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TRANSPORT SAFETY INVESTIGATIONS ACT 2018

TRANSPORT SAFETY INVESTIGATIONS (RAILWAY OCCURRENCES) REGULATIONS 2023

ARRANGEMENT OF REGULATIONS

PART 1

PRELIMINARY

Regulation

1. Citation and commencement
2. General definitions
3. When is rail vehicle in operation
4. Meaning of “accident” associated with operation of rail vehicle
5. Meaning of “rail casualty” and associated terms
6. Meaning of “rail incident” and associated terms
7. What is not “on-board recording” or “OBR”

PART 2

REPORTING OF RAILWAY OCCURRENCES

8. Meaning of “immediately reportable matter”
9. Immediately reportable matter — when, how and what to report
10. Meaning of “ordinary reportable matter”
11. Ordinary reportable matter — what to report

PART 3

REPORTS AND SAFETY RECOMMENDATIONS

12. Draft Final Report and Final Report
 13. Safety recommendations
- The Schedule
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In exercise of the powers conferred by section 49 of the Transport Safety Investigations Act 2018, the Minister for Transport makes the following Regulations:

PART 1
PRELIMINARY

Citation and commencement

1. These Regulations are the Transport Safety Investigations (Railway Occurrences) Regulations 2023 and come into operation on 1 January 2024.

General definitions

2. In these Regulations —

“collision” means an impact, other than an impact associated with normal railway operating circumstances, between —

- (a) rail vehicles; or
- (b) a rail vehicle and an individual or a vehicle (such as, at a level crossing) or any rail infrastructure;

“derailment” means any instance where one or more wheels of a rail vehicle come off the normal running surface of the track;

“fatal railway-related injury” has the meaning given by regulation 5(2);

“interested party” means a person who is determined by the Director to have significant interests, rights or legitimate expectations with respect to the outcome of an investigation into a rail casualty or rail incident;

“level crossing” includes each of the following areas:

- (a) an area where a road and a railway meet at substantially the same level, whether or not there is a level crossing sign on the road at all or any of the entrances to the area;

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- (b) a pedestrian crossing being an area where a footpath or shared path crosses a railway at substantially the same level, whether or not there is a level crossing sign on the path at all or any of the entrances to the area;

“light maintenance service” means any of the following services connected with a railway:

- (a) the refuelling, or the cleaning of the interior or exterior, of rail vehicles placed in service for a rail service;
- (b) the carrying out to rail vehicles mentioned in paragraph (a) of maintenance work of a kind which is normally carried out at regular intervals to prepare the rail vehicles for a rail service without overhaul;

“mainline track” means any track (including any siding) that is part of a railway but not any of the following:

- (a) a non-mainline track;
- (b) an overhaul track;

“maintain” or “maintenance” includes repair, alteration, reconditioning and examination, and the detection and rectification of any faults;

“near collision” means a situation in which a rail vehicle comes so close to being involved in a collision that a threat to the safety of any individual, property or the environment exists;

“non-mainline track” means any track that is not an overhaul track but is part of —

- (a) a railway that is used solely for trials or testing of rail vehicles before first placing any of them in service for the provision of a rail service;
- (b) a railway that is used for testing of altered rail vehicles already in use, before re-placing any of them in service for the provision of a rail service;

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- (c) a railway that is used as a marshalling yard or for storing of rail vehicles, or for a purpose preparatory or incidental to, or consequential on, the operations of a marshalling yard or the storing of rail vehicles at a specified yard, such as (but not limited to) receiving, switching or stabling of rail vehicles;
 - (d) a railway that is used for the provision of light maintenance services, or for a purpose preparatory or incidental to, or consequential on, the provision of light maintenance services at a specified traction maintenance depot; or
 - (e) a railway that is used for any combination of purposes in paragraphs (a), (b), (c) and (d),

and includes a track that may be connected to a mainline track but is used solely for any of the purposes in paragraph (a), (b), (c), (d) or (e), lies within the curtilage of a specific test facility, yard or traction maintenance depot (as the case may be) and has rail infrastructure which is functionally separate from that for the mainline track;

“overhaul track” means a track that is used solely for the provision of overhaul services to rail vehicles, or for a purpose preparatory or incidental to, or consequential on, the provision of overhaul services to rail vehicles at specified locomotive works;

“rail casualty” has the meaning given by regulation 5(1);

“rail incident” has the meaning given by regulation 6;

“rail infrastructure” means the facilities that are necessary to operate a railway safely and includes all of the following, but not rail vehicles:

- (a) tracks, associated track structures and works (such as cuttings, tunnels, viaducts, bridges, train stations, platforms, tram stops, excavations, land fill, track support earthworks and drainage work);

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- (b) service roads, signalling systems, rolling stock control systems, communications systems, notices and signs, electrical power supply systems;
 - (c) test facilities and equipment;
 - (d) depots;
 - (e) associated buildings, workshops, yards and plant;

“rail service” means any of the following services:

- (a) a service for the carriage of passengers by railway;
- (b) a service for the carriage of goods by railway;
- (c) a light maintenance service;

“rail vehicle” includes a locomotive, carriage, rail car, rail motor, light rail vehicle, train, tram, light inspection vehicle, road-rail vehicle, trolley, wagon or monorail vehicle, but does not include a vehicle or a part of a vehicle designed to operate both on and off a track when the vehicle is not operating on a track;

“rail vehicle in operation” has the meaning given by regulation 3;

“railway” includes a railway network, that is to say —

- (a) any railway line, or combination of 2 or more railway lines; and
- (b) any installation associated with any track or tracks comprised in the railway line or lines in paragraph (a),

together constituting a system of tracks and other installations which is used solely for and in connection with the support, guidance and operation of rail vehicles;

“safety recommendation” means a proposal that is —

- (a) made under regulation 13 by the Director in relation to an investigation under the Act;
- (b) made for the purpose of preventing railway occurrences; and

(c) not made for the purpose of creating a presumption of blame or liability for any railway occurrence,

being a proposal based on information derived from the investigation or from other information (such as safety studies);

“section 12(1) report” means a report about a railway occurrence that is an immediately reportable matter required by section 12(1) of the Act to be reported, consisting of an initial notice followed by a written notice in regulation 9;

“section 12(2) report” means a report about a railway occurrence that is an ordinary reportable matter required by section 12(2) of the Act to be reported;

“serious damage” —

(a) for a rail vehicle, means damage that —

(i) significantly affects the structural integrity, safe performance or safe operational characteristics of the rail vehicle; or

(ii) involves the whole or partial destruction of the rail vehicle; or

(b) for a rail infrastructure, means damage that significantly affects the structural integrity, safe performance or safe operational characteristics of the rail infrastructure;

“serious railway-related injury” has the meaning given by regulation 5(3);

“signal passed at danger” means an occasion when a rail vehicle on a railway passes a stop signal, or a signal with no indication, without authority;

“track” means any combination of rails, rail connections, rail joints, rail fastenings, sleepers, ballast, points and crossing, or any substitute devices if used.

When is rail vehicle in operation

3.—(1) Subject to paragraph (2), in these Regulations, a rail vehicle is in operation when it is on a track and at the following times:

- (a) for a rail vehicle with a driver, between the time the rail vehicle is ready to move on the track, until such time as it is parked, and its propulsion system is shut down;
- (b) for a driverless rail vehicle, between the time the rail vehicle is ready to move on the track, until such time as it is parked and either it is placed in “sleep” mode or shut down.

(2) A rail vehicle on a track is not to be regarded as in operation at any time as follows:

- (a) before the commissioning of the railway (or part of the railway) of which the track is part —
 - (i) for the provision of any rail service on it; or
 - (ii) for conducting trials or testing of rail vehicles;
- (b) when the track is closed for the provision to the public of all rail services on it other than merely because the track is in engineering possession.

(3) For the purposes of paragraph (2), “engineering possession”, in relation to a railway, means a section of a track of the railway is temporarily closed to normal traffic for keeping the track either free from obstruction or serviceable through maintenance.

Meaning of “accident” associated with operation of rail vehicle

4. An accident associated with the operation of a rail vehicle is an accident for the purposes of the definition of “accident” in section 2 of the Act, if it involves circumstances that make it a rail casualty.

Meaning of “rail casualty” and associated terms

5.—(1) In these Regulations, “rail casualty” means a railway occurrence associated with the operation of a rail vehicle on a railway, where any of the following happens directly as a result of that occurrence:

- (a) an individual suffers a fatal railway-related injury;

(b) an individual suffers a serious railway-related injury.

(2) For the purposes of paragraph (1), an individual suffers a fatal railway-related injury in relation to the operation of a rail vehicle on a railway if —

(a) he or she suffers an injury as a result of —

- (i) getting on or off or being on board the rail vehicle;
- (ii) following evacuation procedures involving getting off the rail vehicle (commonly called detrainment);
- (iii) coming into direct contact with any part of the rail vehicle, or its contents, during the operation of the rail vehicle, including parts of the rail vehicle which become detached from the rail vehicle;
- (iv) coming into direct contact with any part of the rail infrastructure, including any part of the rail infrastructure which becomes detached, during the operation of the rail vehicle on or at that part of the rail infrastructure; or
- (v) other activities associated with the operation of the rail vehicle and where a rail vehicle is involved;

(b) he or she dies as a result of the injury after sustaining the injury; and

(c) none of the following applies:

- (i) the injury results from natural causes;
- (ii) the injury is intentionally self-inflicted;
- (iii) the injury is intentionally caused by another person;
- (iv) the injury is to an individual who is a stowaway or is on a part of the rail vehicle not normally accessible to passengers and railway workers during the operation of the rail vehicle.

(3) For the purposes of paragraph (1), an individual suffers a serious railway-related injury in relation to the operation of a rail vehicle on a railway if —

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- (a) he or she suffers an injury as a result of —
- (i) getting on or off or being on board the rail vehicle;
 - (ii) following evacuation procedures involving getting off the rail vehicle (commonly called detrainment);
 - (iii) coming into direct contact with any part of the rail vehicle, or its contents, during the operation of the rail vehicle, including parts of the rail vehicle which become detached from the rail vehicle;
 - (iv) coming into direct contact with any part of the rail infrastructure, including any part of the rail infrastructure which becomes detached, during the operation of the rail vehicle on or at that part of the rail infrastructure; or
 - (v) other activities associated with the operation of the rail vehicle and where a rail vehicle is involved;
- (b) any of the following applies:
- (i) the injury requires hospitalisation for a period that —
 - (A) starts no later than the 7th day after the date the individual sustained the injury; and
 - (B) exceeds 48 hours after starting;
 - (ii) the injury involves a fracture of any bone, except a simple fracture of any finger, toe or the nose of the individual; and
- (c) none of the following applies:
- (i) the injury results from natural causes;
 - (ii) the injury is intentionally self-inflicted;
 - (iii) the injury is intentionally caused by another person;
 - (iv) the injury is to an individual who is a stowaway or is on a part of the rail vehicle not normally accessible to passengers and railway workers during the operation of the rail vehicle.

(4) For the purposes of paragraphs (2)(c) and (3)(c), “railway worker” means an individual who is employed or engaged to perform any of the following classes of work with respect to a railway:

- (a) driving or despatching rail vehicles or any other activity which is capable of controlling or affecting the movement of rail vehicles;
- (b) signalling (and signalling operations), receiving or relaying communications or any other activity which is capable of controlling or affecting the movement of rail vehicles;
- (c) coupling or uncoupling rail vehicles;
- (d) maintaining, repairing, modifying, monitoring, inspecting or testing —
 - (i) rail vehicles, including checking that any rail vehicle is working properly before being used; or
 - (ii) rail infrastructure;
- (e) installation of components in relation to rail vehicles;
- (f) working on or about rail infrastructure relating to the repair, maintenance, monitoring, upgrading, inspection or testing of the rail infrastructure or associated works or equipment, including checking that the rail infrastructure is working properly before being used;
- (g) installation or maintenance of —
 - (i) a telecommunications system relating to rail infrastructure or used in connection with rail infrastructure; or
 - (ii) the means of supplying electricity directly to rail infrastructure or to any rail vehicle using rail infrastructure or to a telecommunications system;
- (h) work involving certification as to the safety of rail infrastructure or rail vehicles or any part or component of rail infrastructure or rail vehicles;

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- (i) work involving the decommissioning of rail infrastructure or any rail vehicle or any part or component of rail infrastructure or a rail vehicle;
 - (j) work involving the development, management or monitoring of safe working systems for the railway;
 - (k) work involving the management or monitoring of passenger safety on, in or at the railway;
 - (l) work on board a rail vehicle during its operation on the railway that is in connection with the driving or safety of passengers on board the rail vehicle.

Meaning of “rail incident” and associated terms

6. In these Regulations, “rail incident” means a railway occurrence associated with the operation of a rail vehicle on a railway that resulted in, or is a result of, one or more of the following occurrences, and is not a rail casualty:

- (a) the rail vehicle —
 - (i) is involved in a collision or derailment;
 - (ii) sustained serious damage;
 - (iii) caused or sustained a fire or explosion; or
 - (iv) caused serious damage to the rail infrastructure of that railway, which poses a threat to the safe passage of the rail vehicle or other rail vehicles, or to the safety of any individual, property or the environment;
- (b) a near collision;
- (c) there is an unplanned or uncontrolled movement of any rail vehicle;
- (d) a signal passed at danger;
- (e) a rail vehicle exceeded the limits of authorised movement in a proceed authority or moves without proceed authority on, or onto, the railway;

- (f) a door of the rail vehicle or a platform screen door opened or remained open (without having been commanded to open) while the rail vehicle was in motion;
- (g) an occurrence that had, or could have had, an immediate or direct threat to the safe operation of the railway.

What is not “on-board recording” or “OBR”

7.—(1) For the purposes of the definition of “on-board recording” or “OBR” in section 43(7) of the Act —

- (a) a rail vehicle data recording; and
- (b) a rail vehicle closed circuit video recording,

are each declared not to be an “on-board recording” or “OBR”.

(2) A recording is a rail vehicle data recording for the purposes of paragraph (1) if the recording consists of (or consists mainly of) sounds or images or data, or any combination of sounds, images or data, produced by a device installed in a rail vehicle, signal box, train control complex or other rail infrastructure for the purpose of recording communications and other activities carried out in relation to the operation of a rail vehicle on a railway.

(3) A recording is a rail vehicle closed circuit video recording for the purposes of paragraph (1) if the recording consists of (or consists mainly of) images or sounds and images, produced by a device installed in a rail vehicle, signal box, train control complex or other rail infrastructure for the purpose of recording activities carried out in relation to the operation of a rail vehicle on a railway.

PART 2

REPORTING OF RAILWAY OCCURRENCES

Meaning of “immediately reportable matter”

8.—(1) For the purposes of section 12(1) of the Act, for a railway occurrence, an immediately reportable matter is —

- (a) a rail casualty; or

(b) a serious rail incident,
that occurs in the territory of Singapore.

(2) In paragraph (1), a “serious rail incident” means any rail incident as follows:

- (a) the rail vehicle —
 - (i) is involved in a collision or derailment;
 - (ii) sustained serious damage;
 - (iii) caused or sustained a fire or explosion; or
 - (iv) caused serious damage to the rail infrastructure of that railway, which poses a threat to the safe passage of the rail vehicle or other rail vehicles, or to the safety of any individual, property or the environment;
- (b) there is an unplanned or uncontrolled movement of any rail vehicle;
- (c) a signal passed at danger on a mainline track of a railway.

Immediately reportable matter — when, how and what to report

9.—(1) For the purposes of section 12(1) of the Act, a section 12(1) report about a railway occurrence that is an immediately reportable matter consists of —

- (a) an initial notice, which is given orally in English, about the immediately reportable matter, by telephone call to the Duty Officer using the telephone number +65 96209835; and
- (b) subsequent to the initial notice, a written notice in English about the immediately reportable matter sent by email to the email address `notification_of_rail_occurrences@mot.gov.sg`.

(2) For the purposes of section 12(1) of the Act, a responsible person has to report a railway occurrence that is an immediately reportable matter to a nominated official within the following times:

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- (a) for an initial notice in paragraph (1)(a) about the immediately reportable matter — as soon as reasonably practicable and not more than 2 hours after the responsible person becomes aware of the happening of the immediately reportable matter;
- (b) for the written notice in paragraph (1)(b) about the immediately reportable matter — not more than 24 hours after the responsible person becomes aware of the happening of that immediately reportable matter.
- (3) For the purposes of section 12(1) of the Act, an initial notice and a written notice about an immediately reportable matter in paragraph (1)(a) and (b), respectively, must each contain the particulars specified in the Schedule.
- (4) Where any particulars required by paragraph (3) about an immediately reportable matter was not available or known to the responsible person required to report the immediately reportable matter concerned at the time mentioned in paragraph (2), then for the purposes of section 12(1) of the Act, the responsible person must, as soon as it is practicable to do so, send by email in the manner in paragraph (1)(b), the remainder of those particulars required which becomes subsequently available or known to the responsible person.

Meaning of “ordinary reportable matter”

10. For the purposes of section 12(2) of the Act, an “ordinary reportable matter” means each of the following rail incidents that happens in the territory of Singapore and that is neither a rail casualty nor a serious rail incident:

- (a) the rail vehicle —
- (i) caused or sustained just smoke; or
 - (ii) caused damage to the rail infrastructure of that railway, which poses a threat to the safe passage of the rail vehicle or other rail vehicles, or to the safety of any individual, property or the environment;
- (b) a near collision;

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- (c) a signal passed at danger on a non-mainline track of a railway;
 - (d) a rail vehicle exceeded the limits of authorised movement in a proceed authority or moves without proceed authority on, or onto, the railway;
 - (e) a door of the rail vehicle or a platform screen door opened or remained open (without having been commanded to open) while the rail vehicle was in motion;
 - (f) an occurrence that had, or could have had, an immediate or direct threat to the safe operation of the railway.

Ordinary reportable matter — what to report

11. For the purposes of section 12(2) of the Act, a section 12(2) report about an ordinary reportable matter must contain the particulars specified in the Schedule.

PART 3

REPORTS AND SAFETY RECOMMENDATIONS

Draft Final Report and Final Report

12.—(1) For the purposes of section 19(1) of the Act, the Director must, as soon as possible after the completion of an investigation under the Act into a rail casualty or rail incident, send a copy of the draft Final Report to —

- (a) every interested party with respect to the outcome of the investigation; and
- (b) any other person whom the Director considers appropriate, inviting their significant and substantiated comments.

(2) If any comments on the draft Final Report are received by the Director before the applicable deadline, the Director must consider those comments, and either —

- (a) amend the draft Final Report to include the substance of the comments received; or

(b) notify the relevant interested party or person that the Director does not accept or rejects those comments before finalising the contents of the Final Report.

(3) If no comments on the draft Final Report are received by the Director before the applicable deadline, the Director must issue and send out the Final Report to the interested parties or persons concerned.

(4) In paragraphs (2) and (3), the applicable deadline for any draft Final Report sent under paragraph (1) is —

- (a) the 14th day after the date on which the draft Final Report was sent out to the interested party or person; or
- (b) the end of any extension of time that has been agreed upon with the interested party or person to whom the draft Final Report was sent.

Safety recommendations

13.—(1) The Director may, at any stage of an investigation under the Act into a rail casualty or rail incident, give to every interested party with respect to the outcome of the investigation, a duly dated communication containing the safety recommendation that the Director considers necessary to be taken promptly to enhance railway safety.

(2) The Director must cause any safety recommendation in paragraph (1) to be communicated to those persons in Singapore who, in the opinion of the Director, are most fitted to implement the safety recommendation.

(3) For the purposes of section 22(2) of the Act, the prescribed period is 30 days after the person to whom or to which a safety recommendation is communicated under paragraph (2) is served, or a longer period that the Director allows in any particular case.

THE SCHEDULE

Regulations 9(3) and 11

SCHEDULED PARTICULARS FOR REPORTABLE MATTERS

1. The date and time of the railway occurrence.
2. The location of the railway occurrence by reference to an easily defined geographical point, including the mile, the subdivision and the track designation.
3. The names of the operator of the rail vehicle and the operator of the railway network on which the rail vehicle was on when the railway occurrence happened.
4. A brief description of the railway occurrence and the extent of any resulting damage to a rail vehicle, the environment and any other property so far as known.
5. The number of crew members, passengers and other individuals involved in the railway occurrence who were killed or sustained serious injuries as a result of the railway occurrence.
6. The name and title of the person making the report and the telephone number and address at which the person can be reached.

Made on 14 December 2023.

LOH NGAI SENG
*Permanent Secretary,
Ministry of Transport,
Singapore.*

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