



ONRSR Guideline

Network and Railway Operations
Data Submission Requirements



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1 Overview

This guideline is designed to help rail transport operators provide ONRSR with the network and railway operational data required to define key network and railway characteristics, which is required under Regulation 56A of the *Rail Safety National Law National Regulations 2012*.

ONRSR uses a secure online portal to collect and manage this data from operators. The portal is designed to guide a user through the steps required when validating and updating this data.

This document explains the data fields that need to be provided in context with the operator's role as a rail infrastructure manager or rolling stock operator.

Reporting timeframes

ONRSR will work with an operator to capture the data needed to initially complete these requirements. This will typically occur at the time of any new accreditation or will be undertaken in consultation with operators that are already accredited or registered.

Once established, this data needs to be kept accurate and will be amended as changes occur. Many of these changes will occur through variation of accreditation or notification of change processes, which will trigger the need to update this data.

Rail transport operators will be required to validate the accuracy of the data held by ONRSR on an annual basis.

2 Rail Transport Operator

2.1 Rail infrastructure manager / Rolling stock operator

Data Item ID	Data Item	Format	Description
01	Rail Transport Operator	<i>Auto populated</i>	Rail transport operator making the report.

3 Mandatory network operations data (Rail Infrastructure Manager)

3.1 Total track managed

The length of track under the effective management and control of a rail infrastructure manager within each state or territory.

Track kilometres is measured in the actual length of track inclusive of dual/multiple tracks and passing loops. For example, where a line is dual track, both tracks are counted in calculating track kilometres.

Data Item ID	Data Item	Format	Description
O2	State or Territory	Single selection: 1. ACT 2. NSW 3. NT 4. QLD 5. SA 6. TAS 7. VIC 8. WA	Selection from the state and territories the rail infrastructure manager is accredited in.
O3	Operational track length	(numerical, one decimal point)	Total length of track (in kilometres) under the effective management and control of the rail infrastructure manager that is open to rail traffic, regardless of the frequency of use.
O4	Non-operational track length	(numerical, one decimal point)	Total length of track (in kilometres) under the effective management and control of the rail infrastructure manager that is not available to rail traffic.

3.2 Line Sections

The network operations data is based on the line-section and track km concept.

Required for each line section forming the rail infrastructure manager's railway, with at least one line section required for any railway having a running line.

Data Item ID	Data Item	Format	Description
O5	Line section	Free Text	Name of the line section that will be commonly used in relation to train or track access operations and for the reporting of notifiable occurrences. Required for each line section.
O6	Line section ID	Free text	Only required for operators using a line section identifier. Line section ID for line sections provided in O5.
O7	Start kilometre point	(numerical, two decimal points)	The start km point for the line section.
O8	End kilometre point	(numerical, two decimal points)	The end km point for the line section.
O2	Jurisdiction	Single selection: 1. ACT 2. NSW 3. NT 4. QLD 5. SA 6. TAS 7. VIC 8. WA	The state or territory where the line section is located. Where the line section spans more than one jurisdiction separate entries for each state or territory is required with the respective start/end kilometre points.
O9	Line section status	Single selection: 1. Operational 2. Non-operational	Select whether the line section is open for rail traffic, irrespective of frequency of use (operational) or not available for rail traffic (non-operational).

3.3 Rail traffic density

Required for each line section and for each change in value that occurs along the line section.

Data Item ID	Data Item	Format	Description
-	Line section	<i>Selected from Line sections data</i>	Selection from the line sections provided in O5.
O10	Line kilometre point	(numerical, two decimal points) <i>1st entry - Populated from Start km point data for the selected Line section</i>	First line section entry assumes the following characteristic commence at the Start km point for the Line Section. Additional data is required if these characteristics change along the length of the line section, with the track km point of the commencement of the new value being entered.
O11	Traffic density	Number	Average number of trains per day using the line section. This includes trains in each direction and/or trains operating on multiple lines through the line section.

3.4 Track speed

Required for each line section and for each change in value that occurs along the line section.

Data Item ID	Data Item	Format	Description
-	Line section	<i>Selected from Line sections data</i>	Selection from the line sections provided in O5.
O12	Line kilometre point	(numerical, two decimal points) <i>1st entry - Populated from Start km point data for the selected Line section</i>	First line section entry assumes the following characteristic commence at the Start km point for the Line Section. Additional data is required if these characteristics change along the length of the line section, with the track km point of the commencement of the new value being entered.
O13	Maximum track speed	(numerical, integer)	The general maximum track operating speed (in km/h), ignoring localised speed restrictions due to temporary works or infrastructure restrictions associated with curves or points etc.

3.5 Network Interfaces

Data Item ID	Data Item	Format	Description
O14	Network connections	(numerical, integer)	Number of other accredited rail transport operators that have railways that are connected to or otherwise interface (e.g. have a shared operational corridor) with the rail infrastructure manager's railway. This does not include private sidings of registered rail transport operators.

3.6 Level Crossings

Required for each level crossing location

Data Item ID	Data Item	Format	Description
-	Line section	<i>Selected from Line sections data</i>	Selection from the line sections provided in O5.
O15	Line kilometre point	(numerical, two decimal points)	Location of the level crossing.
O16	Level Crossing ID	(numerical, integer)	The rail infrastructure manager's level crossing identifier.
O17	ALCAM LXM ID	(numerical, integer)	The assigned <i>Australian Level Crossing Assessment Model (ALCAM)</i> level crossing identifier.
O18	Level crossing name	Free Text	The common name of the level crossing that is used in operational communications and for the reporting of notifiable occurrences. Typically, this is the intersecting road name.
O19	Operational Status	Single selection: 1. Operational 2. Non-operational 3. Closed	Operational and non-operational are pre-populated by the line section status provided in O9. Closed status reflects a level crossing that has been closed (or removed) on an operational railway.
O20	Number of tracks	(numerical, integer)	The number of operational tracks running through the level crossing. Only provide the number of tracks under your effective management and control. For example, if the crossing has tracks belonging to two operators, only provide the number of your own tracks and do not count the number of tracks from the other operator.

Data Item ID	Data Item	Format	Description
O21	Track speed	(numerical, integer)	<p>General maximum track speed (in km/h) of trains running through the crossing.</p> <p>Default value is obtained from track speed data provided in O13. This value can be changed if the maximum speed through the crossing is different.</p>
O22	Traffic density	(numerical, one decimal point)	<p>Average number of trains per day using the crossing. This includes trains in each direction and/or trains operating on multiple lines through the line section.</p> <p>Default value is obtained from traffic density data provided in O11. This value can be changed if the train volume through the crossing is different.</p>
O2	Jurisdiction	Assigned <ol style="list-style-type: none"> 1. ACT 2. NSW 3. NT 4. QLD 5. SA 6. TAS 7. VIC 8. WA 	Auto populated from line section data.
O23	Suburb or Town	Free text	Name of the suburb or town in which the level crossing is located.
O25	Road Manager	Selection of: <ol style="list-style-type: none"> 1. Local Council 2. State/Territory Government 3. Private 	Provide the type of road manager.
O24	Local Council Area	Single selection	<p>To be provided if O25 selection is "Local Council".</p> <p>Name of the local council area in which the level crossing is located. Only local councils in the applicable State/Territory will be available for selection.</p>

Data Item ID	Data Item	Format	Description
O26	Number of individual crossings	(numerical, integer)	The number of separate level crossing pathways that are provided at the crossing location. (e.g. a single vehicle crossing with two pedestrian crossings will have 3 individual crossings)
For each individual crossing			
O27	Level Crossing Type	Selection of: 1. Road Vehicle 2. Pedestrian	Provide the type of level crossing.
O28	Level Crossing Protection	If Level Crossing Type is road vehicle, selection of: 1. Active – lights 2. Active – boom gates 3. Passive – Stop 4. Passive – Give Way 5. Unprotected If Level Crossing Type is pedestrian, selection of: 1. Active – lights 2. Active – gates 3. Passive 4. Unprotected	Provide the protection type for each individual crossing.

ONRSR maintained data

Data Item ID	Data Item	Format	Description
O29	Local Council List	List of local councils for 1. ACT 2. NSW 3. NT 4. QLD 5. SA 6. TAS 7. VIC 8. WA	List of local councils for each state and territory.

4 Mandatory railway operations data (rolling stock operator)

4.1 Stations/Stops Utilised

Required for all railway operations.

Data Item ID	Data Item	Format	Description
O30	Station Numbers	Number	Total number of passenger stations or stops that are publicly available for passengers to use the passenger rail service. Includes any stops on the operator's own or other operator's railway.

5 Optional network operation data (rail infrastructure manager)

The following network operation data is sought in order to provide an improved notifiable occurrence reporting experience and remove the free text nature of location details.

This information will enable operators to reporting occurrences with reference to:

- The name of a key location on the network (e.g. a station, yard or passing loop); or
- A line section and line kilometre point.

Without this information, operators reporting occurrences will be required to provide the line section and line kilometre points for every relevant occurrence in order to generate useable location data.

The data provide here, along with that provided under 2.2 and 2.6 will be made available to rolling stock operators that operate on the rail infrastructure manager's railway in order to provide a common manner for describing locations and offer the same location reporting options to all occurrence reporting operators.

5.1 Key Locations

Required for any key location on the railway that may be used as a reference point for the reporting of notifiable occurrences.

Data Item ID	Data Item	Format	Description
-	Line section	<i>Selected from Line sections data</i>	Data link back to one of the defined line sections used to describe the railway.
O31	Line kilometre point	(numerical, two decimal points)	The line kilometre location that best represents the location, e.g. midpoint of a station, entry points to/from a yard.
O32	Location Name	Free text	The operational name of the location. This value will then be presented as selectable location when reporting a notifiable occurrence.
O33	Location ID	Alphanumeric	The rail infrastructure manager's identifier for the location.
O34	Location Type	Single selection of: 1. Station 2. Crossing loop 3. Yard / Siding 4. Private siding 5. Bridge (rail) 6. Control Point*	The location type. * used as a default for other locations that an operator may choose to identify.

6 Private Sidings (registered rail infrastructure managers)

6.1 Private Sidings

Required for each private siding location

Data Item ID	Data Item	Format	Description
O35	Private siding name	Free text	Registered rail infrastructure manager's name for the siding.
O36	Connected Rail Infrastructure Manager	<i>Selected from ONRSR data of accredited rail infrastructure managers</i>	
-	Line Section	<i>Selected from Line sections data for the relevant infrastructure manager</i>	
O37	Line kilometre point	(numerical, two decimal points)	The location of the primary connection point to/from the private siding.
O38	Siding Operations	Multiple selection: 1. Rolling stock maintenance 2. Rolling stock stabling 3. Loading / unloading 4. Train marshalling	