

What and Why

Process Control is the name for the processes and procedures that a rail operator has in place to inspect its infrastructure and rollingstock to make sure that these assets meet the standards set, and that they are fit for purpose.

It also includes the processes for monitoring compliance with operational systems, such as:

- Operating rules and procedures (Safeworking systems /Network Rules);
- Maintenance of rolling stock and infrastructure has been done;
- Ensuring that only competent people are rostered/allocated and undertake rail safety work;
- Rostering /resource allocation of rail safety workers are fit to do so (drugs & alcohol, fatigue, health assessments).

To ensure that standards set as developed as part of Element 19 are being used by rail safety workers.

This module will focus on rollingstock and rail related assets. In addition, the complexity around what standards to set is explored in Element 19. This module refers **only to the inspection processes** for rail related assets.

The standards referred to here are those that have been defined in SMS Element 19 - General Engineering & Operations System safety requirements.

Infrastructure and rollingstock assets, like any other vehicle need to comply with engineering standards to ensure that they are safe whenever they are in use, and to reduce the opportunity of failure or breakdown.

An inspection regime typically involves a combination of:

- Pre-use (daily) inspections of the track and rolling stock to check for obvious defects which affect the safety of the day's operations; and
- Periodic detailed inspections which are conducted at varying frequencies depending on the age, amount of use and rate of deterioration of the infrastructure and rolling stock;
- With various inspection types carried out by rail safety workers with various levels of competency directly associated with those inspection activities.

How

A procedure contained within the SMS should describe the requirements for testing and maintenance of rail infrastructure and rollingstock assets.

Rail operators should include details as to:

- How they schedule inspections - at what level and by who;
- What exceptions exist if any?
- What tolerances exist to inspection periods, if any?

- The process as to certify inspections when additional levels of control are required (eg. a Fireman and Driver may conduct brake tests and certify the brakes fit for use, while an engineer or maintenance manager may have the competence to certify a locomotive after a 365-day service);
- Any specialist engineering and technical skills required to carry out periodic detailed inspections of some assets like bridges and level crossing equipment;
- What calibration and maintenance processes are required for all equipment used to inspect or test infrastructure or rollingstock;
- How test, inspection and maintenance records are kept to provide evidence of the condition of rail infrastructure or rolling stock. Refer to Element 7 – Document Control and Information Management. Records of all inspections form part of the maintenance history of an asset.

Records must be kept to confirm:

- The inspections have been carried out, and by who;
- The defects identified;
- The condition of the infrastructure/rolling stock (and any restrictions) has been reported to those responsible for the day's operation;
- That defects have been reported for rectification;
- That defects are prioritised and tracked until rectified;
- That maintenance work carried out on each asset (both routine and rectifying defects) is recorded (for example a maintenance log for each asset);

Record keeping will also assist rail operators as part of post incident investigations.

Operators should use internal auditing processes in Element 10 – Safety Audit Arrangements), to ensure that the standards that have been set are being met by Rail safety workers.

Who

Inspections and maintenance of safety rail related assets must only be performed by rail safety workers who have the appropriate and correct levels of competence to do the work.

This is particularly important for smaller less complex rail operators, who should assure themselves that any new rail safety workers hold the competencies required for their specific SMS. One size does not fit all.

The Board/Executive Committee may wish to review inspection and maintenance procedures to comply with their governance obligations.

The Board / Executive Committee and Maintenance Managers may seek regular exception reports for rail infrastructure and/or rollingstock maintenance.

All rail safety workers who conduct inspection/maintenance activities should ensure that they only work within the limits of their own competence.

When

All inspections and maintenance activities should be carried out within the timeframes and tolerances of the maintenance regime established for each piece of equipment/asset.

Audits of inspection and maintenance activities, as well as operational systems should be carried out consistent with the audit schedule (see Element 10).

List of relevant documents (internal)

Element 7 – Document Control and Information Management.

Element 10 – Safety Audit Arrangements

Element 11 – Corrective Action

Element 19 - General Engineering & Operations System safety requirements

Element 24 – rail safety worker Competence

Links (external)

[ONRSR Website – Asset Management Guideline](#)

[ONRSR Website – Road Rail Vehicles](#)

[ONRSR Website – Locomotive Boilers Guideline](#)

[ONRSR Website – SMS Guideline](#)

Appendices

None