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RISRB

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

CODE OF PRACTICE

KPIs for Rail Infrastructure Performance – Track and Civil

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Development of this product was prepared by a Rail Industry Safety and Standards Board (RISSB) Development Group consisting of representatives from the following organisations:

PTA WA, Jacobs, ARTC, RTBU, V/Line, Department of Transport and Planning Victoria, Transport for New South Wales, and LORAM.

The Infrastructure Standing Committee verified that RISSB's accredited process was followed in developing the product, before the RISSB Board approved the document for publication.

RISSB wishes to acknowledge the positive contribution of subject matter experts in the development of this Standard. Their efforts ranged from membership of the Development Group through to individuals providing comments on a draft of the Standard during the open review.

I commend this Code of Practice to the Australasian rail industry as it represents industry good practice and has been developed through a rigorous process.



Alan Fedda
Chief Executive Officer
Rail Industry Safety and Standards Board

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Document details

First published: 2025

Document history

Publication Version	Effective Date	Reason for and Extent of Change(s)
2025	27 June 2025	This document has been reviewed to ensure it remains relevant and applicable. The latest review assessed the content, confirming that while updates were made to align with current industry practices, technologies, and regulatory requirements, the original authorship and copyright have been acknowledged as required.

Approval

Name	Date
Rail Industry Safety and Standards Board	27 June 2025

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Published by the Rail Industry Safety and Standards Board, PO Box 518 Spring Hill Qld 4004, Australia.

Objective

The objective of this Code of Practice (CoP) is to provide a consistent approach to measuring the performance of railway infrastructure in a rail corridor with primary focus on the railway track. The CoP lists performance indicators (PIs) and key performance indicators (KPIs) that may be widely adopted to manage the performance of railway infrastructure.

This CoP has been reviewed against applicable European standards such as EN 15341 and international research papers with the aim to maintain a level of consistency in performance measurement, management and reporting.

This CoP aims to achieve a high degree of harmonisation of KPIs that are identified and selected to apply.

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Section 1 Scope and general

1.1 Scope

This Code of Practice (CoP) prescribes a system for managing track and civil railway infrastructure performance within a framework of influencing factors such as safety, environmental, economic, technical and organisational aspects. Measurement practices will provide tools to improve the efficiency and effectiveness of railway infrastructure asset management.

Applying a chosen subset of performance indicators (PIs) from this CoP can define objectives and strategies for improving safety, environmental, economic, technical and organizational outcomes; without requiring changes to existing inspection, maintenance or regulatory regimes.

This CoP identifies a set of PIs for railway corridors or systems with the aim of providing comprehensive measures of performance and the interaction between the physical, operational and managerial aspects of the RIM.

For the purposes of this CoP, rail Infrastructure includes, but is not limited to, mainline operational track and selected railway structures. Rail infrastructure items that currently are excluded from the scope of this CoP are:

- (a) operations related to rolling stock, train control and management;
- (b) infrastructure related to buildings and other civil structures;
- (c) platforms, sidings, wayside facilities, and non-mainline track classes or categories, such as spur lines or seasonal lines;
- (d) depots and maintenance facilities including special equipment and tooling;
- (e) signalling other than those directly related to track maintenance activities;
- (f) electrification other than the catenary system itself;
- (g) low or non-revenue corridors and associated financial considerations; and
- (h) interfaces associated with entering, exiting and operating in a particular rail corridor or rail network.

When using this CoP, the delineation of corridor infrastructure needs to be defined and documented. How asset renewals and life extensions of existing infrastructure will affect what is measured and concluded also warrants careful consideration. On that point however, as this CoP deals primarily with maintenance operations, such life and renewal decisions and the impact of approved capital expenditure projects normally are to be excluded from scheduled performance measures.

Within this defined scope, the core element of the data that is required for this CoP is the feedback from the asset condition. Hence, the infrastructure asset condition developed in Section 8 is based on the rail infrastructure manager's track maintenance plan (TMP). If that TMP defines measurement and reporting of asset performance, condition and remaining service life of other rail corridor infrastructure such as bridges, catenary, and associated electrification assets then these may be considered within the scope of a PI/KPI assessment, at least to the level that the TMP defines those measurement and inspection tasks.

PIs and their attribution to a set of key performance indicators (KPIs) need to be capable of being measured and recorded using existing IT and data collection infrastructure. However, where identified data acquisition and collection requirements are not available currently, those cases may be managed as discussed in Section 10.