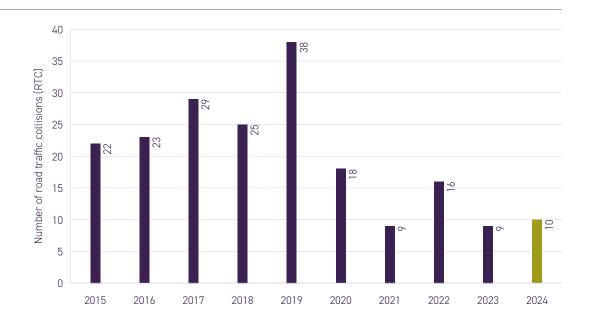


Train derailments

Train derailments remain at low levels, with all those occurring in 2024 taking place in sidings.



Train derailments



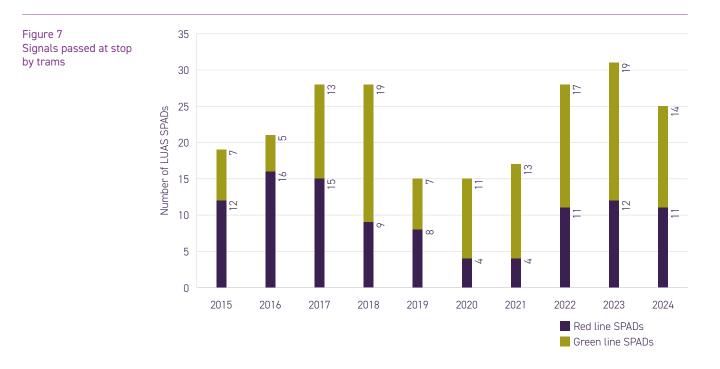
Road traffic accidents involving trams

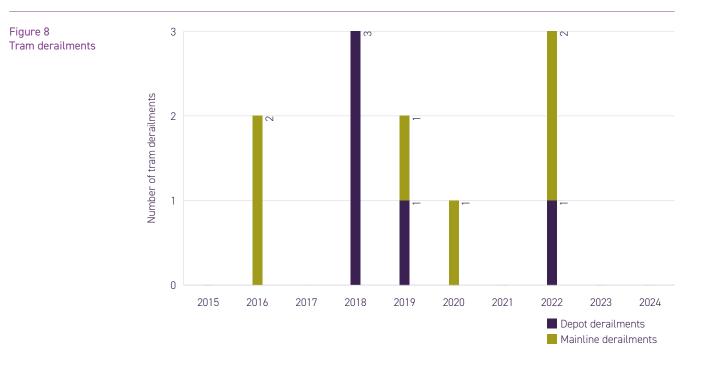
Figure 6 Road traffic accidents (collisions) involving trams by year

For 2024, Road Traffic Collisions remains at very similar levels to 2023 but with the overall positive trend of RTC's decreasing for the light rail network for overall trend.

Signals Passed At Stop (SPASs) and SPAD events

SPAS/SPAD events occur on the LUAS network, 2024 data show a moderate improvement for both the green and redline versus the previous year's data.

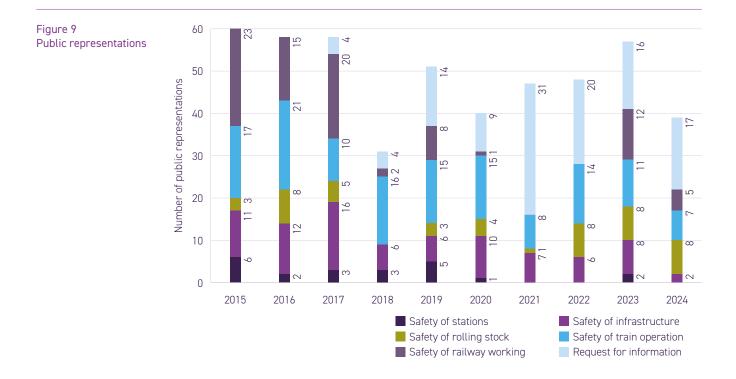




Tram derailments

Public representations

Public and railway staff representations received in 2024, by category.



Appendix E Heritage and Velorail operators

Heritage railways

Table 11 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.

able 12 eritage 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.	
West Clare Railway Co Ltd Moyasta Junction Kilrush Co Clare	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.	
Lullymore Heritage & Discovery Park Ltd Lullymore Rathangan Co Kildare	Lullymore Heritage Railway is a 1km looped journey through rehabilitating cutaway peatlands.	

As these heritage railways do not hold a safety certificate, they are currently non-operational.

Velorail operators

Table 13 Velorail operators with a current safety certificate		
IRD Kiltimagh CLG – Velorail Station Road Kiltimagh Co Mayo	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 Compliance Supervision and Enforcement (CS&E) Department Inspection Activities (including summary reports from CS&E to CA/APIS)

Table 14

Compliance, Supervision and Enforcement Department Inspection Activities (including summary reports) commenced in 2024

No	CS&E Inspection name	Railway entity
1	Inspection of Tandem Lifting	IÉ-IM
2	Inspection of Castlerea Station	IÉ-RU
3	Inspection of Castlebar Station	IÉ-RU
4	Inspection of Roscommon Station	IÉ-RU
5	Inspection of XM 193 Level Crossing	IÉ-IM
6	Inspection of XM 198 Level Crossing	IÉ-IM
7	Inspection of XM 222 Level Crossing	IÉ-IM
8	Cab Ride – Heuston to Galway	IÉ-RU
9	Inspection of XM 128 Level Crossing	IÉ-IM
10	Inspection of XM 080 Level Crossing	IÉ-IM
11	Inspection of XG 151 Level Crossing	IÉ-IM
12	Inspection of XG 133 Level Crossing	IÉ-IM
13	Inspection of Woodlawn Train Station	IÉ-IM
14	C&L Annual inspection	C&LR
15	Supervision Feedback to Conformity Assessment Summary Report – ISPS	ISPS
16	Supervision Feedback to Conformity Assessment Summary Report – LMR	LMR
17	Supervision to Conformity Assessment Summary Report	C&LR
18	Integration of Human Factors in Vehicle Maintenance (Inspection No. 11)	RSIE
19	Wheelset Management IÉ-RU CME (Inspection No. 48)	IÉ-RU
20	Supervision to Conformity Assessment Summary Report – Fintown	Fintown
21	Supervision to Conformity Assessment Summary Report – DLR	DLR
22	LUAS Red line Track Walk Heuston – Connolly (Inspection No.52)	TDLR
23	Possession Inspections (Inspection No. 13)	IÉ-IM
24	Tara Street Station (Passenger Entrance Area)	IÉ-IM
25	Luas Track Walk Sandyford – St Stephen's Green (Inspection No. 54)	TDLR
26	Seabreeze (Inspection No. 60)	RPSI
27	Introduction of a safety control equipment push button on 29000 fleet	IÉ-RU
28	Major event planning – Aviva Stadium	IÉ-RU
29	Inspection of AHB Crossing in Derrygreenah and all other active gates available for decommissioning with public road interface	BnM
30	Joint Emergency Exercise IÉ-RU/RSIE	IÉ-RU/RSIE
31	Clonsilla Station Inspection	IÉ-RU

No	CS&E Inspection name	Railway entity
32	Pelletstown Station Inspection	IÉ-RU
33	Management of PTI Risk	IÉ-RU
34	Inspection of Coastal Management (Inspection No. 3)	IÉ-IM
35	Supervision Feedback to Conformity Assessment Summary Report – RPSI	RPSI
36	Management of Driver Monitoring (Overspeeds) (Inspection No. 19)	IÉ-RU
37	IÉ-RU's management of Train Driver fatigue	IÉ-RU
38	TII notes for SMS CA	TII
39	Midlander (Inspection No. 59)	RPSI
40	Inspection of Ashtown Station	IÉ-RU
41	Inspection of Navan Road Parkway Station	IÉ-RU
42	Inspection of Ashtown Level crossing	IÉ-IM
43	Inspection of Bray Airshow 2024	IÉ-RU
44	Inspection of pre-departure checks for early morning services	IÉ-RU
45	ISPS Annual Inspection (Inspection No. 32)	ISPS
46	Lartigue Mono Railway	LMR
47	Fintown Heritage Railway (Inspection No. 27)	Fintown
48	Difflin Lake Railway (Inspection No. 26)	DLR
49	IRD Kiltimagh Annual Inspection (Inspection No. 28)	IRD Kiltimagh
50	Inspection of Early morning services from Athenry, Over Crowding	IÉ-RU
51	WSVR Inspection 2024	W&SVR
52	Train Dispatch P5 Connolly	IÉ-RU

Table 15

Supervision inspection activities completed in 2024 that were commenced in 2023

No	CS&E Inspection name	Railway entity
1	Tunnel Inspections (Inspection No. 17)	IÉ-IM
2	Annual Inspection (Inspection No. 32)	ISPS
3	Seabreeze or Other (Inspection No. 37)	RPSI
4	CME Concession Management (Drogheda & Fairview) Depots (Inspection No. 48)	IÉ-RU
5	Internal Monitoring, Internal Auditing and Accident Investigation	NIR
6	Lartigue Monorail	LMR
7	Annual Inspection – New Operator (Inspection No. 28)	VELO
8	TDLR 401 Fleet inspection ALARP	TDLR
9	Review of maintenance and operations of MPV790	RSIE
10	Emergency Planning and Response	TDLR
11	Review of TDLR Overspeed trend	TDLR
12	Santa Special	RPSI
13	IE-RU Train Driver medical and competency Check	IÉ-RU
14	Connemara Heritage Railway Inspection	CON
15	Difflin Lake Railway Santa Express inspection	DLR

Appendix G Glossary

AIA	Artificial Intelligence Act
APIS	Authorisation to Place in Service
BNM	Bord Na Móna
CACR	Cork Area Commuter Rail
CER	Critical Entities Resilience
CILT	Chartered Institute of Logistics and Transport
CRR	Commission for Railway Regulation
DART	Dublin Area Rapid Transit
DeBo	Designated Body
DGSA	Dangerous Goods Safety Advisor
DLR	Difflin Lake Railway
DoT	Department of Transport
EC	European Commission
ECM	Entity in Charge of Maintenance.
EFTA	European Free Trade Association
ENRRB	European Network of Rail Regulatory Bodies
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	Iarnród Éireann Railway Undertaking
IM	Infrastructure Manager
IMMAC	Infrastructure Manager Multi Annual Contract
NCSC	National Cyber Security Centre
NIR	Translink Northern Ireland Rail
NIS2	Network Information Systems
NR	National Rules
NSA	National Safety Authority
OTM	On Track Machine
POA	Post Occurrence Activity
RAIU	Railway Accident Investigation Unit.
RISC	Railway Interoperability and Safety Committee
RPSI	Railway Preservation Society of Ireland
RSA	Railway Safety Act
RSD	Railway Safety Directive
RSIE	Rhomberg Sersa Ireland
RO	Railway Organisation
RU	Railway Undertaking

APPENDICES

SEAI	Sustainable Energy Authority of Ireland
SMS	Safety Management System
SPAD	Signal Passed at Danger
SPAS	Signal Passed at Stop
SoS	Statement of Strategy
SPRM	Safety Performance Review Meeting
TDLR	Transdev Dublin Light Rail
TII	Transport Infrastructure Ireland
TPS	Train Protection System
TSI	Technical Specification for Interoperability
USAN	Urgent Safety Advice Notice
VA	Vehicle Authorisation

79





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

