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T HR SY 10000 GU

Guide

Overview of Rail Security Standards and Interpretation Guide

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Standard governance

Owner: Manager Security Risks and Standards, Transport Services, TfNSW

Authoriser: Director Security and Revenue Protection, Infrastructure and Services, TfNSW

Approver: Executive Director, Asset Standards Authority on behalf of the ASA Configuration Control Board

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For queries regarding this document,
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Preface

The Asset Standards Authority (ASA) is a key strategic branch of Transport for NSW (TfNSW). As the network design and standards authority for NSW Transport Assets, as specified in the *ASA Charter*, the ASA identifies, selects, develops, publishes, maintains and controls a suite of requirements documents on behalf of TfNSW, the asset owner.

The ASA deploys TfNSW requirements for asset and safety assurance by creating and managing TfNSW's governance models, documents and processes. To achieve this, the ASA focuses on four primary tasks:

- publishing and managing TfNSW's process and requirements documents including TfNSW plans, standards, manuals and guides
- deploying TfNSW's Authorised Engineering Organisation (AEO) framework
- continuously improving TfNSW's Asset Management Framework
- collaborating with the Transport cluster and industry through open engagement

The AEO framework authorises engineering organisations to supply and provide asset related products and services to TfNSW. It works to assure the safety, quality and fitness for purpose of those products and services over the asset's whole of life. AEOs are expected to demonstrate how they have applied the requirements of ASA documents, including TfNSW plans, standards and guides, when delivering assets and related services for TfNSW.

Compliance with ASA requirements by itself is not sufficient to ensure satisfactory outcomes for NSW Transport Assets. The ASA expects that professional judgement be used by competent personnel when using ASA requirements to produce those outcomes.

About this document

ASA publications include legacy RailCorp standards that were applicable to TfNSW rail assets as at 30 June 2013. This document provides an overview of legacy RailCorp security standards and guidance that are still applicable to TfNSW rail assets, and clarifies the interpretation of references to positions and procedures that are no longer applicable in the current organisational context.

Although due diligence on standards covered in this document has been performed, the interpretations to legacy RailCorp organisational roles and processes provided herein do not cover all eventualities.

Incorporating baseline security measures and good security practices in the design phase of projects is best practice. Security standards provide required performance levels that help ensure that security measures align to the prevailing threat environment and reduce security risks.

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This guidance document has been prepared by the ASA in consultation with TfNSW agencies and is the second issue.

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1. Introduction

The Asset Standards Authority (ASA) suite of standards includes legacy RailCorp standards which will continue to be used until the ASA reviews and updates or replaces them with new standards, or decides that they are no longer applicable.

The legacy standards represent a significant body of knowledge and in the main continue to be relevant. These standards contain references to legacy RailCorp positions, job titles or processes which, in the new environment, are no longer applicable.

This document provides an overview of the suite of legacy RailCorp security standards (RSS's) and guidance on how to interpret references in those standards in the current TfNSW organisational context. The security standards suite is not published on the ASA website and is available to authorised personnel on request only for security reasons.

2. Purpose

The purpose of this document is to create awareness, among the project delivery organisations, of the security requirements for specific rail assets. This document is intended to assist end users to develop appropriate mitigations through the security risk assessment process which contribute towards better security outcomes for customers. These can include management of crime and anti-social behaviour, security improvements and where appropriate, counter terrorism measures.

Specifically, this guide seeks to assist users by providing guidance to interpret the relevant RSS documents against the current TfNSW organisational context.

2.1. Scope

This standard provides an overview of the following RSS's:

- RSS-001 Stations
- RSS-002 Stabling Locations and Maintenance Centres
- RSS-003 Substations
- RSS-004 Signalling and Control Room Facilities

These standards contain processes and positions that may no longer exist. However, the technical requirements within these standards can still be valid for the TfNSW heavy rail environment.

In the first instance, these security standards, along with this guidance document should be referred to for current requirements for security. All other RSS's have been withdrawn from use.

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TfNSW will develop a suite of security standards that will eventually replace all requirements of RSS-001, RSS-002, RSS-003 and RSS-004. Subsequently, as new security standards are issued, the requirements of the new standards will supersede the corresponding RSS requirements.

Access to Transport Security Standards is to be requested through ASA.

This guide will be updated with each release of a new security standard to highlight any requirement within the RSS documents that are no longer relevant. This document also covers information on the process to access security standards, which are available on request.

2.2. Application

This document applies to an end user of legacy RailCorp standards RSS-001, RSS-002, RSS-003 and RSS-004 where a reference is made to a legacy position, job title or process.

This document provides guidance to contractors entering into contracts with TfNSW after 30 June 2013 who are required to use RSS's.

The interpretations provided herein when applied even in a single document environment may not always fit the context or situation. Users shall seek necessary guidance where ambiguities or uncertainties exist. Any obvious omissions or discrepancies are to be notified to ASA by email to standards@transport.nsw.gov.au

3. Reference documents

The following documents are cited in the text. For dated references, only the cited edition applies. For undated references, the latest edition of the referenced document applies.

Australian standards

AS/NZS ISO 31000:2009 Risk management – Principles and guidelines

HB 167:2006 Security risk management

Transport for NSW standards

EP 99 00 00 07 SP Substation Fencing

RSS-001 Stations

RSS-002 Stabling Locations and Maintenance Centres

RSS-003 Substations

RSS-004 Signalling and Control Room Facilities

T HR CI 12160 ST Boundary Fences

TMC 511 Boundary Fences

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T MU SY 10001 ST Public Transport Closed Circuit Television (CCTV) Functional Requirements Standard

T MU MD 00009 SP AEO Authorisation Model

T MU MD 00011 ST Concessions to ASA Requirements

T MU MD 20002 ST Risk Criteria for Use by Organisations Providing Engineering Services

4. Terms and definitions

The following terms and definitions apply in this document:

AEO Authorised Engineering Organisation

ASA Asset Standards Authority

CCTV closed circuit television

CPTED crime prevention through environmental design

RSS RailCorp security standard

SCADA supervisory control and data acquisition

TfNSW Transport for NSW

5. Overview of RSS-001 Stations

RSS-001 establishes requirements for facility design and the security measures for railway stations and station precincts including transport interchanges. The document provides necessary design criteria and supplementary security measures that are minimum requirements when developing a new station facility, or retrofitting security initiatives into an existing location.

RSS-001 was developed to enable an audit of existing measures and to facilitate the design and implementation of new measures.

The standard covers the following:

- station category descriptions based on station patronage and assessed risk
- risk assessment requirements
- crime prevention through environmental design (CPTED) requirements
- station design requirements
- electronic security requirements, including closed circuit television (CCTV)
- physical security measures

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6. Overview of RSS-002 Stabling Locations and Maintenance Centres

RSS-002 establishes requirements for facility design and the security measures for stabling locations and maintenance centres. The document provides necessary design criteria and supplementary security measures that are minimum requirements when developing a new facility or retrofitting security initiatives into an existing location.

RSS-002 was developed to enable an audit of existing measures and to facilitate the design and implementation of new measures.

The standard is applicable to stabling yards, maintenance centres, rail sidings, turnbacks and loops used for the stabling, storage or long term holding of trains.

The standard covers the following:

- definitions for stabling locations and maintenance centres
- risk assessment requirements
- CPTED requirements
- stabling locations and maintenance centre design requirements
- electronic security requirements
- physical security measures

7. Overview of RSS-003 Substations

RSS-003 establishes requirements for substation design and the security measures that shall be incorporated into substations and other rail infrastructure that house high voltage electrical distribution and switching equipment. The document provides necessary design criteria and supplementary security measures that are minimum requirements when developing a new location or retrofitting security initiatives in an existing location.

RSS-003 was developed to enable an audit of existing measures and to facilitate the design and implementation of new measures.

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The standard covers the following:

- definition for substations
- risk assessment requirements
- CPTED requirements
- substation design requirements
- electronic security requirements
- pole mount and pad mount transformer requirements

8. Overview of RSS-004 Signalling and Control Room Facilities

RSS-004 establishes requirements for signalling and control room facility design and the security measures that shall be incorporated to minimise security incidents. The document provides necessary design criteria and supplementary security measures that are minimum requirements when developing a new location or retrofitting security initiatives in an existing location.

RSS-004 was developed to enable an audit of existing measures and to facilitate the design and implementation of new measures.

The standard covers the following:

- definition for signalling and control room infrastructure
- risk assessment requirements
- CPTED requirements
- substation design requirements
- signalling and control room facility design requirements
- electronic security requirements
- overview of security requirements for other signalling infrastructure including small buildings, location cases and cable infrastructure

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9. General interpretations applicable to RSS's

Table 1 provides the interpretations for positional and procedural references that apply across RSS-001, RSS-002, RSS-003 and RSS-004.

Table 1 – General interpretations

Reference	Interpretation and comment
RailCorp Security Division	Security and Revenue Protection Branch, Infrastructure and Services, TfNSW
RailCorp	TfNSW for asset ownership. Sydney Trains or NSW TrainLink as the service operator
Australian standard	The latest version of an Australian standard shall be read where any reference is made to an Australian standard
Legislation	The most current version of legislation shall be read where any reference is made to legislation
Group Remote Monitoring System (GRML)	Security Monitoring Facility
RailCorp's Risk Management Framework	T MU MD 20002 ST *Risk Criteria* for Use by Organisations Providing Engineering Services
CCTV requirements	Refer to T MU SY 10001 ST Public Transport Closed Circuit Television (CCTV) Functional Requirements Standard for all CCTV requirements
All requirements	References to any engineering standard provided in the security standards relate to the latest version of that standard that is published on the ASA website. Where specific security requirements specified in the security standards conflict with engineering or technical requirements specified in an engineering standard, the higher level compliance requirement shall be adopted for the design in formal consultation with the TfNSW Security and Revenue Protection Branch. Where conflicts of requirements occur, guidance shall be sought from the relevant ASA lead engineer in formal consultation with the TfNSW Security and Revenue Protection Branch.

10. Interpretations of references in RSS-001 Stations

The following interpretations are provided for positional and procedural references in RSS-001:

- Section 1.1 Safety Management System

  This section is not relevant to the current TfNSW organisational context and shall be disregarded.

- Section 2.1 Standards framework

  This section is not relevant to current TfNSW process and shall be disregarded.

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- Section 2.5 Security design review and validation

  This section is not relevant to the current TfNSW organisational context and shall be disregarded. Refer to T MU MD 00009 SP *AEO Authorisation Model* for the current governance framework in place for design services.

- Section 2.7 User instructions

  References in this section to 'RailCorp's Security Division' related to queries, exemptions, approvals and specific concessions shall be read as the ASA.

- Section 3 Risk Assessment

  Reference to HB23-2007 shall be read as AS/NZS ISO 31000:2009 *Risk management – Principles and guidelines* and the associated handbook HB 167:2006 *Security risk management*

- Section 5.7 Lifts

  Reference to the 'Period Contract for Passenger Lifts at Railway Stations' shall be read as 'the relevant contract specifications'

- Section 5.10.5 Designated passenger waiting areas

  This section is not relevant to current TfNSW process and shall be disregarded.

- Section 5.10.9 Signage

  Replace item a) with, 'be in accordance with the TfNSW approved communication and branding guidelines'.

- Section 5.11.1 Station bins

  The first paragraph and item a) are not relevant to current TfNSW process and shall be disregarded.

- Section 5.11.4 Bicycle lockers

  The first paragraph is not relevant to current TfNSW process and shall be disregarded.

- Section 7.1 Fencing – Station and Interchange

  The requirements detailed in this section shall be supplemented with requirements in T HR CI 12160 ST *Boundary Fences* and TMC 511 *Boundary Fences*. Refer to Table 1 for guidance on interpretation of engineering and technical requirements.

- Section 9 References

  References in this section shall be replaced in accordance with the interpretations provided in this guide.

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11. Interpretations of references in RSS-002 Stabling Locations and Maintenance Centres

The following interpretations are provided for positional and procedural references in RSS-002:

- Section 1.1 Safety Management System

  This section is not relevant to current TfNSW organisational context and shall be disregarded.

- Section 2.1 Standards framework

  This section is not relevant to current TfNSW process and shall be disregarded.

- Section 2.2 What is a Stabling Location
  - Reference to 'Security Division & their representatives' in the tenth bullet point shall be replaced with 'Security and their representatives'.
  - Reference to 'Rollingstock Division' in the eleventh bullet point shall be disregarded.
  - Reference to 'Asset Management Group, including Buildings and Sidings' in the last bullet point shall be disregarded.

- Section 2.3 What is a Maintenance Centre

  In the first paragraph, disregard reference to 'Managed by the Rolling Stock Division'.

- Section 2.5 Security design review and validation

  This section is not relevant to the current TfNSW organisational context and shall be disregarded. Refer to T MU MD 00009 SP for the current governance framework in place for design services.

- Section 2.7 User instructions

  References in this section to 'RailCorp's Security Division' related to queries, exemptions, approvals and specific concessions shall be read as the ASA.

- Section 5.3 Boundary security
  - Reference to 'Fencing Functional Standard for RailCorp Maintenance Centres and Stabling Locations (Part-A)' in the first paragraph shall be disregarded.
  - The requirements detailed in this section shall be supplemented with requirements in T HR CI 12160 ST and TMC 511. Refer to Table 1 for guidance on interpretation of engineering and technical requirements.

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- Section 5.7 Signage
  - Reference to 'RailCorp Network Rules' in the second bullet point of paragraph one shall be read as 'Network Rules'.
  - Replace last bullet point in paragraph one with 'be in accordance with the TfNSW approved communication and branding guidelines'.
- Section 7.7 Long Line Public Address

  This section is not relevant to current TfNSW process and shall be disregarded.
- Section 9 References

  References in this section shall be replaced in accordance with the interpretations provided in this guide.

12. Interpretations of references in RSS-003 Substations

The following interpretations are provided for positional and procedural references in RSS-003:

- Section 1.1 Safety Management System

  This section is not relevant to current TfNSW organisational context and shall be disregarded.
- Section 2.1 Standards framework

  This section is not relevant to current TfNSW process and shall be disregarded.
- Section 2.6 Security design review and validation

  This section is not relevant to current TfNSW organisational context and shall be disregarded. Refer to T MU MD 00009 SP for the current governance framework in place for design services.
- Section 5.3.3 Earthing, bonding and electrolysis

  In the last sentence of the third paragraph disregard line that states '…and that this design be submitted to the Chief Electrical Engineer for approval'.
- Section 5.3.4 Step, touch and transfer mitigation potential

  In the last sentence of item c) disregard line that states '…and that this design must be submitted to the Chief Electrical Engineer for approval'.
- Section 5.3.7 Standard perimeter fencing and Section 5.3.8 "Protected Area" fencing

  The requirements detailed in these sections shall be supplemented with requirements in T HR CI 12160 ST, TMC 511, and EP 99 00 00 07 SP *Substation Fencing*. Refer to Table 1 for guidance on interpretation of engineering and technical requirements.

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- Section 5.5 Signage
  - Reference to 'RailCorp Network Rules' in the second bullet point of paragraph one shall be read as 'Network Rules'.
  - Replace last bullet point in paragraph one with 'be in accordance with the TfNSW approved communication and branding guidelines'.
- Section 6.1 SCADA (Door Monitoring)

  Reference to 'Electrical Operations Centre (EOC)' in item b) shall be replaced with 'Infrastructure Control Centre'.
- Section 6.6 Long Line Public Address

  This section is not relevant to the current TfNSW process and shall be disregarded.
- Section 9 References

  References in this section shall be replaced in accordance with the interpretations provided in this guide.

13. Interpretations of references in RSS-004 Signalling and Control Room Facilities

The following interpretations are provided for positional and procedural references in RSS-004:

- Section 1.1 Safety Management System

  This section is not relevant to current TfNSW organisational context and shall be disregarded.
- Section 2.1 Standards framework

  This section is not relevant to current TfNSW process and shall be disregarded.
- Section 2.5 Security design review and validation

  This section is not relevant to current TfNSW organisational context and shall be disregarded. Refer to T MU MD 00009 SP for the current governance framework in place for design services.
- Section 2.6 User instructions

  References in this section to 'RailCorp's Security Division' related to queries, exemptions, approvals and specific concessions shall be read as the ASA.
- Section 5.3.3 Boundary fencing

  The requirements detailed in this section shall be supplemented with requirements in T HR CI 12160 ST and TMC 511. Refer to Table 1 for guidance on interpretation of engineering and technical requirements.

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- Section 5.5 Signage
  - Reference to 'RailCorp Network Rules' in the second bullet point of paragraph one shall be read as 'Network Rules'.
  - Replace last bullet point in paragraph one with 'be in accordance with the TfNSW approved communication and branding guidelines'.
- Section 6.5 Long Line Public Address

  This section is not relevant to the current TfNSW process and shall be disregarded.
- Section 9 Reference

  References in this section shall be replaced in accordance with the interpretations provided in this guide.

14. Accessing security standards

Security standards are not readily available via the ASA website due to the sensitive nature of their content. For access to security standards please contact standards@transport.nsw.gov.au.

15. Concessions to security standard requirements

The ASA recognises that due to the complexity of both the rail network and its operational environment it is not always possible to achieve full compliance with the ASA standards requirements including security requirements.

Requests for concessions to security standards shall be made in accordance with T MU MD 00011 ST *Concessions to ASA Requirements*.

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