

8

Glossary of Rail Terms

Glossary of rail terms

- **APRs** (Automatic Position Reporting System) - radio based digital communications system for local, regional or long distance
- **AREMA** (American Railway Engineering and Maintenance-of-Way Association)
- **ATC** (Automatic Train Control) – integrates various systems, onboard and trackside, to enable safe movement of trains
- **ATP** (Automatic Train Protection) – part of ATC, controls speed of the train to maintain a safe operating distance
- **ATO** (Automatic Train Operation) – part of ATC, onboard, controls the smooth acceleration and stopping of the train at signals and platforms/stations
- **ATS** (Automatic Train Supervision) – part of ATC, oversees ATP and ATO together with the control centre
- **CBI** (Computer Based Interlocking) – software that controls the relays, switches and interlocking for smooth running of the network
- **CBTC** (Communication Based Train Control) – leading-edge technology, mainly used on metros to manage and control trains
- **CENELEC** (European Committee for Electrotechnical Standardisation) - responsible for European standardisation in the area of electrical engineering
- **CTC** (Centralised Traffic Control) – system that monitors the status of signalling on the line and the location of trains

Glossary of rail terms (cont)

- **CTCS** (Chinese Train Control System) - a train control system used on railway lines in China
- **DFL** (Dedicated Freight Line) – lines that are for freight only
- **DPL** (Dedicated Passenger Line) – lines that are for passenger use only
- **DTG** (Distance to go) – system that is aware of where the train is relative to the next train or signal
- **ETCS** (European Train Control System) – an ATP developed as part of ERTMS
- **ERTMS** (European Rail Traffic Management System) – an initiative backed by the European Union to enhance cross-border interoperability and signalling procurement by creating a single Europe-wide standard for train control and command systems. It is now fast becoming the global standard
- **GCP** (Grade Crossing Predictor) – an electronic device which is connected to the rails of a railroad track and activates the crossing's warning devices (lights, bells, gates, etc.) based on a range of factors, including train speed, which minimises waiting delays for drivers and therefore reduces the number of accidents
- **GSM-R** (Global System for Mobile Communications - Railway) - an international wireless communications standard for railway communication
- **HSL** (High-Speed Line) – rail lines capable of running trains at speeds of between 220km/h to 299km/h; Very High-Speed Lines are those capable of running trains at 300km/h plus (UNIFE definition)

Glossary of rail terms (cont)

- **Interlocking** – the system of relays and switches that allows the safe movement of trains along routes only allowing a train to pass when it is safe to do so
- **IRAP** (Invensys Rail Asia Pacific)
- **IRNA** (Invensys Rail North America)
- **IRNE** (Invensys Rail Northern Europe)
- **IRSE** (Invensys Rail Southern Europe)
- **OCC** (Operational Control Centre) - system that monitors the status of signalling on the line and the location of trains
- **PTC** (Positive Train Control) – a North American ATP system
- **RBC** (Radio Block Centre) – radio communication that allows the train to report its position
- **SCADA** (Supervisory Control And Data Acquisition) – collects, collates and analyses information from around the network to the CTC; an operator or the SCADA system can then take appropriate action when required
- **TSRs** (Temporary Speed Restrictions)
- **UTO** (Unmanned Train Operation) - a transport system in which vehicles are run fully automatically without any operating staff on-board

i n v e n t o r y s