



AUSTRALIAN RAIL TRACK CORPORATION LTD

Discipline: Engineering (Track & Civil)

Category: Code of Practice

Right of Way

Section 17

Applicability

ARTC Network wide	✓
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Primary Source

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Document Status

Version	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
2.3	16 Jul 13	Standards	Stakeholders	Manager Standards	General Manager Technical Standards & Environment. 22/07/2013

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
2.3	16 Jul 13	17.3.2	Added requirement to list redundant assets in Ellipse, also complete new form 'Section17.3.2F-01 Inspection of Redundant Infrastructure'. Any defects found during inspection of redundant infrastructure also to be recorded on 'EGP1001F-01 Inspection/Defects Found Report Form'. Removed CRN applicability box.

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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.

Contents

17	Section 17: Right of Way	4
17.1	Management of Vegetation.....	4
17.1.1	Management of Bushfire Hazards	4
17.1.2	Native Plant Reserves	5
17.1.3	Weed and Pest Control.....	5
17.2	Construction.....	5
17.2.1	Installation of Pipes and Cables.....	5
17.2.2	Location Markers.....	6
17.3	Inspection and Assessment	6
17.3.1	Scheduled Patrol Inspections	6
17.3.2	General Inspections.....	6
17.3.3	Un-Scheduled Inspections	7

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.

17 Section 17: Right of Way

17.1 Management of Vegetation

17.1.1 Management of Bushfire Hazards

a) Strategies

Action plans to manage fire hazards in consultation with local Bush Fire Management Committees shall be implemented with emphasis given to those measures which prevent or reduce the spread of fires.

Objectives should include:

- Implementing ARTC's commitment to being a good neighbour to adjacent landowners (people, land, property and operations);
- Conforming with Legislative requirements;
- Minimising the risk associated with bushfires;
- Ensuring that staff are aware of their roles and responsibilities in accordance with legislation, this policy, and relevant standards and procedures.
- Safeguarding ARTC's customers, staff, estate and operations.

Procedures should include:

- (i) Representation on local Bush Fire Management Committees.
- (ii) Liaison with landowners, lessees, Bushfire Brigades, Councils, emergency services and other relevant Authorities.
- (iii) Risk assessment of railway property and operations including:
 - (A) source of fires (burning off, welding, grinding, gas cutting, brakes, locomotives, dangerous goods, vandalism, external sources etc.)
 - (B) potential spread of fire (environment, topography, fuel, etc.)
 - (C) consequences to the railway and adjoining landowners
 - (D) preventative actions such as fuel reduction, firebreaks and maintenance procedures
- (iv) Provision of resources (people, equipment, access, etc.).
- (v) Staff training/communications.
- (vi) Maintenance procedures during high fire risk periods.
- (vii) Reporting of incidents.

Action plans should be integrated with community Bush Fire Management Plans and progress monitored.

b) Fire hazard reduction

Excessive growth on the right of way shall be removed by burning off or by mechanical or chemical means. Particular attention should be placed on an eight metre wide strip centred on the track.

On unfenced rural lines where the adjacent landholder usually has use of the railway land, fuel hazard reduction is only to be carried out when requested by and with the co-operation of the user.

Growth removal can best be done in co-operation with local bush fire brigades and adjacent landholders. Maintenance personnel should be encouraged to attend and be part of local bush fire groups and local council administrative groups.

Hazard reduction in areas proclaimed under Clean Air Acts should be undertaken by mechanical methods that will control the growth and provide a green swathe once the area is made suitable for this form of maintenance. Firebreaks should be provided in potential fire hazard areas. The state wide fire danger ratings should be regularly reviewed and the programs adjusted accordingly to ensure that priority is given to the risk areas.

Wherever practical firebreaks are to be combined with access road and track improvement programs to maximize the effectiveness of the effort.

The excessive removal of grass growth is not encouraged, but the problem of dried growth should not to be overlooked. The aim is to provide a railway property similar to the adjacent property and appropriate to the usage of that land.

The growth of trees is not encouraged where train crew visibility could be reduced, the trees could fall on running lines or the structural clearance outline is fouled. Where practical, local interested parties should be encouraged to plant and maintain trees and parkland.

Acknowledging the community concern over the use of "pesticides", ARTC requires that maintenance contractors allow only qualified staff to handle and apply only those chemicals that are authorised by the appropriate Government Authority.

Similarly, only "environmentally acceptable" herbicides shall be used.

In summary, the Australian Rail Track Corporation maintains a responsible attitude to the part it plays in maintaining the land it uses.

17.1.2 Native Plant Reserves

The protection of flora in native plant reserves and for significant flora, e.g. trees shall meet the requirements of the relevant Legislation.

17.1.3 Weed and Pest Control

Weed and pest control shall be undertaken by properly trained and qualified staff to eliminate or control weed growth on operational lines and elsewhere to comply with local Regulations.

The Infrastructure Owner and its maintenance contractors should co-operate with statutory bodies and adjacent landholders in the elimination of noxious weeds, rabbits and other similar matters.

17.2 Construction

17.2.1 Installation of Pipes and Cables

Cables and pipes on Railway land shall be installed in accordance with AS 4799 "Installation of underground utility services and pipelines within railway boundaries". Additionally pipes carrying Flammable Liquids and Flammable Fluids must conform to AS1697 "Installation and maintenance of steel pipe systems for gas".

The owner/operating organisation shall ensure that new underground installations are correctly located and marked, by the service authority or contractor, including:

- a) Signalling cables, telephone cables and co-axial cables.
- b) Electricity mains, domestic and high tension.
- c) Water pipes, water mains, sewer pipes, and drainage pipes.
- d) Pipes for special purposes such as gas, petrol, oil, and other substances.

Before permitting any private party, which has approval to bore or excavate under a Railway line, or any contractor to commence work on the railway, the Infrastructure Owner shall be

satisfied that the correct procedures have been carried out to ensure that the presence and location of underground equipment has been determined.

The owner/operating organisation shall ensure that underground pipes and cables are not damaged, particularly when undertaking earthworks or other maintenance or construction works.

Damaged signal and electrical equipment must be reported to the owning party. In the case of signalling and Telecom cables appropriate signalling personnel must be immediately notified. No attempt is to be made to rectify the damage by unqualified staff.

Where electrical cables are damaged no attempt is to be made to rectify or touch exposed cables but the appropriate Authority is to be informed.

17.2.2 Location Markers

Surface markers, underground slabs, and identification tape markers to indicate cable or pipe locations shall be provided to prevent damage or removal during the course of any work.

Markers shall not be removed without reference to the Authority owning the underground cable or pipe.

When markers are displaced the railway infrastructure owner shall ensure that service owner/operating organisations ensures that the marker is properly re-established.

17.3 Inspection and Assessment

17.3.1 Scheduled Patrol Inspections

Inspection of the Right of Way shall be undertaken during the regular track patrols. These patrols should keep a lookout for defects and conditions that may affect the integrity of the right of way including the following:

- a) damage to vegetative growth outside treated or controlled areas;
- b) high risk fire locations including presence of combustible rubbish and vegetation;
- c) Indications of unreported fires;
- d) infringement on firebreaks by combustible materials;
- e) hazardous tree limbs or trees which may effect train operations including line of sight;
- f) hazards effecting the safe use of access roads and walkway paths;
- g) vegetation obscuring operating signs and signals;
- h) livestock entering right of way.

The inspection should be carried out at a speed 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).

17.3.2 General Inspections

Scheduled general inspections shall be sufficient to observe and document items of concern and significant changes in the condition of the right of way since the previous general inspection. A general inspection should be carried out when suspected defects are identified from conditions determined during track patrol inspections.

General inspections should include the tasks of the patrol inspection and in addition look for conditions or changes in the conditions which may affect the integrity of the right of way including the following:

- a) Damaged or defective fences, gates, or pedestrian mazes designed to prevent or control the ingress of animals or persons onto the Right of Way;
- b) Unsafe conditions of access facilities such as walkways*;

- c) Lack of access control where it may be required*;
- d) Treated or controlled areas (including the ballast, cesses and established fire breaks) not substantially free from vegetative growth;
- e) High risk fire locations including presence of combustible rubbish and vegetation;
- f) Infringement on firebreaks by combustible materials;
- g) Vegetation which may effect train operations;
- h) Presence of noxious weeds as defined by the relevant local authorities ;
- i) Hazards effecting the safe use of access roads and walkways;
- j) Evidence of unauthorised encroachment into the Right of Way by third parties including the building of structures, new excavations, tipping of materials, road construction, erection of hoardings or fences and the laying of drains, pipes or cables;
- k) Damaged or defective third party crossings of the Right of Way (pipelines, services, cables etc.)

* General inspections of redundant infrastructure are to be recorded on form 'Section17.3.2F-01 Inspection of Redundant Infrastructure'. Any inspection items assessed with response 'No' shall be detailed in the comments and reviewed by the Delivery Manager for further action as required. Any potential defects must also be recorded on 'EGP1001F-01 Inspection/Defects Found Report Form'.

Redundant assets shall be listed in Ellipse and the inspections programmed via WMS with appropriate MST's in at 2 year intervals or as specified by the Delivery Manager.

17.3.3 Un-Scheduled Inspections

An un-scheduled inspection of the right of way should be carried out following the identification of suspected defects during general or patrol inspections which may affect the infrastructure and following events such as heavy rainfall and fires.