

# GLOSSARY OF RAIL-RELATED TERMS<sup>1</sup>

**Access regime** is defined as procedures to govern access to rail tracks. It includes setting an access pricing policy, criteria for permitting access and operating conditions.

**Accreditation** is the formal means of establishing the rail safety standards and practices for each railway covered by rail safety legislation. Track managers and rail operators need to be accredited before owning and/or operating a railway.

**Accreditation authority** is the authority in a State or Territory authorised to grant rail safety accreditation under rail safety legislation.

**Automatic Train Protection** is a system that supervises train speed and target speed, alerts the driver to the braking equipment and enforces braking when necessary.

**Ballast** refers to material, usually stone, that surrounds the sleepers to hold them properly in place.

**Balloon loop** is track laid to form a loop usually at the end of a railway line where empty wagons are loaded from overhead bins, or full wagons are emptied through hopper doors in to under-track grates, all while the train is moving at low speed. The loop enables the train to effectively do a 'U' turn.

**Bogie** is used to connect the wheel axles through bearings to a carriage, wagon or locomotive. The connections allow a certain degree of rotational movement around a vertical axis. Most bogies have two axles, but wagons designed for heavy loads may have more axles per bogie.

**Commercial operations** are railway services operated for reward, but generally excluding the tourist and heritage sector.

**Disused (or unused) lines** are those on which rail operations are currently suspended.

**Gauge** refers to the distance between the inside running faces of the two rails, measured between points 16 mm below the top of the rail heads. Standard gauge is track gauge measuring 1435 mm, broad gauge measures 1600 mm and a narrow gauge measures 1067 mm.

**Infrastructure** generally includes the track and its components eg. rails, sleepers, bridges, ballast, and signalling equipment. Generally the term does not include stations or terminals.

**Interlocking** is an arrangement of signal equipment that prevents conflicting movements of trains through junctions or crossings. It is designed so that it is impossible to give clear signals to trains unless the route to be used is proved to be safe.

The **mainline** is the running line normally used for running trains. In NSW these are operated by RailCorp, ARTC and RIC.

**Network** refers to the connected track and infrastructure, generally owned or operated by a single organisation such as RailCorp.

**Network rules** are rules issued to mandate the requirements for safe operation on a rail network.

**On time running** measures the proportion of train trips which arrive within a given time of the scheduled arrival time.

**Operator** is the person or body responsible by reason of ownership, control or management, for the provision, maintenance or operation of trains, or a combination of these; or a person or body acting on its behalf.

**Pantograph** is an apparatus fixed to the roof of electric traction vehicles to draw current from the overhead supply.

**Passenger trains** are designed and used for carrying passengers, while freight trains are designed and used for carrying freight, such as coal and minerals, grain, fuel, livestock and containers.

The number of **passenger journeys** in urban areas measures the number of point to point journeys, irrespective of number of vehicles or mode used for the trip. For non-urban areas, it measures the number of point to point journeys, but each change of vehicle along the route is a separate journey.

**Railway safety worker** is a person who has carried out, is carrying out or is about to carry out safety work. It includes a person who is employed by or engaged under a contract for services, including a trainee and a volunteer.

**Rolling stock** means any vehicle that operates on or uses railway track.

**Running line** is any line used for the through operation of trains inclusive of mainlines, branch lines, crossing loops and shunting yards.

A **safeworking system** is an integrated system of operating procedures and technology for the safe operation of trains and the protection of people and property on or in the vicinity of the railway.

**Sidings** are portions of railway track connected to a running line or another siding on which rolling stock can be placed clear of the running line and stabled. A private siding is owned and maintained by a person who does not own, control or manage the running line with which the siding connects or to which it has access.

To **shunt** is to move trains or vehicles on lines for the purposes other than through movement.

**Terminals** are places where freight is loaded onto or unloaded from trains.

**Tonne kilometres** is calculated by the weight of a train and the distance it runs. This can be expressed as the total weight of a train (gross tonne kilometres or gtk) or the weight of the cargo (net tonne kilometres or ntk).

The term **track kilometres** refers to the length of operational track (kilometres). This is distinct from the length of the corridor, as a corridor may contain more than one track.

**Track machines** are specialised pieces of rolling stock used on the rails to maintain infrastructure.

**Train kilometres (passengers) (tkm passengers)** refers to the total kilometres travelled in NSW by an organisation's passenger trains.

**Train kilometres (freight) (tkm freight)** refers to the total kilometres travelled in NSW by an organisation's freight trains.

**Wheel scale** refers to the build up of metallic material on a wheel tread's surface.

**Wheel flat** is the loss of roundness of the tread of a wheel caused by wheelslip or wheel slide.

A **wrong side failure** refers to a failure in the signalling system which results in a proceed indication to be given when the correct indication should be stop.

1. A number of definitions have been sourced from the Australasian Railway Association (ARA) Glossary [www.ara.net.au/publications.htm](http://www.ara.net.au/publications.htm)

Independent Transport Safety and Reliability Regulator  
Level 22, 201 Elizabeth Street  
PO Box A2633, Sydney South, 1235

Phone: 02 8263 7100  
Fax: 02 8263 7200

Email: [contact@transportregulator.nsw.gov.au](mailto:contact@transportregulator.nsw.gov.au)  
Website: [www.transportregulator.nsw.gov.au](http://www.transportregulator.nsw.gov.au)



INDEPENDENT  
TRANSPORT  
SAFETY AND  
RELIABILITY  
REGULATOR