

Network Safeworking Rules and Procedures

Glossary

Applies to all Network Safeworking Rules and Procedures

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A	
Absolute Signal	An automatic fixed signal that is controlled by the passage of Rail Traffic (i.e. they are not operated by a Network Controller) and must not be passed at STOP without the authority of the Network Controller.
Access	A designated safe way into, along, across or out of the Rail Corridor.
Access Provider	An organisation that provides and manages a rail network and safe method of entry to that network for Access Users.
Accredited Person	Any person who holds a valid Arc Infrastructure Track Access Permit in accordance with the established procedures and whose accreditation has not been cancelled or suspended.
Active Control Level Crossing	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
Adjacent	Near to, close to, parallel to.
Adjoining	In contact with, connected to.
Advance Train Order	A Train Order issued before the rail traffic fulfils an existing Train Order that applies from the end of the limits of the existing Train Order (still in effect).
Advertise	To give written or electronic notice, usually in advance, of planned activities.
Affected Signal	A signal not available for normal use.
Airbrake	A braking system activated by change in air pressure.
AKOL	Annett's Key on Locomotive.
Alternative Proceed Authority (APA)	An APA may be used to authorise rail traffic movements when the Proceed Authority normally provided by the system of Safeworking is not available.
Appropriate Authority	A generic term used to describe authorities e.g. Work Authority, Alternative Proceed Authority, Train Orders, etc.
Approved Document	A Network Control diagram or any other document used for recording rail traffic movements over a section of the Network.
Arc Infrastructure	Arc Infrastructure Pty. Ltd.
Arc Infrastructure Network Safeworking Rules and Procedures	The master set of rules and procedures that define how Access Users operate safely on the Arc Infrastructure Rail Network.
Aspect	The displayed pattern or position of lights used to give a signal indication.
Arrived Complete	Rail traffic where the last vehicle of a consist has arrived within a location.
Associated Rail Traffic	Rail traffic that performs track maintenance or construction tasks for the work.
At Grade Rail Crossing	A point where two or more railway lines cross over at the same elevation, commonly known as a "Diamond Crossing".
Attended Location	A location or station attended by a Competent Worker for safeworking purposes.
Audible Warning Device	A device, such as a whistle, siren, horn or hooter, used to give warning.

Authorised Speed	The maximum permissible speed as laid down by Arc Infrastructure, subject to any lesser speed shown in a Special Notice (SN), authorised electronic management system or imposed by warning and caution
	boards or a permanent speed board.
Authority	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
Automatic Brake	A brake which operates automatically in the event of a reduction of Brake Pipe pressure through any cause.
Automatic Signalling Territory	See Centralised Traffic Control (CTC).
Axle Counters	Equipment used to detect the presence of rail traffic vehicles by counting the number of axles entering or leaving a location. They may be used to operate signalling or other infrastructure equipment.
B	
Bi-Directional	Normal movement of rail traffic in either direction according to the infrastructure and system of Safeworking in use.
Block	A portion of line with defined limits between which only one rail traffic movement is permitted at any one time (i.e. not a Permissive Block).
Block Station	A station at either end of a block section at which equipment is provided to control the movement of rail traffic.
Blocking Facility	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
Blocking Limits	The limits of the Blocking Facilities placed to Protect an Occupancy Authority. See also Blocking Facility.
С	
Cancel	To withdraw permission for or to end previously authorised activities, such as Occupancy Authorities, without completing them.
Catch Points	Single or double bladed points used to derail rail traffic that might enter or foul an adjacent running line.
Centralised Traffic Control (CTC)	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
Centralised Traffic Control (CTC) Territory	The portions of line where the Centralised Traffic Control system of Safeworking is used.
Certified	Infrastructure or rolling stock that is fit for purpose.
Certify	To classify infrastructure or rolling stock as fit for purpose.
Civil Infrastructure	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.

	A pressed indication displayed by a signal
	A proceed indication displayed by a signal.
Clear	In reference to a track circuit, block, section or signal route, the absence of rail traffic.
	In reference to track workers being clear of track.
Clear and Complete	Rail traffic where the last vehicle of a consist has passed beyond a location.
Closely Approaching	Going towards a location at a speed such that the rail traffic crew could not be expected to react in sufficient time to stop safely.
Commission	To formally place into active service or use.
Communication Device	A device that supports effective communication between Network Controllers, Rail Traffic crews, Track Workers and other Competent Workers.
Competent	Having the ability, skill and certification to carry out a relevant task.
Competent Worker	A worker certified as competent to carry out a relevant task.
Complete	Rail traffic where the consist has not parted.
Condition Affecting the Network (CAN)	A situation or condition that affects or has potential to affect the safety of the Network.
Consist	A listed order of the vehicles arranged to make up a complete train.
Controlled Absolute Signal	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
Controlled Location	A location where a Network Controller controls the signalling and Safeworking operations remotely.
Controlled Speed	Controlled speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear line that is visible ahead.
Converging	Lines meeting and joining to become one line.
Convoy	A group of track vehicles not coupled but travelling closely together under a single Occupancy Authority.
Cross	To cross or pass other rail traffic.
Crossing Location/Station	May consist of single or double ended portion of track, to hold rail traffic, connected to a main line that is used to permit other rail traffic to cross or pass.
Crossover	A portion of line that is used to divert rail traffic from one continuing line to another.
D	
Danger Zone	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
Dangerous Goods	Materials defined under the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) $$
Delegate	A Competent Worker authorised and designated to act in place of another.
Demarcation Fencing	Easily-seen, continuous worksite safety boundary markers approved by Arc Infrastructure.

	A Controlled Absolute signal controlling the entrance to a Single line
Departure Signal	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.
Derail Device	A device intended to guide the wheels of rail traffic off the rails to protect a running line.
Disabled	Unable to travel due to a defect.
Double Line Automatic Signalling	The portions of line where the Double Line Automatic Signalling system of Safeworking is used.
Double Line Working	The working of Rail Traffic over separate Uni-Directional lines for Up and Down movements.
Driver Information System	 A system that can provide Rail Traffic Crews with: Train Consist Temporary Speed Restrictions Permanent Speed Restrictions Standard Timetable Train Notices Instructions Track Warnings Vehicle Restrictions
Driver Supervisory Systems	A system fitted to a rail vehicle that can monitor the Driver (or train) condition or performance and apply the brakes when a measured condition or performance parameter violates a required state or limit.
Dual Gauge Track	Track that allows rail traffic of different gauges to transit using a common rail.
Ε	
Effective Communication	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
Electrical Control Officer	A Public Transport Authority (PTA) employee responsible for managing the PTA's Overhead Traction Wiring system and the authorising the removal and restoration of the overhead supply.
Electrical Infrastructure	This may include: Equipment and systems for supplying and distributing electricity Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.
Electrical Representative	A person with the appropriate delegated authority and electrical engineering competence to make judgments about electrical safety.
Electrical Safety Instructions	Instructions provided by the Public Transport Authority's Electrical Maintenance Representative for work on or near electrical infrastructure.
Emergency	Incident requiring urgent action. The incident might involve death or serious injury, health or safety effects, significant damage to property or infrastructure.
End-of-Train Marker	A device, including tail lights, fitted to the trailing end of the last vehicle of a rail traffic consist to indicate the end of the consist.
End-of-Train Monitor	A device secured to the coupler of the last vehicle which communicates via radio link to the locomotive and provides real time end-of-train air pressure and other related information (e.g. rail traffic separation alarm).
Exclusive Occupancy	Sole occupancy of track within defined limits.

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Facing Points	Points with the switch blades facing approaching rail traffic where the track diverges.
Fit for Purpose	Able to be used for the function required.
Fixed Signal	A signal that is located permanently near the line.
Fixed Worksite	A worksite with boundaries that are fixed and defined by the Authority provided for the duration of the work.
Foul	In a position to obstruct rail traffic on adjacent lines.
Fulfil	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.
Η	
Handbrake	A device to secure a rail vehicle against movement.
Handsignal	A signal given by hand or lights movements, hand signals may be with or without flags.
Handsignaller	A Competent Worker who gives handsignals to rail traffic crew
Haul	To move rail traffic using a motive power source at the leading end.
Hazard Light	Amber or orange flashing light fitted to a vehicle to provide warning.
Headlights	Lights fitted at the front of rail traffic to provide visibility for the rail traffic crew and to improve the visibility of rail traffic.
Illegal Signal Indication	A signal indication which is inconsistent with correct signal aspects as used on the Network, or, the indication of a signal which does not reflect the condition, or, occupancy of the line to which that signal applies
In-Effect	Activate, become current, in force.
In Field Protection	One or more devices approved by Arc Infrastructure that provide warning to protect rail traffic crew and workers.
In-Field Protection	The device or devices may be used in conjunction with signalling or blocking facilities.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Infrastructure Representative	An authorised Arc Infrastructure employee or an organisation contracted to Arc Infrastructure, responsible for constructing or maintaining network infrastructure.
Interlocking	Interaction of interconnected locking equipment controlling points and/or signals to prevent conflicting movements to make sure routes are set correctly.
Intermediate Siding	A siding located within a section, generally used for purposes other than crossing or passing of rail traffic.

	An intermediate signal is an outemptic fixed signal (sheet) is signal in the
Intermediate Signal	An intermediate signal is an automatic fixed signal (absolute signal) used to divide a section to facilitate the movement of following rail traffic.
Issue	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
J	
Joint Occupancy	Simultaneous occupancy of track within defined limits.
L	
Level Crossing	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
Light Tool or Device	A tool that can be carried and easily removed by one person and is not powered by cord or hose (e.g. compressed air, gas, electricity).
Limit of Authority	The limit may be defined by a sign, a signal capable of displaying a STOP indication, or a specific kilometrage point on a line.
	It defines the location to which rail traffic may travel under a Proceed Authority or the limits of a work on track authority.
Local Possession Authority (LPA)	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Loco	Locomotive
Locomotive	Self-propelled, non-passenger-carrying railway vehicles used for hauling other (typically freight or passenger) rolling stock.
	A Competent Worker responsible for
Lookout	keeping watch for approaching rail traffic; and
	 warning other workers to stand clear of the line before the rail traffic arrives.
Lookout Working	A safety measure used by Competent Workers to carry out work on track without a formally issued work on track authority.
Low Visibility	Any condition that does not allow Competent Workers to view the distance required to work safely (e.g. fog, heavy rain, smoke, dusk, curve in the track)
Μ	
Main Line	The running line (not including Loops) normally used for running rail traffic through and between locations
Major Incident	An incident assessed by Arc Infrastructure as having a potentially major impact on the Network, human life, property or the environment.
Manual Block Working	A method of working, which ensures sole occupancy by administratively maintaining the block for rail traffic movements where the control system cannot.

Manual Points Control Mechanism	A device used for the manual control of points. Includes crank handle and hand throw point lever.
Marker Lights	Lights which indicate the front or rear of a train.
Marshal	To arrange the order of vehicles in a train's consist.
Marshalling Irregularity	An irregularity in marshalling of a train, (e.g. not in accordance with the Dangerous Goods code).
Motive Power Unit	A rail vehicle used to provide the power to move itself or other vehicles.
Movement Authority	An Authority (e.g. a PROCEED aspect on a signal, Train Order) that allows rail traffic to enter and occupy a portion of line and proceed in the forward direction.
Ν	
Network	A combination of track and other associated infrastructure controlled by Arc Infrastructure.
Network Control Diagram	A diagram used by Network Controllers showing operational information for a Rail Traffic control area, also known as a Network Control graph to create a permanent record.
Network Controller	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
Non-Controlled Location	A location where the rail traffic crew carries out the signalling and Safeworking operations.
Normal Speed	A speed that does not exceed the speed limit currently in effect for the section of line and type of rail traffic.
0	
Obstruct	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
Occupancy	Presence of rail traffic or track workers on track.
Occupancy Authority	A formal authority that allows occupancy of a portion of line by rail traffic or for work on track.
Open-Channel	A system that allows all radio users to take part in all conversations.
Operator's Representative	A person authorised by an above rail or below rail Operator to act on their behalf.
Ρ	
Parting	Rail traffic consist that has uncoupled en-route (i.e. portions separated).
Passive Control Level	Road and pedestrian level crossing warning that relies on road users and
Crossing	pedestrians looking out for and giving way to rail traffic (i.e. no flashing lights, half boomgate or bells).

Permissive Working	A method of safeworking in CTC territory where the line between two adjoining Block Stations is divided to permit following rail traffic to enter the same Section with safe separation.
Pilot	To direct or guide rail traffic crews and tell them about local conditions and operating restrictions on running lines and at worksites.
Plant	Equipment, machinery or apparatus used for the purpose of maintaining/constructing rail infrastructure (e.g. generators, excavators, backhoes. cranes).
Platform	A designated raised or level area, next to the line, that allows passengers to enter and leave trains.
Points	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
Points Indicator	An indicator showing the position of points.
Possession Protection Officer	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
Propel	To push rail traffic away from the controlling locomotive or motive power unit.
	A fixed signal that is held and maintained at Stop to prevent rail traffic entry into a worksite.
Protecting Signal	A signal that protects a train from conflicting movements and/or obstructions.
Protection	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
Protection Officer (PO)	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. in compliance with the Network Safeworking Rules and Procedures).
R	
Rail Corridor	The land on which a railway is built; comprising all property between property fences, or from the nearest rail in each direction for the distance defined under the Arc Infrastructure lease.
Rail Traffic	Trains and track vehicle or vehicles travelling on the network.
Rail Traffic Crew	Competent Workers responsible for the operation of the Motive Power Unit.
Rail Traffic Integrity	The requirements that must be met for rail traffic to be deemed to be fit for purpose as required by Arc Infrastructure and Accreditation requirements to travel in the Network.
Rail Traffic Working Advice	A form used to provide information to rail traffic crews regarding other rail traffic movements.
Railway Track Signal (RTS)	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.
Relief Rail Traffic Authority	A Relief Rail Traffic Authority is issued to permit relief Rail traffic to enter a section occupied by disabled Rail Traffic and provides instruction on how that disabled Rail Traffic is to be recovered.
Remotely Controlled Location	A location where signals and/or points are controlled by a Rail Traffic Controller at another location.

	To prevent movement of rail traffic with signals, signalling equipment,
Restrain	blocking facilities, or the issue of a written warning.
Restraint Authority	The Restraint Authority directs rail traffic not to depart the location irrespective of any available Proceed Authority.
Restricted Speed	Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead. Restricted speed must not exceed 25 km/h.
Right Running-Direction	The normal direction of travel on unidirectional lines.
Road Rail Vehicle	A road vehicle fitted with additional rail gear that enables the vehicle to be driven on rail.
Roll-by Inspection	A visual inspection of passing rail traffic to identify equipment, loading security or other defects or failure.
Rolling Stock Standards	Arc Infrastructures' specified requirements for locomotives, vehicles and track vehicles to operate on the Network.
Route	The rail traffic path from one limit of authority to the next in the direction of travel.
Running-Direction	See right running direction; wrong running direction.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Running Signal	A fixed signal placed near a running line to authorise and control running movements.
S	
Safe Braking Distance	A distance indicated to rail traffic that would allow rail traffic to stop with the application of normal service braking.
Safety Assessment	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
Safe Place	 A Safe Place is: where there is at least three metres clearance from the nearest Running Line; on a Platform behind the safety lines; within a purpose-built refuge or shelter; where a structure or physical barrier has been erected to provide a position of safety; or immediately in front of stationary and Secured Rail Traffic.
Section	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
Secure	To safeguard against accidental or unauthorised access or movement.
Self-Restoring Points (SRP)	Points which can be operated remotely or by push button that automatically restores to their normal position following the movement of rail traffic. (refer to Points)
Set Back	To move in the reverse direction to that provided in the current Proceed Authority.
Shunt	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.

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Shunt Authority	An Authority for rail traffic to move and occupy a block for the purpose of shunting.
Shunting Yard	A system of tracks, within defined limits, used for shunting.
	A portion of track where vehicles can be placed clear of the running lines.
Siding	Also see intermediate siding.
Sighting Distance	The distance that someone can clearly see along the track.
Signals Maintenance Representative	A competent and authorised signals maintenance worker.
Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Signals Engineer	A person with the appropriate delegated authority and signals engineering competence to make judgments about signalling safety.
Single Line Automatic Signalling	The portions of line where the Single Line Automatic Signalling system of Safeworking is used.
Single Line Working	Rail traffic working in both directions over a single line where multiple line unidirectional operation normally applies.
Sole Occupancy	Rail traffic or track workers having occupancy of track within defined limits that excludes all other rail traffic.
Special Padlock	A padlock other than any standard issue rail padlock.
Special Train Notice (STN)	A notice issued by Arc Infrastructure which contains safeworking information for competent workers.
Special Working	Working rail traffic using an Alternative Proceed Authority or manual block working.
Stable	To leave rail traffic unattended and secured, usually in a siding.
Station	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
Station Limits	A defined operational limit of controlled locations or a running line.
Stopping Place	A designated location, next to the line, that may allow personnel to enter and leave trains.
Sufficient Warning Time	The minimum time needed for workers to react to a Lookout's warning and move themselves and equipment to a safe place; should include time for the Lookout's reaction and a margin for safety.
System of Safeworking	An integrated system of operating procedures and engineered systems used on the Network, for safe operation of rail traffic, and protection of people and property.
Switchlock	A device used to lock a points lever. The device must be initially released by the Network Controller or by the positioning of the rail traffic prior to a Competent Worker operating a lever.
	Usually found on points leading to or from an intermediate siding or non- signalled portions of yards in CTC territory.

Т	
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Tail Lights	Red lights used as to designate the end of rail traffic (also see end-of-train markers).
Take-Off Rail	A structure used to give track vehicles entry to and exit from the line.
Temporary Speed Restriction (TSR)	An imposed reduction of the normal speed for a portion of track.
Terminal Line	A dead-end line.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Closed Warning Device	An Arc Infrastructure approved Stop sign designed to lock into the gauge as part of In-Field Protection.
Track-Circuit	An electric circuit where current is carried through the rails and used to detect the presence of trains. Track-circuits are used in the operation and control of points, signalling and level crossing equipment.
Track-Circuited Territory	Portions of line where the system of safeworking relies on track circuits to detect the presence of rail traffic.
Track-Circuit Shorting Device	A cable that can be clamped to a line's rails to activate track-circuits.
Track Indicator Diagram	A diagram that shows if tracks are occupied and other relevant information.
Track Occupancy	An authority to perform work on track. See Local Possession Authority (LPA) and Work on Track Authority (WoTA).
Track Speed	The allowed maximum speed for a portion of track.
Track Vehicle	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
Track Vehicle Identification	The unique number displayed on a track vehicle.
Track Vehicle Operator	A Competent Worker controlling the movement of a track vehicle.
Track Work	Construction, maintenance or repair work on or around infrastructure in the Rail Corridor.
Track Workers	Competent rail safety workers whose primary duties are associated with work on or around infrastructure in the Rail Corridor.
Trailing Points	Points with the switch blades facing away from approaching rail traffic where the track converges.
Train	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
Train Number (Identification)	A train or run number used to provide unique identification of a train.
Train Order	An authority issued by the Network Controller for the movement of rail traffic.
Train Order Location	A location in Train Order territory that may be used as the limit of a Proceed Authority or as a reporting location.
Train Order Territory	The portions of line where the Train Order system of Safeworking is used.
Travel	Planned or purposeful movement from one location to another.

U	
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Unattended Location	A location not attended by a Competent Worker for safeworking purposes.
Unauthorised	Not given approval, or exceeding the limit of authority.
Uni-Directional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
V	
Visibility Lights	Lights, fitted below the headlights, to improve rolling stock's ability to be seen and to assist the crew in viewing of the immediate area in front of the vehicle. Also known as ditch lights or crossing lights.
W	
WARNING/CAUTION Handsignal	A handsignal to indicate to rail traffic crews to reduce speed and travel at restricted speed.
Whistle	A device such as a bell, whistle, siren, horn or hooter, fitted to rail traffic to give audible warning.
Work Authority	A formal authority that allows rail traffic to move in either direction between specified locations.
Work on Track	The work performed in the Danger Zone.
Work on Track Authority (WoTA)	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
Work Out of Service	To work rail traffic to a suitable yard, service depot, siding or location where rolling stock can leave the running line for repair or replacement of vehicle equipment.
Work Train	A train used in maintenance or construction activities.
Wrong Running-Direction	The direction opposite to the normal direction of travel on unidirectional lines.