

Railway Accident Investigation Unit Ireland



Annual Report 2025

Summary

The Railway Accident Investigation Unit (RAIU) is an independent investigation unit within the Department of Transport and is concerned with the investigation of accidents and incidents on Irish railways with a view to establishing their causes and making safety recommendations to prevent their recurrence or otherwise improve railway safety.

In January 2025, the RAIU was notified that during the opening of the Navan Road Parkway Station, the platform access gate onto Platform 2 to the concourse was closed and locked, preventing passengers leaving Platform 2, resulting in passengers accessing the line to exit the station from Platform 1, the incident warranted the issuance of a Safety Advice Notice (SAN), SAN 002, which issued eight safety recommendations.

In February 2025, the RAIU were notified of timber train colliding with a stabled InterCity Railcar (ICR) during a shunting movement into a siding; the ICR was fouling the loop; this resulted in the issuance of an Urgent Safety Advice Notice (USAN), USAN 005, with one recommendation related to fouling points markers.

In May 2025, the RAIU completed their investigation into an operational irregularity at Clontarf Road which occurred in May 2024; where a train was within the possession limits when signal protection was granted; the investigation resulted in seven safety recommendations.

A total of sixteen recommendations were issued in 2025, bringing the total count of safety recommendations made by the RAIU, since 2007, to 333.

The Commission for Railway Regulation (CRR) monitors the implementation of safety recommendations and has advised that of the 333 safety recommendations issued: 191 have been closed as having been addressed (57%); evidence has been submitted or further evidence has been requested by the CRR for sixty-four (19%); and seventy-eight remain open or in progress (23%).

In 2025, sixty-three preliminary examination reports (PERs) were completed by the RAIU. The main themes across the PERs using the European Union Agency for Railways categories were: Derailments; Collisions; Rolling Stock; Traffic Operation and Management; and, To Persons Rolling Stock in Motion. The PERs resulted in the commencement of two full investigations, one related to a Signal Passed At Danger (SPAD) without authority while the other related to overspeed over a set of crossover points during the testing of a new Battery Electric Multiple Unit (BEMU).

In the last quarter of 2025, with the Chief Investigator absent, the Deputy Chief Investigator was the Acting Chief Investigator for the RAIU.

David Murton
Chief Investigator
30 September 2026

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Introduction to the RAIU

Legal Basis

The RAIU is an independent investigation unit within the DoT which conducts investigations into accidents and incidents on the national railway network, the Dublin Area Rapid Transit (DART) network, the LUAS light rail system, heritage and industrial railways in Ireland. Investigations are carried out in accordance with the Railway Safety Directive (EU) 2016/798 enshrined in the European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020; and, where relevant, by the application of the Railway Safety (Reporting and Investigation of Serious Accidents, Accidents and Incidents Involving Certain Railways) Act 2020.

The RAIU's role and aim

The RAIU investigate all serious accidents. A serious accident means any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety.

During an investigation (full investigation or PER), if the RAIU make some early findings on safety issues that require immediate action, the RAIU will issue an USAN or SAN outlining the associated safety recommendation(s).

The RAIU may investigate and report on accidents and incidents which under slightly different conditions might have led to a serious accident.

The RAIU may also carry out trend investigations where the occurrence is part of a group of related occurrences that may or may not have warranted an investigation as individual occurrences, but the apparent trend warrants investigation.

The purpose of RAIU investigations is to make safety recommendations, based on the findings of investigations, in order to prevent accidents and incidents in the future and improve railway safety.

It is not the purpose of an RAIU investigation to attribute blame or liability.

The following railway systems within the RAIU's remit:

- The IÉ national heavy rail network;
- The Luas light rail system in Dublin operated by TDLR;
- The Bord Na Móna (BnM) industrial railway;
- Seven operational heritage & minor railway systems.

For further information on these organisations see Appendix 1.

Organisation

In the early part of 2025, the RAIU comprised of a Chief Investigator, a Deputy Chief Investigator, two Senior Investigators and one Administrator.

Organisation Flow

The Commission for Railway Regulation (CRR)

In accordance with the European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020, recommendations are addressed to the national safety authority, the CRR. The recommendation is directed to the party identified in each recommendation.

European Union (EU) Agency for Railways

As part of its role as an NIB, the RAIU actively participates in the development of accident investigation processes and procedures through the work of EU Agency for Railways. To this end, the RAIU participated in the 2025 NIB plenary meetings and provided input on the direction of NIB related work.

The RAIU is also a member of the EU Agency for Railways taskforce set up to develop a system of peer review of the NIBs. In addition, the Chief Investigator chairs a task force dealing with the dissemination of accident investigation learning and investigation techniques.

Memorandums of Understandings (MoUs) & co-operating bodies

The RAIU continues to participate in Memorandums of Understanding (MoU) with the Transportation Safety Board of Canada, the Rail Accident Investigation Branch of the United Kingdom and with the Irish Health and Safety Authority (HSA).

The RAIU also continued to work with both An Garda Síochána and the Coroner's Society of Ireland.

Peer Review of the RAIU

Since 2018, European and other NIBs have volunteered for peer review by other NIBs, with the support of the EU Agency for Railways, in accordance with Article 38(2) of Regulation (EU) 2016/796, whereby NIBs were required to establish a programme of peer reviews where all NIBs were encouraged to participate so as to monitor their effectiveness and independence. Since its inception members of RAIU staff have contributed to many of these peer reviews.

In November 2022, the RAIU were subject to a peer review; its scope covered: organisation; investigation activities and processes; staff training; resources; handling safety recommendations. The findings of the report were issued in December 2022. Four areas of improvement were identified as; three of these were addressed in 2023 with one outstanding, namely: “Accelerate the process of concluding of creating a Memorandum of Understanding (MoU), that defines the on-site working arrangements, between the RAIU and An Garda Síochána”; work on progressing the MoU continued through 2025.

Of note, one of the other areas of improvement identified was that the “NIB should take steps to include in the contingency planning some arrangements in place about who will act as Chief Investigator in case that the Chief Investigator would be ill or unavailable”. At the start of 2023, a Deputy Chief Investigator was nominated; and in the last quarter of 2025, with the Chief Investigator absent, the Deputy Chief Investigator was the Acting Chief Investigator for the RAIU.

Investigation Activities



Investigation Activities

Notification of incidents and accidents to the RAIU

The RAIU must be notified of railway incidents and accidents, either through immediate notification; monthly bulk notifications (see Appendix 2 for schedules); or the reporting after the death of an individual within thirty days of an accident. The RAIU also receive the daily incident reports (DIRs) from IÉ.

In terms of immediate notification of an incident or accident (and in some instances a monthly bulk notification), the on-call investigator will carry out a preliminary examination and create a PER.

In 2025, the RAIU continued reviewing the DIRs from IÉ; in some instances, a PER was conducted as a result of information received in the DIRs and a PER created.

PERs include information on who and when reported the occurrence; details of the occurrence (including the relevant asset information, times, locations and relevant parties); the categorisation of the occurrence (see Appendix 3); and the RAIU decision on whether a full investigation, USAN or SAN is warranted.

In 2025, the RAIU compiled sixty-three PERs.

IE Notifications

IE 2025 Daily Incident Reports

IE circulate the DIRs, for the previous day, to the RAIU every morning. The RAIU review and log these occurrences.

In 2025, IE reported 8,871 incidents through the DIRs, of these, 935 incidents were related to anti-social behaviour and another 939 were related to trespass occurrences onto the railway line or premises. A further 201 incidents of passenger illness, injury and emotional distress not involving moving trains were also recorded. Excluding these, there are 6,796 incidents. Starting with the largest, the RAIU have categorised the incidents as follows:

- 2,703 (40%) rolling stock faults – these can range from minor issues such as faulty air conditioning to more serious incidents such as underframe fires or wheelset damage);
- 1,089 (16%) Infrastructure faults and issues – these range from infrastructure faults such as reports of poor drainage, broken rails, failing earthworks, signalling equipment failures and objects on the line;
- 649 (10%) Low Rail Adhesion (LRA) events – these events are reported events where LRA affects traction or braking but no operational incident occurred. Note: incidents with a safety incident are categorised elsewhere;
- 669 (10%) Train Protection System (TPS) and Continuous Automatic Warning System (CAWS) faults – these can range from reports of momentary loss of CAWS code to total failures of the system with almost all system events involving “right side” or “fail to safe” events;
- 629 (9%) Level crossing incidents – these include minor non-compliance events such as level crossing gates left open at user worked unattended level crossings through to damage to crossing barriers, near miss events and collisions between trains and road vehicles;
- 443 (7%) animal incursions – these include all reported animal incursions and collisions with animals, ranging from small animals such as dogs through to larger animals such as deer and cattle;
- 336 (6%) other occurrences – these are a wide range of incidents which do not meet the other RAIU categories. These range from events of limited direct safety consequence e.g. late hand back of engineering possessions; or staff injuries in the workplace, which are occupational health and safety and do not all under the RAIU's remit;
- 123 (2%) operational and possession incidents – these range from events with limited safety impact such as “fail to call events” by passenger trains to incidents such as higher consequence events such as near misses with staff;
- 91 (1%) bridge strikes – these range from contact with sacrificial beams or minor contact with the bridge deck, arch or parapet to serious damage resulting in line closure;
- 40 (<1%) overcrowding events – these range from discomfort due to limited seat availability through to platform closures for safety reasons;
- 32 (<1%) platform train interface (PTI) events– injuries and mishaps to passengers boarding and alighting from trains not in motion, ranging from staff rendering assistance through to passengers requiring hospital attention.

The categorisation of the 6,796 incidents are presented in Figure 1 below.

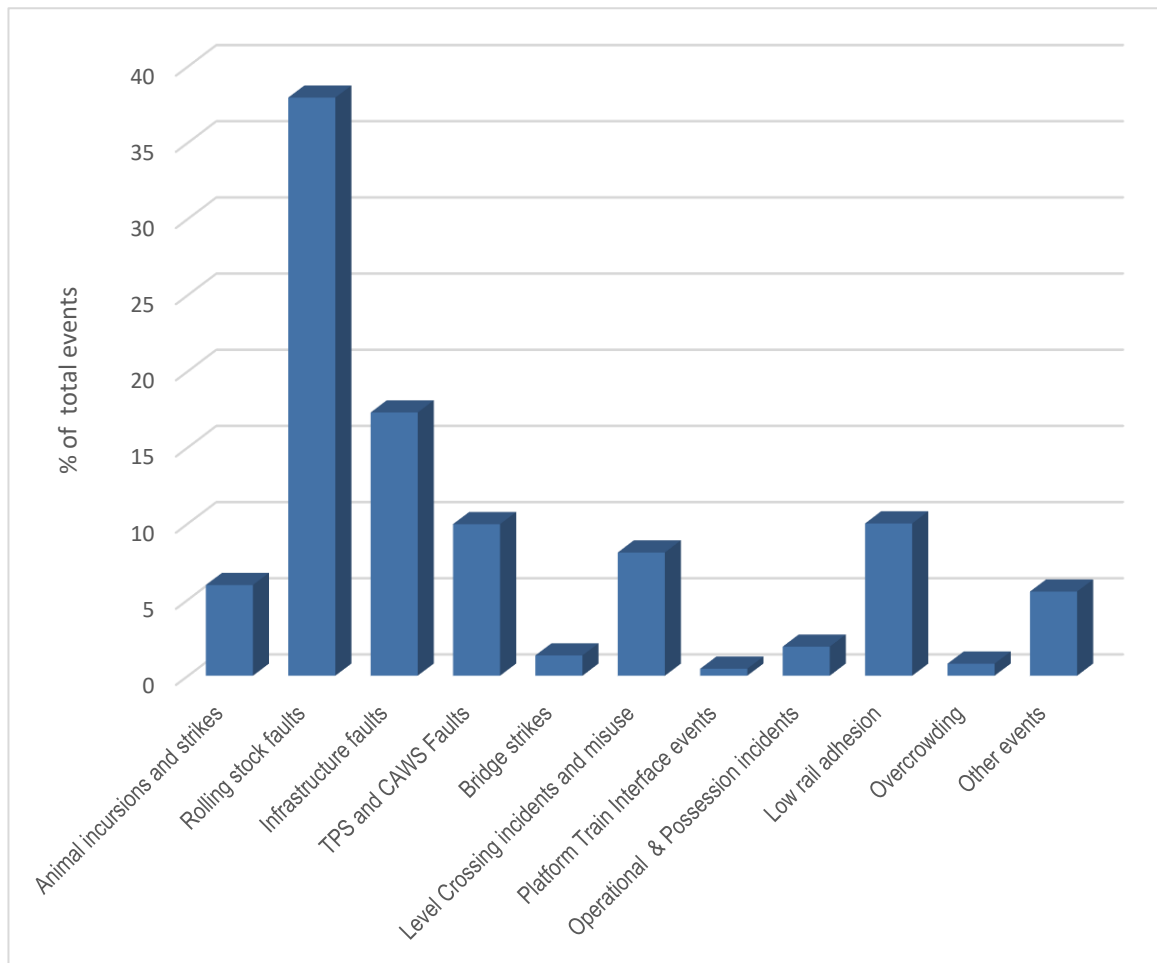


Figure 1 – 2025 DIR incident by RAIU category

IE 2025 Preliminary Examination Reports

PERs from 1st January 2025 to 31st December 2025

Date of occurrence	Location of Occurrence	Classification of Occurrence	Classification subset	Summary	Fatalities/ Injuries
31 January 2025	Navan Road Parkway, Co. Dublin	Incident	Traffic Operations and Management	Transport for Ireland (TFI) contacted the Mainline Regulator to report children trapped in Navan Road Parkway Station. The gates blocking access to footbridge was locked by contractor. Services were advised to travel under extreme caution through station. A review of CCTV shows a mass trespass incident at 08:10 hrs where approximately forty schoolchildren trespassed from down to up in an attempt to exit the station. The RAIU issued SAN 002 as a result of this incident, see pages 33 and 34.	0
02 February 2025	Lansdowne Road, Co. Dublin	Accident	Infrastructure	As the 10:58 hrs DART passenger service from Greystones to Howth (Train E905) moved off from the platform at Lansdowne Road Station a metal cover fell over just as the last unit (8603) passed by and landed on the rail nearest the platform. The metal plate had been covering an access point for SE&T near the end of the platform. At 11:54 hrs a member of the public reported the incident to the National Emergency Line to Central Traffic Control (CTC).	0
08 February 2025	Mallow, Co. Cork	Accident	Traffic Operations and Management	The 13:05 hrs passenger service from Tralee to Mallow Station (Train A309), passed Signal MW813 at Danger without authority. When the signalman received the critical alarm, that Signal MW813 had been passed at danger without authority, the signalman attempted to contact the driver of Train A309 (Driver A309) by emergency call and by train radio, but this was unsuccessful. Train A309 continued, running through Points MW564 at Killarney Junction, damaging these in the process. Train A309 came to a stop at the next signal, Signal MW821, which was displaying a red aspect. The RAIU commenced an investigation into this incident, see page 36.	0
09 February 2025	Portarlinton, Co. Laois	Accident	Fires	The driver of the 18:05 hrs Galway to Dublin Service reported smoke and a burning smell from beneath a fuel tank on IE Class 22000 Set 42 as the train was near Portarlinton Station. The automatic fire suppression system operated. The driver evacuated the train at the station as a precaution. Fire brigade requested to attend as smouldering continued, and they extinguished fire.	0
10 February 2025	Westport, Co. Mayo	Accident	Collision	At approximately 23:30 hrs, a timber train consisting of a locomotive and twelve empty wagons was shunting in sidings at Westport when it collided with a stationary six-piece ICR which was fouling the line, causing damage to the leading cab 22139 and a timber wagon. The RAIU issued a USAN, USAN 005, as result of this incident, see page 29.	0
02 March 2025	Killiney, Co. Dublin	Serious Accident	To persons due to rolling stock in motion	As the 09:02 hrs passenger service from Malahide to Bray (Train E201) was approaching Killiney Station; a person placed themselves into the path of the train and was fatally injured.	One fatality - deliberate self-harm

Date of occurrence	Location of Occurrence	Classification of Occurrence	Classification subset	Summary	Fatalities/ Injuries
12 March 2025	Dun Laoghaire, Co. Dublin	Accident	Collision	At 17:16 hrs the driver of DART service Train E936 approaching Salthill reported striking a messenger wire hanging down from the Overhead Line Equipment (OHLE) and that the wires were down on the Down Line. The driver reported that the wires were now down behind Train E936. This coincided with an OHLE tripping.	0
19 March 2025	Parkwest, Co. Dublin	Incident	Other	At approximately 21:10 hrs, the 21:00 hrs passenger service from Dublin Heuston to Cork (Train A230) received a report from a passenger of a smell of smoke. The train was stopped at Parkwest Station and examined by the driver who confirmed a smell of smoke but no fire. As the fault could not be identified at that time, the passengers were transferred to a different train and the train was failed. A brake fault had been reported on coach 22427 prior to departing Heuston. The train was attended at this time by the CME Department in Heuston and the brakes were isolated.	0
19 March 2025	Blakestown, Co. Kildare	Incident	Operational Irregularity	At 01:25 hrs an Road Rail Vehicle (RRV) excavator crane and trailer (positioned in front of the RRV) passed over Blakestown Level Crossing XG104 with the barriers in the raised position, during a T3 Possession of the line between Kilucan and Clonsilla. The RRV was operating under the instruction of an IE Person-In-Charge RRV (PIC-RRV). On approach to the Level Crossing XG014 the PIC-RRV had contacted the Level Crossing Control Operator (LCCO) and requested that the barriers be lowered to allow the RRV to pass through the Level Crossing. However, the LCCO lowered the barriers at Level Crossing XG012 (Barberstown) in error. As the RRV arrived at Level Crossing XG014 both the PIC-RRV and the RRV Operator (RRVO) realised that the barriers had not been lowered however there was not enough time for the RRV to come to a stop and the RRV came to a stop after passing through the Level Crossing XG014.	0
09 April 2025	Castleblinham Co. Louth	Accident	Derailment	A T3 Possession was in place between Drogheda and Dundalk. Two RRV dumpers and one RRV excavator accessed the track at Dundalk and were involved in ballasting in a worksite between the 48 Mile Post (MP) and the 46 ½ MP. After completion of ballasting around a manhole between the 47 MP and the 47 ¼ MP, the RRVs started to move and the RRVO of one of the RRV dumpers felt rattling and stopped the RRV immediately. Upon investigation it was discovered that a front rail wheel had become detached.	0
10 April 2025	Bray Tunnel, Co. Wicklow	Incident	Traffic Operations and Management	At approximately 09:52 hrs two members of the Chief Civil Engineer (CCE) staff were in Bray Head Tunnel No. 2 when a train approached. The driver applied the emergency brake, the driver reported the occurrence to the CTC Signaller, driver was shaken but continued journey. The RAIU commenced an investigation into this incident, see page 37.	0

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
13 April 2025	Adamstown, Co. Dublin	Accident	PRSM	At approximately 15:24 hrs, the driver of the 15:15 hrs passenger service from Heuston to Waterford, (Train A504), reported that the train had struck and injured a person at Adamstown Station.	One injured - deliberate self-harm
30 April 2025	Maynooth, Co. Kildare	Incident	Rolling stock	At approximately 11:41hrs, the 10:47 hrs passenger service from Connolly to Maynooth (Train A911), arrived at Maynooth Station, where the service was terminating. The driver became aware of smoke coming from the bogies of carriage 29419. After the passengers had disembarked the driver used a fire extinguisher on the bogies and he then isolated the service and parking brake on the advice of the CME.	0
06 May 2025	Carrow Level Crossing, Co. Tipperary	Accident	Level crossings	At approximately 10:02 hrs, as Train A462 (the 09:00 hrs Down direction service from Ballybrophy to Limerick) approached user worked Level Crossing XN089 (F Type), a van approached the level crossing and stopped before attempting to reverse. Train A462 struck the front of the van at close to the maximum permissible line speed (40 mile per hour (mph), 64 kilometres per hour (km/h)) causing extensive damage and rotating the van ninety degrees. The two occupants of the van were unhurt but suffered from shock. Train A462 stopped approximately 69 metres (m) from the crossing.	2 minor injuries to van occupants
09 May 2025	Sherlockstown, Co. Kildare	Accident	Collision	At 19:46 hrs a report was received from Garda Control to IÉ's National Emergency Line at CTC of a road traffic collision at Over Bridge Cork (OBC) 33 where a road vehicle struck the bridge resulting in debris on the line. The signalman was alerted and made an emergency call to all drivers requesting they bring their trains to an immediate stop at 19:48 hrs. At 19:49 hrs, the driver of Train A725 (Driver A725), a passenger service from Galway to Heuston, reported their train had collided with some debris that had fallen from OBC 33. The driver had not heard the emergency call; however, this may have been as a result of the emergency brake being applied.	0
25 May-2025	Between Cork and Mallow. Co. Cork	Incident	Traffic Operations and Management	At approximately 02:15 hrs, during a possession near Cork, an RRV working in the possession passed Signal CE419 on the Up line breaching the possession limits. The handsignalman had placed the detonator protection on the incorrect side of the possession protecting signal, signal CE419 on the Up Road, when the possession was being established.	0
11 June 2025	Williamstown, Co. Dublin	Accident	Others	Vegetation control was being carried out by a contractor with protection provided by the CCE Department. Whilst strimming, a live 1,500 V OHLE cable was damaged by a strimmer. This caused a trip out on the OHLE system. There were no injuries as result of the occurrence.	0
30 June 2025	Glasnevin, Co. Dublin	Incident	Command, Control and Signalling	Train D318 passenger service was traveling towards Glasnevin Junction, when the driver contacted the signalman and reported an abnormal upgrade (wrong side failure) of the Continuous Automatic Warning System (CAWS) to double yellow approaching Signal CW55, which was actually at danger (red). A second train confirmed the same double yellow instead of red.	0

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
01 July 2025	Bray, Co. Wicklow	Accident	Traffic Operations and Management	An RRV Excavator (with an RRV Operator (RRVO)) was working within a T3 Possession near Dargle Bridge when the RRV boom struck the registration arm of the OHLE and damaged the overhead line.	0
01 July 2025	Hazelhatch, Co. Kildare	Incident	Traffic Operations and Management	During the testing of a BEMU out in a T3 Possession from Inchicore to Sallins, the BEMU traversed a crossover with a 20 mph (32 km/h) permanent speed restriction (PSR) at a speed of 90 mph (145 km/h). The points had been traversed on the outward journey and had been intended to be reversed before carrying out the movement at higher speed. The RAIU commenced an investigation into the incident, see page 38.	0
02 July 2025	Myrtle Hill, Co. Cork	Accident	Collision	At 05:30 hrs a passenger service left Kent Station Cork travelling towards Cobh. The driver reported hitting a boulder near LC XC 238 that had fallen onto the track from the rock face. The train was damaged from the impact. There was fifteen passengers on board but no injuries reported. The line was closed as a result of the accident. The train returned to Kent Station for an assessment of the damage.	0
24 July 2025	Cherryville, Co. Kildare	Accident	Collision	At approximately 04:00 hrs, two RRV dumpers were returning to the access point within a T3 Possession. After the first RRV stopped, the second RRV failed to stop and collided into it. No injuries were reported. There was damage to the windscreen of the second dumper.	0
31 July 2025	Skerries, Co. Dublin	Serious Accident	To persons due to rolling stock in motion	At approximately 06:30 hrs, the driver of the 06:10 hrs empty service from Drogheda to Connolly (Train J171), reported that the train had struck and fatally injured a person at 17.440 MP south of Skerries Station.	Single fatality - self harm
03 August 2025	Midleton, Co. Cork	Accident	Derailment	A T3 Possession was in place between Cork and Midleton. Two RRV dumpers were transporting capping material (type of stone) to a site location between 0 MP and ¾ MP. They had both side cast the capping material at the location and returned to be reloaded. On the next run the first RRV dumper while side casting its front rail wheels derailed. It was re-railed and returned to the access point where it was off-tracked. The second RRV dumper travelled to the same location and while they were side casting the capping material its front rail wheels derailed. It was re-railed and returned to the access point where it was off-tracked.	0
14 August 2025	Inchicore and Heuston, Co. Dublin	Accident	Derailment	While works were being carried out in a T3 Possession between Heuston and Inchicore an RRV Excavator was distributing chippings around newly installed concrete troughing. The RRV was stationary as it dropped off the chippings when the rear rail wheels lost contact with head of the rail and damaged the rear stretcher bar of Points 711.	0
20 August 2025	Cobh, Co. Cork	Accident	Derailment	During a T3 Possession near Cobh an RRV Dumper, operated by an RRVO moved back across a set of points (Trap Points CE965) without permission from the PIC-RRV and derailed; the points had not been set for the movement.	0

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
23 August 2025	Carrigtwohill, Co. Cork	Accident	Derailment	At approximately 01:55 hrs the Cork signalman reported a lost detection of on Points CE973. The CCE Department advised that a rail wheel of an RRV Excavator had become caught between the switch and the rail in a T3 Possession. On further investigation, it came to light that as the RRV Excavator was transporting a pallet and the rail wheels climbed over the rail head. It was subsequently discovered that rail head damage had occurred as a result.	0
05 September 2025	Arklow, Co. Wicklow	Incident	Traffic Operations and Management	Signal RL524 was passed at Danger without authority by Train A606 (13:28 hrs passenger service from Dublin Connolly to Rosslare Europort). After Train A606 arrived at Arklow Station, the driver (Driver A606) exited the cab to assist a wheelchair passenger as there was no Customer Service Officer on board the train and there was not staff at the station staff to assist. After assisting the wheelchair passenger, Driver A606 returned to the cab, completed the train dispatch and the train departed the platform, passing Signal RL524 at danger.	0
07 September 2025	Cherryville, Co. Kildare	Accident	Derailment	At approximately 02:10 hrs two RRV excavators were returning to the location where track panels were stored to collect more track panels. The first RRV stopped at the location but the second RRV did not stop, colliding with the first RRV. The two rail trailers (attached to the second RRV) derailed as a result of the collision. There was damage caused to the draw bar between the two trailers.	0
11 September 2025	Maynooth, Co. Kildare	Accident	Derailment	At approximately 02:30 hrs, an RRV Jeep was reversing over Points MN260 from the Down Line to the Up Line when the RRV Jeep derailed as it traversed the points.	0
02 October 2025	Claremorris, Co. Mayo	Incident	Level crossing	As the 13:10 hrs passenger service from Westport to Dublin Heuston (Train A807) approached LC XM198, the driver saw a bus about to cross over the level crossing and applied the emergency brake and sounded the train horn continuously; the bus then reversed off the level crossing and behind the white stop line, with Train A807 safely passing through the level crossing.	0
03 October 2025	North Wall, Co. Dublin	Accident	Derailment	A CCE Panel train arriving at North Wall Yard was being propelled onto Road No.5. During the movement wagon 24237 derailed. It was reported that an error had occurred in setting the hand points, resulting in one bogie of 24327 becoming derailed.	0
08 October 2025	Castleknock, Co. Dublin	Incident	Rolling stock	The 05:55 hrs passenger service from Maynooth to Connolly (Train P740) departed Maynooth, with the driver (Driver P740) making a number of reports of LRA to the signalman. At approximately 06:19 hrs Train P740 approached Castleknock Station at approximately 25 mph (40 km/h) As Driver P740 applied the brake, to stop at the station, the train went into a slide, Driver P740 then applied full-service brake, followed by an emergency brake application; and contacted the signalman to tell them the train was sliding. The train continued to slide for approximately 1.2 km passing Castleknock Station by approximately 550 m before coming to a stop.	0

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
14 October 2025	Inchicore, Co. Dublin	Accident	Derailment	An On Track Machine (OTM). tamper No. 744, was carrying out shunt movement when one axle derailed on hand points. Following an inspection, it was found that poor track condition was the cause.	0
18 October 2025	Powerstown, Co. Carlow	Incident	Traffic Operations and Management	At 08:34 hrs, the driver of a Waterford to Dublin Heuston passenger service (Train A502) saw a member of staff on the line and made an emergency brake application. Train A502 was travelling at approximately 75 mph (120 km/h) at the time. The member of staff, a Permanent Way Inspector (PWI) was only visible from the trains FFCCTV for approximately seven seconds and only reached a place of safety four and a half seconds before the train passed their location instead of the required ten seconds. The incident resulted in the commencement of a USAN, see page 39.	0
21 October 2025	Heuston, Co. Dublin	Incident	Traffic Operations and Management	At 19:45 hrs, the Driver of the 18:29 hrs Portlaoise to Dublin Heuston (Train D222) reported that two staff on the line had to jump clear as their train approached. No emergency brake application was made, but the incident was reported to the signalman as a near miss by the train driver. The incident resulted in the commencement of a USAN, see page 39.	0
24 October 2025	Sydney Parade, Co. Dublin	Incident	Command, Control and Signalling	As the 14:25 hrs passenger DART service from Bray to Malahide (Train E826) departed Sydney Parade Station it came to a stop as a result of an automatic train protection (ATP) enforced brake application with the rear of the train within the level crossing. Raising of the barriers at Sydney Parade is normally done under automatic function aligned and timed to commence after the approaching train has cleared (+5 seconds) the track circuit located immediately before the crossing; the barriers raised and pedestrians/ cyclists/ road users accessed the line.	0
28 October 2025	Killester, Co. Dublin	Accident	Collision	An under panel (top locked) of a De Dietrich train became unlocked and was hanging down when it struck the supports of the platform in Killester before becoming detached. The collision resulted in damage to the platform supports.	0
28 October 2025	Pelletstown, Co. Dublin	Serious Accident	To persons due to rolling stock in motion	After departing Pelletstown Station, the driver of the 17:12 hrs passenger service from Maynooth to Connolly (Train P761) saw a person lying across the tracks. The driver applied the emergency brakes but was unable to stop before the train struck the person, causing fatal injuries.	Single fatality - self harm
01 November 2025	Cherry Orchard, Co. Dublin	Accident	Collision	An RRV Excavator struck an electricity cable, with the operator experiencing an electrical shock; they were taken to hospital as a precaution.	1 minor injury
04 November 2025	Mallow, Co. Cork	Accident	Derailment	A rail trailer was placed on the line at the access pad at Linton's Yard, by an RRV excavator, and was loaded with pallets and stone chippings. As the rail trailer was being pushed off the access pad by the RRV excavator, the trailer derailed.	0

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
24 November 2025	Clonygowan, Co. Offaly	Incident	Traffic Operations and Management	At approximately 08:07 hrs a member of the CCE staff who was engaged in a track patrol was involved in a near miss with the 06:25 hrs passenger service from Galway to Dublin Heuston (Train A705). The incident resulted in the commencement of a USAN, see page 39.	0
25 November 2025	Portarlinton, Co Laois	Accident	Derailment	An RRV excavator was travelling to a worksite when the RRV excavator lost all hydraulic power. As the RRV excavator lost power the weight of the tamping head caused the boom to slew towards the cess, as the RRV excavator was on a curve and with no hydraulics the RRVO could not correct the slew which in turn caused the right-hand-side rail wheels to become unloaded, rise up and the RRV derailed.	0
02 December 2025	Raheny, Co. Dublin	Incident	Traffic Operations and Management	The DART E118 passenger service from Malahide to Greystones stopped at Raheny Station, passengers disembarked and alighted from the train. The doors were closing when an elderly male attempted to board the last carriage. CCTV footage shows them putting their hands between the closing doors while they were holding a small paper bag. The doors continued to close with the male pulling their hands free. The footage shows them attempting to pull the bag free and pressing the door release button. As the train started to move the male moved with the train before releasing the bag handles.	0
04 December 2025	Dundrum, Co. Tipperary	Accident	Collision	Two RRV dumpers were on a worksite. One RRV came to a stop at a work site marker board, as the RRVs were about to leave the worksite, when the second RRV collided at low speed with the stationary RRV.	0
18 December 2025	Carrigtwohill, Co. Cork	Accident	Derailment	A RRV Dumper derailed in an engineering possession after the Person In Charge signalled to the RRV Operator to proceed over the points that were incorrectly set for the move.	0

Categorisation of IÉ-IM & IÉ-RU Preliminary Examination Reports

Introduction

In 2025, the RAIU completed forty-six PERs in relation to occurrences reported by IÉ-IM and IÉ-RU.

The following is a compilation of the categories of PERs related IÉ-IM and IÉ-RU occurrences.

Serious Accidents and Accidents to Persons due to Rolling Stock in Motion

Workplace incidents

There were three near misses between staff and trains during 2025 which resulted in the RAIU commencing a USAN.

Apparent self-harm serious accident and accidents on the IÉ Network

In general, the RAIU do not conduct a full investigation into occurrences related to apparent self-harm as a full investigation is unlikely to result in any safety recommendations to prevent similar occurrences in the future.

In 2025, there were three reported serious accidents (fatalities) and one accident (non-fatal) as a result of apparent self-harm occurrences on the IÉ network. Figure 2 below shows 2025, and the previous ten years of occurrences.

Note, there was a reduction in the number of occurrences in 2025, over the last recent years.

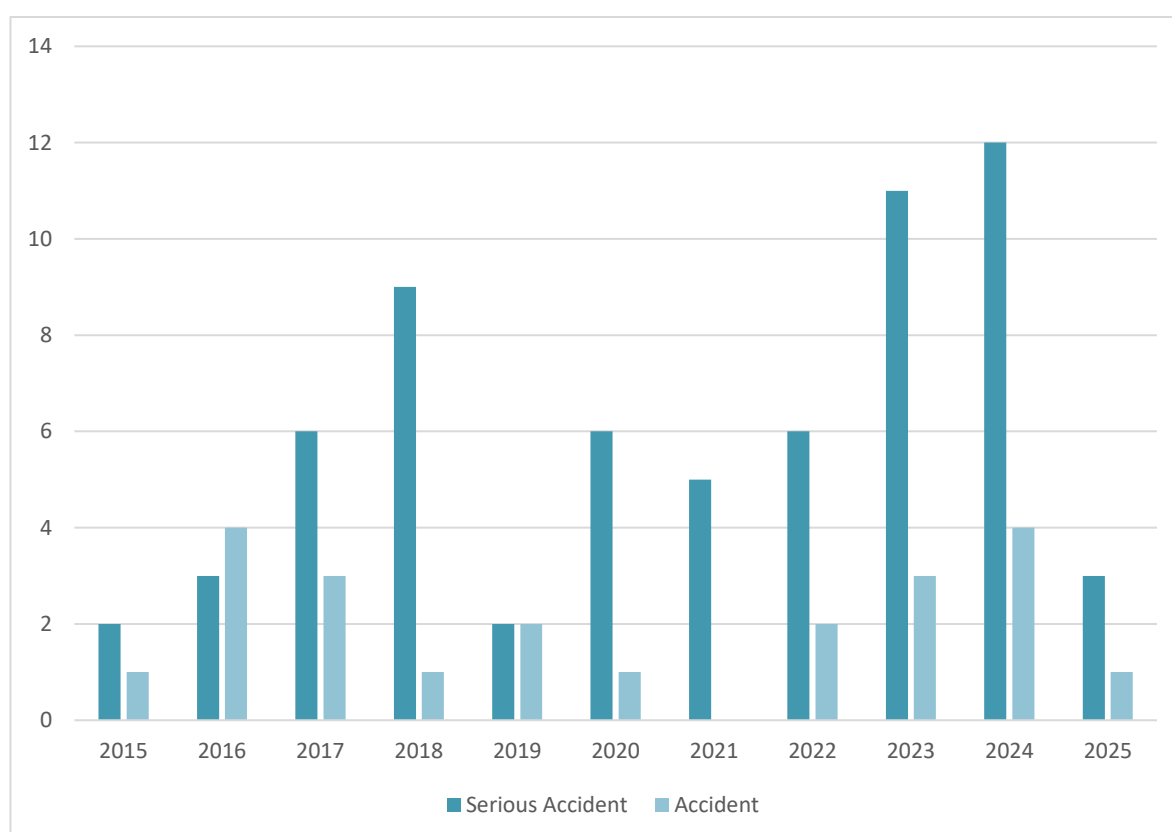


Figure 2 – Apparent self-harm occurrences on the IÉ network

Trespass onto the IÉ Network

There were no reported fatalities as a result of trespass on the IÉ network in 2025, excluding events where self-harm was the motive, with the previous six years indicating low numbers. However, trespass events without accidents remained at a similar level.

Platform Train Interface

There were no injuries as a result of a PTI occurrences with moving trains in 2025.

Traffic operations & management

General reporting

In 2025, there were nine incidents related to traffic operations and management reported, these included:

- Four incidents relating to protection of staff working on open running lines;
- Three SPADs;
- Two incidents at user worked crossings, with one being a collision and the other a near miss;
- One incursion of an RRV onto an open level crossing during an engineering possession;
- One possession irregularity where an RRV exited an engineering possession onto the live railway;
- A station that not been unlocked before start of service resulting in a significant number of passengers crossing a live running line to egress the station
- A significant overspeed during new BEMU train testing operations in a possession.

RRV accidents on the IÉ network (derailments and collisions)

In terms of RRV incidents in 2025, there were thirteen incidents, consisting of nine derailments and three collisions and one equipment failure. This represents an increase from the previous year. IÉ-IM have been notifying the RAIU of RRV occurrences since 2018. Figure 3 illustrates the common types of RRV occurrences over recent years.

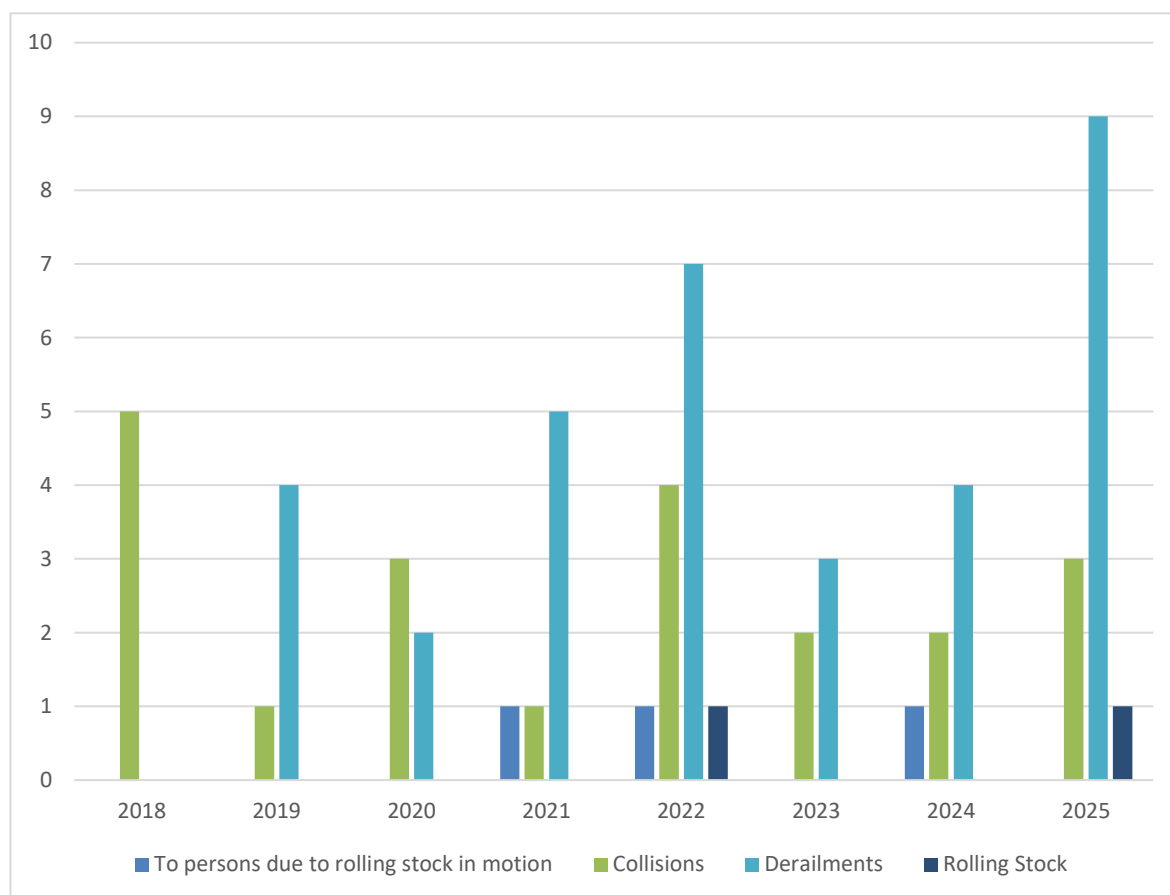


Figure 3 – RRV occurrences from 2018 to 2025

During 2025, the RAIU progressed the investigations into:

- Collision between RRVs between Athenry and Galway;
- The excavator derailment and overturning at Ballycollin;
- Entrapment of a member of staff between an RRV and trailer at North Esk.

Some of the other RRV incidents and accidents occurring in 2025 were incorporated into the open investigations. The RAIU will continue to assess RRV accidents and incidents on an individual basis and conduct a full investigation, when warranted.

Other occurrences on the IÉ network

In terms of the other occurrences on the IÉ network in 2025, these included:

- Three infrastructure occurrences;
- Two instances of dewirements / overhead line failure;
- Two derailments in sidings;
- One collision between a shunting movement and a stationary train;
- One fire on rolling stock and one instance of a train stopped and detrained for reported smoke;
- One collision between an unsecured underframe door and a passing platform.

Summary of PERs

Figure 4 shows the percentages, in terms of categories, of the PERs for IÉ.

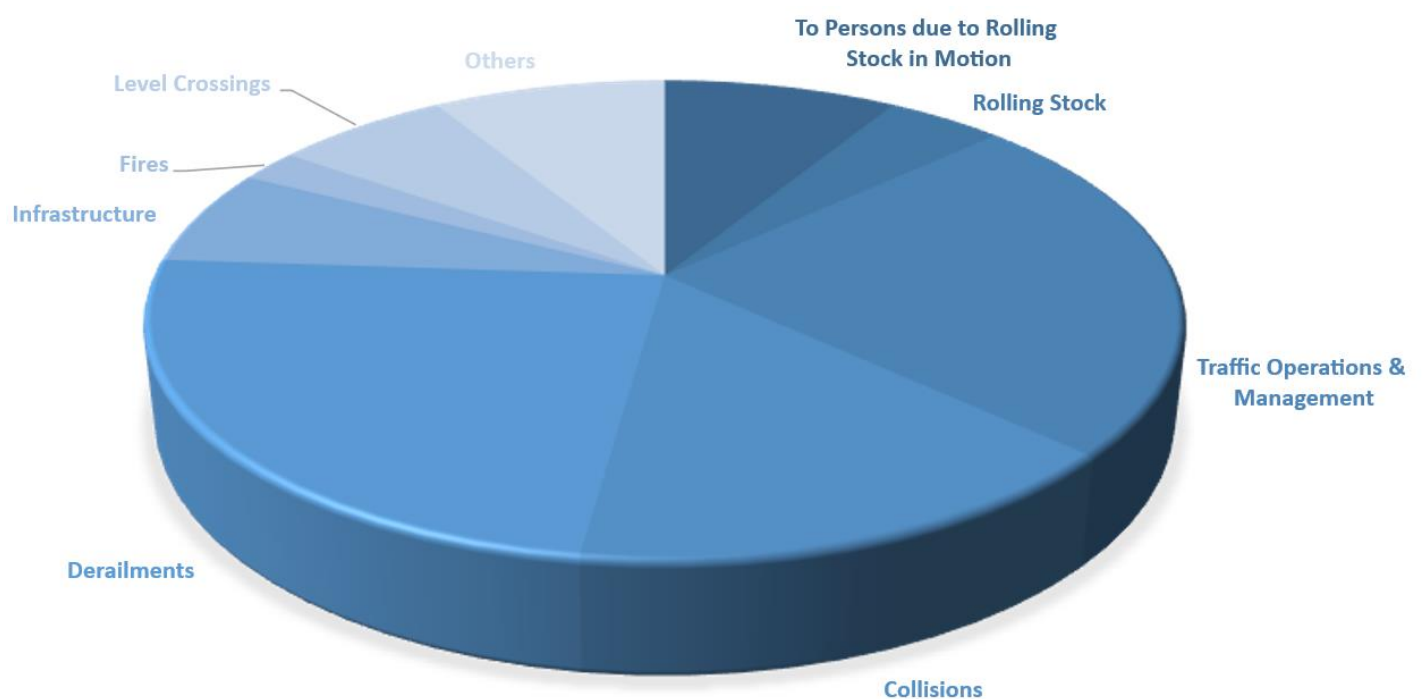


Figure 4 – Summary of PERs on the IÉ network

IE 2025 Monthly Bulk Notifications

The monthly bulk notifications (not including immediate notifications) for IE (IE-IM & IE-RU) are as follows:

Month / ID	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2.01 Unexpected failures of assets that led to an unsafe condition													0
2.02 Unintentional divisions of rolling stock released for service													0
2.03 SPADs with no risk of conflicting movements		1	1	1	2	1							6
2.04 Fires, smoke or explosions on rolling stock not requiring the evacuation of passengers			3	2			1		3	3		1	13
2.05 Collisions with large objects or large animals	9	13	3	9	12	7	9	6	16	17	18	10	129
2.06 Non railway vehicles damaging or fouling a railway line													0
2.07 Collisions between light rail vehicles and road vehicles													0
2.08 Any other occurrence where an investigation remit has been issued internally	1	1		1			1	1			1	2	8
Total	10	15	7	13	14	8	11	7	19	20	19	13	156

The majority of occurrences related to collisions with objects or animals, this number decreasing from 2024 (which was reported to be 139 events). Within this category wild deer and trees falling on to the line in weather events account for a large proportion of the reports. Instances of fire, smoke and explosions not requiring train evacuation decreased to thirteen in 2025 from to nineteen in 2024. In terms of SPADs, six were reported in 2025, representing a decrease from the nine reported in 2024.

TDLR Notifications

TDLR 2025 Preliminary Examination Reports

PERs from 1st January 2025 to 31st December 2025

Date of occurrence	Location of Occurrence	Classification of Occurrence	Classification subset	Summary	Fatalities/ Injuries
15 January 2025	Harcourt/ Cuffe Street, Co. Dublin	Accident	Collision	A taxi collided with the front of a tram in motion; tram had the proceed signal through the junction and was struck by a taxi making an illegal right turn. Tram made an emergency stop, a passenger on the tram alleged that their child had been injured by the sudden stop and the child was removed to hospital.	1 Injury to tram passenger
29 January 2025	Suir Road, Co. Dublin	Accident	To persons due to rolling stock in motion	A cyclist with a child on a rear mounted seat breached a road traffic signal and entered the tramway as a tram had entered the Suir Road junction on a proceed signal. The tram driver sounded the horn and applied the emergency brake. The cyclist had stopped on the tramway they were struck by the tram and deflected to the left. The cyclist and child were taken to hospital as a precaution there were no injuries on board the tram.	0
16 February 2025	Drimnagh, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram was travelling outbound towards the Drimnagh Platform. As the tram approached the platform, a number of youths were standing and sitting under the platform shelter. As the tram approached the stop, one of the youths stuck their leg out into the sweep path of the tram. They caught their leg between the platform edge and the tram. The tram driver brought the tram to an immediate stop. Emergency services attended and the youth was removed to hospital for surgery on their leg.	1 minor injury to leg of youth
06 March 2025	Ballymount Ruins, Co. Dublin	Accident	Collision	A tram was travelling outbound at Ballymount Ruins at night when it struck a rock between the running rails. The tram driver applied the emergency brake. The rock became trapped underneath the tram.	0
14 April 2025	Embankment Road / Outer Ring Road, Co. Dublin	Accident	Collision	A tram was stopped at the junction, when the tram signal displayed a proceed the tram driver moved into the junction. A vehicle breached the road traffic signal turning left into the junction. When the tram driver saw the vehicle, they sounded the horn and applied the emergency brake. The vehicle made minor contact with the right side of the tram causing minor panel damage. The tram driver received minor injuries to their shoulder. There were no other injuries reported.	1 Injury to tram driver
16 April 2025	Phibsborough, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram stopped at Phibsborough and passengers disembarked. The tram departed from the platform and as the tram was passing a disembarked passengers side stepped into the path of the tram and were thrown back from the tram. The tram driver applied the emergency brake. The injured party was tended to by Luas staff before being taken to hospital.	1 Injury to pedestrian
25 May 2025	The Gallops, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram stopped at The Gallops and passengers disembarked. One of the passengers walked to the pedestrian lights at the Ballyogan Wood / Glencairn Crescent. As the tram approached the junction, the pedestrian moved off the footpath into the path of the approaching tram. The tram driver sounded the horn and applied the emergency brake. The pedestrian made contact with the left-hand side of the tram cab and was deflected onto the ground. They were removed to hospital by ambulance.	1 Injury to pedestrian

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
11 June 2025	Parnell Street, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram was approaching the O'Connell and Parnell Street junction when a pedestrian attempted to cross in front of the tram. The tram driver sounded the horn and applied the emergency brake. The pedestrian made contact with the front side of the tram and was deflected to the ground. They left the scene but returned to report an injury to their arm. They were removed by ambulance to hospital.	1 Injury to pedestrian
04 July 2025	Naas Road, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram was travelling inbound between Bluebell and Blackhorse on the Naas Road. A pedestrian stepped out from in front of a car into the path of the oncoming tram. The tram driver sounded the horn and applied the emergency brake. The pedestrian was removed to hospital by ambulance.	1 Injury to pedestrian
19 August 2025	George's Dock, Co. Dublin	Incident	Others	A gas line near George's Dock was disturbed resulting in a gas leak that ignited around the bridge and tram line. Tram services were suspended while Dublin Fire Brigade attended the scene. The fire was brought under control with Gas Networks Ireland cutting off the gas supply. The bridge was assessed by Luas engineers and three trams that had been stabled at Spencer Dock were taken across the bridge. Services remained suspended from Connolly Stop to Spencer Dock while the bridge was demolished and rebuilt. The line reopened in November 2025.	0
27 August 2025	Dominick Street, Co. Dublin	Incident	Energy	During the removal of a standard Overhead Catenary System (OCS) isolation process, an unintentional switch of traction power occurred while the earthing straps were still connected to the overhead line and track, causing a minor arcing on the overhead wire. There were no staff on the tram line at the time of the occurrence.	0
03 September 2025	Abbey Street, Co. Dublin	Accident	To persons due to rolling stock in motion	A tram was travelling towards Abbey Street Stop when a person standing on the platform collapsed and fell forward between the platform and the front of the tram. The tram driver applied the emergency brake and the body catcher deployed. The person managed to free themselves and were attended to by the emergency services.	1 Injury to person
15 September 2025	Blackhorse, Co. Dublin	Incident	Rolling Stock	During a track walk by TDLR infrastructure team, a Flange Lubricant Reservoir (FLR) was discovered beside the track at the Blackhorse. The tram missing the FLR was identified and had not suffered any significant damage. The FLR had become detached due to fatigue failure of the fixings. A fleet once around was carried out, and a systematic replacement task was added for all the fleet.	0
01 October 2025	Heuston, Co. Dublin	Accident	To person due to rolling stock in motion	A tram was travelling outbound towards Heuston Station, when a cyclist came out from behind the inbound tram and into the path of the outbound tram and collided with it. The cyclist had breached the road traffic signal. The cyclist sustained leg injuries and was removed to hospital by ambulance.	1 Injury to cyclist
25 November 2025	Old Belgard Road, Co. Dublin	Accident	Collisions	A tram was travelling outbound; it approached the junction at Old Belgard Road a truck was travelling parallel to it. As the tram entered the junction the truck breached the road traffic signal and made a sudden left turn colliding with the tram. A passenger on the tram sustained injuries and was removed by to hospital by ambulance.	1 Injury to tram passenger

Date of occurrence	Location of occurrence	Classification of occurrence	Classification subset	Summary	Fatalities/ Injuries
10 December 2025	Green Line Network, & Red Line from O'Connell St to The Point, Co. Dublin	Incident	Energy	An unplanned line closure that exceeded the six-hour threshold was reported on the Green Line. A traction power failure occurred effecting the complete Green Line and the Red Line from O'Connell St to The Point. The effected Lines remained closed until the 11 December 2025 at 18:00hrs when full service resumed.	0

Categorisation of TDLR Preliminary Examination Reports

Introduction

In 2025, the RAIU completed sixteen PERs in relation to occurrences reported by TDLR.

The following is a compilation of the categories of PERs related to TDLR occurrences.

To Persons due to Rolling Stock in Motion

In 2025, there were no serious accidents (fatalities) related to Luas movements.

In 2025, there were eight accidents to person due to rolling stock in motion:

- Five were related to pedestrian incursions onto the tram line in non-segregated areas;
- One was due to a person waiting for a tram collapsing on the platform
- One was a pedal cyclist who breached the traffic lights and stopped in the path of the oncoming tram;
- One was a pedal cyclist who came out from behind a tram into the path of the oncoming tram;

In relation to apparent self-harm injuries, these remain low, with five occurring in the previous six years, one being fatal.

In terms of the other occurrences, the 2024 figures and 2025 figures are the highest numbers to date as seen in the figure below.

Type & Year	2025	2024	2023	2022	2021	2020	2019	2018	2017
Serious Accident	0	0	0	0	0	0	1	0	0
Accident	12	12	4	0	2	2	5	1	3

Other occurrences on the Luas network

In terms of other occurrences on the Luas network in 2025, the notified occurrences are as follows:

- One rolling stock incident (loss of Flange Lubricant Reservoir)
- Two road traffic collisions (RTCs) with cars, one RTC with a truck and one collision with a rock on the tram line;
- Two energy incidents (During removal of a standard overhead contact system (OCS) an unintentional switch of traction power occurred while the earthing straps were still attached to the rails causing arcing) and (Traction power failure occurred on the Green Line and partial failure on the Red Line causing a closure that exceeded the six-hour threshold);
- One other (gas line near George's Dock was disturbed and ignited around the bridge and tram line causing extensive structural damage necessitating the rebuild of the bridge and tram line).

See Figure 5 in terms of categories of the PERs for TDLR.

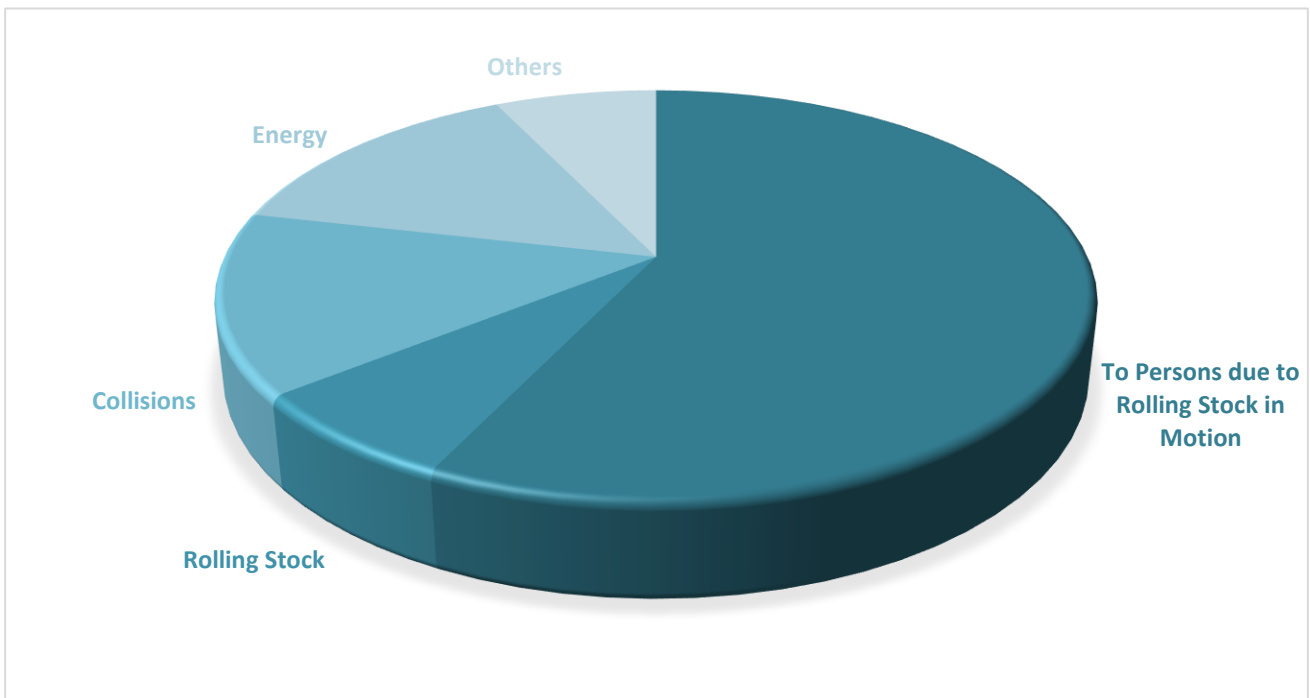


Figure 5 – PERS for TDLR

TDLR 2025 Monthly Bulk Notifications

The monthly bulk notifications (not including immediate notifications) for TDLR are as follows:

Month / ID	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2.01 Unexpected failures of assets that led to an unsafe condition													
2.02 Unintentional divisions of rolling stock released for service													
2.03 SPASs with no risk of conflicting movements	2		1	4	1	3	5	1	1	2	1	3	24
2.04 Fires, smoke or explosions on rolling stock not requiring the evacuation of passengers													
2.05 Collisions with large objects or large animals													
2.06 Non railway vehicles damaging or fouling a railway line	6		2		1		1	2	5	2	1		20
2.07 Collisions between light rail vehicles and road vehicles	4	1	1	4	5	6	1	4	4	4	4	1	39
2.08 Any other occurrence where an investigation remit has been issued internally	4	1	1	6	1	4	6	2	2	3	2	3	35
Other occurrences Involving contact with pedestrians.	8	3	3	4	3	2	7	2	3	3	5	7	50
Other occurrences Involving contact with cyclists.	2		1	2	2		1	1	1	2	1		13
Other occurrences involving E-scooters									1				1
Other occurrences Any other occurrences (Trespass, impact with object, wrong side opening, wrong platform, de-energised zone, surfing, others).	13	2	3	2	5	8	6	12	11	11	9	6	88
Total	39	7	12	22	18	23	27	24	28	27	23	20	270

The total number of notifications for 2025 is 270, which is higher than the 211 notifications in 2024.

In 2025 there was a reduction of one in the number of SPAS incidents from the previous year.

There were increases in road traffic collisions and collisions with other objects.

Notification from other railway organisations

There was a single incident notified in 2025 by other railway organisations with this occurring on a heritage railway.

Reporting Railway Body*	Date of occurrence	Location of Occurrence	Classification of Occurrence	Classification subset	Summary	Fatalities/ Injuries
Connemara Railway	13 th December 2025	Maam Cross	Accident	Other	The signal box structure ignited from a flue pipe from the stove resulting in major damage to the building.	None

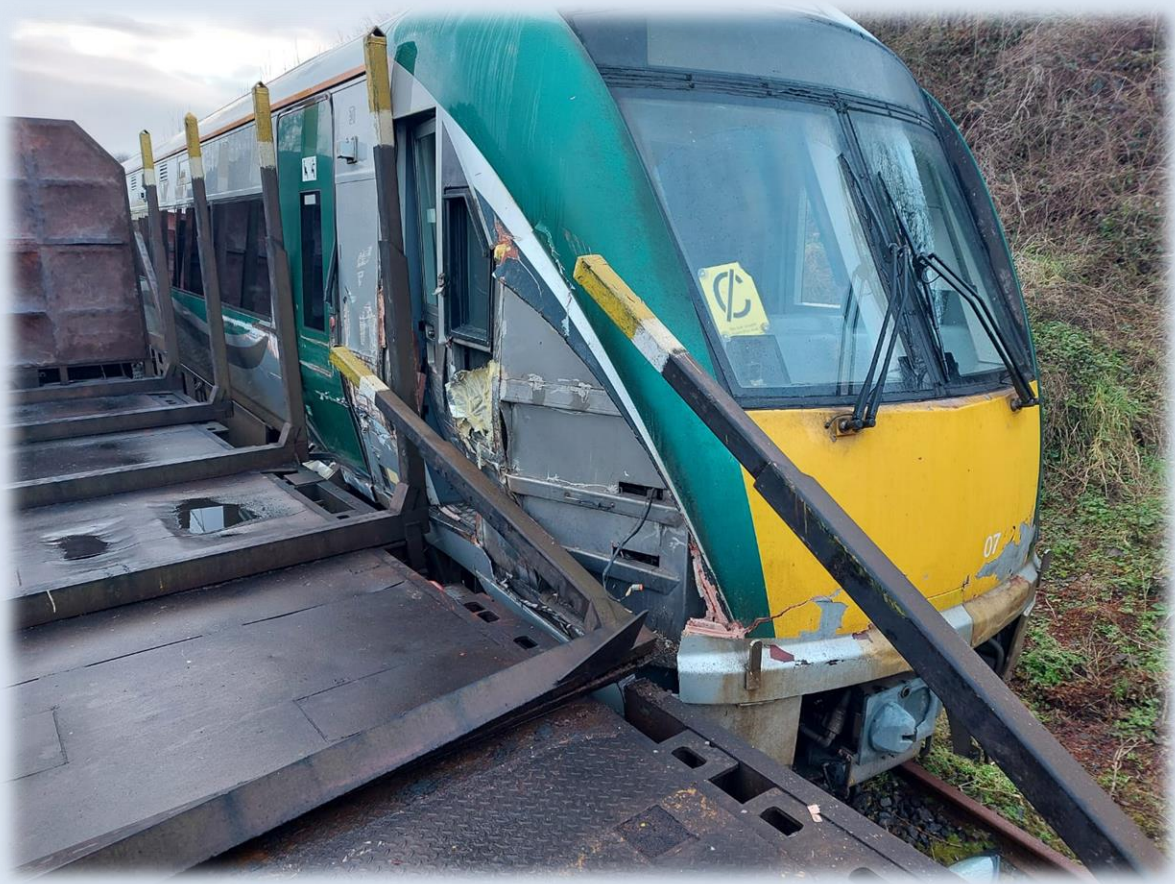
2025 Investigation Reports

Investigation Reports (including U/SANs) published in 2025

1st January 2025 to 31st December 2025

The RAIU published one full investigation report, one USAN and one SAN in 2025, resulting in a total of sixteen new safety recommendations, the investigation is as follows:

- USAN 005: Collision of a timber train with a stabled Intercity Railcar at Westport Yard on the 10th February 2025; USAN 005 published on the 25th March 2025;
- Investigation Report: Operational Irregularity, Clontarf Road, 1st May 2024, RAIU Investigation Report No: 2025-R001; published: 16th May 2025;
- SAN 002: Track access by members of the public at Navan Road Parkway on the 31st January 2025; SAN 002 published on the 24th June 2025.



On the 10th February 2025, an ICR was driven onto the Shed Road in Westport Yard in expectation of the arrival of the Timber Train into the Cabin Siding. The ICR was fouling into the loop.

The driver for Locomotive 076 undertook a number of shunting movements before propelling the timber wagons down the loop siding, colliding with the ICR which was fouling the loop, causing damage to the leading cab (22139) and a timber wagon.

The physical damage is estimated to be €100,000.

USAN 005 issued one safety recommendation:

- USAN Safety Recommendation 1: IÉ-IM, in conjunction with IÉ-RU Operations, should risk assess all siding locations with a view to identifying whether fouling points markers should be installed at other siding locations.

At approximately 21:42 hours (hrs) on the 1st May 2024 an Iarnród Éireann (IÉ) Signaller signed on-duty for a night shift on the Central Workstation of Central Traffic Control (CTC). The Signaller had qualified two months earlier and was on only their second night shift working alone.

At approximately 23:30 hrs there was an *axle counter* fault after the passage of a train at Lansdowne Road Station which resulted in delays and late running to the last services returning to the depots and stabling locations. Services resumed at 00:28 hrs.

On the night, four *Absolute Possessions* (referred to as a T3 Possessions in this report) were planned to be taken that night for maintenance and enhancement works, in the Central Workstation area, which was under the control of the Signaller. Trackside, each T3 Possession is under the control of a Person In Charge of Possession (PICOP).

One of the T3 Possessions, identified by the Possession Plan Reference Number (PPRN) MH/CF/1, was between Clontarf Road and Malahide on the Dublin to Belfast mainline, and also included the Howth branch. The PPRN provided details of the *protecting signals* and *possession limits*.

At 00:51 hrs, the PICOP contacted the Signaller to start the process of taking this T3 Possession PPRN MH/CF/1. The Signaller saw that a passenger train (23:00 hrs passenger service from Bray to Howth (Train E950)) was enroute to Howth Station (within the T3 Possession limits) and therefore could not provide *signal protection* and agreed to contact the PICOP later.

At 01:00 hrs, after detraining passengers at Howth, the now empty train, operating as Train F015 (the 00:20 hrs Howth Station to Fairview Depot) departed Howth.

At 01:08 hrs the Signaller started the process of granting the T3 Possession by putting in place the signal protection. The Signaller then contacted the PICOP to advise this was in place and gave permission to the PICOP to place the detonator protection. During this time, the Signaller did not see the presence of Train F015, passing Killester, still inside the limits of the T3 Possession.

At 01:10 hrs the PICOP called the Handsignaller, positioned at Clontarf Road Station, in a *place of safety*, to tell them to place their detonator protection. As they were talking, the Handsignaller saw a train (Train F015) approaching the location where they were about to place the detonator protection; and informed the PICOP. The Handsignaller and the PICOP took no immediate actions in notifying the Signaller of the irregularity.

Train F015 passed from the area under signal protection and into Fairview Depot with the driver of Train F015 (Driver F015) being unaware of the incident.

The cause of the operational irregularity was that the Signaller on the Central Workstation, whilst carrying out the process for the granting of signal protection of T3 Possession PPRN MH/CF/1, did not establish that Train F015 was in the T3 Possession limits before granting signal protection.

The RAIU have identified the following possible causal factors (CaF) which may have resulted in the incident:

- CaF-01 – The Signaller did not carry out a thorough and systematic check of the T3 Possession limits before granting signal protection;
- CaF-02 – The Signaller did not successfully apply the *non-technical skills* that would allow them to carry out the thorough and systemic checks required;
- CaF-03 – The Signaller did not apply *track blocks* before granting signal protection, which would have identified that Train F015 was still within the limits of the T3 Possession; although noting this does not appear to be a clearly defined requirement.

The following contributory factors (CoF) were identified:

- CoF-01 – At the time of the incident, as a result of an earlier signalling fault at Lansdowne Road, the Signaller had to grant multiple delayed T3 Possessions; meaning that the Signaller's workload was now heightened;
- CoF-02 – The Signaller had limited experience of managing multiple T3 Possessions concurrently and did not apply the workload management skills for such situations effectively;
- CoF-03 – The previous night, the Signaller successfully carried out the night shift unsupervised, which may have given the Signaller a false sense of confidence in being able to manage multiple T3 Possessions.

The RAIU have identified the following systemic factors to the incident:

- SF-01 – The documentation around the application and use of track blocks is not robust in terms of how and when they should be used;
- SF-02 – The limited capability of the current signalling simulator has prevented the realistic simulation of managing multiple possessions, likely to be encountered on CTC Workstations.
- SF-03 – The assessment process does not require the targeted assessment of signallers managing T3 Possessions in the workplace despite the identified risk potential and their frequent occurrence.

The RAIU investigation has resulted in the following safety recommendations:

- Safety Recommendation 2025001-01 – IÉ-IM to revise the initial signalman training to include additional experience of T3 Possessions working under actual workload conditions;
- Safety Recommendation 2025001-02 – IÉ-IM to revise the competence management system to include the assessment of granting and managing T3 Possessions under actual workload conditions;
- Safety Recommendation 2025001-03 – IÉ-IM to review operational procedures, signalman training and competency management, to include clear guidance to CTC Signalmen on the use of the track block function or alternative techniques for checking during the granting of T3 Possessions.

The RAIU also made a number of safety recommendations as a result of additional observations:

- Safety Recommendation 2025001-04 – IÉ-IM to ensure that the information recorded in the *Train Register* is consistent with the information required to be recorded in the IÉ Rule Book;
- Safety Recommendation 2025001-05 – IÉ-IM to review the IÉ Rule Book instructions, and associated training materials, applicable to IÉ-IM staff, for actions to be taken, in situations where a safe system of work is compromised;
- Safety Recommendation 2025001-06 – IÉ should review their current documents that reference drugs and alcohol testing with a view to clearly addressing how staff should be managed where it has been decided drugs and alcohol testing is required i.e. should staff who are in safety critical roles be stood down until after a negative drugs and alcohol test;
- Safety Recommendation 2025001-07 – IÉ-IM to review the contingency manning arrangements for its signalling centres to ensure safety critical tasks continue to be performed safely, if required.



During the opening of the Navan Road Parkway Station, the platform access gate onto/from Platform 2 to the concourse was closed and locked, preventing passengers leaving Platform 2.

When the stairs weren't available, passengers who likely never used the lift, were required to use the lift to exit the station. The current two-step system, for operating the lift, appears to have impeded their understanding of how to use the lift e.g. users were reluctant to use the intercom call button to seek assistance and some thought it was an emergency button.

When a student, who was able to operate the lift, reported to the lift operator that they were stuck on the platform as the gates on the stairs were locked (without any instructional signage), the lift operator did not have access to the other station CCTV to see that there were passengers gathered at the locked gate, which would have verified the claim. Instead the lift operator thought the schoolchildren were "messaging".

It was noted that the help points on the platforms are inconspicuous to some passengers as the signage was facing directly towards the railway. In relation to this incident, they were inconspicuous to the passengers needing assistance at the lifts and staircase.

In total, at least thirty-three persons (nine separate instances), trapped on Platform 2, subsequently crossed the running lines to access Platform 1 and exit the station.

SAN 002 made the following eight safety recommendations:

- IÉ-RU should review their station monitoring systems (such as CCTV) to see if technologies are available to identify and alert IÉ-RU of incidents of people being stranded at stations and of people accessing the railway lines from station platforms;
- IÉ-RU should review the current two-step process for lift call operation to determine whether it is feasible to move to a one-step lift call operation process, on all lifts. Where this is not possible, the Human Factors Department should carry out another review of the lift-call intercom system, with a view to making improvements in terms of the customer experience;
- IÉ-RU should review the current set-up at HJCC to determine whether it is operationally feasible to provide access to station CCTV for the lift operators and/or develop procedures whereby lift operators can receive and/or report information from/to staff monitoring the CCTV for stations;
- IÉ-RU should review the role of the lift operator; this should include the following:
 - Update their training and procedures in terms of positively engaging/ communicating with passengers; and ensuring a consistent approach is adopted across the network;
 - Update their training and procedures in terms of dealing with anti-social behaviour to include clear guidelines on how to correctly identify anti-social behaviour; and, how to engage and/or communicate with users behaving in an anti-social manner;
 - Evaluation of human and organisational factors affecting task performance in the role (in particular in terms of workload);
 - Updating their job description to clearly identify the roles and responsibilities associated with the role;
 - Update the competence management to reflect the above updates.
- IÉ-IM Chief Civil Engineer (CCE) should review current signage located at the platform ramps, with a view to having the signage clearly portray the hazard (i.e. the passenger is accessing a live railway line) and indicates the severity of not adhering to the warning (i.e. possible collision with a train);
- IÉ-IM, in conjunction with IÉ-RU should expand its risk assessment process in terms of prioritising the locations where anti-trespass mats should be fitted, to also consider whether anti-trespass mats should be installed at stations that are in close proximity to schools;
- IÉ-RU should review and improve its current signage for help points, with a view to improving the visibility of these help points at passenger locations along the platform;

IÉ-RU should consider whether instructional signage is warranted at locations where passengers may become trapped e.g. on gated stairwells, to include emergency numbers and/or details of alternative routes.

Investigations continuing through 2025

Three RRV investigations commenced in 2024 and continued through 2025. Three of these related to RRV accidents, the scope of these investigations was expanded with a view to seeing how IÉ-IM implement the Construction Regulations, the investigations are as follows:

- IÉ collision between two RRVs, on the Athenry to Galway line, on the 8th March 2024;
- IÉ derailment of a RRV (excavator), near Ballycollin, Co. Offaly, on the 12th June 2024;
- IÉ collision between a RRV and a member of IÉ staff, North Esk, Co. Cork, on the 10th September 2024.

The other investigation continuing through 2025 is the IÉ cardan shaft detachment from an ICR, between Templemore and Ballybrophy on the 24th November 2024.

Investigations (including USANs) commenced in 2025

Three full investigations into reported occurrences were commenced in 2025 and one USAN commenced:

- Investigation into IÉ signal passed at danger without authority, Mallow, on the 8th February 2025;
- Investigation into two near miss events involving IÉ track workers at Bray Tunnels on the 6th December 2023 and the 10th April 2025 (these were excluded from the USAN below (last bullet) as they were deliberate non-compliances by staff members, in that signal protection, which was required to enter the tunnels, was not requested);
- Investigation into IÉ overspeeding of test train (new BEMU train) through crossover points in a possession on the 1st July 2025;
- Investigation into the safety of track workers on or near the line, after reported near misses throughout 2023 and 2025 (with the decision to draft a USAN in November 2025).

IE signal passed at danger without authority, Mallow, on the 8th February 2025

On the 8th February 2025, Train A309 (13:05 hrs Tralee to Mallow) passed Signal MW813 at Killarney Junction at danger without authority before trailing through Points MW564 which were not set for the movement before continuing to Signal MW821 at danger where the train stopped.

The total overrun distance was approximately 1340 m.

After Train A309 passed Signal MW813, the Mainline CTC Signaller had tried to contact Train A309 to stop it using a direct radio call, but this failed to connect as an incorrect Train ID was entered into the train radio by the driver. A subsequent call using the general call function also failed to connect due the 'Press to Talk' button not being used on the signaller's communications terminal.

The SPAD risk ranking tool scored the SPAD as 23 (on a scale between 0 and 28) making it a High risk SPAD.

IE near misses between track workers and trains at Bray Tunnels on the 6th December 2023 and the 10th April 2025¹

On the 6th December 2023, the Patrol Ganger accessed the line at Bray Station to undertake a routine track patrol between Bray and Greystones, heading in the Down direction. The line was open to train traffic, with Lookout Protection being the Safe System of Work (SSOW) i.e. red zone working. On approach to Bray Tunnel No. 4, at the Bray end, the Patrol Ganger was passed by a Down passenger train. The Patrol Ganger thought they had time to enter the tunnel, after the train, and inspect a breather switch¹⁴ (located eleven yards from the tunnel mouth at the Bray end) before calling the Rosslare Line Signaller for signal protection to pass through the tunnel. At 12:05 hrs, the 09:35 hrs Wexford to North Wall infrastructure train comprising Track Recording Vehicle (TRV) 701 (Train Y683) entered Bray Tunnel No. 4. The operation of Train Y683 was not in the Working Timetable, instead it was published in the Weekly Circular. On seeing Train Y683, the Patrol Ganger moved to a nearby refuge inside the tunnel between eight and ten seconds before the train arrived. The Patrol Ganger acknowledged the driver of Train Y683.

On the 11th April 2025 the PWI and Track Engineer were jointly conducting a site survey of scrap rail to plan its removal between Bray and Greystones, Co. Wicklow. This involved accessing the line at an access point to the south of Bray Station and walking to the location between Bray Tunnel No. 2 and No. 3 where the rail had been stacked, away from the running lines. The task was part of a larger survey of scrap rail being carried out by the PWI across several locations. After accessing the line, the PWI and Track Engineer walked in the cress to Tunnel No. 1 where they used a walkway around the headland to avoid passing through the tunnel before continuing to Tunnel No. 2. At 09:52 hrs, the 08:30 hrs Malahide to Greystones (Train E106) approached Bray Tunnel No. 2. The driver (Driver E106) sounded the horn on approaching the tunnel. On hearing the train horn, the PWI and Track Engineer cleared the tunnel by running through the remaining section of reduced bore rather than remain in the wider section. As Train E106 entered the tunnel, Driver E106 saw two people in orange Personal Protective Equipment (PPE) running out of the far end of the tunnel. Driver E106 made an emergency brake application and stopped inside the tunnel before contacting the North & East Signaller to report the situation.

¹ The final report into this investigation was published on 22 June 2026, Report No. 2026-R003.

IE overspeeding of test train, a BEMU, through crossover points in a possession, between Hazelhatch and Sallins, on the 1st July 2025

On the 1st July 2025, testing of a BEMU was being carried out in a T3 Possession between Inchicore and Sallins. The BEMU first travelled on the Down line towards Sallins. The crossover points, Points 812, located west of Hazelhatch were set so that the BEMU could change from the Down line to the Up line (a Permanent Speed Restriction (PSR) of 32 km/h (20 mph) applies to Points 812 for all reverse movements).

The BEMU moved across to the Up line from the Down line and travelled away from the points in preparation for a test run on the Up line towards Inchicore; the request for Points 812 to be reset was not relayed to the PICOP and the Signaller did not reverse Points 812.

The BEMU started the test run, reaching a speed of 145 km/h (90 mph) before it reached Points 812 (which were not set for the movement); resulting in the overspeeding of the BEMU over Points 812.

IE safety of track workers on or near the line

On 24 November 2025 a patrol ganger was conducting a patrol; the patrol ganger was walking in the Up direction in the five foot when they heard a train approaching in the Up direction i.e. the patrol ganger had their back to the approaching train. The train was travelling at 79 mph (127 km/h) as it approached the location. The patrol ganger, on hearing the train, moved clear, but only reached a position of safety less than three seconds before the train arrived (see image below from the train's FFCCTV, patrol ganger circled).



On notification of this incident, this was the eighth near miss between staff and trains, between the 27th February 2023 and 24th November 2025, three involved patrol gangers, two were related to the Bray Tunnels, one involved OHLE workers, one involved a PWI and one involved SET workers. The RAIU then made the decision to commence the drafting of a USAN².

² USAN 006 was published on 9 January 2026, making five safety recommendations. Significantly, the RAIU made a number of recommendation to seek to reduce the risk of track workers being struck by trains by requiring IE-IM to publish and maintain Track Access Index instructions, stop lone track patrolling where adequate sighting distances cannot be achieved, review the use of alternative or technological methods for track inspection, identify opportunities to undertake inspection and maintenance during planned safe access rather than while trains are running, and strengthen management and supervisory controls to ensure that the hierarchy of risk controls is applied before staff are exposed to the railway.

Tracking Safety Recommendations



RAIU

Railway Accident Investigation Unit

Tracking Safety Recommendations

Monitoring of RAIU safety recommendations

In accordance with the Railway Safety Act 2005 (Government of Ireland, 2005a) and the European Railway Safety Directive (European Union, 2020), recommendations are **addressed** to the national safety authority, the CRR. The recommendation is **directed** to the party identified in each recommendation. The CRR also **monitors** the RAIU safety recommendations from USANs and SANs.

The CRR safety recommendation statuses are open/in progress, submitted, further evidence requested and closed; and are defined below.

Status	Description
Open/ In Progress	Feedback/evidence from the Railway Organisation is pending; or actions have not yet been completed.
Submitted	The Railway Organisation has made a submission to the CRR advising that it has taken measures to address the recommendation and the CRR is considering whether to close the recommendation.
Further Evidence Requested	The CRR has reviewed a submission (or further submission) but considers that further evidence is necessary 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.

Status of RAIU safety recommendations

RAIU Safety Recommendations in numbers

The CRR, holds meetings with the relevant stakeholders to monitor the progress of safety recommendations.

As of the 31st December 2025, the RAIU have made 333 recommendations from investigation reports, USANs and SANs. All recommendations were accepted by their addressee and implementer.

In terms of the individual safety recommendations, the safety recommendations are compiled in the following tables:

Table	Title
Table 1	Status of RAIU safety recommendations made from 2007 to 2025
Table 2	RAIU safety recommendations made in 2025
Table 3	RAIU safety recommendations closed in 2025
Table 4	All RAIU Safety Recommendations with an Open, FER or submitted status

Table 1 – Status of RAIU Safety Recommendations from 2007 to 2025

See the status of all RAIU safety recommendations made as of the end of 2025.

Year	No. of Reports/ U/SANs	Number of Recommendations	Status of Recommendations				Percentage Closed
			Open/ In Progress	Submitted	FER	Closed	
*	22	63	0	0	0	63	100%
2010	6	26	1	0	0	25	96%
2014	6	28	0	0	2	26	92%
2016	3	17	5	0	2	10	58%
2017	2	9	0	0	1	8	89%
2018	2	8	1	0	1	6	75%
2019	5	36	6	3	6	21	58%
2020	4	18	4	1	6	7	39%
2021	8	35	9	5	8	13	34%
2022	3	16	8	7	1	0	0%
2023	5	47	18	14	3	12	25%
2024	4	14	10	4	0	0	0%
2025	3	16	16	0	0	0	0%
Totals	73	333	78	34	30	191	57%

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

Table 2 – RAIU safety recommendations made in 2025

The safety recommendations made in 2025 and remained open at the end of 2025.

Report/USAN/SAN	Recommendation	Status
Operational Irregularity, Clontarf Road, 1 st May 2024 (RAIU Investigation Report No: 2025-R001, published: 16 th May 2025)	2025001-01 – IÉ-IM to revise the initial signalman training to include additional experience of T3 Possessions working under actual workload conditions.	Open
	Safety Recommendation 2025001-02 – IÉ-IM to revise the competence management system to include the assessment of granting and managing T3 Possessions under actual workload conditions.	Open
	Safety Recommendation 2025001-03 – IÉ-IM to review operational procedures, signalman training and competency management, to include clear guidance to CTC Signalmen on the use of the track block function or alternative techniques for checking during the granting of T3 Possessions.	Open
	Safety Recommendation 2025001-04 – IÉ-IM to ensure that the information recorded in the Train Register is consistent with the information required to be recorded in the IÉ Rule Book.	Open
	Safety Recommendation 2025001-05 – IÉ-IM to review the IÉ Rule Book instructions, and associated training materials, applicable to IÉ-IM staff, for actions to be taken, in situations where a safe system of work is compromised.	Open
	Safety Recommendation 2025001-06 – IÉ should review their current documents that reference drugs and alcohol testing with a view to clearly addressing how staff should be managed where it has been decided drugs and alcohol testing is required i.e. should staff who are in safety critical roles be stood down until after a negative drugs and alcohol test.	Open
	Safety Recommendation 2025001-07 – IÉ-IM to review the contingency manning arrangements for its signalling centres to ensure safety critical tasks continue to be performed safely, if required.	Open
Track access by members of the public at Navan Road Parkway on 31 January 2025 (RAIU SAN 002, published 24 th June 2025)	SAN 002 Safety Recommendation 01 – IÉ-RU should review their station monitoring systems (such as CCTV) to see if technologies are available to identify and alert IÉ-RU of incidents of people being stranded at stations and of people accessing the railway lines from station platforms.	Open ³
	SAN 002 Safety Recommendation 02 – IÉ-RU should review the current two-step process for lift call operation to determine whether it is feasible to move to a one-step lift call operation process, on all lifts. Where this is not possible, the Human Factors Department should carry out another review of the lift-call intercom system, with a view to making improvements in terms of the customer experience.	Open ⁴
	SAN 002 Safety Recommendation 03 – IÉ-RU should review the current set-up at HJCC to determine whether it is operationally feasible to provide access to station CCTV for the lift operators and/or develop procedures whereby lift operators can receive and/or report information from/to staff monitoring the CCTV for stations.	Open ⁵

³ This safety recommendation was closed at the time of publication of this report, in 2026.

⁴ This safety recommendation was closed at the time of publication of this report, in 2026.

⁵ This safety recommendation was closed at the time of publication of this report, in 2026.

Report/USAN/SAN	Recommendation	Status
Track access by members of the public at Navan Road Parkway on 31 January 2025 (RAIU SAN 002, published 24 th June 2025)	SAN 002 Safety Recommendation 04 – IÉ-RU should review the role of the lift operator; this should include the following: • Update their training and procedures in terms of positively engaging/ communicating with passengers; and ensuring a consistent approach is adopted across the network; • Update their training and procedures in terms of dealing with anti-social behaviour to include clear guidelines on how to correctly identify anti-social behaviour; and, how to engage and/or communicate with users behaving in an anti-social manner; • Evaluation of human and organisational factors affecting task performance in the role (in particular in terms of workload); • Updating their job description to clearly identify the roles and responsibilities associated with the role; • Update the competence management to reflect the above updates.	Open
	SAN 002 Safety Recommendation 05 – IÉ-IM CCE should review current signage located at the platform ramps, with a view to having the signage clearly portray the hazard (i.e. the passenger is accessing a live railway line) and indicates the severity of not adhering to the warning (i.e. possible collision with a train).	Open
	SAN 002 Safety Recommendation 06 – IÉ-IM, in conjunction with IÉ-RU should expand its risk assessment process in terms of prioritising the locations where anti-trespass mats should be fitted, to also consider whether anti-trespass mats should be installed at stations that are in close proximity to schools.	Open ⁶
	SAN 002 Safety Recommendation 07 – IÉ-RU should review and improve its current signage for help points, with a view to improving the visibility of these help points at passenger locations along the platform.	Open
	SAN 002 Safety Recommendation 08 – IÉ-RU should consider whether instructional signage is warranted at locations where passengers may become trapped e.g. on gated stairwells, to include emergency numbers and/or details of alternative routes.	Open ⁷
Collision of a timber train with a stabled Intercity Railcar at Westport Yard on 10 February 2025 (USAN 005, published 25 March 2025)	USAN 005 Safety Recommendation 01 – IÉ-RU should consider whether instructional signage is warranted at locations where passengers may become trapped e.g. on gated stairwells, to include emergency numbers and/or details of alternative routes.	Open

⁶ This safety recommendation was closed at the time of publication of this report, in 2026.

⁷ This safety recommendation was closed at the time of publication of this report, in 2026.

Table 3 –RAIU safety recommendations closed in 2025

This section identifies the safety recommendations closed in 2025.

Report/USAN/SAN	Recommendation
Near miss with an Iarnród Éireann SET Worker at Rush and Lusk Station, 20 th June 2019 (published 2020)	Safety Recommendation 2020003-01 – The IÉ-IM SET Department should develop a formalised process, through their SMS suite of documents, for IÉ-IM SET staff walking/working alone, which should be completed prior to any member of SET staff going on or near the line; at a minimum consideration should be given to: • Whether it is necessary to go on or near the line to conduct the walk / work; • What local knowledge is required to walk /work safely; • Whether all the requirements of the IÉ Rule Book / SSOW can be met; What special protection arrangements are required either at night or during the day.
Overhead Line detachment, Pearse Station, 1 st October 2020 (published 2021)	Safety Recommendation 202105-03 – IÉ-RU and IÉ-IM should review the current Engineering Change Request and Safety Approval of Changes documents, to ensure that the appropriate stakeholders are consulted, and the correct processes followed.
Dangerous occurrence involving a Double SPAD at Clontarf Road Station, 7 th December 2021 (published 2023)	Safety Recommendation 2023001-01 – The Head of Health & Safety IÉ-RU should arrange for the development and issue of a guidance document for drivers outlining the understanding of the ATP equipment and the driving technique required. New training, monitoring and assessment material should be developed from this guidance.
	Safety Recommendation 2023001-02 – The Head of Health & Safety IÉ-RU should arrange for the development of a briefing for DTEs on analysis of driving trends by use of the OTDR.
	Safety Recommendation 2023001-08 – IÉ-RU CME should update its commissioning documents, to ensure that maintenance tasks commence after installation.
	Safety Recommendation 2023001-10 – IÉ-RU Ops should update the OTDR Download Assessment Form for DART drivers with only tasks pertinent to DART drivers; allowing DTEs to carry out comprehensive assessments of the DART drivers' driving techniques.
Self-detrainment of passengers between Shankill & Bray, 24 th of July 2022 (RAIU Report No. 2023-R005, published 2023)	Safety Recommendation 2023005-08 – IÉ-RU should consider developing processes, in the case of emergency situations, to provide information through social media channels; these communications must be customer-friendly in order to encourage passengers to follow any directions given.
	Safety Recommendation 2023005-11 – IÉ-IM, and IÉ-RU, should review and formalise its processes for the attendance and allocation of staff requirements at CTC for major events, to determine what members of staff need to be present.
	Safety Recommendation 2023005-20 – IÉ-IM and IÉ-RU should develop a system whereby internal recommendations as a result of safety related incidents are logged with an allocated timeframe, and the actions taken verified, and the status recorded.
Light blue indicates recommendations associated with IÉ; dark blue indicates recommendations associated with TDLR	

Table 4 – All RAIU Safety Recommendations with an Open, FER or submitted status

This section includes all RAIU safety recommendations with a status of open, FER or submitted as of the end of 2025. Safety recommendations that have been closed prior to 2025 are not included. Note, safety recommendations closed at the time of publication of this report (in 2026) are included in the footnotes.

Report	Safety Recommendation	Status
Malahide Viaduct Collapse on the Dublin to Belfast Line, on 21 August 2009	Safety Recommendation 2010-019 – The CRR, in conjunction with IÉ, should develop an action plan in order to close all outstanding recommendations in the AD Little Review (2006) and the International Risk Management Services Reviews (1998, 2000, and 2001). This action plan should include defined timescales for the implementation and closure of all these recommendations.	Open
Trend Investigation: Possession incidents on the IÉ Network	Safety Recommendation (2014-0404) – IÉ-IM should monitor and review entries into Section “Engineering works requiring absolute possessions – Section T Part III” of the Weekly Circular to ensure that the information published in this document is accurate and credible.	FER ⁸
Tram fire on approach to Busáras Luas Stop on the 7 th November 2013	TDLR should undertake a review of higher ignition temperature hydraulic oils to identify if they would be feasible in the braking circuit and add a safety benefit.	FER
Investigation into SPADs on the IÉ network from January 2012 to July 2015	Safety Recommendation 2016-001 – IÉ-IM must introduce an adequate TPSs on all of the IÉ network for the protection of trains; this system should be robust and to an acceptable standard within Europe; and have the appropriate ATP and speed supervision functionality.	Open
	Safety Recommendation 2016-002 – IÉ-IM should review the functionality of the ATP’s running release to ensure that the train protection function in relation to passing a signal at danger is appropriately maintained where drivers are approaching signals displaying red aspects. If this is not feasible with the current equipment it should be included any new TPS introduced on the network.	Open
	Safety Recommendation 2016-007 – IÉ-IM should identify high risk signals and, where the technology exists, introduce a mechanism to monitor the approach speed to these signals; to ensure that near misses are identified and managed.	Open
	Safety Recommendation 2016-019 – IÉ-IM should review their training and competency management for Traffic Regulators so that they have the appropriate skill set in terms of identifying potential risks associated with the regulating of trains.	FER
	Safety Recommendation 2016-011 – IÉ-IM should identify all locations where safety critical communications are not recorded and develop a programme of works for the introduction of recording safety critical communications at these locations.	Open
Dangerous occurrence between Ballybrophy and Portlaoise, 12 th September 2015	Safety Recommendation 2016-016 – IÉ-IM should review the method of allocation and accountability for general operatives detailed for work sites, to ensure that there are sufficient personnel on site to perform the required duties.	FER
Operational incidents at Ardahan on the 23 rd October 2015 & Spa on the 28 th November 2015	Safety Recommendation 2016-017 – IÉ-RU should review all traction fleets that do not have sanding capabilities and fit suitable systems to minimise the risk of low adhesion incidents. NIR have also closed this recommendation. Although this recommendation was closed for IÉ-RU, it remains open against the Railway Preservations Society of Ireland & other maintenance railway organisations operating on the IÉ network.	Open

⁸ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Near miss at Knockcroghery Level Crossing, XM065, Co. Roscommon, 31 st January 2017	Safety Recommendation 2017-007 – IÉ-IM should identify CCTV level crossings with obstructed views and issue interim instructions to LCCOs to fully raise the barriers where there is a possibility of any obstructions on level crossings.	FER
Derailment of DART passenger service, at Points DL115, Dun Laoghaire, 13 th September 2017	Safety Recommendation 2018-002 – IÉ-IM and IÉ-RU should evaluate the current training, assessment and monitoring of Safety Critical Communications to ensure that communications are carried out to the requirements set out in IÉ Rule Book, and safety critical communications standards IMO-SMS-033 and OPS-SMS-8.1.	Open
	Safety Recommendation 2018-005 – IÉ-IM should agree and implement a consistent wording in the Rule Book, General Appendix, training material and oral instructions in relation to the points operator's instructions; and ensure that the importance of the task order is highlighted in the training for points operators	FER
Vehicle struck by train at Cartron level crossing, XM220, Co. Mayo, 17 th August 2018	Safety Recommendation 2019003-02 – IÉ-IM should carry out a full review of known misused user worked level crossings on public and private roads and should develop a programme to either close or upgrade the level crossings to minimise misuse; where possible, level crossings with the highest risks should be addressed first.	FER
	Safety Recommendation 2019003-03 – The DoT should review, in consultation with the relevant stakeholders, their current advance warning signage (W 121) with a view changing the signage to make it clear to road users that they are approaching a user operated level crossing. They should also consider the introduction of other traffic calming measures in efforts to encourage safe road user behaviour. Care should be taken not to inadvertently introduce new risks as a result of their proposed measures.	Open
Road Rail Vehicle occurrences on Iarnród Éireann Network from 2015 to 2018	Safety Recommendation 2019004-01 – DoT should review the Railway Safety Act 2005 and current amendments to make clear the classification of RRVs; consultation should be sought with the CRR; and relevant stakeholders where appropriate.	Open
	Safety Recommendation 2019004-02 – The CRR & IÉ-IM should review the requirements prescribed in the Railway Safety Act (and current amendments) to ensure they are satisfied that all the requirements of the Railway Safety Act (and current amendments) are met in terms of RRVs being classified as rolling stock.	Open

Report	Safety Recommendation	Status
Road Rail Vehicle occurrences on Iarnród Éireann Network from 2015 to 2018	Safety Recommendation 2019004-03 – IÉ-IM should review and improve its current CCE Plant and Machinery Standards; attention should be given to best international practice in RRVs; and, as a minimum, the following should be considered for inclusion: • Applying the requirements set out in the EN 15746/ I.S. EN 15746 standards such as controls & indicators, visibility from the cab, warning systems & communications between work positions, etc. Where, due to a technical impossibility, the design specifications of EN 15746 cannot be met in full, control measures to address these deficiencies should be clearly identified, risks assessed, and suitable controls implemented; • The installing of an appropriate emergency warning system, which, when activated in emergency, can produce a suitably loud audible alarm and/or visual alarm. In cases, where this is not possible, as a result of a technical impossibility, control measures to address this deficiency should be clearly identified, risk assessed, and suitable controls implemented; • Installing Wheel Slip Prevention and/or sanders on RRVs; • Installing of Anti-Collision Devices (ACDs) on RRVs for the prevention of collisions with other RRVs, rolling stock, infrastructure and staff (through the provision of portable ACDs fitted to staff) on the IÉ network. In cases, where this is not possible, as a result of a technical impossibility, control measures to address this deficiency should be clearly identified, risk assessed, and suitable controls implemented; • Introducing an appropriate means of communication between work positions, whereby the RRVOs and RRVOs can communicate while on-tracking, travelling on the railway and at worksites; • Installing of data recorders on RRVs; • The suitability of the current braking system on Type 9B RRVs where an indirect rail wheel braking system is in place; consideration should be given for the requirement to have all RRVs fitted with direct rail wheel braking systems.	FER
	Safety Recommendation 2019004-05 – In relation to existing RRVs, IÉ-IM should assess the operation of existing RRVs to satisfy itself, on the basis of a risk assessment, that there are adequate technical and operational controls to prevent loss of control of RRV occurrences in the future.	Submitted
	Safety Recommendation 23019004-08 – IÉ-IM must develop a suitable RRVO training course which must incorporate both theory and practical elements for the operation of RRVs; there should be an assessment on completion of this initial training. When a person passes this initial training, they must complete and log supervised hours of RRV operation; and present for a final through assessment. This process should be risk assessed to determine the: number of days training; practical training requirements; number of supervised hours; and final assessment requirements.	Open
	Safety Recommendation 2019004-09 -IÉ-IM should develop a competency management system for the management of RRVOs competencies; this system should also include instructions related to re-training and monitoring of RRVOs after they have been involved in an accident.	FER ⁹
	Safety Recommendation 2019004-10 – IÉ-IM should conduct a thorough review of their suite of SMS documentation and plant and machinery standards, related to RRV contractors, to identify deficiencies in terms of the management of contractors and their plant. Where deficiencies are identified, IÉ-IM should develop new systems for the management of plant on site, and, for their safety tour and compliance verification processes to ensure contractors regularly inspect and maintain their plant in good condition; rather than the continued issuance of corrective action notices.	FER

⁹ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Road Rail Vehicle occurrences on Iarnród Éireann Network from 2015 to 2018	Safety Recommendation 2019004-12 – IÉ-IM should ensure appropriate procedures are in place for D&A screening for IÉ-IM and contractor staff post RRV occurrence.	FER
	Safety Recommendation 2019004-13 – IÉ-IM should update their CCE Plant and Machinery Standards to ensure that RRV contractors are either provided with, or required to identify, the hazards associated with track gradient, rail contamination (or other low adhesion conditions) and RRV orientation and position on track through: - Assessing documentation on the site-specific hazards associated with RRV and ensuring these are addressed in contractor's safety documentation; - Setting requirements in relation to the spacing between RRVs when travelling in convoy (e.g. 100 m) and putting in place a regime to ensure these requirements are met; - Training RRVOs/RRVOs on the risks associated with track gradient, rail contamination and RRV orientation and guidance on how to manage these risks in a braking emergency.	Submitted
	Safety Recommendation 2019004-14 – IÉ-IM should conduct an audit on RRV contractor's safety documents with a view to identifying deficiencies in terms of safety and ensuring the appropriate safety documentation is produced for the works; IÉ-IM should support and offer guidance to the RRV contractors in terms of the identification of hazards and methods of working on a railway network	Open
	Safety Recommendation 2019004-16 – IÉ-IM should update their CCE Plant and Machinery Standards to include the requirements set out in Section Q 2018 of the IÉ Rule Book related to the collection of pre-operation checklists by the RRVOs from the RRVs; and ensure these requirements are enforced through compliance verification activities.	Open
	Safety Recommendation 2019004-17 – IÉ-IM should clearly define, document and explain the role and function of the RRVO in the management of RRVs in Section Q of the IÉ Rule Book and/or relevant CCE Plant and Machinery Standards. This should include: - Location of RRVO when on-tracking, during work, and off-tracking; - The sighting requirements of RRVOs (i.e. an RRVO should be able to see RRVs in their control at all times); - The allocation of RRVOs per quantity RRVs (i.e. how many RRVs per RRVs).	FER
	Safety Recommendation 2019004-018 – IÉ-IM should review and update the training requirements of RRVOs with a view to incorporating: - Basic infrastructure training (e.g. points); - Training in communications with relevant staff; - Practical RRV training to ensure they have confidence in accepting pre-operations checklists from RRVOs as set out in the IÉ Rule Book.	Submitted
	Safety Recommendation 2020001-01 – TDLR should update their suite of documents for driver training (SM 017 Driver Training Plan), operations (TSI Manual) and competence assessment (SM 018 & SM 019 Competence Assessment) to include a requirement for drivers to conduct a thorough final visual check (using CCTV and mirrors) after obtaining doors closed and locked indications and before moving the tram to confirm that nothing is trapped in the doors.	FER
Passenger trap-and-drag occurrence on Luas tram at Heuston Stop, 26 th March 2019	Safety Recommendation 2020001-03 – TII should conduct a risk-based review on whether the tram fleet operating on the Red Line should be upgraded with coloured rear view monitors.	Open
	Safety Recommendation 2020001-05 – TDLR, as part of the update to the SMS 018 Competence Assessment, should formally include the assessments that should be conducted every quarter.	FER
	Safety Recommendation 2020001-07 – TDLR should develop and implement an induction training and competency assessment program for security staff, which should include training and assessment in the use of safety critical communications.	Submitted

Report	Safety Recommendation	Status
Passenger trap-and-drag occurrence on Luas tram at Heuston Stop, 26 th March 2019	Safety Recommendation 2020001-08 – TDLR should update their Work Instructions to ensure that appropriate testing is conducted for sensitivity of obstacle detection, door impact for closing forces and obstacle removal forces; the requirements set out in I.S. EN 14752 should be used, as appropriate.	FER
	Safety Recommendation 2020001-10 – TDLR should update their Chain of Care Procedure mandating that drivers are subject to appropriate developmental supports post incident/accident. Depending on the type of incident/accident, and whether the actions of the driver contributed to the incident/accident, specified periods of time of continuing developmental supports should be set.	FER
Near miss with an Iarnród Éireann Patrol Ganger near Woodlawn, Galway, 4 th June 2019	Safety Recommendation 202002-01 – IÉ-IM should review its track inspection methods to see if technological/ mechanised systems and/ or other safety measures could be implemented to eliminate/ minimise track worker exposure to railway hazards whilst undertaking the task of track patrolling.	FER
	Safety Recommendation 202002-02 – IÉ-IM should, through their risk assessment process, conduct a review of the patrol lengths, with the objective of identifying all patrol lengths with associated risks, and introducing adequate mitigation measures to eliminate these risks. Consideration should be given to the introduction of technologies (such as ACDs) for use by patrol gangers, with the objective of warning patrol gangers of oncoming trains.	FER
Collision between an IÉ passenger train and rail-mounted maintenance equipment, Rosslare, Wexford, 11 th January 2020	Safety Recommendation 202004-01 – IÉ-IM should classify and define RMMEs, Trolleys, LMEs and other commonly used plant or equipment on the railway and ensure appropriate safety procedures are in place for their use. IÉ-IM should also assess the need for any associated training and competency related to these changes and if considered necessary prepare training and competency assessment material.	Open
	Safety Recommendation 202004-02 – IÉ-IM CCE should ensure that, once defined and classified, change management systems are put in place to ensure RMMEs, Trolleys, LMEs, etc are not altered for other uses, without first having been safety validated in line with company processes.	Open
	Safety Recommendation 202004-03 – IÉ-IM should update their Mobile Gang WIs, I-PWY-1490, (Ganger's Handbook) to ensure that all routine light maintenance activities are included. Systems, e.g., training, should be put in place to ensure that relevant staff can undertake dynamic risk assessments should non-routine activities need to be undertaken that are not described in the Ganger's Handbook.	Open
Collision between a car and a train at Kilnageer, Level Crossing (XM240), Mayo, 29 th April 2020	Safety Recommendation 202101-01 – The RSA should update the “Rules of the Road” to include guidance on the Decision Support System (DSS).	Open
	Safety Recommendation 202101-02 – IÉ-IM should update the ‘The SAFE use of Unattended Railway Level Crossings’ booklet to include guidance on the DSS.	FER
	Safety Recommendation 202101-03 – IÉ-RU should put systems in place to ensure ICR train horns meet the current standards for sound pressure levels.	FER ¹⁰
Collision between a Bord na Móna (BnM) Flat Wagon and Kilcolgan Level Crossing Gates, Offaly, 8 th June 2020	Safety Recommendation 202102-01 – BnM should identify locations where derailing points are vulnerable to unauthorised movements and provide a means of securing the derailing points at these locations.	FER
	Safety Recommendation 202102-04 – BnM should review its level crossing Risk Register updating where necessary to sufficiently capture all reasonably foreseeable risks. In addition, BnM should consider adding a requirement within its Rail Safety Case Document that requires regularised Risk Management Workshops at which risks, mitigation measures, etc, are reviewed and updated when necessary.	FER

¹⁰ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Collision between a Bord na Móna (BnM) Flat Wagon and Kilcolgan Level Crossing Gates, Offaly, 8 th June 2020	Safety Recommendation 202102-05 – The Engineering Department of BnM should carry out the technical evaluation into the efficacy of the derailing points, etc. identified in Bord na Móna internal investigation report into the collision between a BnM locomotive and the gates of Endrim Gates on the 21st September 2017.	FER
	Safety Recommendation 202102-06 – BnM should update their Specification for Crossings to include the requirements of the Department of Transport's Traffic Signs Manual; based on this BnM should update the signage on the approaches to all BnM level crossings.	FER
USAN 003 Luas isolation irregularity incident, between Kylemore to Suir Road, on the 5 th January 2021	TDLR should urgently undertake a review of their safety critical communications for all modes of communication, while the review was being undertaken, TDLR should: - Develop and publish a concise standard for safety critical communications for all modes of communication; - Implement a robust competency management program for initial and refresher training based on the requirements of this new standard; - Continuously assess safety critical communications to ensure that staff are adhering to safety critical communications set out in the new standard.	Submitted
Person entrapped in lowered CCTV level crossing, Ashfield, Offaly, 24 th May 2020	Safety Recommendation 202103-01 – IÉ-IM SET Department should, using a risk-based approach, consider the suitability of the "Signal Controls" functions for Mid-Section CCTV Crossings; should they be deemed to have an unacceptable level of risk, they should be removed from the LCCO's console.	Open
	Safety Recommendation 202103-02 – IÉ-IM SET Department should, consider introducing a time delay between the "Crossing Clear" buttons to prevent the LCCO pressing the second Crossing Clear button until the first Crossing Clear button times out. This time can be spent checking the confines of the level crossing for vehicles, pedestrians or other obstructions.	Open
	Safety Recommendation 202103-03 – IÉ-IM CCE Department should examine the feasibility of installing signage inside the barriers of CCTV level crossings warning member of the public (MOP) what actions to take in the event of becoming trapped.	Open
	Safety Recommendation 202103-04 – IÉ-IM should develop a means to make MOPs more visible should they become trapped inside level crossing barriers and position themselves adjacent to level crossing furniture or other infrastructure; where this cannot be achieved consideration should be given to examining possible initiatives or technologies that could be introduced to provide aid and assistance to LCCOs in identifying persons/obstacles that maybe trapped within the confines of a level crossing.	Open
	Safety Recommendation 202103-05 – IÉ-IM should introduce measures to deter pedestrians from using unauthorised routes onto CCTV Level Crossings.	Open
	Safety Recommendation 202103-06 – IÉ-IM should conduct a focused review on the instances of MOP entrapment at Sydney Parade (LC XR004) and Serpentine Avenue (LC XR002) with a view of identifying any actions that can be taken to prevent the re-occurrence of MOP entrapments.	Open
Chassis Plate Fracture on General Motors Class 201, Locomotive 224, 7 th July 2020	Safety Recommendation 202104-03 – IÉ-RU CME and IÉ-IM CCE should carry out a risk assessment on the implications of the increased axle load of a 201 Locomotive.	FER

Report	Safety Recommendation	Status
Overhead Line detachment, Pearse Station, 1 st October 2020	Safety Recommendation 202105-01 – IÉ-RU CME Department should in conjunction with the OEM develop a maintenance regime for the pantographs, taking into consideration the operational conditions and traceability of safety critical components.	FER ¹¹
	Safety Recommendation 202105-05 – IÉ-IM SET Department, should evaluate the auto-reclose function of the OHLE control system on the DART network to ensure the safe operation in the event of failures which could expose staff and passengers to live OHLE.	Open
Luas Overhead Line Failure, Stillorgan, 2 nd November 2020	Safety Recommendation 202106-02 – TDLR should conduct a full review and update of their dewirement/incident management documents, to ensure that dewirement incidents are fully addressed; in particular in relation to zone identification for de-energised sections of track in the event of an incident. These documents should then be fully briefed to the Traffic Supervisors.	Submitted
	Safety Recommendation 202106-04 – TDLR should include the electrical resistance measuring of vehicle earth bonding in the planned preventative maintenance regime for all trams.	Submitted
	Safety Recommendation 202106-05 – TDLR should investigate the reason for the build-up of Cupric Oxide on the OCS wire. The investigation should include but not limited to: • Impact of longer trams, and congestion of trams in electrical sections; • Electrical resistance monitoring of tram to identify if high current demand is an issue; • Consequence of trams working in degraded mode on current demand; • The pantograph carbon bands and OCS interface.	Submitted
Luas isolation irregularity, Kylemore to Suir Road, 5 th January 2021	Safety Recommendation 202107-02 – TDLR should consider increasing the visibility of the Isolation Signage (through illuminating); as well as providing a means to secure the Isolation Signage (to prevent the signage being removed by unauthorised persons).	Submitted
	Safety Recommendation 202107-03 – TDLR should review and update the suite of documents related to earthing, switching, possessions and isolations to ensure that the documents are consistent in terms of the actions to be taken, referencing and terminology.	FER
Near miss with an IÉ CCE Worker near Gormanston Station, 21 st July 2021	Safety Recommendation 202202-01 -The IÉ-IM CCE Department should develop a formalised process, through their SMS suite of documents, for IÉ-IM CCE staff walking/ working alone, which should be completed prior to any member of CCE staff going on or near the line; at a minimum consideration should be given to: • Whether it is necessary to go on or near the line to conduct the walk / work; • What local knowledge is required to walk /work safely; • Whether all the requirements of the IÉ Rule Book / SSOW can be met; • What special protection arrangements are required either at night or during the day.	Submitted
Trend investigation into Signals Passed At Stop on the LUAS network	Safety Recommendation 202203-01 – TII should determine if in-cab technological and/or mechanised systems could be introduced to assist drivers with the prevention of SAS SPAS incidents, taking into account requirements for ensuring safety risk is ALARP. Analysis should include an appraisal of available systems and the effect they may have on mitigating sub-standard driver performance.	Open
	Safety Recommendation 202203-02 – TDLR should enhance the TSI Manual operating instructions for all depot and Line Signalling System (LSS) locations based off site-specific risk assessments for the different locations. These enhancements should include step-by-step guidance on how trams are moved at these locations; this should include how verbal permissions are granted by LNMC.	Submitted
	Safety Recommendation 202203-03 – TII should review the technical specification of the onboard AVLS console to see if it is possible to limit the inputting of the AVLS service files to when the tram is stationary; and if so, implement this change.	Open

¹¹ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Trend investigation into Signals Passed At Stop on the LUAS network	Safety Recommendation 202203-04 – TDLR should, with the assistance of a qualified human factors expert, review the timings and locations of SPAS incidents to establish reasons as to why drivers are involved in SPAS incidents at certain times and locations	Open
	Safety Recommendation 202203-05 – TDLR should, with the assistance of a qualified human factors expert, introduce training in relation to error prevention techniques as a tool for drivers to manage distraction, pre-occupation and incorrect expectation.	Open
	Safety Recommendation 202203-06 – TDLR should review its current training regime with a view to increasing training and competency assessment of drivers, in particular in terms of driving in depots and LSS locations and in degraded mode.	Submitted
	Safety Recommendation 202203-07 – TII should, as part of the increased driver training and competency assessment, consider the introduction of a driver training simulator which would assist in driving training in depots, LSS locations and in degraded mode.	Open
	Safety Recommendation 202203-08 – TDLR should ensure that tram signals are referenced correctly in the TDLR suite of documents, this in turn should reinforce, to the drivers, which signals are Stop signals.	Submitted
	Safety Recommendation 202203-09 – TDLR should establish a formalised SSC, to include stakeholders from the relevant internal and external departments (e.g. TII and local authorities) to ensure that: - In the event of a SPAS event an SSC is convened, where appropriate, to determine if any immediate actions can be taken at the signal location which may prevent a SPAS re-occurrence; - Any changes to signalling sequencing (including the introduction of new signals) are carried out as per the relevant SMS procedure to ensure that risks are not inadvertently introduced at signals; - Multi-SPAS signals are reviewed to see if there are any trend to the SPAS incidents; - Previous recommendations, related to SPAS events, from internal investigations have been addressed.	FER
	Safety Recommendation 202203-10 – TDLR should update the TSI Manual and training and competency management suite of documents to include clear instructions on when emergency brake applications should be made in relation to the prevention of SPAS incidents; these instructions should be properly communicated to the drivers.	Submitted
	Safety Recommendation 202203-11 – TDLR should introduced a SPAS risk scoring process for high-risk SPAS events on the Luas network, to ensure that the severity of a SPAS can be measured (best-practice should be applied if available). This scoring process can be used to assess if risks associated with the SPAS conform to TDLR risk acceptance criteria and are ALARP. The scoring process will also ensure that correct system interventions are applied, where required.	Submitted
	Safety Recommendation 202203-12 – TII should research if technological and/or mechanised systems could be implemented for the entire Luas network to ensure SPAS events are immediately detected, taking into account requirements for ensuring safety risk is ALARP. Analysis should include appraisal of available systems, including systems that report detection of SPAS events to LNMC and to the driver in the cab.	Open
	Safety Recommendation 202203-13 – TII should evaluate if it is possible to introduce an audible alarm for suspected SPAS incidents at LNMC.	Open
	Safety Recommendation 202203-14 – TDLR to review and strengthen the current process for the management of drivers post SPAS incident, to ensure drivers skill are further developed (through adequate re-training) and they are supported (through increased monitoring) post SPAS incident.	Submitted
	Safety Recommendation 202203-15 – TDLR should develop their internal investigation processes, to develop a: Training and competency management system for internal investigators; and, Manual, or similar, outlining internal investigation processes.	Open

Report	Safety Recommendation	Status
Dangerous occurrence involving a Double SPAD at Clontarf Road Station, 7 th December 2021	Safety Recommendation 2023001-03 – IÉ-RU CME should upgrade the OTDRs on the 8500 Electrical Multiple Unit (EMU) fleet to the most up-to-date version, to ensure that digital signals are recorded for ATP penalty brake applications.	Open
	Safety Recommendation 2023001-06 – IÉ-IM SET should undertake a review of I-SIG-2145, Calculation of Signal Spacing Distance, to consider if the risk approaches identified in the standard are effective in relation to the calculation of the spacing of signal distances, in particular, in relation to sharp speed decreases on the approach to signals and consideration should be given to incorrect driving techniques (i.e. driving into the bonds). A review of the use of derogations should also be undertaken.	Open
	Safety Recommendation 2023001-07 – IÉ-IM SET should put systems in place to ensure that the train simulator staff are provided with updated signal layout schematics as and when required e.g. altered signal positions.	FER
	Safety Recommendation 2023001-09 IÉ-RU CME should review the 8500 EMU sanding improvement plan (2016) against current standards with a view to updating and implementing the sanding improvements to current standards.	Open ¹²
Collision with track equipment between Newbridge and Kildare, 27 th August 2021	Safety Recommendation 2023002-01 – IÉ-IM should consider developing a system, whereby Signalmen must provide a Unique Possession Authority Number, or similar, when authorising T3 Possessions to the PICOP; this number or safeguard should be provided to all staff prior to entering a T3 Possession.	Open
	Safety Recommendation 2023002-02 – IÉ-IM should review the current system of supervising and monitoring T3 Possessions, in terms of possession arrangements (e.g. Authority Number) and safety documentation (e.g. method statements); this review should identify improvements in terms of managing T3 Possessions. At a minimum, IÉ-IM should: • Expedite an increase in the supervision and monitoring of T3 Possessions by Engineering Department staff through updating CCE-SMS-001, specifically increasing monitoring prior to possessions being granted (while the IÉ-IM review and updating of supervision and monitoring of T3 Possessions is being undertaken); • Revise the current process of monitoring possessions through Safety Tours, CCESMS-008, to ensure the requirements of all guidelines are recorded in the Safety Tour Form; • Once the Safety Tours, CCE-SMS-008, documentation has been reviewed and updated, verify that the Safety Tours are being carried out correctly, and in full accordance with the guidelines, through an auditing process.	Open
	Safety Recommendation 2023002-03 – IÉ-IM should promote a positive culture between staff, at different grades, to ensure ground level staff (including contractors) feel confident to challenge more senior staff in terms of safety. This can be achieved through staff briefing days, safety campaigns and development of a means for staff to provide feedback on supervision activities.	Open
	Safety Recommendation 2023002-04 – IÉ-IM should introduce processes to ensure that information submitted to the RAIU is correct and submitted within the requested timeframes.	Open
	Safety Recommendation 2023002-05 – The IÉ CCE Department (Engineering Department Division 3) should ensure the requirements of CCE-TMS-422 (2022) are met in full.	Submitted

¹² Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Collision with track equipment between Newbridge and Kildare, 27 th August 2021	Safety Recommendation 2023002-06 – IÉ-IM should conduct a full review on the reporting of accidents by IÉ-IM staff and contractors, consideration should be given to: • Reviewing CCE-SMS-007 and CCE-SMS-005 to identify any areas where improvements can be made related to the reporting of safety related occurrences; where areas of concern are identified these should be addressed; • Enhance and promote its confidential reporting system to ensure all staff (with a particular emphasis on contracted staff) can report issues related to safety and welfare; • Promote a positive culture, associated with the reporting of occurrences, in an effort to eliminate on-site authority gradients whereby staff cannot challenge supervisors.	Open
	Safety Recommendation 2023002-07 – The CCE Department review and update CCE-SMS-001 and CCE-SMS-008 with a view to addressing the monitoring and supervision of works, in terms of quality of works that affects track safety, which are carried out under internal method statements (and contractor) method statements.	Open
Collision of an RRV Dumper with a member of Iarnród Éireann infrastructure maintenance staff, Tivoli, Cork, 6 th July 2022	Safety Recommendation 2023003-01 – IÉ-IM PTS Certification training should include training on the head lights and tail lights for trains (“white lights” are coming towards you, or “red lights” are travelling away from you); and, specifically, for RRV Dumper, explain the configurable directional lights and the requirement to have red lights displayed at both ends when stationary.	Open
	Safety Recommendation 2023003-02 – IÉ-IM CCE should re-examine the risk assessment related to RRV movements, where previous control measures cannot be implemented (i.e. RRV engines cannot be switched off), alternatives should be considered.	Open
	Safety Recommendation 2023003-03 – IÉ-IM should produce and circulate a policy document for the use of mobile phones and all handheld electronic devices for the acceptable, safe and secure use and management of these devices when working on the railway.	Open
Failure of a Current Return Cable on a Luas Tram, Connolly Stop, 25 th October 2022	Safety Recommendation 2023001-01 – TDLR should develop supporting guidance documentation to WI-00814, Preparation before and after wheel turning, to include information on possible defects e.g. photographs of unacceptable levels of corrosion on the Current Return and Earth Shunt cable Lugs.	Submitted
	Safety Recommendation 2023001-02 – TDLR should consider updating LNMC Manual Document (TDLR-OP-M-0001) to include guidance for Traffic Supervisors in relation to actions to be taken in the case of failed cables and hoses.	FER
	Safety Recommendation 2023001-03 – TDLR should consider updating WI-00814, Preparation before and after wheel turning to include the recording of the testing and serial number of the torque wrench into TDLR-FRM-ENG-023 Citadis 401 Wheel Turning Certificate Issue A November 2020.	FER
	Safety Recommendation 2023001-05 – For instances where rolling stock is withdrawal from service as a result of damage; TDLR should develop notification procedures to identify where immediate notification to the RAIU is required.	Open
Self-detrainment of passengers between Shankill & Bray, 24 th July 2022	Safety Recommendation 2023005-01 – IÉ-RU Head of Health & Safety, in conjunction with the CME Department, should develop Traction Manual for the entire 8500 Class DART fleet; this should include guidance on the air conditioning. Once complete, this should be briefed to drivers to ensure drivers fully understand how the air conditioning operates.	Open
	Safety Recommendation 2023005-02 – IÉ-RU Head of Health & Safety should include a check that the heating, ventilation and air conditioning systems are operational in the train preparation instructions.	Open ¹³

¹³ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Self-detraining of passengers between Shankill & Bray, 24 th July 2022	Safety Recommendation 2023005-03 – IÉ-RU should update its Passenger Comfort Risk Register to adequately address the issues related to crowding on trains (with special consideration given to crowding during adverse weather conditions). Based on this, IÉ-RU should develop an operational SMS document for the management of crowding on trains.	Open ¹⁴
	Safety Recommendation 2023005-04 – IÉ-RU should conduct a full review of how crowding at outlying stations is managed during major events, including reviews to local crowd control plans, PTI and train dispatch documentation; to ensure that the relevant stations are staffed appropriately to adequately manage the passenger flows.	Open ¹⁵
	Safety Recommendation 2023005-05 – IÉ-RU should review its planning and management processes for large events; considerations should be given to: - How and what information is provided to passengers prior to the event (such as information in relation to predicted scale of passengers using the trains and likely conditions for their journey in order to manage passengers' expectations); - How passengers' expectations are managed for the duration of the event (such as using real time information and making this freely available through passenger announcements at stations and on the IÉ App and social media accounts).	Open ¹⁶
	Safety Recommendation 2023005-06 – IÉ-RU should review its Ontrain Customer Communications Booklet and Professional Driving Handbook, and provide drivers with additional training, to enhance driver communications with passengers. The documentation and training should consider best practice and, at a minimum, the following requirements: - An initial announcement to be made within a specified short period of time, even if the reason for the delay is not known at that point; - A further announcement to be made as soon as further information is available about the cause and likely consequences of the delay; - Further announcements, at specified intervals, should be made whenever new facts suitable for informing and/or reassuring passengers become available; - In critical conditions, announcements should be made to dissuade passengers from detraining, these should include making announcements highlighting the risks involved with detraining and their safest option is to remain on the train.	Open ¹⁷
	Safety Recommendation 2023005-07 – IÉ-IM should carry out a review to determine the suitability of direct messaging (visually and/or verbally) from CTC directly onto trains, consideration should be given as to whether it would improve onboard passenger communications.	Open
	Safety Recommendation 2023005-09 – IÉ-IM should develop suitable instructions and guidance for operational staff at CTC to help them determine when a train should be considered as stranded (consideration should be given to the proximity of the stranded train to a station); the timeframe within which this needs to be declared and the actions that then need to be taken must be set out. Where appropriate, these instructions and guidance should be included in the IÉ Rule Book and relevant associated documentation.	Open

¹⁴ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

¹⁵ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

¹⁶ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

¹⁷ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Self-detrainment of passengers between Shankill & Bray, 24 th July 2022	Safety Recommendation 2023005-10 – IÉ-RU should review their suite of documents which reference major customer disruptions and emergencies (in particular, in terms of stranded trains) and address the management of passengers on these trains. Considerations should be given to, but not limited to, the effective development of the following: • A common understanding and shared awareness of the circumstances in order to recognise when minor operational occurrences have the potential to develop into major incidents unless decisions are taken in a timely and decisive manner; • Effective communication and information sharing arrangements between the controlling signalman/ traffic regulators to the driver/s; • Assist driver/s in managing, informing and reassuring passengers in order to encourage passengers to stay onboard the train/s; • Anticipate and understand the needs of passengers in a train stranding situation (information, air conditioning, etc.) and to focus action plans accordingly; • Anticipate the need to provide on-site support to drivers of such trains in managing passengers' needs.	Open ¹⁸
	Safety Recommendation 2023005-12 – IÉ-RU and IÉ-IM should carry out an incident simulation in terms of a scenario involving an incident with the potential for self-detrainment. As part of this simulation, the relevant stakeholders (An Garda Síochána, Dublin Fire Brigade, etc.) should be invited to participate. Any lessons learnt such be adopted into the relevant guidance documents.	Open ¹⁹
	Safety Recommendation 2023005-13 – IÉ-RU should review its high level emergency preparedness, crowd control plans, risk assessments, train evacuation briefing notes and all other relevant document to include guidance on self-detrainments. Once complete, they should be circulated to the relevant departments and stations, for briefing.	Open ²⁰
	Safety Recommendation 2023005-14 – IÉ-RU CME should carry out an assessment on the quality of the public address systems on EMUs against good practice standards and address any deficits.	Open ²¹
	Safety Recommendation 2023005-15 – IÉ-RU Health & Safety should ensure that train preparation instructions should include a check that public address systems are working prior to trains entering service.	Open ²²
	Safety Recommendation 2023005-16 – IÉ-IM & IÉ-RU should review the suite of documents in relation to the planning of large events to ensure that all key personnel are involved in the planning of events.	Open ²³
	Safety Recommendation 2023005-17 – IÉ-IM should update the IÉ Rule Book to include instructions for drivers in the event of self-detrainment and/ or stranded trains; these requirements should then be incorporated into the relevant associated documents.	Open
	Safety Recommendation 2023005-18 – IÉ-IM should develop procedures for the evacuation of passengers over trespass guards, these should then be included in the Train Evacuation Briefing Notes and other relevant documents which reference evacuations.	Open

¹⁸ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

¹⁹ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

²⁰ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

²¹ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

²² Note: This safety recommendation was closed at the time of publication of this report, in 2026.

²³ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Self-detrainment of passengers between Shankill & Bray, 24 th July 2022	Safety Recommendation 2023005-19 – IÉ should engage with the relevant parties of An Garda Síochána to ensure that there is a shared understanding at CTC of when and how instructions from An Garda Síochána should be complied with. This can be practiced through IÉ-RU incident simulations where An Garda Síochána are in attendance.	Open
Broken rail, Newbridge, Kildare, 23 rd February 2023	Safety Recommendation 2024001-01 – IÉ-IM should risk assess whether the existing rail end cleaning equipment and processes adequately control the risk of weld contamination and identify improvements where required.	Open
	Safety Recommendation 2024001-02 – IÉ-IM to investigate altering the monitoring and detection parameters of the rail welding machine to be able to identify and highlight possible anomalies in the welding process.	Open
	Safety Recommendation 2024001-03 – IÉ-IM to revise the risk assessments for the Portlaoise Rail Welding Plant to ensure risks in the production process affecting the quality of rail welds are understood and control measures are identified.	Open
Broken Rail near Emly, County Tipperary, 22 nd February 2023	Safety Recommendation 2024002-01 – IÉ-IM CCE to update CCE-TMS-323, to include a more robust guidance for welders, in relation to recognising when there may be issues with the Rail Tensors; and what actions are to be taken when difficulties arise with the Rail Tensors	Open
	Safety Recommendation 2024002-02 – IÉ-IM CCE should review the current suite of documents related to welding to ensure consistency across the relevant documents.	Open
	Safety Recommendation 2024002-03 – IÉ-IM CCE should develop systems for the management and certification of rail stressing equipment (including contractor's rail stressing equipment), to ensure equipment is regularly serviced and recalibrated at a nominated frequency. These updated requirements should be reflected in the relevant documents.	Open
	Safety Recommendation 2024002-04 – IÉ-IM CCE should review and update the CWR Record Sheet to include sections for recording the serial number and calibration/ recalibration date of the Rail Tensors being used, the pressure gauge readings and the frequency of these checks on the pressure gauges. On completion, ensure staff are briefed on the changes, and changes should be incorporated into future training programmes for a Person in Charge of Stressing.	Open ²⁴
	Safety Recommendation 2024002-05 – IÉ-IM CCE should update CCE-TMS-323 to include guidance for the Person in Charge of Stressing, in relation to actions to be taken when difficulties are encountered with Thermit SoW-5 (including when Thermit SoW-5 can continue, be restarted or must be abandoned; and, who is responsible for this decision, the Person in Charge of Stressing or their Supervisor). On completion of the update, Persons in Charge of Stressing should be briefed and the training programme for the role revised with the new guidance.	Open ²⁵
Collision between a car and a train at Level Crossing XM190, Mayo, 9 th September 2023	Safety Recommendation 2024003-01 – The DoT should continue to trial the new design sign (Sign W126), in consultation with the relevant stakeholders, with a view to replacing Sign W121. The RAIU maintain that the advance warning signs on the approaches to OP Type level crossings should portray the hazard (i.e. the road user is approaching a live railway) and indicate the severity of not adhering to the warning (i.e. possible collision with a train).	Open
	Safety Recommendation 2024003-02 – IÉ-IM should replace their "Warning Trains" sign, located at OP Type level crossings, to the new proposed advance warning sign (Sign W126), once included in the Traffic Signs Manual.	Open
Operational Irregularity, Clontarf Road, 1 st May 2024	2025001-01 – IÉ-IM to revise the initial signalman training to include additional experience of T3 Possessions working under actual workload conditions.	Open
	Safety Recommendation 2025001-02 – IÉ-IM to revise the competence management system to include the assessment of granting and managing T3 Possessions under actual workload conditions.	Open

²⁴ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

²⁵ Note: This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Operational Irregularity, Clontarf Road, 1 st May 2024	Safety Recommendation 2025001-03 – IÉ-IM to review operational procedures, signaller training and competency management, to include clear guidance to CTC Signallers on the use of the track block function or alternative techniques for checking during the granting of T3 Possessions.	Open
	Safety Recommendation 2025001-04 – IÉ-IM to ensure that the information recorded in the Train Register is consistent with the information required to be recorded in the IÉ Rule Book.	Open
	Safety Recommendation 2025001-05 – IÉ-IM to review the IÉ Rule Book instructions, and associated training materials, applicable to IÉ-IM staff, for actions to be taken, in situations where a safe system of work is compromised.	Open
	Safety Recommendation 2025001-06 – IÉ should review their current documents that reference drugs and alcohol testing with a view to clearly addressing how staff should be managed where it has been decided drugs and alcohol testing is required i.e. should staff who are in safety critical roles be stood down until after a negative drugs and alcohol test.	Open
	Safety Recommendation 2025001-07 – IÉ-IM to review the contingency manning arrangements for its signalling centres to ensure safety critical tasks continue to be performed safely, if required.	Open
Track access by members of the public at Navan Road Parkway on the 31 st January 2025	SAN 002 Safety Recommendation 01 – IÉ-RU should review their station monitoring systems (such as CCTV) to see if technologies are available to identify and alert IÉ-RU of incidents of people being stranded at stations and of people accessing the railway lines from station platforms.	Open ²⁶
	SAN 002 Safety Recommendation 02 – IÉ-RU should review the current two-step process for lift call operation to determine whether it is feasible to move to a one-step lift call operation process, on all lifts. Where this is not possible, the Human Factors Department should carry out another review of the lift-call intercom system, with a view to making improvements in terms of the customer experience.	Open ²⁷
	SAN 002 Safety Recommendation 03 – IÉ-RU should review the current set-up at HJCC to determine whether it is operationally feasible to provide access to station CCTV for the lift operators and/or develop procedures whereby lift operators can receive and/or report information from/to staff monitoring the CCTV for stations	Open ²⁸
Track access by members of the public at Navan Road Parkway on the 31 st January 2025	SAN 002 Safety Recommendation 04 – IÉ-RU should review the role of the lift operator; this should include the following: - Update their training and procedures in terms of positively engaging/ communicating with passengers; and ensuring a consistent approach is adopted across the network; - Update their training and procedures in terms of dealing with anti-social behaviour to include clear guidelines on how to correctly identify anti-social behaviour; and, how to engage and/or communicate with users behaving in an anti-social manner; - Evaluation of human and organisational factors affecting task performance in the role (in particular in terms of workload); - Updating their job description to clearly identify the roles and responsibilities associated with the role; - Update the competence management to reflect the above updates.	Open
	SAN 002 Safety Recommendation 05 – IÉ-IM CCE should review current signage located at the platform ramps, with a view to having the signage clearly portray the hazard (i.e. the passenger is accessing a live railway line) and indicates the severity of not adhering to the warning (i.e. possible collision with a train).	Open

²⁶ This safety recommendation was closed at the time of publication of this report, in 2026.

²⁷ This safety recommendation was closed at the time of publication of this report, in 2026.

²⁸ This safety recommendation was closed at the time of publication of this report, in 2026.

Report	Safety Recommendation	Status
Track access by members of the public at Navan Road Parkway on the 31 st January 2025	SAN 002 Safety Recommendation 06 – IÉ-IM, in conjunction with IÉ-RU should expand its risk assessment process in terms of prioritising the locations where anti-trespass mats should be fitted, to also consider whether anti-trespass mats should be installed at stations that are in close proximity to schools.	Open ²⁹
	SAN 002 Safety Recommendation 07 – IÉ-RU should review and improve its current signage for help points, with a view to improving the visibility of these help points at passenger locations along the platform.	Open
	SAN 002 Safety Recommendation 08 – IÉ-RU should consider whether instructional signage is warranted at locations where passengers may become trapped e.g. on gated stairwells, to include emergency numbers and/or details of alternative routes.	Open ³⁰
Collision of a timber train with a stabled Intercity Railcar at Westport Yard on the 10th February 2025 (USAN 005, published 25 th March 2025)	USAN 005 Safety Recommendation 01 – IÉ-RU should consider whether instructional signage is warranted at locations where passengers may become trapped e.g. on gated stairwells, to include emergency numbers and/or details of alternative routes.	Open
Light blue – Heavy Rail (IÉ-RU / IÉ-IM); dark blue – Light rail (TII or TDLR).		

²⁹ This safety recommendation was closed at the time of publication of this report, in 2026.

³⁰ This safety recommendation was closed at the time of publication of this report, in 2026.

Appendices



RAIU

Railway Accident Investigation Unit

Appendix 1 – Railway Organisations

The following railway systems are within the RAIU's remit:

- IÉ, the national heavy rail network;
- The Luas light rail system in Dublin;
- The Bord Na Móna industrial railway;
- Seven operational heritage & minor railway systems.

For each of these railway systems there are entities identified as Railway Undertakings (RUs) and Infrastructure Managers (IMs). RUs are defined as organisations that provide the transport of goods and/or passengers by rail on the basis that the undertaking must ensure traction, including undertakings that provide traction only; which operate under an SMS approved by the CRR through the issue of a safety certificate. IMs are defined as organisations that establish and maintain railway infrastructure, including the management of infrastructure control and safety systems; which operate under a SMS approved by the CRR through the issue of a safety authorisation.

The national heavy rail system is owned by IÉ, within IÉ there are separate IM and RU Business Divisions. The heavy rail system is interoperable with the heavy rail system in Northern Ireland and cross border services are operated by IÉ in conjunction with Translink, the RU in Northern Ireland. These operations are carried out under IÉ's Safety Case and Translink is classified as a guest operator. A heritage RU, The Railway Preservation Society of Ireland, also operates steam trains on the heavy rail system several times a year. Rhomberg Sersa operate as an RU on IÉ's rail system; they operate and maintain OTMs on behalf of IÉ.

The Luas light rail system is owned by the Railway Procurement Agency. TDLR is the RU that operates passenger services, the passenger stops and the Central Control Room. TDLR is also the IM responsible for the maintenance of the infrastructure.

The Bord Na Móna industrial railway is owned and operated by Bord Na Móna, acting as the RU and IM for the transport of peat on its network. As this is an industrial railway and does not carry passengers it only falls within the RAIU's remit where the railway interfaces with the public, such as at level crossings and bridges.

The operational heritage railway & minor systems are:

- Diffin Lake Railway, Oakfield, Raphoe, Co Donegal;
- Finntown & Glenties Railway, Co Donegal;
- Listowel Lartigue Monorail, Co Kerry;
- Waterford & Suir Valley Railway;
- Irish Steam Preservation Society, Stradbally, Co Laois;
- Cavan & Leitrim Railway, Dromod, Co Leitrim;
- Connemara Railway, Co. Galway.

Appendix 2 – Notification (Immediate & Monthly Bulk)

Immediate notification

The schedule of immediate notifications is as follows:

ID	Schedule of immediate notification occurrences
1.01	Occurrences relating to rolling stock in motion resulting in one or more fatalities or serious injuries. <i>Exceptions: Serious injury/fatality due to assault or fatality due to natural causes.</i>
1.02	<i>Level crossing accidents</i> involving rolling stock.
1.03	Collisions between rolling stock causing damage or blocking a running line with harmful consequences.
1.04	Collisions of rolling stock with arrestor mechanisms/buffer stops with harmful consequences.
1.05	Derailments of rolling stock.
1.06	Fires, smoke or explosions on rolling stock requiring the evacuation of passengers from a train or a station.
1.07	The release or combustion of dangerous goods being carried on rolling stock.
1.08	Occurrences leading to the closure of a railway line for more than 6 hours. <i>Exceptions: Weather related occurrences.</i>
1.09	Any occurrences that lead to extensive damage.
1.10	Wrong side failures of safety critical equipment that led to an unsafe condition requiring withdrawal from service.
1.11	Unintentional divisions of rolling stock where passengers had access to a gangway.
1.12	SPADs resulting in rolling stock exceeding the signal overlap and involving conflicting movements. <i>Inclusion for IÉ: All High Risk Category A SPADs (Risk Ranking between 20 – 28) should be reported to the RAIU when the SPAD Risk Ranking has been established.</i>
1.13	Occurrences that under slightly different conditions may have led to a fatality, serious injury or extensive damage.
1.14	Occurrences related to passenger trap-and-drag t in doors when rolling stock is in motion.
1.15	Occurrences of axle bearing failures in service.

Monthly bulk notifications

The schedule for monthly bulk notifications is as follows:

ID	Description
2.01	Unexpected failures of assets that led to an unsafe condition.
2.02	Unintentional divisions of rolling stock released for service.
2.03	SPADs with no risk of conflicting movements. <i>Inclusion for IÉ: All SPADs, the monthly notification should include the Risk Ranking for all Category A SPADs.</i>
2.04	Fires, smoke or explosions on rolling stock not requiring the evacuation of passengers.
2.05	Collisions with large objects or large animals. <i>Exceptions: Where the intent was vandalism or criminal damage.</i>
2.06	Non railway vehicles damaging or fouling a railway line. <i>Exceptions: Where the intent was vandalism or criminal damage.</i>
2.07	Collisions between light rail vehicles and road vehicles.
2.08	Any other occurrence where an investigation remit has been issued internally.

Appendix 3 – Classification of occurrences & investigations by the RAIU & other bodies

Classification of occurrences

Occurrences fall into one of three types as defined in European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020 (S.I. 430 of 2020):

- Accident – An unwanted or unintended sudden event or a specific chain of such events which have harmful consequences including collisions, derailments, level crossing accidents, accidents to persons caused by rolling stock in motion, fires and others;
- Serious accident – Any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety;
- Incident – Any occurrence, other than an accident or serious accident, associated with the operation of trains and affecting the safety of operation.

For clarity, the meaning of the following terms should be noted:

- Harmful consequences – Injury to persons and/or damage to equipment;
- Serious injury – Any injury requiring hospitalisation for over 24 hours.

RAIU investigation of occurrences

The RAIU have investigators on call, twenty-four hours a day, seven days a week, who are notified of reportable occurrences by the RUs in accordance with European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020 (S.I. 430 of 2020). Based on the nature of the occurrence and the legal requirements, a decision is made on whether or not an investigation is required. In accordance with the Railway Safety Directive, the RAIU must investigate serious accidents; accidents and incidents are investigated depending on the potential for safety lessons to be learnt.

Where notified occurrences warrant further investigation to determine whether or not an investigation is warranted a preliminary examination is carried out and one of the following three determinations is made:

- No further investigation – no safety improvements are likely to be identified that could have prevented the occurrence or otherwise improve railway safety;
- Full investigation – there is clear evidence that the occurrence could have been prevented or the severity of the outcome could have been mitigated through the actions of those parties involved either directly or indirectly in the installation, operation and maintenance of the railway;
- Full investigation (Trend) – where the occurrence is part of a group of related occurrences that may or may not have warranted an investigation as individual occurrences, but the apparent trend warrants investigation.

Investigations are classified as one of three types under the Railway Safety Directive (2016/798):

- Article 20(1) – Investigations into serious accidents on the IÉ network, the objective of which is possible improvement of railway safety and the prevention of accidents;
- Article 20(2) – Investigation into accidents and incidents, which under slightly different conditions might have led to serious accidents;
- Article 22(6) – Investigations into railway accidents and incidents under national legislation, this includes all investigations relating to the Luas light rail system, the Bord Na Móna industrial railway and the heritage railways.

For each investigation, the level of damage to rolling stock, track, other installations or environment is identified and classified based on the European common safety indicators as follows:

- None;
- Less than €150,000 ($<€150,000$);
- Equal to or greater than €150,000 ($\geq€150,000$);
- Equal to or greater than €2,000,000 ($\geq€2,000,000$).

The RAIU, as soon as practicable but not later than 2 months after receipt of the notification, decide whether or not to start an investigation concerning the accident or incident European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020. The RAIU advise the relevant railway undertaking of the decision. In accordance with S.I. No. 430/2020 - European Union (Railway Safety) (Reporting and Investigation of Serious Accidents, Accidents and Incidents) Regulations 2020, the RAIU also notify the ERA within seven days of a decision to carry out a full investigation into an occurrence on the IÉ network.

Investigations by other bodies

The CRR, An Garda Síochána, the Health and Safety Authority and other organisations may carry out investigations in parallel with an RAIU investigation. The RAIU will share its own technical information with these Investigation Bodies; however, the investigations are carried out independently. Based on its investigation, the RAIU produce a report that is provided to all relevant parties, including the Railway Undertaking, the CRR and the DoT. Reports relating to the IÉ network are also provided to ERA. All investigation reports are made available in the public domain once they have been published.

In accordance with the Railway Safety Act 2005 (53(6)), a railway undertaking shall in an expeditious manner carry out an investigation and shall, as soon as practicable but in any event not later than 6 months after the date of the incident, prepare a report on its findings.

Appendix 4 – Abbreviations

AO	Additional Observation
ATP	Automatic Train Protection
AVLS	Automatic Vehicle Location System
BnM	Bord na Móna
CaF	Causal Factor
CAWS	Continuous Automatic Warning System
CCE	Chief Civil Engineer
CCTV	Closed Circuit Television
CME	Chief Mechanical Engineer
CoF	Contributing Factor
CRR	Commission of Railway Regulation
CTC	Central Traffic Control
DART	Dublin Area Rapid Transit
DIR	Daily Incident Reports
DLR	Diffin Light Rail
DoT	Department of Transport
DSS	Decision Support System
EMU	Electrical Multiple Unit
EU	European Union
FER	Further Evidence Requested
FFCCTV	Forward facing CCTV
hrs	hours
HSA	Health & Safety Authority
ICR	InterCity Railcar
IÉ	Iarnród Éireann
IÉ-IM	Iarnród Éireann Infrastructure Manager
IÉ-RU	Iarnród Éireann Railway Undertaking
IM	Infrastructure Manager
km/h	kilometres per hour
LCCO	Level Crossing Control Operator
LNMC	Luas Network Management Central
LRA	Low Rail Adhesion
LSS	Line Signalling System
m	metre
MoU	Memorandum of Understanding

MP	Mile Post
mph	miles per hour
NIB	National Investigation Body
NIR	Northern Ireland Railways
NSA	National Safety Authority
OCS	Overhead Contact System
OEM	Original Equipment Manufacturer
OHLE	Overhead Line Equipment
OI	Operating Instruction
OTDR	On train/tram data recorder
OTM	On track machinery
PER	Preliminary Investigation Report
PICOP	Person in Charge of Possession
PIC-RRV	Person in Charge Road Rail Vehicle
PPI	Points Position Indicator
PPRN	Possession Plan Reference Number
PTI	Platform Train Interface
RAIU	Railway Accident Investigation Unit
RMME	Rail Mounted Maintenance Equipment
RRV	Road Rail Vehicle
RRVO	Road Rail Vehicle Operator
RTC	Road Traffic Collision
RTS	Ready to Start
RU	Railway Undertaking
SAN	Safety Advice Notice
SAS	Start Against Signal
SCADA	Supervisory Control And Data Acquisition
SET	Signalling, Electrical and Telecommunications
SI	Statutory Instrument
SLW	Single Line Working
SMS	Safety Management System
SF	Systemic Factor
SPAD	Signal Passed at Danger
SPAS	Signal Passed at Stop
SSC	Signal Sighting Committee
SSOW	Safe System of Work

T-COD	Track Circuit Operating Device
TDLR	Transdev Dublin Light Rail
TED	Traffic Event Database
TGA	Traction Gel Applicators
TII	Transport Infrastructure Ireland
TPS	Train Protection System
TRV	Track Recording Vehicle
TSC	Track Safety Co-ordinator
TSI	Tramway Safety Instruction
USAN	Urgent Advice Safety Notice
WI	Work Instruction
WSP	Wheel Slip Protection

Appendix 5 – Definitions

Accident	An unwanted or unintended sudden event or a specific chain of such events which have harmful consequences. For heavy rail, the EU Agency for Railways divides accidents into the following categories: collisions, derailments, level-crossing accidents, accidents to persons caused by rolling stock in motion, fires and others.
Causal Factor	Any action, omission, event or condition, or a combination thereof that if corrected, eliminated, or avoided would have prevented the occurrence, in all likelihood.
Cardan Shaft	A shaft with a universal joint at each end, which transmits torque and rotation between two misaligned components of a transmission system.
Contributing Factor	Any action, omission, event or condition that affects an occurrence by increasing its likelihood, accelerating the effect in time or increasing the severity of the consequences, but the elimination of which would not have prevented the occurrence.
Control, Command & Signalling	Control-command and signalling on-board subsystems of vehicles which are (or are intended to be) operated on and control-command and signalling trackside subsystems of the rail network.
Derailing points	A set of points used to derail a rail vehicle.
Incident	Any occurrence, other than an accident or serious accident, associated with the operation of trains and affecting the safety of operation. For heavy rail, the EU Agency for Railways divides incidents into the following categories: infrastructure; energy; control-command & signalling; rolling stock; traffic operations & management and others.
Investigation	A process conducted for the purpose of accident and incident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations
Road Rail Vehicle	A dual mode vehicle than can operate both on rail tracks and road mostly used for rail infrastructure maintenance.
Serious Accident	Any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety. For heavy rail, the EU Agency for Railways divides serious accidents into the following categories: collisions, derailments, level-crossing accidents, accidents to persons caused by rolling stock in motion, fires and others.
Signal Passed at Danger	Signal passed at danger where not in accordance with the governing safety rules, this includes signals passed at stop.
Systemic Factor	Any causal or contributing factor of an organisational, managerial, societal or regulatory nature that is likely to affect similar and related occurrences in the future, including, in particular the regulatory framework conditions, the design and application of the safety management system, skills of the staff, procedures and maintenance.
T3 Possession	Absolute possession no operational train movements. Engineering trains On Track Machinery/ RRV movements are permitted. Planned Engineering

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