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Guidance on the Notification of Railway Occurrences for Railway Organisations

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1 Introduction

The Commission for Railway Regulation (CRR) is an organisation that provides safety oversight to Railway Organisations operating in Ireland. It is an organisation that has been formed by Ireland under primary national legislation (The Railway Safety Act, Statutory Instrument 31 of 2005).

Statutory Instrument No. 258 of 2014 requires Railway Organisations in Ireland to notify the CRR promptly of accidents and incidents that occur on the Railway System of Ireland. Information collected is used to understand operational risk, review the effectiveness of risk controls, and to notify the Minister of Transport, Tourism and Sport of *serious accidents, accidents and incidents*.

This document defines the occurrences that are to be notified by specific types of Railway Organisations to the CRR. In Section 2, guidance is provided to those organisations on the preparation and submission of information for Notifiable Occurrences. Section 3 contains a glossary of terms that are used within the document. The appendix to this document defines specific Notifiable Occurrences for Railway Systems.

1.1 Railway Organisation Definition

A Railway Organisation is defined in Statutory Instrument No. 444 of 2013, which is an amendment to the Railway Safety Act of 2005. The definition is as follows:

'Railway Organisation' means:

- (a) a metro, tramway or other light rail system
- (b) a heritage, museum or tourist railway that operates on its own network, including workshops, vehicles and staff
- (c) a heritage railway that runs on the railway system in the State
- (d) a railway undertaking or an infrastructure manager to which the European Union (Railway Safety) Regulations 2013 (S.I. No. 444 of 2013) apply except in the case of sections 39, 45, 46, 47, 48 and 50 of Railway Safety Act, or
- (e) any other person who operates a railway

This document defines notification requirements for the following types of railway organisations:

- light rail system
- railway undertaking
- infrastructure manager

2 Notifiable Occurrences – Reporting Guidelines

2.1 Notifiable Occurrences for Immediate Reporting

All occurrences detailed in the Appendix should be reported immediately by telephone call to the CRR Duty Inspector. For the purposes of this guidance, the term immediately is taken to mean less than one hour. Railway Organisations should report an occurrence if there is any doubt as to whether an occurrence qualifies for immediate notification. If reports are provided later than one hour after the occurrence (delayed reports), the Railway Organisation shall provide to the CRR the details of the circumstances and conditions that led to the delayed reporting..

The form and content of telephone reports should conform to specifications outlined in Section 2.2. Telephone contact points shall be agreed in correspondence between the CRR and the relevant Railway Organisation.

In accordance with Statutory Instrument No. 258 of 2014 railway organisations shall immediately report the following to the CRR:

- Any serious accident, where:
“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;
- Any accident, where:
“accident” means an unwanted or unintended sudden event or a specific chain of such events which have *harmful consequences*; accidents are divided into the following categories: collisions, derailments, level-crossing accidents, accidents to persons caused by *rolling stock* in motion, fires and others;
- Any incident, where:
“incident” means any occurrence, other than an accident or serious accident, associated with the operation of trains and affecting the safety of operation;

As indicated in Section 3 of this document, an occurrence shall be defined as an accident, serious accident or incident for the purposes of notification to the CRR.

2.2 Reporting Occurrences – Oral Reports

The Railway Organisation should provide as much of the following information as is available at the time of occurrence by means of a telephone call to the CRR Duty Inspector. Information may be clarified or supplemented via follow up telephone calls and/or written correspondence. This detail shall be confirmed by the written report described in Section 2.3.

Item No	Requirement
1.	Name, Role and Organisation of person reporting the occurrence
2.	The date and time of the occurrence
3.	Brief details of the occurrence and the sequence of events leading up to it
4.	The geographical location of the occurrence with railway asset reference (e.g.: Route, Mile Post, Junction, Station/Stop, Asset Number)
5.	Nearest point of access to the site
6.	The Train ID/Tram No, point of departure and intended destination of any train/tram involved
7.	train/tram type involved
8.	In the case of an accident, the number of crew, passengers and others seriously or fatally injured (as known at the time by the Railway Organisation)

9.	An estimate of the number of passengers on board the train/tram involved at the time of the occurrence (e.g. low occupancy, medium occupancy, high occupancy)
10.	A description of the extent of damage caused to any railway equipment, railway property or the environment
11.	The weather conditions at the time of the occurrence
12.	Presence of train/tram CCTV video
13.	Presence of Train Event Recorder data
14.	Presence of witnesses to the occurrence
15.	The type and an estimate of the quantity of any dangerous goods on board the train/tram involved at the time of the occurrence
16.	The number of crew on board the train/tram involved at the time of the occurrence
17.	The name(s) of the railway organisation(s) who manage assets involved in the occurrence
18.	Holder of the safety certificate/authorisation for the railway activity
19.	Details of any emergency services, railway organisation staff, and other external organisations attending the site of the occurrence
20.	Contact details of the person in command or control of the occurrence site (e.g. incident officer, incident manager).
21.	Details of testing related to the presence of drugs and alcohol (as per Railway Safety Act Requirements)
22.	Occurrence ID Classification (see Appendix)

Table 1

2.3 Reporting Occurrences – Written Reports

Where reporting is done verbally by telephone a written report must be provided to the CRR as soon as possible but in any case not later than 48 hours after the event. The written report from the railway organisation concerned may confirm/amend/clarify or expand the information verbally submitted as required the Table in Section 2.2. Additionally, in the written report the Railway Organisations should record the time and date at which they first reported the incident to the CRR. .

Care should be taken to clarify/correct any items which have been reported in error or omitted in the immediate aftermath of the event. All persons within the relevant railway organisation or interfacing railway organisation who report the occurrence should be respectively stated on the written report.

2.4 Reporting of Signals Passed at Danger Occurrences on the National Rail Network

Railway Infrastructure Managers shall report all occurrences of Signals Passed at Danger (SPAD) without authority in writing within 3 days of the occurrence. If reports are provided later than 3 days after the occurrence (delayed reports), the Railway Infrastructure Manager shall provide a justification to the CRR detailing the circumstances and conditions that caused delayed reporting. If the SPAD occurrence conforms to the specification of item 1.13 in the Appendix, the railway organisation should use that specification and associated reporting requirements in Section 2.1, 2.2 and 2.3 to report the occurrence: the guidance of this section will no longer apply. A specific contact point and format will be agreed between the CRR and each relevant organisation via correspondence. The report shall contain the following details at a minimum:

- i. Time
- ii. Date
- iii. Line
- iv. Location (e.g. nearest mile post, land mark)
- v. Signal Number
- vi. Vehicle Number

- vii. Train Service Type (e.g. Commuter, Intercity, DART)
- viii. Train Destination
- ix. Distance to Potential Conflict point
- x. Railway Organisation SPAD Risk Classification
- xi. The overrun distance between the front of the train and the signal passed at danger
- xii. The number of times the signal has been passed at danger in the previous 10 years.
- xiii. Type of Train Protection System (e.g. ATP, CAWS, ETS/Manual Token)

2.5 Reporting of Signals Passed at Danger Occurrences on the Dublin Light Rail System (Luas)

Railway Organisations with responsibility for managing the Dublin Light Rail System Infrastructure shall report the occurrences of Signals Passed at Danger (SPAD) without authority, as occurrences categorised below, in writing within 3 days of the occurrence. If reports are provided later than 3 days after the occurrence (delayed reports), the Railway Organisation shall provide to the CRR the details of the circumstances and conditions that led to the delayed reporting.. A specific contact point and format will be agreed between the CRR and each relevant organisation via correspondence.

The following SPAD Categories are to be reported:

A SPAD/SPAS	Tram is stopped passed the signal head, but before yellow box or points or driver engaged the area under line of sight. No conflict with pedestrians or road traffic.
B SPAD/SPAS	Tram passed the signal on a non-conflicting route.
C1	Tram passed the signal and crossed points on a conflicting route, but no other tram in the area.
C2	Tram passed the signal and crossed points on a conflicting route, with another tram in the area possibility of collision.
D1	Tram passed the signal and entered a traffic junction or pedestrian crossing with no contact and with all traffic at stop.
D2	Tram passed the signal and entered a traffic junction or pedestrian crossing leading to a contact.
E	SPAD/SPAS which occurs when a Stop Aspect is displayed as a result of failed equipment or Signal Reversion, which the driver may or may not have time to react to correctly. If it is suspected that a technical fault has caused the incident, this must be investigated by the appropriate technical experts, in line with current procedures.

The following detail should be captured in reports:

- a. Time
- b. Date
- c. Line
- d. Location (e.g. nearest stop, land mark, designation)
- e. Signal Number
- f. Tram Number
- g. Tram Destination
- h. SPAD Category
- i. Tram Signal Functions
- j. The number of times the signal has been passed at danger in the previous 10 years

- k. General Description of Occurrence
- l. Actions that have been taken since SPAD Occurrence

2.6 Reporting of Possession Management Occurrences

Railway Organisations with responsibility for managing Engineering Possessions on Railway Infrastructure shall advise the CRR of an occurrence within 3 days in writing. If reports are provided later than 3 days after the occurrence (delayed reports), the Railway Organisation shall provide to the CRR the details of the circumstances and conditions that led to the delayed reporting.. A specific contact point and format will be agreed between the CRR and each relevant organisation via correspondence.

The following criteria shall be considered guidance when determining what shall be reported to the CRR:

- i. Runaway vehicle within a possession
- ii. Possession granted with a railway vehicle or tram in section
- iii. Points run through by a railway vehicle in a possession
- iv. Possession protection breached
- v. Possession without isolation in OHLE/OCS area
- vi. Working before possession granted
- vii. Working after possession handed back
- viii. Contact between a railway worker and any vehicle in a possession that causes serious injury
- ix. Collision or derailment of railway vehicle or road rail vehicle (as defined the by the infrastructure manager) in a possession

The report shall contain the following details at a minimum:

- a. Time
- b. Date
- c. Location
- d. Description of Occurrence

2.7 Notification of a Death on the Railway

SI no. 258 of 2014, Section 7(3), states –

“Where as a result of an accident, a person sustains a personal injury and as a result of that accident the person dies within 30 days of the accident, the railway undertaking, the infrastructure manager or the railway organisation concerned shall, as soon as possible after the death comes to its knowledge, inform the Investigation Unit and the safety authority in writing of the death.”

This requirement is repeated within this guideline to advise Railway Organisations of their legal obligations.

3 Glossary of Terms

The following terms are used in the appendix to assist the definition for notification of occurrences.

Extensive damage: Damage that can immediately be assessed to cost at least €2 Million in total (Railway Safety Directive).

Serious injury: Any injury requiring hospitalisation for over 24 hours as a result of an accident.

Fatality (death of person): Any person killed immediately or dying within 30 days as a result of an accident

Harmful consequences: Injury to persons and/or damage to equipment.

Injury: Any injury other than superficial wounds, such as minor cuts and bruises.

Level crossing: Any level intersection between the railway and a road or passage, as recognised by the Infrastructure manager and open to public or private users. Passages between platforms within stations are excluded, as well as passages over tracks for the sole use of employees.

In this regard, a road' means any public or private road, street or highway, including adjacent footpaths and bicycle lanes, or other route provided for the passage of people, animals, vehicles or machinery. A 'passage' means any route, other than a road, provided for the passage of people, animals, vehicles or machinery.

Occurrence: An accident, serious accident or incident as defined in Statutory Instrument No. 258 of 2014 and in Section 2.1 of this document.

Rolling Stock: Any train or any other vehicle with flanged wheels which is designed to operate on a mainline or conventional railway. For the purpose of this guidance, Rolling Stock does not include Road- Rail Vehicles used for infrastructure maintenance, which are classed as road rail vehicles vehicles.

Train: 'Train' means one or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point, including a light engine, i.e. a locomotive travelling on its own.

Tram: 'tram' means a railway vehicle with flanged wheels primarily designed for passenger transport on a Tramway or Light Railway line.

SPAD: 'Signal Passed at Danger' means any occasion when any part of a train proceeds beyond its authorised movement where not in accordance with the governing safety rules

Luas SPAD/SPAS: A tram has passed a segregated or street running signal at danger/stop without authority.

Train Protection System: means a system that helps to enforce obedience to signals and speed restrictions.

Vehicle: Vehicle means a *railway vehicle* suitable for circulation on wheels on railway lines, with or without traction; a vehicle is composed of one or more structural and functional subsystems

Appendix

Notifiable Occurrences for Conventional Railway Systems

Occurrence ID	Description
1.01	Occurrences relating to railway vehicle in motion resulting in one or more fatalities or <i>serious injuries</i> .
1.02	Level crossing occurrences involving railway vehicles.
1.03	A malfunction of a railway electrification system which creates a hazard for railway operations
1.04	Collisions of railway vehicles with arrestor mechanisms/buffer stops resulting in <i>harmful consequences</i> .
1.05	A railway vehicle or any part of a railway vehicle leaving the rails (includes depots, yards & sidings)
1.06	An uncontrolled railway vehicle movement that results in <i>harmful consequences</i>
1.07	The unintentional release or combustion of dangerous goods being carried on railway vehicles
1.08	Occurrences leads to the cessation of railway services for greater than 6 hours. (Exceptions: Weather related occurrences.)
1.09	Any occurrence that leads to <i>extensive damage, fatalities or serious injuries</i> .
1.10	Wrong side failure of safety critical equipment that led to an unsafe condition requiring withdrawal from service.
1.11	The unplanned divide of connected ('coupled') railway vehicles in service on the running line
1.12	Fires, smoke or explosions on a railway vehicle(s) requiring the evacuation of passengers from a train or a station.
1.13	Signals Passed At Danger (SPADs) without movement authority resulting in a railway vehicle exceeding the signal overlap and involving conflicting movements.
1.14	A collapse or failure of any structure or part thereof that requires the cessation of train service and/or imposition of an emergency speed restriction.
1.15	A Railway Vehicle(s) colliding with another railway vehicle, animal(s) or object that causes injury to persons and/or extensive damage
1.16	Any Occurrence other than a fire which requires detraining or evacuation in service, not at a station
1.17	An unplanned opening of an external carriage door of a railway vehicle in motion where a passenger had access to the door
1.18	Wheelset defects that require detraining of passengers
1.19	Occurrences that under slightly different conditions may have led to a <i>serious injury, fatality or extensive damage</i>

Notifiable Occurrences for Tram (Light Railway) Systems

Occurrence ID	Description
2.01	Occurrences relating to tram in motion resulting in one or more fatalities or <i>serious injury</i> .
2.02	Tram colliding with another tram, road vehicle, animals(s) (250 kg or more) or object that causes <i>serious injury</i> to persons and/or extensive damage
2.03	A tram or any part of a tram leaving the rails (includes yards & sidings)
2.04	Any occurrence which requires an emergency evacuation in service and/or causes extensive damage
2.05	A runaway light railway vehicle on running lines or sidings, not in depot
2.06	An unplanned opening of an external tram door of a tram in motion where a passenger had access to the door
2.07	Wrong side failure of safety critical equipment/infrastructure (conflict or unsafe conditions have manifested)that requires withdrawal of tram(s) from service.
2.08	<i>Occurrences</i> leading to the closure of a light railway line for more than 6 hours.
2.09	A collapse or failure of any structure or part thereof that requires the cessation of tram services and/or imposition of an emergency speed restriction. This may include cuttings, bridges, embankments and retaining walls
2.10	A malfunction of a railway electrification system which creates a hazard for light railway operations.
2.11	Collisions of a tram(s) with arrestor mechanisms/buffer stops with <i>harmful consequences</i> or <i>extensive damage</i> .
2.12	Occurrences that under slightly different conditions may have led to a <i>fatality</i> , <i>serious injury</i> or <i>extensive damage</i>