



AUSTRALIAN RAIL TRACK CORPORATION LTD

Discipline: Engineering (Track & Civil)

Category: Code of Practice

Railway Operating Signs

Section 11

Applicability

ARTC Network wide	✓	CRIA (NSW CRN)	
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Primary Source

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Document Status

Version	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
2.2	08 Nov 11	Standards	Standards & Procedures Administrator	Track Standards Engineer	Manager Standards

Amendment Record

Version	Date Reviewed	Clause	Description of Amendment
2.0	31 Jul 09		Implementation draft of network wide document which is an amalgamation of the CoP for SA/WA & Vic and NSW requirements.
2.1	18 Jun 10		Banner added regarding mandatory requirements in other documents and alternative interpretations.
2.2	08 Nov 11		Banner added regarding elements of RISSB National CoP being incorporated

This ARTC CoP has drawn on the Rail Industry Safety and Standards Board (RISSB) National Code of Practice Volume 4, Track and Civil Infrastructure, but is not identical. The ARTC CoP has been subject to Risk Assessment as required by the various State Rail Safety Regulators. The results of these risk assessments have made it necessary to deviate from the RISSB CoP in some areas. ARTC maintains traceability of the differences.

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Mandatory requirements also exist in other documents.

Where alternative interpretations occur, the Manager Standards shall be informed so the ambiguity can be removed. Pending removal of the ambiguity the interpretation with the safest outcome shall be adopted.

11 Railway operating signs

11.1 Design and Rating

11.1.1 General

This Section applies to permanent and temporary infrastructure operating signs that provide information and directions for network users. These include signs for the following:

- a) Permanent speed restrictions including curves and turnouts.
- b) Temporary speed restrictions including track, work site, warning and caution signs.
- c) Protection including worksites and obstructions.
- d) Warning signs including whistle signs and advance warning signs.
- e) Change of operations system or operational parameters (eg. CTC, train order, radio channel, station/yard limits, end of electrification wiring).
- f) Structure, equipment and location identification signs including station identification and kilometre posts.

11.1.2 Line of sight

The line of sight to operating signs should be such that no obstruction is permitted within the sight line when viewed from the driver's normal operating position.

11.1.3 Documentation

A register providing information on all permanent operational signs shall be established and maintained. General inspections shall be carried out with reference to this register.

Information provided to the operators with regard to permanent and temporary signs shall be promulgated and shall include their location.

11.2 Inspection and Assessment

11.2.1 Scheduled Inspections

- a) Track Patrol inspection

The interval between patrol inspections of permanent and temporary operating signs shall not exceed 7 days or as otherwise specified by ARTC e.g. in an approved Technical Maintenance Plan. Particular attention shall be given to temporary signs. Track patrol inspections shall keep a lookout for defects and conditions (i.e. indicators of a defect) that may cause signs to not be performing the function intended including:

- (i) damaged, missing or unreadable signs;
- (ii) temporary signs; or
- (iii) locations where sight distances are deficient, or the view by the train crew of the sign or signal may be obscured.

The speed at which the inspection is carried out should be consistent with the local conditions and the full scope of the inspection being carried out (eg. the type and number of other infrastructure elements being inspected).

b) General inspection

General inspections shall be undertaken by visual means for all permanent and temporary operating signs to ensure they are to standard, are visible and conspicuous, and performing the function intended.

This inspection shall include the tasks of the patrol inspection in addition to the identification of the defects and conditions. Inspection of line of sight shall be carried out by on-rail inspection at the specified sight distance as near as practicable to the train driver's normal operating position. Checklists shall be completed and retained.

General inspections shall be carried out at intervals not exceeding 3 years or as otherwise specified by ARTC e.g. in an approved Technical Maintenance Plan.. General inspections shall also be carried out when suspected defects are identified from conditions determined during track patrol inspections.

11.2.2 Assessment and Action

Each sign shall be assessed to ensure compliance with the required standards for the installation.

Where the sign installation site is assessed and does not comply with the required standard, appropriate action shall be taken to ensure the immediate safety of operations. Follow up action shall then be taken to ensure that the required standards are complied with.

Assessment of the line of sight shall be conducted on the basis that the sight line originates from a train drivers normal operating position to the sign to be observed.

Where it is assessed that the sight line is obstructed appropriate action shall be taken to ensure the immediate safety of operations. Follow up action shall then be taken to ensure that the sight line is restored.

Where the sight line is permanently obstructed for the maximum operating speed then either—

- a) advance warning to drivers of trains should be provided;
- b) the sign should be relocated; or
- c) operational restrictions should be imposed.