

Emergency and Temporary Speed Restriction (ESR/TSR) overview.

When there is a requirement to slow trains down from the Permissible Speed (PS) for a period of time, a speed restriction needs to be put in place. An Emergency Speed Restriction (ESR) for short notice or Temporary Speed Restriction (TSR) for pre-planned or longer term. When there is sufficient time to publish a speed restriction it will be shown in the Weekly Operating Notice (WON) as a TSR.

Equipment will be installed lineside consisting of:

Automatic Warning System (AWS) magnets



AWS provides an audible, visual and acknowledgeable warning to train drivers.

AWS is provided on approach to emergency indicators (ESR only) and warning boards. AWS are normally placed 200 yards / 183 meters prior to the Emergency Indicator or Warning Board but that distance can be reduced on slower line speeds or will need to be increased on higher line speeds.

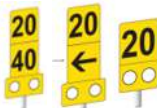
Emergency Indicators (EI) (only for ESR)



Colloquially known as Dalek, Metal Mickey or advanced warning board.

A flashing indicator is provided to draw it to the driver's attention. No numerals are shown on the indicator.

Warning Board (WB)



This is a reflective sign placed at the service braking distance at the point where the driver will be applying the brakes to slow their train down. The applicable speed(s) are displayed which is a single board for all trains. When two speeds are displayed this is known as a differential the top board is for freight trains and the bottom board is for passenger trains or light locomotives. Below the speed indicators are two roundels sometimes referred to as bull's eyes. A warning board is sometimes colloquially referred to as a fish tale as previously the board was a fish tale shape.

Repeater Warning Board (RWB)



These are sometimes referred to as reminder boards. The top part of the board consists of the letter R.

Repeater warning boards are placed at stations to remind drivers of the speed restriction ahead. They also can be placed at the exit to sidings or terminal stations where it is not practical to install AWS magnets and a warning board as trains start from a stand. Repeater warning board locations should be stated on the advice to drivers.

Speed Indicator (SI)



These are also referred to as a commencement board. The lineside mileage where the speed indicator is situated is given to drivers on their advice. This is the point at which the train should be travelling at the speed shown on the speed indicator. An additional speed Indicator may be provided for longer speed restrictions with an intermediate station or a converging line.

Termination board (T board)



Trains can accelerate when the rear of the train passes the termination board. It marks the end of the emergency/temporary speed restriction. The lineside mileage where the termination board is situated is given to drivers on their advice.

Acceleration board (A board)



Trains can accelerate when the front of the train passes the acceleration board. It marks the end of the emergency/temporary speed restriction. The lineside mileage where the acceleration board is situated is given to drivers on their advice.

Cancellation board



Advises drivers to disregard an AWS warning as it is not applicable to them. Typically, on a single line.

SPATE indicator



Where a TSR can go back to the Permissible Speed but the TSR is still published in the weekly operating Notice. A SPATE indicator will replace the speeds displayed at the Warning Board, Speed Indicator and, if in use, the Repeater Warning Board. SPATE is an old Telegraph code word.

Guidance.

Drivers should only pass one Warning Board for each ESR or TSR. At a converging junction there may be two or more emergency indicators and warning boards required prior to the converging junction.

The applicable speed(s) displayed are the same on the Warning Board and, if in use the repeater warning board and speed indicator.

Indicators and boards are normally situated on the left-hand side of the track to the driver. If they are placed on the right-hand side this should be stated on the advice to drivers.

Where one ESR or TSR consecutively follows another there will only be one termination (or acceleration) board at the end of the last restriction. If the second speed restriction is slower than the first, a second Emergency Indicator and/or Warning Board will be provided as well as a second speed Indicator.

A warning board, repeater warning board or speed Indicator before a diverging junction an arrow will be provided to indicate to the driver which route the speed is applicable to. This should be stated on the advice to drivers.

Advice to drivers of a ESR is done by a 'wire' from Control and will be placed in the driver's late notice case or in the case of a TSR in the weekly operating notice.

The speed advised to drivers must not be higher than the permissible speed. Where there is a faster lettered permissible speed such as MU (Multiple unit) or EPS (enhanced permissible speed) they do not apply to ESR and TSRs. The maximum speed displayed should be the standard speed. For example, a lettered MU sign of 100 MPH and a standard speed of 80 MPH the maximum speed of the ESR or TSR would be 80 MPH.



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