

2023

Annual Safety Performance Report



Department for
Infrastructure

An Roinn
Bonneagair

Department für
Infrastructure

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Summary

This annual safety report, published by the Department for Infrastructure's (the Department) Rail Safety Authority (RSA), provides an overview of rail safety activity within Northern Ireland (NI) during 2023. This was a challenging year for railway operators as passenger numbers and services returned to pre-pandemic levels.

Overall, the total number of incidents and accidents remained quite low in 2023, with one fatality recorded. In addition, the number of precursors to accidents/incidents remained low.

Our focus for railway safety in 2023 was on safety certification, with the key audit activity being focused on safety culture and leadership. The RSA, with the support of the Office of Rail and Road (ORR), developed a report with recommendations to improve leadership and safety culture for Translink to consider.

Throughout 2023, the RSA took forward regular engagement with railway operators on their progress in meeting safety targets and implementing the recommendations of inspection reports.

Going forward, the RSA will continue to work with railway operators to monitor and support their safety activity and undertake targeted activity as part of its monitoring and supervision programme.

1. Introduction

- 1.1. This annual safety performance report for the NI rail network is based on the activities of the RSA as National Safety Authority (NSA) for NI, as well as the information supplied by the two mainline railway operators in NI, Northern Ireland Railways NIR and Iarnród Éireann (IÉ). Both NIR and IÉ submitted an annual safety report to the RSA for 2023 as required under [regulation 18\(1\) of the Railways \(Safety Management\) Regulations \(NI\) 2006 \(as amended\)](#) (the 2006 Regulations).
- 1.2. It is important to note that while both mainline operators run cross-border services between Belfast and Dublin, the information presented in this report, specifically the Common Safety Indicators (CSI) data at section 4, relates to activities on the NI network.
- 1.3. This report covers the period from 1 January 2023 to 31 December 2023 and is concerned with the mainline railway system of NI.

NI Rail Network

- 1.4. Translink is the brand name of the integrated public transport operation of NIR as well as Metro and Ulsterbus. NIR acts as both infrastructure manager (IM) and railway undertaking (RU) or train operating company. NIR operates all mainline domestic services on the NI network and jointly operates the Belfast to Dublin Enterprise service with IÉ.
- 1.5. The Department provides funding to maintain and develop the rail infrastructure and rolling stock. This activity is structurally separate from the delivery of its statutory duties as NSA.
- 1.6. IÉ operates as an RU in NI. A subsidiary of Córas Iompair Éireann, IÉ provides passenger and freight rail services in Ireland as well as operating Rosslare Europort. IÉ jointly operates the Dublin to Belfast Enterprise service with NIR and does not operate any domestic services on the NI rail network.
- 1.7. All railway operators in NI, including heritage railways, are required to comply with railway safety regulations. In some circumstances, heritage railways operating on their dedicated tracks and at a line speed that does not exceed 25mph (40kph) may be exempted from some regulations where the Department is satisfied that the safety of passengers and the general public is not compromised.

National Safety Authority

- 1.8. Rail safety is a devolved matter in NI. The Department carries out the role of the NSA for NI (RSA) and is responsible for ensuring railway operators' regulatory compliance with the rail safety regulatory framework. The Department does this in accordance with the [Railway Safety Act \(Northern Ireland\) 2002](#) and associated Regulations. The main legislative framework for rail safety in NI is set out at Annex A.
- 1.9. The Department's key responsibilities as Safety Authority are:
 - To ensure that railway operators manage the rail network efficiently and in a way that meets the needs of users;
 - To encourage continuous improvement in health and safety performance;
 - To secure compliance with relevant health and safety law, including taking enforcement action as necessary;
 - To develop policy and enhance relevant railway health and safety legislation; and
 - To issue or refuse safety certificates to railway operators in accordance with the relevant Regulations.
- 1.10. The statutory functions of the RSA in the Department are exercised by Rail Safety Branch. The Branch is responsible for the monitoring and supervision of railway operators' safety management systems and for conducting audits and inspections of the application and practical deployment of safety management systems.
- 1.11. The Branch also acts as the Competent Authority for interoperability on the rail system. Interoperability is a mainly reserved matter, with the Department for Transport (DfT) legislating on behalf of NI in this area. The RSA works closely with DfT on issues relating to interoperability and engages with them more broadly on rail safety matters.
- 1.12. The RSA also works with the ORR, the NSA for Great Britain (GB), to secure technical support to assist with the discharge of its statutory functions, and with the Health and Safety Executive for Northern Ireland (HSENI), which undertakes statutory functions concerning rail safety and interoperability, and also supports the RSA in the discharge of its functions.
- 1.13. As a result of EU Exit and the continuing requirement under the Windsor Framework and Ireland/Northern Ireland (NI) Protocol for NI to adhere to the EU's rail technical standards regime, the Department will continue to publish the required information for NI only.

1.14. Previous UK wide annual safety reports developed by ORR and submitted to the European Union Agency for Railways (ERA) prior to EU Exit, which include NI information and statistics, are available on [ERA's website](#).

2. Legislative framework

The Railways (Safety Management) Regulations (NI) 2006

- 2.1. The purpose of the 2006 Regulations when introduced was to harmonise safety standards. The 2006 Regulations impose prohibitions and requirements in relation to the safety of NI's railways and cover the following key areas:
- Requirements for safety management systems, safety certificates and safety authorisations;
 - Risk assessment, co-operation and reporting requirements; and
 - Requirements relating to safety critical work.

Reporting requirements

- 2.2. Under regulation 18 of the 2006 Regulations, railway operators in NI are required to send to the Department an annual safety report relating to the previous calendar year which contains the following information:
- information on how any railway operator's safety targets are met;
 - the results achieved through putting any railway operator's safety plans into effect;
 - statistics for relevant CSIs;
 - the findings of internal safety auditing carried out; and
 - comments on any deficiencies or malfunctions relating to the running of vehicles or the management of infrastructure relating to the operation in question that may be relevant to the safety of any railway.
- 2.3. The Department is then required to publish a report which includes the following:
- the development of railway safety including an aggregation of all the statistics reported to the Department for the relevant calendar year relating to CSIs which relate to an operation or part of an operation which is carried out on the railway;
 - any important changes in relation to the regulation of railway safety;
 - the development of the system for safety certification and authorisation; and
 - the results of and experience relating to the supervision of railway operators.
- 2.4. Whilst the Department is not required under the current NI legislation to provide information on the experience of the RUs and IMs on the

application of the relevant Common Safety Methods (CSMs), we have included this information in previous reports.

- 2.5. The 2006 Regulations currently state that the Department must send this annual report to ORR. ORR previously represented NI in its relations with ERA and included NI specific information within a wider UK report. However, as a result of legislative amendments following EU Exit, there are now different reporting requirements for GB and NI. The relevant GB legislation does not provide a mandate for ORR to receive NI safety performance information. Consequently, the RSA will now publish this information for NI only.

EU legislation and standards

- 2.6. Under the Windsor Framework/NI Protocol, the Technical Specifications for Interoperability (TSIs) continue to have direct effect in NI. The recast [Rail Interoperability Directive 2016/797](#) applies in NI “insofar as conditions and technical specifications for placing on the market, putting into service and free movement of railway products are concerned.”¹ To meet the requirements of the Windsor Framework/NI Protocol, during 2021, DfT announced the development secondary legislation to implement for NI the relevant provisions of 2016/797, and work to develop this legislation took place in 2022. In the interim, the RSA engaged with DfT to apply Windsor Framework/NI Protocol requirements in the NI context as required.
- 2.7. The provisions of the [Railways \(Interoperability\) Regulations 2011 \(as amended\)](#) continue to apply in NI in the context of the continued applicability of Directive 2016/797 detailed above.

Legislative changes and developments in 2023

Domestic legislative developments

- 2.8. During 2023 the RSA finalised three new Level Crossing Orders in conjunction with NIR. These were to allow for the installation and operation of new level crossings and related operational and technical equipment at Cullybackey North, South and Station. RSA were closely involved with the NIR engineers and contractors during the development and installation of these new crossings. These works aimed to improve safety in the operation of the level crossings at these sites for all users.
- 2.9. The RSA had close involvement in the consideration of the legislative impact of the Retained EU Law (Revocation and Reform) Bill (REUL)

¹ Ireland/Northern Ireland Protocol, Annex 2, paragraph 28.

amendments with particular focus on the railways and rail safety legislative framework. The RSA took part in a series of projects and meetings with DfT and ORR to consider the impacts from the rail safety perspective in NI.

- 2.10. The RSA continued to progress the review of rail safety. The review examines the role, remit, functions, structure, processes and systems to ensure that the DfI rail safety responsibilities in NI are fit for purpose in a post EU Exit operating environment. Phase 1 of the review – an extensive legislative review to identify the scope and extent of statutory duties – was completed in 2022. The timeline for reporting is 2024 and is likely to require legislation to implement the agreed recommendations of the review.

EU legislative developments

- 2.11. ERA published a number of updates to its TSIs to implement the Digital Rail and Green Freight TSI revision package. In addition, the EU took the opportunity to remove a number of GB specific cases within TSIs. This presents a challenge going forward as some of these specific cases apply to Ireland, but not Northern Ireland. Consequently, as the sector develops its National Technical Rules post EU Exit, these will have to consider any potential requirements as a result of the changes in TSIs.

3. Development of railway safety

- 3.1. Railway safety in 2023 remained broadly consistent with previous years, with accidents and precursors to accidents remaining in low numbers. Further details on CSIs are provided in section 4.

NSA activities

- 3.2. The post EU Exit environment continues to pose a challenge for the RSA, with significant resources dedicated to developing an understanding of the applicable standards and to engaging with key stakeholders to share developments and enhance knowledge.
- 3.3. Work was carried out in 2022 to review existing relationships with partner organisations who support the RSA in delivering its statutory duties. Regular engagement between the organisations has continued in 2023 to ensure collaboration and sharing of information takes place in a timely manner, and so joint working can be agreed and undertaken as required.
- 3.4. The RSA also continued to develop informal links with other organisations, such as the Rail Safety and Standards Board, to enhance knowledge and understanding of wider developments in the rail safety and standards arena.

Mainline operators - inspection, audit and supervision

- 3.5. To undertake any programme of audit and inspection, the RSA draws on the technical support and advice of railway engineers, fleet engineers and health and safety experts from ORR or the HSENI. The RSA then works with the designated technical experts to develop a remit for each audit and inspection.
- 3.6. The RSA carried out the Leadership and Safety Culture audit with support from ORR. Whilst the planned Management of Contractors audit could not be carried out during 2023, this allowed RSA to bring forward the audit of Irish Rail which commenced in November 2023. The RSA also undertook platform-train interface inspections

Leadership and Culture

- 3.7. The RSA engaged with the ORR inspection team in the first quarter of 2023 to develop the inspection brief and remit for the Leadership & Safety Culture Inspection. Following this, the aims of the inspection were:

- Focusing on the railway operations at the Translink organisational level and the interface at the senior levels of the railway divisions:
 - Understanding the safety culture at all levels throughout the organisation; and
 - Interface and independence arrangements between the Infrastructure Management and Transport Undertakings.
- 3.8. The inspection focussed on meeting key people, visiting key sites and observing Translink’s Annual Safety Conference. The findings and observations made by the ORR inspection team highlighted positive aspects of Translink’s approach to leadership and safety culture. Safety is prioritised as the first of TransLink’s organisational values and is recognised and actualised by staff across the organisation each day.
- 3.9. The inspection report developed by the RSA based on the ORR inspection includes 12 recommendations to improve leadership and safety culture at Translink. The report’s recommendations identify areas for improvement, and it is for Translink to consider how best to respond to those recommendations.

Platform-Train Interface Inspections

- 3.10. In partnership with HSENI, the RSA commenced a programme of platform-train interface inspections.
- 3.11. The programme of inspection aims to:
- review the station risk assessments for passengers at the platform-train interface; and
 - undertake an assessment of practical compliance with the relevant regulations from a passenger perspective.
- 3.12. The inspections have consisted of a visiting a range of stations (terminus, suburban and rural) across each of the main network routes.
- 3.13. The inspection programme is ongoing into 2024 as the inspection team review station risk assessments to inform the observations made during site visits.

Monitoring and supervision

- 3.14. The RSA continued to engage with railway operators to undertake monitoring and supervision activities in 2023. Hybrid and in person meetings were undertaken as public health guidelines changed. Follow-up

activity was also undertaken between meetings to monitor the implementation of the audit recommendations.

Previous inspections

- 3.15. The reports from previous years with outstanding or long-term recommendations (structures asset management and user worked level crossings) continued to be monitored.
- 3.16. Many of the recommendations from the user worked crossings report were addressed within the previous years with minor issues outstanding. NIR continued to meet the recommendations through the closure of user worked crossings and successfully closed 2 crossings. The User Worked Crossing Safety Improvement Programme continued with the upgrade of 10 crossings being completed in late 2023. NIR also undertook preparatory work on the Enterprise Asset Management System to enable the effective tracking of interventions on an asset basis, in order to provide an 'auditable trail' of interventions for each asset.

RIDDOR reportable incidents

- 3.17. Translink noted that there were six RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Northern Ireland) 1997) reportable incidents in 2023– further details are provided below. Translink took remedial action as required. The RSA did not investigate any of these incidents.

Railway operator activities

- 3.18. Railway operators continued to set and monitor safety targets, with regular reporting and reviews to ensure mitigations are developed as appropriate. Safety performance trends were closely monitored and reported periodically within each operator and to the RSA.
- 3.19. Overarching safety plans were also developed, with the aim of driving continuous improvement in the safety of the railways. In order to achieve this, both operators undertook recognised industry approaches such as the following:
 - Independent external audits
 - Compliance verification
 - Internal audits
 - Safety tours, planned general inspections and management reviews

- Action plans responding to regulatory inspections
- Responding to issues raised through regulator safety performance meetings
- Progress with actions from accident investigations and audits reviewed at safety meetings
- Performance indicators and progress on safety actions are periodically reported and reviewed at safety meetings

Railway operator priorities, targets set and outcomes

- 3.20. This section focuses on the targets set by and the activity of NIR as it relates solely to the NI rail network. Where IÉ has highlighted similar issues to NIR, this is noted in the relevant section.
- 3.21. The main areas of focus for safety activity across the NI network in 2023 have been passenger and staff safety, the platform train interface, operational and fleet safety, and safety at level crossings.
- 3.22. NIR has set a range of targets across IM and RU operations. A selection of these are detailed out below.

Passenger accidents

<u>2022 Target</u>	<u>2022 Target Outcome</u>	<u>2023 Target</u>	<u>2023 Target Outcome</u>	<u>Year on Year Change</u>
≤ 110	76	≤ 110	87	+11

- 2023 saw an increase in passenger footfall, increasing the potential for accidents. There were no major injuries recorded. 49 incidents involved no injury to passengers.

Workforce Safety

<u>Key risk area</u>	<u>2022 Target</u>	<u>2022 Target Outcome</u>	<u>2023 Target</u>	<u>2023 Target Outcome</u>	<u>Year on Year Change</u>
Rail Operations Staff Accidents (including Contractors)	≤ 12	10	≤ 12	13	+3
Rail Fleet Engineering Staff Accidents	≤ 12	9	≤ 12	16	+7
Employee Assaults (including Contractors)	No target set	60	No target set	28	-32
Staff Fatalities	0	0	0	0	0

- **Rail Operations staff accidents (including contractors)** – Three of these were RIDDOR reportable, with one being classed as a major injury.
- **Rail Fleet Engineering staff accidents** – Three of these injuries were RIDDOR reportable, however it was not classed as a major injury.
- **RU employee assaults (including contractors)** – Physical assaults to staff decreased by 6.6% on the previous year. There were 80 verbal assaults on staff (not included in the above figures) representing an increase of 166.6% from the previous year.

<u>Key risk area</u>	<u>2022 Target</u>	<u>2022 Target Outcome</u>	<u>2022 Target</u>	<u>2023 Target Outcome</u>	<u>Year on Year Change</u>
Infrastructure Manager Staff Accidents (including Contractors)	3% improvement on 5-year average	27	3% improvement on 5-year average	29	+2
Infrastructure (T3, T2 and Red Zone PAC Inspections)	Ensuring increase in PAC activity in line with an increase in possessions and project activities on the network	T3: 145 T2: 32 Red Zone: 28	Ensuring increase in PAC activity in line with an increase in possessions and project activities on the network	T3: 227 T2: 44 Red Zone: 15	T3: +82 T2: +12 Red Zone: -13
Infrastructure Worksite Safety Inspections and Visits	Ensuring increase in PAC activity in line with an increase in possessions and project activities on the network	185	Ensuring increase in PAC activity in line with an increase in possessions and project activities on the network	360	+175

- IM staff accidents (including contractors)** – NIR noted a year-on-year increase of 2 incidents. It is worth noting that the 5-year average in 2022 was 19.2 with a target of 18.6 staff accidents. The total of 27 was 8.4 greater than target. In 2023, the 5-year average of staff accidents was 22 with a target of 21.3 for the year. The total of 29 was 7.7 greater than the target. This is set within the context of a 57% increase in the number of worksites.
- IM Protection Assurance Coordinator (PAC) inspections** – There was a 94.5% increase in the number of PAC inspections between 2022 and 2023. Within the context of an increasing number of work sites (2580 in 2022 to 4048 in 2023), this represents an increase in the number of sites inspected from 7.2% in 2022 to 8.9% in 2023.
- IM Safety, Health and Environment (SH&E) assurance activities** - There was a significant increase in the amount of site inspections and visits undertaken between 2022 and 2023. Nevertheless, it represents an increase of 1.7% of sites inspected in 2023 compared to 2022 and as a proportion is only marginally above 2021. The increasing number of work sites has created challenges for the capacity of the SH&E team to maintain the level of inspection.

Operational targets

<u>Key risk area</u>	<u>2022 Target</u>	<u>2022 Target Outcome</u>	<u>2023 Target</u>	<u>2023 Target Outcome</u>	<u>Year on Year Change</u>
Category A SPADs	≤ 3	2	≤ 3	4	+2
TPWS Brake Demands (No SPAD)	≤ 6	10	≤ 6	19	+9
Failure To Call	≤ 6	4	≤ 6	10	+6
Station Overruns	≤ 10	10	≤ 10	9	-1
Wrong Side Doors Enabled	≤ 1	1	≤ 1	2	+1
Stop Short	≤ 5	2	≤ 5	8	+6
Wrong Routing (Taken)	≤ 12	3	≤ 12	7	+4
Collisions	No target set	41	No target set	30	-11
Infringement of Train Operating Rules	No target set	47	No target set	66	+19
Potential Self Harm	No target set	97	No target set	+101	4
Anti-social Behaviour	No target set	142	No target set	132	-10
Derailments	0	0	0	0	0
Level Crossings Incidents	3% improvement on 5-year average	PRC: 86 UWC: 167	3% improvement on 5-year average	PRC: 89 UWC: 156	PRC: +3 UWC: -11

- IM – Level crossings – public road crossing (PRC) misuse** – While there was a small increase in the level of misuse of public road crossings, the overall number was within the 3% target reduction on the 5-year average which was 104.95.
- IM – Level crossings – user worked crossing (UWC) misuse** - There were 156 UWC misuse instances in 2023 while the 5-year average was 141.65. The total number for 2023 exceeded the 3% improvement on 5-year average target which was 136.96 incidents.

- **RU – Category A Signals Passed At Danger (SPADs)** – Four category A SPADs were reported during 2023, which was an increase of 2 on the previous year and above the annual target. Further details are provided in section 4.
- **RU – Collisions** – Collisions reported decreased in 2023. These included collisions with debris, animals and vegetation, the majority of which resulted in no damage or a minor delay. Five collisions were with members of the public as a result of suspected self-harm and trespass – four fatalities and one major injury were recorded.
- **RU – Potential self-harm** – Incidents of self-harm increased in 2023. This category covers a broad range of incidents which can include reports of concern to physical attempts.
- **RU – Anti-social behaviour (ASB)** – 132 incidents of ASB were recorded in 2023, representing a 3.6% decrease from 2022.

Actions taken to meet targets

- 3.23. To meet targets on **passenger safety**, NIR continued to deliver a range of interventions throughout 2023 to reduce the risk of slip, trips and falls, including signage, automated passenger announcements, and social media campaigns. These initiatives have been designed to improve safety and regulate passenger flow to and from the platforms.
- 3.24. In addition, both operators undertook initiatives targeted at improving **safety for their staff and contractors**. For NIR, these included the following:
- The facilitation of a **Contractor Safety Forum**, providing a platform for sharing lessons learned, discussion of good practice and the provision of feedback to NIR on the effectiveness of policies and procedures.
 - **RSSB Human Awareness training** was increased to provide understanding and awareness of human factors and how it can be applied. A Human Factors Working Group was established and is represented by members of both IM and RU;
 - Following a significant near miss in January 2023, planning and development of a new **Principal Contractors Licensing Scheme** commenced with the aim of introducing the new scheme in 2024;
 - Bimonthly **HAZOP Workshops** were established with representatives across the IM departments present to discuss and significant SH&E risks to the IM;

- The introduction of the **Safety Representative Committee Action Tracker** to monitor any comments/suggestions raised by the Safety Representative during the bimonthly meeting, has increased engagement with all representatives in attendance and encouraged discussion on relevant topics;
- An audit was completed on **RM3** compliance for all departments within the IM, followed by a list of recommendations and opportunities for improvement;
- Following the 2023 annual review of the safety management system, a **SMS induction** was developed and rolled out to all Management, Professional and Technical staff;
- To assist with the safety authorisation in 2023, a **Criteria Route Map** was established to signpost the ORR to the relevant documents on the safety hub for each criteria, streamlining the audit process and resulting in zero outstanding issues;
- In November 2023, Signalling & Telecoms held a safety conference supported by other IM Departments;

3.25. Both NIR and IÉ noted an increase in the number of **passenger accidents** in the context of the return to growth of passenger numbers post Covid. NIR highlighted that there was an increase in passenger incidents not resulting in injury, which was attributed to increased reporting.

3.26. In focussing on the **safety of the platform train interface**, initiatives continued to be implemented throughout 2023 to reduce the risk of slips, trips and falls for both staff and passengers. For NIR, this included signage and automated passenger announcements, along with the roll-out of social media campaigns. These initiatives have been designed to improve safety and regulate passenger flow to and from the platform-

3.27. In terms of **operational safety**, during 2023 there have been modifications to rail vehicles to make them safer for train crew and passengers, as well as more reliable. These included:

Enterprise Generator Van upgrades, with all four vehicles now completed. These upgrades focussed primarily on reliability with the two generator engines fitted in each van being replaced with new generators, an upgraded fire suppression system and interior LED lighting.

- The delivery of targeted training and development for train drivers to reduce the risk of overspeeding or passing a signal at danger.

- 3.28. NIR IM has made further progress in their long-term plan to reduce the number of **user worked level crossings**. These types of level crossings typically represent a significant risk area for the rail network as a result of the interaction between members of the public and the rail network. NIR's Level Crossings Management Group meets regularly and is focussed on reviewing level crossings and developing mitigation methods, and ongoing management of level crossing risk. In 2023, NIR's ongoing work on level crossings included the closure of 2 user worked level crossings, the commencement of level crossing renewals at Cullybackey, upgrades of 10 user worked crossings over the network with the installation of telephones, and infrastructure upgrades to other user worked crossings.
- 3.29. An additional area of focus for both NIR and IÉ was **addressing anti-social behaviour**. During 2023, there were a number of instances of anti-social behaviour on trains and at stations across the NI network, affecting both passengers and staff. While there has been a reduction in incidents when compared with 2022, NIR continue to implement initiatives to address ASB. These included the continued operation of the Safe Transport Team, delivering a visible, reassuring presence for staff, passengers, and members of the public, and the introduction of body mounted cameras, made available for front line staff. Since the introduction of cameras, there has been a decrease in the number of physical assaults on staff reported, however NIR have noted an increase in verbal assaults which is as a result of better reporting among staff. IÉ noted an increase in ASB and undertook activities such as commencement of integration of IÉ Command and Control Security monitoring Centres, introduction of a security action plan which included IÉ supervisors appointed as Authorised Officers for enforcement of RSA 2005 and byelaws and the introduction of new high visibility jackets. IÉ also note that they continue to progress initiatives which were introduced in 2022.

Heritage and tourism operators

- 3.30. The heritage railways in NI operate under Section 27 of the [Regulation of Railways Act 1868](#). During 2023, the RSA carried out inspections and site visits to the three of the operational heritage and tourism railways:
- Giant's Causeway and Bushmills Railway Company
 - Downpatrick and County Down Railway Company
 - The Railway Preservation Society of Ireland (Whitehead Operations)

- 3.31. The site visit and inspection of Downpatrick and County Down Railway Company was a follow up to the severe flooding incident to inspect what remedial work would be needed to the infrastructure and rolling stock to allow for a return to operation within the terms of the existing licensing period. Downpatrick and County Down Railway commenced work to achieve operational status in 2024. A further site visit and inspection would be required before recommencing operational services.
- 3.32. Additional site visits to the remaining heritage railway operators are planned in conjunction with HSENI colleagues as interim checks and inspections during the licensing period. The inspections carried out in 2023 to review the respective sites and operations from the rail and health and safety perspectives, with any remedial works or improvements being identified and acted upon. Such visits are planned generally to take place on an annual basis.

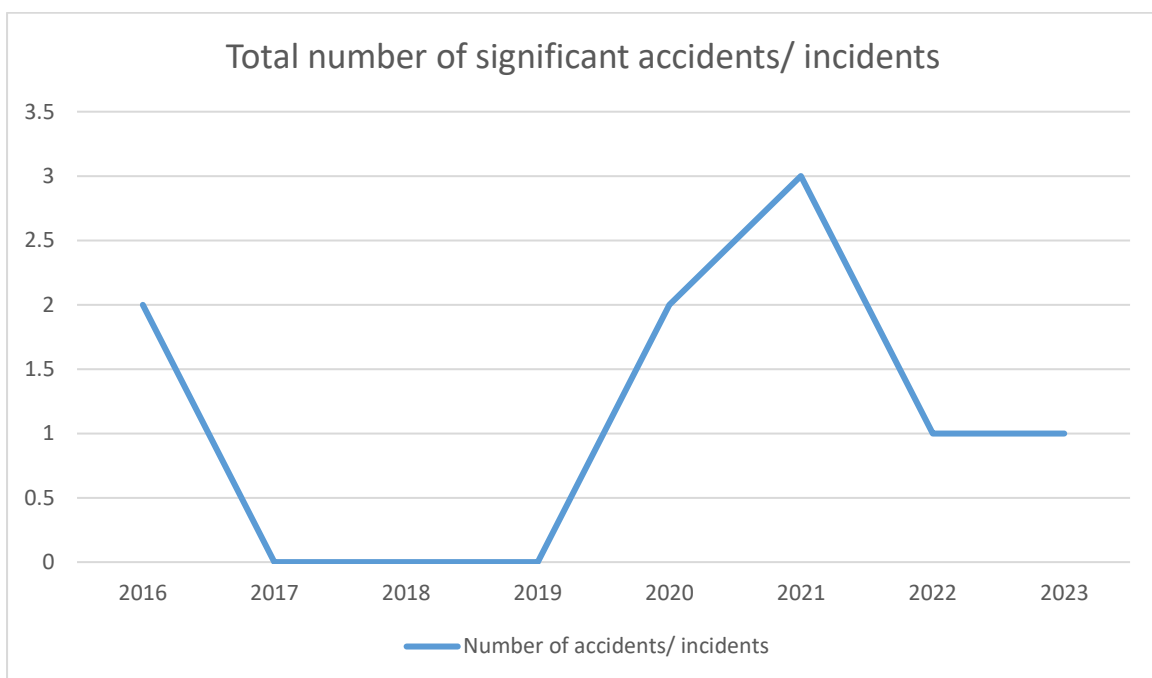
4. Key statistics

- 4.1. The CSIs and key performance indicators (KPIs) in relation to accident and incident precursors have been consistently quite low in numbers and have indicated a safe rail network.

Common Safety Indicators

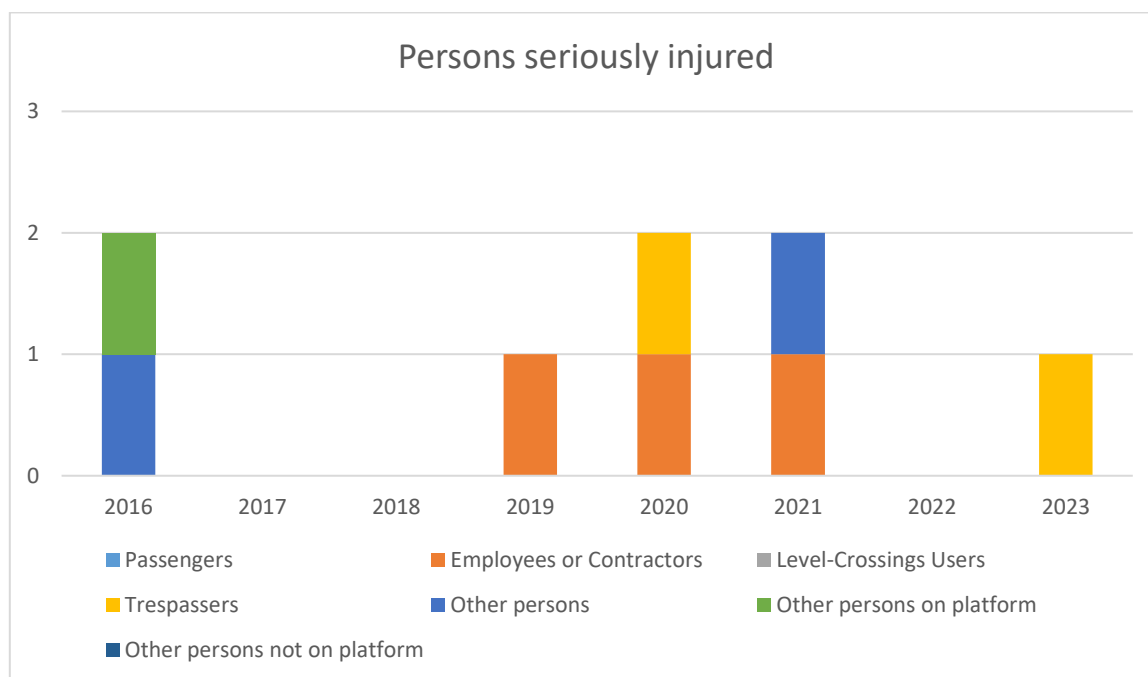
- 4.2. An aggregation of the statistics reported to the RSA for 2023 relating to CSIs is provided below. These statistics cover the last seven calendar years and have been provided by NIR. Overall, numbers of incidents and accidents have remained low between 2016 and 2023.

Total number of significant accidents/incidents



- 4.3. There was one significant accident/ incident recorded on the NI rail network in 2023, relating to accidents to persons caused by rolling stock in motion (with the exception of suicides and attempted suicides).

Persons seriously injured, by category of person

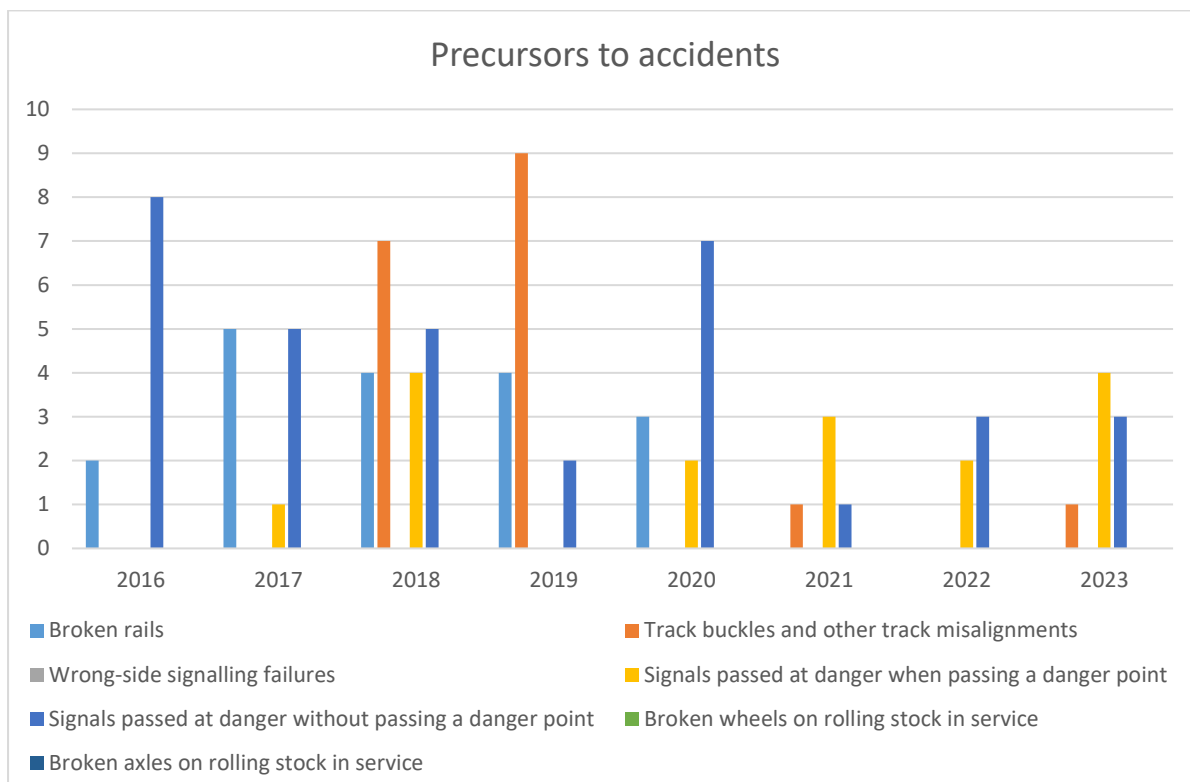


4.4. In 2023, there were 13 recorded injuries to employees or contractors on the NI rail network. 12 resulted in minor injuries along with one accident resulting in a major injury. A major injury is categorised as an injury resulting in hospitalisation for more than 24hrs.

Persons killed, by category of person

4.5. There was one fatality as a result of an accident/ incident recorded between 2016 and 2023. There was a total of 12 recorded suspected suicides between 2016 and 2023.

Precursors to accidents



- 4.6. Eight precursors to accidents were recorded on the NI rail network in 2023. This is a slight increase on 2022 but is still down on the pre-covid period.

Train Protection Systems

- 4.7. The NI rail network has a total of 301km of operational line. At the end of 2023, 98% of tracks had Train Protection Systems (TPSs) in operation providing warning. 40% of tracks had TPSs providing warning and automatic stop, and 16% of tracks had TPSs with warning, automatic stop and discrete supervision of speed.

Level crossings

- 4.8. In 2023, the NI rail network had 133 level crossings in operation of which 78 were active level crossings and 55 were passive. Of the active level crossings, 16 had automatic user-side warning, 42 had automatic user-side protection, and three had automatic user-side protection and warning, and rail-side protection.

- 4.9. The number of level crossings in operation has been reduced over the seven-year period. These reductions have specifically been made to passive level crossings, with a reduction of 35 crossings since 2017.

Major malfunctions/deficiencies

- 4.10. There have been no observations on deficiencies or malfunctions relevant to NI railway operations on the network during 2023.

Other accidents and incidents

- 4.11. In addition to the incidents mentioned previously in section 4, a further three incidents took place during 2023 on the NI network and were reported to the RSA:

- **Bann River Bridge strike, Coleraine**

An incident occurred in September 2023, where a boat struck the Bann Bridge, Coleraine, whilst passing through the navigation to Coleraine Harbour. Translink assessed the bridge, which identified significant damage to the pedestrian walkway underneath the bridge, as well as damage to the bridge operator's cabin. The assessment found no structural damage above the waterline.

Whilst there was no structural damage above the waterline, the collision caused significant damage and as such Translink engineers ordered a structural assessment under the waterline by a team of specialist divers.

The bridge was deemed sound, and the decision was taken to reopen the line to traffic with restricted speed.

- **Whiteabbey near miss**

The train driver on the Derry/ Londonderry to Great Victoria Street reported to Central Signal Cabin that members of staff had crossed the track in advance of the train. In his statement, the driver noted sounding the horn and applying the break, but the train did not come to an emergency stop.

From review of CCTV footage, it was confirmed that a work party of three signalling and telecoms engineers crossed the track,

and as doing so acknowledged the sounding of the horn to the driver. The work party returned to their base and did not report the event as they did not feel they had been involved in a near miss.

The event was reported to the on-call manager who instigated an investigation to determine who was involved and if the event warranted being reported as a near miss.

RAIB were notified of the event, but they decided not to investigate further. Translink carried out a detailed investigation, where the event was identified as a near miss. The investigation resulted in a number of recommendations to improve processes which RSA have monitored through the quarterly supervisory meetings.

- **Breach of Train Driver Licensing Regulations**

Following a complaint regarding the application of the Train Driver Licensing and Certificate (Northern Ireland) Regulations, specifically in relation to Regulations 4, 8, 13 and Schedule 1 paragraph 3, the RSA initiated an investigation to determine whether these regulations were properly applied.

RSA coordinated the investigation with HSENI, to share insights where applicable on the issue. Detailed evidence was sought and after a thorough investigation, RSA identified a breach of the Regulations. The RSA made a number of recommendations ensure this did not happen in the future. Translink have since developed an action plan to implement the recommendations. Progress against the action plan was monitored in bi-lateral meetings with Translink, which have now closed out the recommendations in the report.

Accidents/incidents reportable to the Rail Accident Investigation Branch

- 4.12. The RSA engages with NIR on their considerations of the recommendations of relevant RAIB reports and safety digests to understand how learning from incidents on the GB network is practically deployed on the NI network.
- 4.13. The RSA also continues to engage with railway operators on incidents which do not meet the criteria for RAIB investigation, and monitors any

mitigations or improvements implemented to reduce the risk of future incidents.

5. Development of the system for safety certification and authorisation

Safety certificates and authorisations

- 5.1. The 2006 Regulations set out the arrangements for safety certification and authorisation in NI.
- 5.2. NIR RU holds Part A and Part B safety certificates issued under the 2006 Regulations. These certificates were last issued in 2018. NIR RU also holds a railway undertaking licence, issued by the RSA, and Part A and Part B safety certificates for cross-border services issued by CRR.
- 5.3. IÉ holds a Part A safety certificate issued by CRR which the RSA has deemed a Part A certificate valid in NI, and a Part B certificate issued by the RSA.
- 5.4. No safety certificates were issued, amended or revoked in 2023. No updated, amended or part safety authorisations were issued in 2023.
- 5.5. No requests were received from other NSAs to verify or access information relating to a Part A certificate of an RU that has been certified in the UK but applies for a Part B certificate in another EU member state.
- 5.6. The RSA will continue to support railway operators in developing applications for certificates and authorisations as required.

Developments/changes

- 5.7. No changes to the regime for safety certification and authorisation, or changes to the strategy and procedures governing this area, were made in 2023.
- 5.8. The RSA continues to engage regularly with the rail sector, sharing information and feedback as required.

6. Experience of applying relevant Common Safety Methods

- 6.1. 2023 was the third year for which railway operators in NI were asked to provide information on their experience of applying the CSMs for risk evaluation and assessment and monitoring. It is anticipated that, for future calendar years, this feedback and analysis will develop as further experience is gained in examining the application of relevant CSMs.

Common Safety Method for risk evaluation and assessment (CSM-REA)

- 6.2. NIR noted the following:

Railway undertaking

- 12 technical changes relevant to fleets were assessed in line with the Engineering safety management system change control process and authorised for implementation. None of these proposed changes were deemed to be significant for the purposes of applying this CSM.

Infrastructure manager

- In 2023 the IM Change Management Register contained five capital projects classed as significant under the CSM-REA:
 - Belfast Transport Hub
 - Northern Ireland Railways Operating Centre (NIROC)
 - Train radio upgrade
 - Electrification Programme
 - Ballast Rehabilitation Establishment Programme (BREP)

- 6.3. IÉ RU noted that, during 2023, 13 applications for safety approval were submitted to the RU Safety Approvals Panel relating to 13 individual change projects. One of the proposed changes were organisational and the remaining were technical.

Common Safety Method for monitoring

- 6.4. NIR noted its use of first, second- and third-line monitoring activities to provide management, and both internal and external stakeholders, with

confidence in levels of compliance and the effectiveness of its health and safety monitoring arrangements.

- 6.5. NIR highlight the information management arrangements that are in place to ensure effective two-way communication throughout the organisation. Information arising from, for example, internal and external audits, outcomes of accidents and investigation reports or staff and contractors reporting/feedback, is disseminated as appropriate. A combination of both safety management processes and location audits are scheduled each year to develop audit programmes. The programmes take account of the current risk profile, which is based on safety performance indicators, findings from internal and external reviews, incident investigations and trend analysis and the Hazard Register. The IM's focus is on verifying and testing the correct application and the effectiveness of all the processes and procedures in the safety management system, including the technical, operational and organisational risk control measures. Programmes are regularly reviewed to ensure ongoing effectiveness.
- 6.6. The RU noted that the competence of safety critical staff was an area of focus in 2022, with a two-pronged approach being adopted. External expertise was engaged to review current train crew competency management system (CMS) arrangements, with findings informing a CMS development project and a review of performance against current CMS programmes. Location audits focussed on areas with newly recruited staff to provide assurance on their competency and performance.
- 6.7. NIR has established a suite of key safety performance indicators, and trends are monitored and reviewed via TSMIS (Translink Safety Management Information System) which was undergoing upgrades during 2022. The output of monitoring activity is captured in periodic performance reports and reviewed at a number of forums throughout the organisation's hierarchy. Performance is communicated via safety and risk management meetings, safety committees, safety briefings and newsletters. NIR has arrangements in place to regularly monitor both leading and lagging indicators to analyse and evaluate the safety management system in order to ensure its ongoing effectiveness.
- 6.8. NIR commenced work to update their TSMIS and replace the Rail Validation System in 2022, which should enhance information and reporting arrangements. This work is ongoing and further developments were made in 2023 to build the system to meet the needs of Translink.
- 6.9. NIR has developed action plans, with responsibility for achievement assigned as appropriate. Where weaknesses are identified they are subject to the development of a corrective action plan, assigned an owner

and monitored to completion via a divisional tracker by NIR. Strategic planning takes place to implement the relevant management system, and progress monitoring, review and tracking takes place as required to ensure the actions within the plan can be delivered. Based on the results of their monitoring activity, NIR has a process in place for determining whether it is necessary to implement preventative, corrective or both types of measures. Status of corrective actions are monitored at monthly KPI meetings with senior management and reported at monthly safety management meetings. NIR are examining options to enhance their monitoring activity to ensure a more cohesive approach in line with the CSM for monitoring, which will be an area of focus in 2023.

- 6.10. IÉ RU highlight a wide range of monitoring activity, for example, both internal and external independent audits, discussion of the findings of monitoring programmes at formal safety meetings and reporting on and review of performance indicators and progress on safety actions. Where deficiencies are identified, these are rectified through corrective actions.

7. Supervision of railway undertakings and infrastructure managers

7.1. The day-to-day supervision of the health and safety performance of the railway industry is delivered under the 2006 Regulations where the NSA is the Department. The Department continues to work closely with CRR as well as NIR and IÉ on all EU issues and mutual railway safety matters as they impact on the shared service between Belfast and Dublin.

Monitoring and supervision

7.3. The RSA hosts regular monitoring and supervision meetings with: NIR – infrastructure manager

- NIR – railway undertaking
- IÉ – railway undertaking

7.4. These meetings typically involve safety updates from the railway operators and monitoring of progress in implementing recommendations arising from audits and inspections.

Audit and inspection – NIR

Internal audits

7.4. The number of internal audits completed by the NIR RU in 2023 was 9. These covered areas ranging from depot audits, independent vehicle inspections and competency management system audits. The number of actions raised as a result of these audits was 60 and there were no major non-conformances identified. The number of internal auditing activities conducted by or on behalf of the NIR IM during 2023 was 26. As a result of these audits there were 3 significant non-conformances identified, which included site managers briefing procedure not being followed consistently, TVP procedure not being followed consistently, and safety responsibility statement procedure not being followed consistently. NIR have noted that recommendations for procedures to be reviewed and reissued have been introduced. The IM audit programme included an audit of contractors and subcontractors' safe systems of work.

RSA audits and inspections

7.5. To undertake the programme of audit and inspection, the RSA draws on the technical support and advice of railway engineers, fleet engineers and health and safety experts from ORR or HSENI. The RSA then works with the designated technical experts to develop a remit for each audit and inspection.

During 2023, one inspection report was completed and handed over to NIR for action:

- Leadership and Culture)

A summary of the findings of these reports is contained in section 3.

- 7.6. Recommendations from completed inspections feed into an action log for the supervisory process to monitor NIR's progress in implementing the agreed response to the recommendations. This monitoring takes place during quarterly meetings.

Audit and inspection – IÉ

- 7.7. The RSA commenced an audit and inspection of Irish Rail's interface management arrangements in 2023. The purpose of the audit was to consider how Irish Rail manage the transition between the Irish train radio and train protection systems to the Northern Irish train radio and train protection systems. The scope of the audit was agreed between the RSA and Irish Rail in November and the audit team met virtually with the Irish Rail team to facilitate introductions of both teams and provide an opportunity to identify key documents to be reviewed in advance of the physical inspection which took place in 2024.

Annex A: Main legislative framework for rail safety in NI

[Transport Act \(Northern Ireland\) 1967](#)

[Railway Safety Act \(Northern Ireland\) 2002](#)

[The Railways \(Safety Management\) Regulations \(Northern Ireland\) 2006](#)

[The Cross-border Railway Services \(Working Time\) Regulations \(Northern Ireland\) 2008](#)

[The Train Driving Licences and Certificates Regulations \(Northern Ireland\) 2010](#)

[The Railways \(Interoperability\) Regulations 2011](#)

[The Rail Vehicle Accessibility Regulations \(Northern Ireland\) 2014](#)

[The Private Crossings \(Signs and Barriers\) Regulations \(Northern Ireland\) 2014](#)

[The Railways Infrastructure \(Access, Management and Licensing of Railway Undertakings\) Regulations \(Northern Ireland\) 2016](#)