

## 1. Purpose

This standard provides guidance to Rail Infrastructure Managers (RIM) and Authorised Engineering Authorities (AEO) when considering proposals for changes to Yard Limits.

This standard describes the process to be used for determining Yard Limit boundaries where it is proposed to establish Yard Limits that differ from the normal Yard Limit conventions in *Signal Design Principle ESG 100.23* (for example to extend boundaries at a single location or consolidate boundaries at adjoining locations.)

.....

## 2. Scope

This standard applies to:

- the establishing Yard Limits for new signalling locations
- redefining Yard Limits at existing locations due to signalling infrastructure changes
- amending or consolidating Yard Limits at existing locations for operational reasons.

## **3. References**

Signal Design Principle ESG 100.23 Yard Limits NTR 418 Yard Limits

## 4. General

When Yard Limits are being determined for new locations, or existing locations where significant signalling redesign has occurred, the requirements of *Signal Design Principle ESG 100.23* must be applied.

If it is determined that there are demonstrable Safety or Operational benefits to be achieved by the extension or consolidation of Yard Limits, the process described in *Signal Design Principle ESG 100.23* must be followed.

# **5. Standard convention for Yard Limits**

The standard convention for Yard Limits in Rail Vehicle Detection system areas in the Sydney Trains Network is:

#### Unidirectional double line areas.

END	LIMIT
Arrival	First Controlled Signal
Departure	First Automatic Signal beyond the last Controlled Signal

#### **Bidirectional double line areas.**

END	LIMIT
Arrival	First Controlled Signal
Departure	First Controlled Signal in the opposing direction



#### **Bidirectional single line areas.**

END	LIMIT
Arrival	First Controlled Signal
Departure	First Controlled Signal in the opposing direction

#### **6.** Proposal for extension or consolidation of Yard limits

A proposal to amend existing, or establish new Yard Limits that differ from normal Yard Limit conventions in *Signal Design Principle ESG 100.23* may be made by an industry stakeholder. Requests must be made in writing to the Director Safety and Standards, Sydney Trains.

A request must clearly describe:

- all details of the proposed change
- the reasons for the proposed change
- all benefits to be achieved by the change
- any known or anticipated risks associated with the change
- any existing or proposed risk controls supporting the change proposal.

On receipt of a request, the Network Rules unit will conduct a preliminary review of the proposal to determine its feasibility.

If the preliminary review determines that the proposal is not feasible, the proposer will be advised of the decision in writing by the Director Safety and Standards, Sydney Trains.

If the preliminary review determines that the proposal is credible and warrants further consideration, the Director Safety and Standards, Sydney Trains will coordinate with the Professional Head Signalling and Control Systems to facilitate a formal risk assessment of the proposal, ensuring that all affected stakeholders are consulted.

## 7. Risk assessment

The review of any proposal to establish or amend Yard Limits must be supported by a formal risk assessment. The risk assessment must consider, but not be limited to:

- the line speeds and track gradients involved
- the locations of any level crossings
- the involvement of any local control panels
- the task load of intended Signallers
- the availability of track-circuits indicated on the Signaller's panel providing an uninterrupted display of track occupancies.

#### NS-0920

# **Determining Yard Limits**

If existing Yard Limits are proposed to be consolidated, the following additional factors must be considered:

- the number of interlockings to be included in the proposed Yard Limits
- the length of, and number of signals in, the intervening automatic signalling sections (between interlockings) to be included in the consolidated Yard Limit boundary
- the locations of any intermediate sidings or crossovers, especially where points are not operated or released from the Signaller's control panel.

# 8. Approval

A decision to amend existing Yard Limits, or establish new Yard Limits that differ from the normal Yard Limit conventions will be based on the outcome of the risk assessment.

Approval will be given only if the proposal review has identified there is a demonstrable operational benefit and the risk assessment demonstrates:

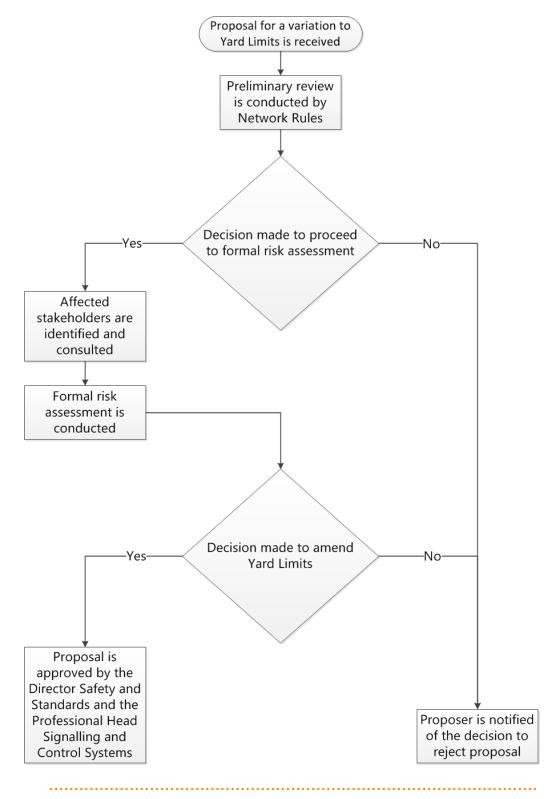
- any new risks introduced by the proposal are effectively mitigated SFAIRP
- proposed controls can be practically implemented

Approval must be documented in writing by both:

- the Director Safety and Standards, Sydney Trains
- the Professional Head Signalling and Control Systems, Sydney Trains



#### 9. Process





# **10. Definitions**

AEO	Authorised Engineering Authority
Bidirectional	Allowing for normal movement of rail traffic in either direction according to the infrastructure and system of Safeworking in use.
Industry Stakeholder	ASA representative, Sydney Trains Network Operations representative, Sydney Trains Signal Design representative, AEO engaged by or on behalf of Sydney Trains or ASA
RIM	Rail Infrastructure Manager
SFAIRP	So far as is reasonably practical
unidirectional	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.

## **11. Effective date**

21 July 2018