



AUSTRALIAN RAIL TRACK CORPORATION LTD

Signals – Inspection and Assessment

**Specification
Requirements**

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Australian Rail Track Corporation

Authorised By:

1 Scope

This document specifies requirements for inspections and assessment of suspected defects and faults and the initiation of appropriate actions to control their impact.

2 Specification

2.1 Incident Response Requirements

The Contractor shall roster sufficient personnel to effectively maintain an as required response service for all incidents, faults and defects.

It is the Contractors responsibility to provide ARTC with sufficient information to easily identify and contact the Contractors representative at any time.

The Contractors representative will notify the appropriate response personnel in accordance with the impact of the incident, as advised by Train Control.

Response personnel shall be capable of fulfilling the following requirements:-

In the case of a suspected fault or defect, a person competent to carry out an unscheduled inspection and assessment and to initiate appropriate actions.

In the case of an incident, fault or defect which results in or has the potential to result in damage to property or injury to persons or has an impact on train safeworking operations, a person responsible for liaising with ARTC in an investigation.

All response personnel shall be sufficiently equipped to enable them to be immediately contactable when required and be able to travel reliably to a location on any part of the ARTC infrastructure where an incident or suspected fault or defect occurs and take the appropriate action to remedy the situation.

2.2 Procedures

The Contractor shall implement specific procedures for incident response, fault and defect finding, incident investigation and appropriate remedial action. These shall be presented to ARTC for approval, prior to implementation.

2.3 Incident Assessment

When the Contractors response personnel are requested by Train Control to conduct an inspection and assessment following a reported incident , the method of assessment and response shall be in accordance with the requirements of AS 4292.1-1995: Railway Safety Management Part 1-General and Interstate Requirements.

2.4 Response to Incidents and Suspected Faults and Defects

The Contractor shall provide response services for incidents and suspected faults and defects including:

Provide and maintain a 24 hour call out roster to ARTC requirements.

Respond to Train Control requests and Train Control Reports (TCR) generated from ARTC.

Respond to incidents and suspected faults and defects as identified and reported to the Contractor by other parties, including the Contractors inspectors, other ARTC agents and members of the public, if required, after liaising with Train Control.

Send representative to site and with permission from Train Control carry out initial assessment of extent of incident or suspected fault or defect and expected impact on ARTC operations.

Relay information on damage and impact to Train Control.

Arrange for additional response personnel to attend, if required.

Obtain permission from Train Control to initiate action, with the objective to minimise disruption to train services.

The response shall be in accordance with the impact as follows:

If the incident, fault or defect results or has the potential to result in damage to property or injury to persons or has a impact on train safeworking operations, then:

The Contractors representative is to provide assistance to the Emergency Services Officer in Charge as directed.

After release of the site by emergency services and if requested by ARTC, take control of the site in cooperation with the representatives from other organisations involved. Minimise further damage to the infrastructure or other parties and ensure that material and/or evidence is not removed from site without ARTC permission.

In cooperation with Train Control, instigate safeworking procedures in accordance with the Commonwealth Network Operations Code of Practice to ensure that any train which was not able to complete its movement prior to the incident, fault or defect, is able to traverse through the affected area safely.

Carry out an initial assessment of damage, including resources and time estimates for repair of the infrastructure to an operational state.

Provide estimates for repair of the infrastructure to the pre-incident or pre-failure condition in the case of an expected insurance claim.

Complete and submit to ARTC an Incident Report.

If the situation can be remedied and does not involve an insurance claim, then initiate appropriate action in accordance with the relevant parts of the following section.

If the incident or suspected fault or defect is other than that described above, then:

Identify location of the suspected fault or defect.

If the fault or defect is not present upon inspection then the suspected causes should be investigated to confirm system performance. All relevant results and comments should be recorded to enable an independent assessor to conduct further investigations, if required.

When the fault or defect is identified, relay the information to ARTC before initiating further action and cooperate in assisting Train Control to complete a Signal Incident Report.

If train traffic is in the vicinity, ensure that the necessary remedial work does not affect the safeworking of trains. If the safeworking of trains is to be affected, then in cooperation with Train Control instigate safeworking procedures in accordance with the Commonwealth Network Operations Code of Practice.

The fault or defect should then be rectified as soon as possible. If repairs are delayed or only temporary repairs are possible then, if necessary, train safeworking procedures must be instigated in cooperation with Train Control to ensure the safe passage of all train movements in the vicinity in accordance with the Commonwealth Network Operations Code of Practice, until the system can be returned to its original condition.

2.5 Repairs to Safeworking Equipment

All work carried out shall restore the system or asset to its original condition such that it is safe for the operation of trains and the protection of people and property on or in the vicinity of the railway.

Repairs shall be carried out by competent, qualified staff to proper standards and to the satisfaction of ARTC.

All incidents of damage to vital signalling equipment shall be reported to ARTC. The Contractor shall ensure the timely, adequate and proper repairs of the equipment.

Appropriate tests shall be carried out to ensure that the system or asset operates correctly.

The rectification of a failure shall not, in itself, be considered as the final action to be taken. Steps have to be taken to avoid the recurrence.

If a temporary repair has been made, the Contractor shall ensure that permanent repairs are completed within 24 hours unless ARTC approve an extension. A record of temporary repairs shall be kept in a database for that purpose.

New work shall be installed in "as new" condition however, within a reasonable limit, damage repair may be accepted subject to ARTC approval.

2.6 Signal Incident Reports

When defects, faults, accidents or damage occur to the signals infrastructure then the Contractor shall cooperate with Train Control in supplying factual information, as required, to complete a Signal Incident Report by Train Control, as per the sample attached.

In addition, it is essential that information such as the 'nature' and 'cause' of the failure be supplied and when known, the make, type and serial number of the equipment which has failed or suffered damage. Advice is also required in the case of a failure for which the cause is not found immediately.

Advice shall also be required to indicate whether any repair work carried out is permanent or temporary.

These statements shall be sufficient to enable an independent assessor to check the nature and adequacy of the repairs made.

ARTC will maintain a register of damage to vital signalling equipment with full details of the incident and personnel involved.

SUPERSEDED

Signal Incident Report

The Contractor shall cooperate with Train Control in supplying factual information as required to complete the Signal Incident Report by Train Control.

Sample is shown as follows:

Location _____		Date ____ / ____ / ____	
Type of failure (circle whichever is applicable)			
Signal	Points	CTC	
Level Crossing	Power	Block	
	Other	Communications	
Description of incident (include signal, points or track number)			
.....			
.....			
Time of incident hrs	Time reported to Contractor hrs
Time restored hrs	Total down time hrs mins
Officers advised			
Name	Position	Time advised	
Remarks			
.....			
.....			
Train No	Delay	Train No	Delay
.....
Train No	Delay	Train No	Delay
.....
Train No	Delay	Train No	Delay
.....
Train No	Delay	Train No	Delay
.....
Are Repairs Permanent or Temporary Y / N			
Train Controller		Name	