

## Overview

This standard is about monitoring the performance and condition of signalling assets and covers ongoing periodic checking of the signalling infrastructure to monitor its condition using signalling gauges and other equipment and comparing this to previous inspection data. The signalling equipment in this standard can be for overground or underground rail transportation systems and can apply to newer systems, such as the European Train Control System (ETCS).

You will be required to monitor the performance and condition of signalling assets. You will know the types of assets to be monitored, the methods and equipment to use for monitoring, and the operating environment in which to monitor the performance and condition of signalling assets.

During this work, you must take account of the relevant worksite operational requirements, procedures, and safe working practices as they apply to you.

Your underpinning knowledge will provide a good understanding of your work and will provide an informed approach to applying problem-solving techniques and procedures when monitoring the performance and condition of signalling assets.

You will comply with any organisational procedures, and legislative or regulatory health, safety, and environmental requirements applicable when monitoring the performance and condition of signalling assets.

This standard is for all supervisors carrying out signalling engineering activities.

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## Performance criteria

### *You must be able to:*

- P1 maintain safe working practices and comply with all relevant health and safety regulations, directives, and guidelines
- P2 identify any necessary changes to safety requirements upon site arrival and report to the relevant person(s) without delay
- P3 set up and check the monitoring equipment meets relevant specifications
- P4 carry out the monitoring activities in line with your organisation's procedures
- P5 identify and analyse any defects or variations from the specification
- P6 record and review the outcomes and take appropriate action in line with your organisation's procedures
- P7 prepare appropriate documentation to update on progress and report completion of activities in line with your organisation's procedures
- P8 address problems within your control and report unresolved issues

## Knowledge and understanding

### *You need to know and understand:*

K1 the relevant health and safety regulations, directives, guidelines, and safe working practices and procedures defined by your organisation, as appropriate to the activity and your working area

K2 your responsibilities in respect of health, safety, and environment. This should include the limits of your personal responsibility, your legal responsibility for your own health and safety and the health and safety of others

K3 the importance of wearing protective clothing and other appropriate types of safety equipment (PPE) and where to obtain it from

K4 hazards associated with working on signalling infrastructure

K5 how to source and interpret current and historical information and document systems relevant to the engineering activity

K6 how to access and interpret the performance requirements of signalling engineering assets

K7 the type of assets to be monitored

K8 the methods and procedures for monitoring signalling engineering assets including the use of signalling gauges and other relevant equipment for measurement, static and dynamic tests, and friction monitoring

K9 the operating environment in which to monitor the performance and condition of signalling assets

K10 the impact of monitoring can have on the operation of the equipment

K11 how to minimise disruption to the operation of the railway

K12 when and why the monitoring of the performance and condition of signalling is required

K13 the range of monitoring equipment available

K14 the methods and techniques for analysing the types of monitoring information obtained

K15 your organisation's procedures for the care and control of equipment including calibration

K16 the importance of equipment calibration and authorisation procedures for the care and use of the equipment

K17 your organisation's procedures for the setting, care, and control of monitoring equipment

K18 the relevant data management processes and technologies for recording

information

K19 the relevant reporting lines, timeframes, and procedures as approved by your organisation

K20 the interfaces and impact of the work that you are undertaking on others

K21 the limits of your own authority and responsibility and those of others involved

## Scope/range

1.  
Types of health and safety legislation, regulations and safe working practices and procedures, as applicable to the work location and activities, could include:
2.  
Schedules, diagrams, and specifications could include:
3.  
The type of assets to be monitored could include:
4.  
The operating environment in which to monitor the performance and condition of signalling assets could include:

SEMRES404

Monitor the performance and condition of signalling assets



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