Introduction

To meet the requirements of the European Rail Agency, the glossary is now presented by two methods - by subject matter and by alphabetical listing.

Terms by subject matter  Page 2 to 15
Terms in alphabetical order  Page 16 to 30
## Electrified Lines

**Conductor rail**  
A rail through which electricity is supplied to electric-powered trains.

**Earthed**  
The term ‘earthed’ when applied to the overhead line equipment which is normally live, means connected to the traction return running rail either directly or to a structure which is itself connected thereto.

**Electrified line**  
A line that is electrified either by 25,000 volts AC overhead lines or by 750 volts DC conductor rails. Local instructions are issued for certain sections of route electrified by 1500 volts DC overhead lines.

**Isolated**  
Electrical equipment is isolated when it is disconnected from all sources of electricity supply in a secure way.

**Isolation**  
Isolation is the action of causing electrical sections or sub-sections of the OLE or CRE to be isolated. For AC it includes the entire process of switching off, securing, testing and earthing and issue of the overhead line permit. For DC it includes the entire process of switching off, securing and testing and issue of the conductor rail permit.

**Live**  
Connected to an electrical supply.

**Overhead line equipment**  
Wires and associated equipment, suspended over or adjacent to the railway line for supplying electricity to electric trains.

**Switched off**  
Electrical equipment that is disconnected and separated from all sources of supply.
# Engineering Work

**Affect the normal passage of trains**
Any activity or event that allows train working to continue but causes diversion, inability to call at a planned destination or introduction of degraded-mode operations such as passing signals at danger, handsignalling, manual route setting or single line working arrangements.

**Affect the safety of train working**
Any activity or event that may, during its course, render a movement control or interlocking system unusable for the signalling of trains.

**Engineering train**
Includes an on-track machine.

**Engineering Possession Reminder (EPR)**
A reminder applied by the signaller to one or more axle counter sections in advance of pre-planned engineering works in order to indicate the area affected. When removed from an axle counter section indicating occupied, this initiates an unconditional reset/restoration of the axle counter without aspect restriction.

**Intermediate point to a possession**
A location other then the limits at the ends of the possession where an engineering train can enter or leave the possession to:
- an open line
- a siding not under possession.

**On-track plant**
A road-rail vehicle (RRV) or rail mounted maintenance machine (RMMM) also known as ‘in possession only’ vehicles.

**Possession Limit Board (PLB)**
A double-sided board, red on both sides, with a red light (which may be steady or flashing). The board also has the word STOP printed on both sides.
<table>
<thead>
<tr>
<th><strong>Terms by subject matter</strong></th>
</tr>
</thead>
</table>

**Track circuit operating device (T-COD)**

A special device that can be placed on the line to provide protection by operating the track circuit, to hold a signal at danger.

**Incidents & Emergencies**

**Controlled evacuation**

The evacuation of passengers from a train after the signaller has confirmed that all lines have been protected.

**Detonator**

A small disc-shaped warning device, designed to be placed on the railhead for protection and emergency purposes. It explodes when a train passes over it.

**Detonator Protection**

Detonator protection consists of three detonators placed 20 metres (approx 20 yards) apart on the same rail with a possession limit board at the first detonator in the direction of travel.

**Emergency evacuation**

The evacuation of passengers from a train if the signaller states that protection cannot be given or the signaller cannot be contacted.

**Emergency protection**

The means of protecting a train by track circuit operating clips, hand danger signals and detonators when:

- a driver or guard cannot contact the signaller, or
- the signaller cannot provide signal protection.

**Protection**

Ways of making sure that a line is protected. This includes keeping signals at danger, placing detonators on the line, using a track circuit operating clip and showing a hand danger signal.

**Track circuit operating clip**

A device which, in an emergency can be placed on top of each running rail to operate the track circuit and protect an obstruction.
Level crossings

Automatic level crossing
Any of the following level crossings:
- Automatic half-barrier (AHBC)
- Automatic barrier crossing, locally monitored (ABCL)
- Automatic open crossing, locally monitored (AOCL)
- Crossing with red and green warning lights (R/G).

Barrow crossing
A crossing (often at the end of a platform) for railway personnel to use. Some barrow crossings have white-light indicators which, when lit, indicate to the user that it is safe to cross.

Controlled crossing
Any of the following level crossings.
- Manned crossing with barriers (MCB).
- Manned crossing with gates (MG).
- Remotely controlled crossing with barriers (RC).
- Barrier crossing with closed-circuit television (CCTV).
- Barrier crossing with obstacle detection (OD).

Level crossing
Any manned, automatic, controlled, or open crossing shown in Table A of the Sectional Appendix.

Manned level crossing
A level crossing that is operated locally by a signaller or crossing keeper (MCB or LC).

Open level crossing
An unmanned level crossing that has no barriers, gates or road traffic signals. It has a ‘Give Way’ sign on each road approach.

Lines, Stations and Depots

Adjacent line
A line or siding next to the line you are on.

Bi-directional line
A line on which the signalling allows trains to run in both directions.
### Terms by subject matter

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Goods line</strong></td>
<td>A line that has not been signalled to the standard required for running passenger trains.</td>
</tr>
<tr>
<td><strong>Maintenance depot</strong></td>
<td>A location defined in a train operator’s Contingency Plan with the facilities to repair or replace specified items of defective on-train equipment.</td>
</tr>
<tr>
<td><strong>No-block line</strong></td>
<td>A line on which the signaller does not monitor the condition of the block section.</td>
</tr>
<tr>
<td><strong>Running line</strong></td>
<td>A line as shown in Table A of the Sectional Appendix as a passenger line or as a non-passenger line.</td>
</tr>
<tr>
<td><strong>Siding</strong></td>
<td>A line on which vehicles are marshalled, stabled, loaded, unloaded or serviced clear of a running line.</td>
</tr>
<tr>
<td><strong>Single line</strong></td>
<td>One line is available for movements in both directions.</td>
</tr>
<tr>
<td><strong>Station</strong></td>
<td>Terminal, depot, yard or halt.</td>
</tr>
</tbody>
</table>

### Lineside Equipment

<table>
<thead>
<tr>
<th>Term</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect</strong></td>
<td>The indication of a colour light signal that the driver sees.</td>
</tr>
</tbody>
</table>
| **ATWS**  | Automatic track warning system. An individual or lineside warning system that can be installed at a site of work to:  
• detect an approaching train  
• alert personnel who are on or near the line.  
It may be installed temporarily for the period of work or it may be installed permanently at a location. This definition does not include TOWS or LOWS. |
| **Automatic Signal** | A signal operated by the passage of trains. The signaller or a person operating a signal post replacement switch can place some automatic signals to danger.                                                     |
**Axle counter**
A method of detecting the presence of a train or vehicle on a line. Track-mounted equipment, at each end of a portion of line, counts the number of axles passing over. This is used to identify when a portion of line is occupied or clear.

**Axle counter head**
A device that detects the passage of a wheel passing over a running rail.

**Block marker**
Reflective board that serves as a physical indication of signalling sections within ERTMS. Used when degraded working is required.

**Home signal**
The first stop signal on the approach to a signal box on a line not signalled by the track circuit block system of signalling.

**Interlocking**
A general term applied to equipment that controls setting and releasing signals and points to prevent an unsafe condition of the signalling system arising during the passage of trains.

**Intermediate block home signal**
A stop signal that controls the exit from an intermediate block section. (Although an intermediate block home signal controls the entrance to an absolute block section, it is referred to as the intermediate block home signal).

**Junction signal**
A signal that controls more than one running route and can display an indication of route.

**LOWS**
Lookout operated warning system. A lineside warning system, used to warn personnel on or near the line about an approaching train. It is operated by a lookout.

**Main aspect**
The following aspects of a colour light signal:
- red
- yellow
- two yellows
- flashing yellow
- two flashing yellows
- green.
## Terms by subject matter

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<tr>
<td>PoSA</td>
<td>Proceed-on-sight authority. A signal used for controlling movements into a section affected by a failure of signalling equipment.</td>
</tr>
<tr>
<td>Right-side failure</td>
<td>A failure that does not reduce the protection given by signalling equipment.</td>
</tr>
<tr>
<td>Section signal</td>
<td>A stop signal that controls the entrance to a block section or intermediate block section ahead.</td>
</tr>
<tr>
<td>Semi-automatic signal</td>
<td>A signal normally operated by the passage of trains, but can also be controlled from the signal box or from a ground frame, or by a person operating a signal post replacement switch.</td>
</tr>
<tr>
<td>Shunt entry board</td>
<td>A lineside indicator board that indicates the entry of a shunt route on ERTMS cab signalled lines where lineside signals are not provided.</td>
</tr>
<tr>
<td>Shunting signal</td>
<td>A signal that is provided for shunting purposes only.</td>
</tr>
<tr>
<td>Signal post replacement key</td>
<td>The key used to operate a signal post replacement switch.</td>
</tr>
<tr>
<td>Signal post replacement post switch</td>
<td>A switch on the post of an automatic or semi-automatic colour light signal that can be operated by a key to turn it to, and keep it at, danger.</td>
</tr>
<tr>
<td>Stop signal</td>
<td>A signal that can show a stop aspect or indication.</td>
</tr>
<tr>
<td>Subsidiary signal</td>
<td>A semaphore signal used for controlling shunting movements and movements onto occupied tracks. It is always positioned below the main semaphore arm with which it is associated.</td>
</tr>
</tbody>
</table>
**TOWS**  
Train operated warning system. An audible warning system at locations listed in the Sectional Appendix. When switched on, it is used to warn personnel on or near the line about an approaching train.

**TPWS**  
Train protection and warning system. A system by which a train is stopped by an automatic application of the brakes when activated by lineside equipment.

**Wrong-side failure**  
A failure that reduces or removes the protection given by signalling equipment.

**Points**

**Catch points**  
Points designed to derail vehicles running back on a gradient in the wrong direction. These points may be unworked if trains normally pass over them in one direction only.

**Derailer**  
A device at an exit from a siding or bay platform that derails an unauthorised movement.

**Detection**  
An electrical or mechanical indication that points are set in the correct position.

**Facing point lock (FPL)**  
Equipment that physically locks facing points so that they cannot move.

**Facing points**  
Points where two routes diverge.

**Ground frame**  
A control point containing levers or switches to allow points in running lines and sidings, and any associated signals, to be operated locally. This local operation is only possible when the signaller at the controlling signal box gives a release. Also includes a ground-switch panel.

**Hand points**  
Points that are worked manually by lever independent of any other signalling controls.

**Mechanical points**  
Points that are mechanically operated without any other form of power operation.
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</thead>
<tbody>
<tr>
<td><strong>Power-operated points</strong></td>
<td>Points that are operated by means other than mechanically.</td>
</tr>
<tr>
<td><strong>Run through (of points)</strong></td>
<td>An incident where a movement runs through a trailing set of points that are not set in the correct position for the movement.</td>
</tr>
<tr>
<td><strong>Token</strong></td>
<td>Any single line token, staff or tablet.</td>
</tr>
<tr>
<td><strong>Track circuit</strong></td>
<td>A method of detecting the presence of a train or vehicle on a line. An electrical device, using the rails as an electrical circuit, detects the absence of a train or vehicle. If these rules refer to track circuits, this also includes detection by axle counters unless specially excluded.</td>
</tr>
<tr>
<td><strong>Trailing points</strong></td>
<td>Points where two routes converge.</td>
</tr>
<tr>
<td><strong>Train-operated points</strong></td>
<td>Points that are continuously driven to one position such that facing movements always pass through them in the same direction. Trains themselves operate the points in the trailing reverse direction.</td>
</tr>
<tr>
<td><strong>Trap points</strong></td>
<td>Facing points at an exit from a siding or converging route that derail an unauthorised movement, so protecting the adjacent line.</td>
</tr>
<tr>
<td><strong>Unworked points</strong></td>
<td>Points that are not operated from a signal box or ground frame.</td>
</tr>
<tr>
<td><strong>Worked points</strong></td>
<td>Points that are operated from a signal box or ground frame.</td>
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</table>

**Train Signalling Regulations**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td><strong>Absolute block</strong></td>
<td>A signalling system that allows only one train to be in a block section at the same time. The block indicator is used to indicate whether the line between adjacent signal boxes is clear or occupied.</td>
</tr>
<tr>
<td><strong>Block section</strong></td>
<td>The section of the line between the section signal of one signal box and the home signal of the next signal box ahead.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>ERTMS</td>
<td>European rail traffic management system. A signalling system that uses in-cab indications as opposed to external track-side signals.</td>
</tr>
<tr>
<td>Intermediate block section</td>
<td>The line between the section signal and the intermediate block home signal worked by the same signal box in the same direction of travel.</td>
</tr>
<tr>
<td>Overlap</td>
<td>The distance beyond a stop signal up to which the line must be clear before the previous signal can show a proceed aspect.</td>
</tr>
<tr>
<td>Route setting position</td>
<td>Location on a signalling control panel or workstation from which a route can be set or closed.</td>
</tr>
<tr>
<td>Station limits</td>
<td>The line between the home signal and the section signal worked by the same signal box and in the same direction of travel. This does not apply on a track circuit block line.</td>
</tr>
<tr>
<td>Track circuit block</td>
<td>A method of signalling trains in a section of line using track circuits or other means of automatic train absence detection and without using block instruments.</td>
</tr>
<tr>
<td>Train signalling regulations</td>
<td>Instructions for use by the signaller that give details of the rules, regulations and instructions relating to each different kind of signalling system.</td>
</tr>
<tr>
<td>Transition</td>
<td>The process of the onboard ERTMS signalling system transferring from one signalling system to another. This process has to be acknowledged by the driver.</td>
</tr>
</tbody>
</table>

**Train Working**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braking distance</td>
<td>The distance a train needs in which to stop or reduce speed, from travelling at a given speed.</td>
</tr>
<tr>
<td>Coupled in multiple</td>
<td>Traction units coupled to allow through controls by one driver.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
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<td>-------------------------------------------</td>
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</tr>
<tr>
<td>Coupled in tandem</td>
<td>Each traction unit is separately controlled by its own driver, with through control of the automatic brake only.</td>
</tr>
<tr>
<td>Driver only (or DO) train</td>
<td>A train that is worked only by a driver and does not have a guard.</td>
</tr>
<tr>
<td>In service</td>
<td>A train is in service from the time it starts its journey until the time it completes its journey. A vehicle is in service when it forms part of a train which is in service.</td>
</tr>
<tr>
<td>End of authority (EoA)</td>
<td>The location to which a train is permitted to proceed. The boundary of a movement authority.</td>
</tr>
<tr>
<td>Full supervision</td>
<td>The normal movement used by ERTMS, an authority that gives comprehensive protection to all trains.</td>
</tr>
<tr>
<td>Journey</td>
<td>The route between the depot, siding, platform line or other authorised place where the train enters service and the depot, siding, platform line or other authorised place where the train reaches its destination, or:</td>
</tr>
<tr>
<td></td>
<td>• is required to reverse before continuing to its destination</td>
</tr>
<tr>
<td></td>
<td>• is required to have vehicles attached or detached</td>
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<tr>
<td></td>
<td>• is required to terminate short of its destination, as a result of - infrastructure fault - line blockage - defective on-train equipment - any other operational reason.</td>
</tr>
<tr>
<td></td>
<td>This also applies to short-distance shunting movements.</td>
</tr>
<tr>
<td>Movement authority (MA)</td>
<td>Permission for a train to run to a specific location as a signalled move.</td>
</tr>
<tr>
<td>On sight</td>
<td>A type of movement authority used by ERTMS that allows entry into an occupied section. The driver will be presented with a maximum speed and must ensure that the train is stopped short of any obstruction.</td>
</tr>
<tr>
<td><strong>One-train working</strong></td>
<td>Method of signalling on a single line, with or without a train staff, where only one train at a time is permitted.</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Out of service</strong></td>
<td>A train is out of service between the time that it completes its journey and the time it is ready to start another journey.</td>
</tr>
<tr>
<td><strong>Out of service</strong></td>
<td>A vehicle is out of service when it forms part of a train that is out of service, or when it has been detached from a train in a depot, siding, platform line or other authorised place. The detraining of passengers does not in itself mean a train has been taken out of service.</td>
</tr>
<tr>
<td><strong>Passenger service</strong></td>
<td>A train that is in service carrying passengers.</td>
</tr>
<tr>
<td><strong>Permissible speed</strong></td>
<td>The maximum permitted speed as shown in the Sectional Appendix.</td>
</tr>
<tr>
<td><strong>Shunting movement</strong></td>
<td>Any movement of a train or vehicle other than a train passing normally along a running line.</td>
</tr>
<tr>
<td><strong>Tail lamp</strong></td>
<td>Includes an illuminated built-in red light or blind.</td>
</tr>
</tbody>
</table>

**Trains**

<table>
<thead>
<tr>
<th><strong>Brake van</strong></th>
<th>Any vehicle with a brake compartment.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cant rail</strong></td>
<td>The point on the side of a locomotive or coach where the bodyside meets the roof (sometimes marked by an orange stripe).</td>
</tr>
<tr>
<td><strong>Central door-locking (CDL)</strong></td>
<td>A secondary locking system fitted to certain slam-door passenger vehicles and controlled by the guard that prevents passengers from opening the doors.</td>
</tr>
<tr>
<td><strong>Defective on-train equipment</strong></td>
<td>On-train equipment that:</td>
</tr>
<tr>
<td></td>
<td>• is not performing its intended safety function, either fully or partly</td>
</tr>
<tr>
<td></td>
<td>• is isolated</td>
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<td></td>
<td>• is missing.</td>
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**Terms by subject matter**

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<tr>
<td><strong>Driver machine interface (DMI)</strong></td>
<td>The device used by a driver to interact with onboard equipment. Typically a computer screen located in the driving cab.</td>
</tr>
<tr>
<td><strong>Driver's reminder appliance (DRA)</strong></td>
<td>A device in a driving cab that allows the driver to set a reminder that the signal ahead is at danger. While the DRA is set, the driver cannot take power.</td>
</tr>
<tr>
<td><strong>Power-operated doors</strong></td>
<td>Doors on a train where the opening and closing are controlled by the driver or guard.</td>
</tr>
<tr>
<td><strong>TASS</strong></td>
<td>Tilt authorisation and speed supervision. A system on tilting trains that controls:</td>
</tr>
<tr>
<td></td>
<td>• the operation of the tilt system</td>
</tr>
<tr>
<td></td>
<td>• the speed of the train on routes where enhanced permissible speeds apply on TASS fitted lines.</td>
</tr>
<tr>
<td><strong>TPWS</strong></td>
<td>Train protection and warning system. A system by which a train is stopped by an automatic application of the brakes when activated by lineside equipment.</td>
</tr>
<tr>
<td><strong>Track circuit actuator (TCA)</strong></td>
<td>Equipment provided on certain trains to improve the operation of track circuits.</td>
</tr>
<tr>
<td><strong>Traction unit</strong></td>
<td>Locomotive, multiple unit, self-propelled rail vehicle or road-rail vehicle operating in rail mode.</td>
</tr>
<tr>
<td><strong>Train</strong></td>
<td>Light locomotive, self-propelled rail vehicle or road-rail vehicle in rail mode.</td>
</tr>
</tbody>
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**Workforce**

<table>
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<td><strong>Competent person</strong></td>
<td>A person who is passed as being qualified and has the required knowledge and skills to carry out a particular rule, regulation, instruction or procedure.</td>
</tr>
<tr>
<td><strong>Operations control</strong></td>
<td>The term used for Network Rail Operations Control Offices.</td>
</tr>
</tbody>
</table>
Pilotman  A person who has been appointed to manage the passage of trains over a single line during a failure of equipment, during repairs or due to an obstruction.

Rolling stock technician  A person who is authorised and has the necessary technical competence to examine or repair specified items of equipment forming part of a train or vehicle.

Traincrew  Driver and guard.

Train operator  The company responsible for operating a train.

Your employer  The company, or subsidiary of a larger organisation for whom you work.
**Terms in alphabetical order**

**A**

**Absolute block**  A signalling system that allows only one train to be in a block section at the same time. The block indicator is used to indicate whether the line between adjacent signal boxes is clear or occupied.

**Adjacent line**  A line or siding next to the line you are on.

**Affect the normal passage of trains**  Any activity or event that allows train working to continue but causes diversion, inability to call at a planned destination or introduction of degraded-mode operations such as passing signals at danger, handsignalling, manual route setting or single line working arrangements.

**Affect the safety of the line**  Any activity or event that may, during its course, render the track, the formation or a structure unsafe for the passage of trains, or unsafe for the passage of trains at normal speed.

**Affect the safety of train working**  Any activity or event that may, during its course, render a movement control or interlocking system unusable for the signalling of trains.

**Aspect**  The indication of a colour light signal that the driver sees.

**ATWS**  Automatic track warning system. An individual or lineside warning system that can be installed at a site of work to:
- detect an approaching train
- alert personnel who are on or near the line.
It may be installed temporarily for the period of work or it may be installed permanently at a location. This definition does not include TOWS or LOWS.
### Automatic level crossing
Any of the following level crossings:
- Automatic half-barrier (AHBC)
- Automatic barrier crossing, locally monitored (ABCL)
- Automatic open crossing, locally monitored (AOCL)
- Crossing with red and green warning lights (R/G).

### Automatic Signal
A signal operated by the passage of trains.
The signaller or a person operating a signal post replacement switch can place some automatic signals to danger.

### Axle counter
A method of detecting the presence of a train or vehicle on a line. Track-mounted equipment, at each end of a portion of line, counts the number of axles passing over. This is evaluated to identify when a portion of line is occupied or clear.

### Axle counter head
A device that detects the passage of a wheel passing over a running rail.

### Barrow crossing
A crossing (often at the end of a platform) for railway personnel to use. Some barrow crossings have white-light indicators which, when lit, indicate to the user that it is safe to cross.

### Bi-directional line
A line on which the signalling allows trains to run in both directions.

### Block marker
Reflective board that serves as a physical indication of signalling sections within ERTMS. Used when degraded working is required.

### Block section
The section of the line between the section signal of one signal box and the home signal of the next signal box ahead.

### Brake van
Any vehicle with a brake compartment.
### Braking distance
The distance a train needs in which to stop or reduce speed, from travelling at a given speed.

### Catch points
Points designed to derail vehicles running back on a gradient in the wrong direction. These points may be unworked if trains normally pass over them in one direction only.

### Cant rail
The point on the side of a locomotive or coach where the bodyside meets the roof (sometimes marked by an orange stripe).

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A secondary locking system fitted to certain slam-door passenger vehicles and controlled by the guard that prevents passengers from opening the doors.

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Any of the following level crossings.
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- Manned crossing with gates (MG).
- Remotely controlled crossing with barriers (RC).
- Barrier crossing with closed-circuit television (CCTV).
- Barrier crossing with obstacle detection (OD).

### Controlled evacuation
The evacuation of passengers from a train after the signaller has confirmed that all lines have been protected.
Coupled in multiple
Traction units coupled to allow through controls by one driver.

Coupled in tandem
Each traction unit is separately controlled by its own driver, with through control of the automatic brake only.

Defective on-train equipment
On-train equipment that:
- is not performing its intended safety function, either fully or partly
- is isolated
- is missing.

Derailer
A device at an exit from a siding or bay platform that derails an unauthorized movement, so protecting the adjacent line.

Detection
An electrical or mechanical indication that points are set in the correct position.

Detonator
A small disc-shaped warning device, designed to be placed on the railhead for protection and emergency purposes. It explodes when a train passes over it.

Detonator Protection
Detonator protection for a line blockage consists of three detonators placed 20 metres (approx 20 yards) apart on the same rail with a possession limit board at the first detonator in the direction of travel.

Driver only (or DO) train
A train that is worked only by a driver and does not have a guard.

Driver machine interface (DMI)
The device used by a driver to interact with onboard equipment. Typically a computer screen located in the driving cab.

Driver's reminder appliance (DRA)
A device in a driving cab that allows the driver to set a reminder that the signal ahead is at danger. While the DRA is set, the driver cannot take power.
Earthed

The term ‘earthed’ when applied to the overhead line equipment which is normally live, means connected to the traction return running rail either directly or to a structure which is itself connected thereto.

Electrified line

A line that is electrified either by 25,000 volts AC overhead lines or by 750 volts DC conductor rails. Local instructions are issued for certain sections of route electrified by 1500 volts DC overhead lines.

Emergency evacuation

The evacuation of passengers from a train if the signaller states that protection cannot be given or the signaller cannot be contacted.

End of authority (EoA)

The location to which a train is permitted to proceed. The boundary of a movement authority.

Engineering Possession Reminder (EPR)

A reminder applied by the signaller to one or more axle counter sections in advance of pre-planned engineering works in order to indicate the area affected. When removed from an axle counter section indicating occupied, this initiates an unconditional reset/restoration of the axle counter without aspect restriction.

ERTMS

European rail traffic management system. A signalling system that uses in-cab indications as opposed to external trackside signals.

Facing point lock (FPL)

Equipment that physically locks facing points so that they cannot move.

Facing points

Points where two routes diverge.

Full supervision

The normal movement used by ERTMS, an authority that gives comprehensive protection to all trains.
G

Goods line  A line that has not been signalled to the standard required for running passenger trains.

Ground frame  A control point containing levers or switches to allow points in running lines and sidings, and any associated signals, to be operated locally. This local operation is only possible when the signaller at the controlling signal box gives a release. Also includes a ground-switch panel.

H

Hand points  Points that are worked manually by lever independent of any other signalling controls.

Home signal  The first stop signal on the approach to a signal box using the absolute block system of signalling.

I

In service  A train is in service from the time it starts its journey until the time it completes its journey. A vehicle is in service when it forms part of a train which is in service.

Interlocking  A general term applied to equipment that controls setting and releasing signals and points to prevent an unsafe condition of the signalling system arising during the passage of trains.

Intermediate block home signal  A stop signal that controls the exit from an intermediate block section. (Although an intermediate block home signal controls the entrance to an absolute block section, it is referred to as the intermediate block home signal).
Intermediate block section
The line between the section signal and the intermediate block home signal worked by the same signal box in the same direction of travel.

Intermediate point to a possession
A location other than the limits at the ends of the possession where an engineering train can enter or leave the possession to:
- an open line
- a siding not under possession.

Isolated
Electrical equipment is isolated when it is disconnected from all sources of electricity supply in a secure way.

Isolation
Isolation is the action of causing electrical sections or sub-sections of the OLE or CRE to be isolated. For AC it includes the entire process of switching off, securing, testing and earthing and issue of the overhead line permit. For DC it includes the entire process of switching off, securing and testing and issue of the conductor rail permit.

J
Journey
The route between the depot, siding, platform line or other authorised place where the train enters service and the depot, siding, platform line or other authorised place where the train reaches its destination, or:
- is required to reverse before continuing to its destination
- is required to have vehicles attached or detached
- is required to terminate short of its destination, as a result of
  - infrastructure fault
  - line blockage
  - defective on-train equipment
  - any other operational reason.
This also applies to short-distance shunting movements.
**Junction signal**  A signal that controls more than one running route and can display an indication of route.

**L**

**Level crossing**  Any manned, automatic, controlled or open crossing shown in Table A of the Sectional Appendix.

**Lever**  Includes a switch, button or workstation control.

**Live**  Connect to an electrical supply.

**LOWS**  Lookout operated warning system. A lineside warning system, used to warn personnel on or near the line about an approaching train. It is operated by a lookout.

**M**

**Main aspect**  The following aspects of a colour light signal:
- red
- yellow
- two yellows
- flashing yellow
- two flashing yellows
- green.

**Maintenance depot**  A location defined in a train operator’s Contingency Plan with the facilities to repair or replace specified items of defective on-train equipment.

**Manned level crossing**  A level crossing that is operated locally by a signaller or crossing keeper (MCB or LC).

**Mechanical points**  Points that are mechanically operated without any other form of power operation.

**Movement authority (MA)**  Permission for a train to run to a specific location as a signalled move.
N

No-block line  A line on which the signaller does not monitor the condition of the block section.

O

On sight  A type of movement authority used by ERTMS that allows entry into an occupied section. The driver will be presented with a maximum speed and must ensure that the train is stopped short of any obstruction.

One-train working  Method of signalling on a single line, with or without a train staff, where only one train at a time is permitted.

On-track plant  A road-rail vehicle (RRV) or rail mounted maintenance machine (RMMM) also known as ‘in possession only’ vehicles.

Open level crossing  An unmanned level crossing that has no barriers, gates or road traffic signals. It has a ‘Give Way’ sign on each road approach.

Operations control  The term used for Network Rail Operations Control Offices.

Out of service  A train is out of service between the time that it completes its journey and the time it starts another journey.

Out of service  A vehicle is out of service when it forms part of a train that is out of service, or when it has been detached from a train in a depot, siding, platform line or other authorised place. The detraining of passengers does not in itself mean a train has been taken out of service.

Overhead line equipment  Wires and associated equipment, suspended over or adjacent to the railway line for supplying electricity to electric trains.
Overlap
The distance beyond a stop signal up to which the line must be clear before the previous signal can show a proceed aspect.

P
Passenger service
A train that is in service carrying passengers.

Permissible speed
The maximum permitted speed as shown in the Sectional Appendix.

Pilotman
A person who has been appointed to manage the passage of trains over a single line during a failure of equipment, during repairs or due to an obstruction.

PoSA
Proceed-on-sight authority. A signal used for controlling movements into a section affected by a failure of signalling equipment.

Possession Limit Board
A double-sided board, red on both sides, with a red light (which may be steady or flashing). The board also has the word STOP printed on both sides. It is placed in the four foot at the detonator protection for a possession.

Power-operated doors
Doors on a train where the opening and closing are controlled by the driver or guard.

Power-operated points
Points that are operated by means other than mechanically.

Protection
Ways of making sure that a line is protected. This includes keeping signals at danger, placing detonators on the line, using a track circuit operating clip and showing a hand danger signal.

R
Reminder appliance
A device or control used to remind the signaller that a particular lever, button or switch must not be operated at all, or used only under certain conditions.
Repeater (in a signal box) - A dial or indicator in a manual signal box that shows the position of a signal arm and whether the signal lamp is lit.

Right-side failure - A failure that does not reduce the protection given by signalling equipment.

Rolling stock technician - A person who is authorised and has the necessary technical competence to examine or repair specified items of equipment forming part of a train or vehicle.

Route setting position - Location on a signalling control panel or workstation from which a route can be set or closed.

Running line - A line as shown in Table A of the Sectional Appendix as a passenger line or as a non-passenger line.

Run through (of points) - An incident where a movement runs through a trailing set of points that are not set in the correct position for the movement.

Section signal - A stop signal that controls the entrance to a block section or intermediate block section ahead.

Semi-automatic signal - A signal normally operated by the passage of trains, but can also be controlled from the signal box or from a ground frame, or by a person operating a signal post replacement switch.

Shunt entry board - A lineside indicator board that indicates the entry of a shunt route on ERTMS cab signalled lines where lineside signals are not provided.

Shunting movement - Any movement of a train or vehicle other than a train passing normally along a running line.
**Shunting signal**  A signal that is provided for shunting purposes only.

**Siding**  A line on which vehicles are marshalled, stabled, loaded, unloaded or serviced clear of a running line.

**Signal post replacement key**  The key used to operate a signal post replacement switch.

**Signal post replacement switch**  A switch on the post of an automatic or semi-automatic colour light signal that can be operated by a key to turn it to, and keep it at, danger.

**Single line**  One line is available for movements in both directions.

**Station**  Terminal, depot, yard or halt.

**Station limits**  The line between the home signal and the section signal worked by the same signal box and in the same direction of travel. This does not apply on a track circuit block line.

**Stop signal**  A signal that can show a stop aspect or indication.

**Subsidiary signal**  A semaphore signal used for controlling shunting movements and movements onto occupied tracks. It is always positioned below the main semaphore arm with which it is associated.

**Switched off**  Electrical equipment that is disconnected and separated from all sources of supply.

**Tail lamp**  Includes an illuminated built-in red light or blind.
### Terms in alphabetical order

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TASS</strong></td>
<td>Tilt authorisation and speed supervision. A system on tilting trains that controls:</td>
</tr>
<tr>
<td></td>
<td>• the operation of the tilt system</td>
</tr>
<tr>
<td></td>
<td>• the speed of the train on routes where enhanced permissible speeds apply on TASS fitted lines.</td>
</tr>
<tr>
<td><strong>Token</strong></td>
<td>Any single line token, staff or tablet.</td>
</tr>
<tr>
<td><strong>TOWS</strong></td>
<td>Train operated warning system. An audible warning system at locations listed in the Sectional Appendix. When switched on, it is used to warn personnel on or near the line about an approaching train.</td>
</tr>
<tr>
<td><strong>TPWS</strong></td>
<td>Train protection and warning system. A system by which a train is stopped by an automatic application of the brakes when activated by lineside equipment.</td>
</tr>
<tr>
<td><strong>Track circuit</strong></td>
<td>A method of detecting the presence of a train or vehicle on a line. An electrical device, using the rails as an electrical circuit, detects the absence of a train or vehicle. If these rules refer to track circuits, this also includes detection by axle counters unless specially excluded.</td>
</tr>
<tr>
<td><strong>Track circuit actuator (TCA)</strong></td>
<td>Equipment provided on certain trains to improve the operation of track circuits.</td>
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<tr>
<td><strong>Track circuit block</strong></td>
<td>A method of signalling trains in a section of line using track circuits or other means of automatic train detection and without using block instruments.</td>
</tr>
<tr>
<td><strong>Track circuit operating clip</strong></td>
<td>A device which, in an emergency can be placed on top of each running rail to operate the track circuit and protect an obstruction.</td>
</tr>
<tr>
<td><strong>Track circuit operating device (T-COD)</strong></td>
<td>A special device that can be placed on the line to provide protection by operating the track circuit, to hold a signal at danger.</td>
</tr>
<tr>
<td><strong>Traction unit</strong></td>
<td>Locomotive, multiple unit, self-propelled rail vehicle or road-rail vehicle operating in rail mode.</td>
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<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
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<tr>
<td><strong>Trailing points</strong></td>
<td>Points where two routes converge.</td>
</tr>
<tr>
<td><strong>Train</strong></td>
<td>Light locomotive, self-propelled rail vehicle or road-rail vehicle in rail mode.</td>
</tr>
<tr>
<td><strong>Traincrew</strong></td>
<td>Driver and guard.</td>
</tr>
<tr>
<td><strong>Train-operated points</strong></td>
<td>Points that are continuously driven to one position such that facing movements always pass through them in the same direction. Trains themselves operate the points in the trailing reverse direction.</td>
</tr>
<tr>
<td><strong>Train operator</strong></td>
<td>The company responsible for operating a train.</td>
</tr>
<tr>
<td><strong>Train signalling</strong></td>
<td>Instructions for use by the signaller that give details of the rules, regulations and instructions relating to each different kind of signalling system.</td>
</tr>
<tr>
<td><strong>Transition</strong></td>
<td>The process of the onboard ERTMS signalling system transferring from one signalling system to another. This process has to be acknowledged by the driver.</td>
</tr>
<tr>
<td><strong>Trap points</strong></td>
<td>Facing points at an exit from a siding or converging route that derail an unauthorised movement, so protecting the adjacent line.</td>
</tr>
</tbody>
</table>

| **U**                    | Points that are not operated from a signal box or ground frame.                                     |
Terms in alphabetical order

W

Worked points  Points that are operated from a signal box or ground frame.

Wrong-side failure  A failure that reduces or removes the protection given by signalling equipment.

Y

Your employer  The company, or subsidiary of a larger organisation for whom you work.