

Development and Approval of Engineering Waivers

Procedure

ENG-PRO-NIL-0006

Document Control

Table 1: Torrens Connect Document Control

V	Date	Description of Change	Review	Accountable	Endorse
1	30/01/2023	First submission	Digitally Signed By: Rolling Stock Reliability Engineer - Andrew Oliver at: 30/01/2023 12:10	Digitally Signed By: Head of Assets - Tristan Smith at: 30/01/2023 12:03	Digitally Signed By: General Manager - Sarah Kelley at: 02/02/2023 09:57

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Definitions

Table 2: Definitions

Term	Definitions
DIT	Department for Infrastructure and Transport
Functional Groups	Various disciplines within Torrens Connect i.e. Rail Infrastructure (Track and Civil, Signals, Overhead, Traction Power), and Rolling Stock.
MBOS	Torrens Connect Electronic Record and Document Management System
Safety Validation	The process defined in AS 4292.1 and expanded in the requirements of this document and performed by the Safety Validator(s).
SAPTA	South Australian Public Transport Authority
TC	Torrens Connect
Rail Engineering Standard	An authorised document that describes the Rail Engineering characteristics, properties, or qualities of an item of infrastructure or equipment. It is intended to underpin customer and user expectations that the infrastructure or equipment will be safe, reliable and fit-for-purpose.
Urgent Waiver Process	An adaptation of the usual approval process for Engineering Waivers to enable faster decision making about whether the requirements of an authorised Rail Engineering Standard can be waived.
Waive	To decide not to require a level of performance normally enforced
Waiver	The authorised record of a decision not to require a level of performance or conformance that is normally enforced



1 Introduction

The Department of Infrastructure and Transport (DIT), South Australian Public Transport Authority (SAPTA), owns the Adelaide Tram Network. Torrens Connect (TC) operates and maintains the Adelaide Tram Network on behalf of DIT. This procedure forms part of the Engineering Management System used to ensure safety and customer service levels are efficiently and effectively supported.

Waiving Rail Engineering Standards may occasionally be justified. However, this cannot be done without subjecting such action to an equivalent level of risk and safety scrutiny as the decision to adopt Rail Engineering Standards in the first place. Waivers can only be granted using a documented management process as described in Section 7.

2 Purpose

The purpose of this document is to describe how TC develops and approves waivers where an authorised Rail Engineering Standard is proposed not to be met.

3 Scope

This document applies to Engineering Waivers to be used in designing, constructing, maintaining and decommissioning any assets used on or in connection with the Adelaide Tram Network Rail Infrastructure, Rolling Stock or supporting systems.

Typical uses of this document include, but are not limited to:

- The generation of Engineering Waivers for non-compliance with Rail Engineering Standards
- Considering, and where appropriate, granting approval to waive Rail Engineering Standards
- Issuing Waivers
- Updating the Waivers Register

4 References

- Rail Safety National Law (South Australia) Act 2012
- AS 4292.1: Railway Safety Management – General Principles

5 Roles and Responsibilities

5.1 Proponent

The proponent is responsible for recommending the Waiver by completion of the Engineering Waiver Form *ENG-FRM-NIL-0005*. By completion of the Engineering Waiver form the Proponent is completing the risk analysis and defining the safety risk and impacts of the Waiver. The Engineering Waiver Form template can be accessed via MBOS Document Control. The Waiver Form Number for the Engineering Waiver will be issued by the Proponent through referencing the Waiver Register.

5.2 Engineering Waiver Manager

The Engineering Waiver Manager is to be nominated by name within the Engineering Waiver Form and is responsible and accountable for ensuring that all impacts and actions required that arise from an approval of the Waiver are completed. These include, but are not limited to, transfer of residual risks to another project entity or operational function, updating any necessary design models, documentation and/or drawings, conduct of training and/or inductions, and the completion of and submission of records. The Engineering Waiver Manager may also be the Proponent and is most likely to be the Rolling Stock Reliability Engineer, or the Infrastructure Engineer.

5.3 Head of HSQE

The Head of HSQE is responsible for performing the Safety validation of the Waiver under *AS 4292.1: Railway Safety Management - General Principles*. The Head of HSQE may consult with the Rolling Stock Reliability Engineer, or Infrastructure Engineer to assist with the Engineering validation SFAIRP. The approval of the Head of HSQE may be obtained by remote means (phone or email) for urgent waivers.

5.4 Functional Group Manager

The relevant Functional Group Manager is responsible for approving Engineering Waivers. In some cases, approval may be required from more than one Functional Group Manager (Rolling Stock, Infrastructure, Rail Operations).

5.5 Head of Assets

The Head of Assets is responsible for the overall risk profile of the business, ensuring that:

- The Proponent and Engineering Waiver Manager have completed the Engineering Waiver Form
- The Proponent and Engineering Waiver Manager have the authority to raise and progress the Waiver
- The Head of HSQE has completed the Safety Validation required under *AS 4292.1: Railway Safety Management - General Principles*
- The relevant Functional Group Manager(s) has approved the Waiver before giving final sign off

The approval of the Functional Group Manager and the Head of Assets may be obtained by remote means (phone or email) for urgent waivers.

6 Engineering Waiver Process

6.1 Process Overview for Engineering Waivers

The generic process for development and approval of a Waiver is shown in Figure 1:

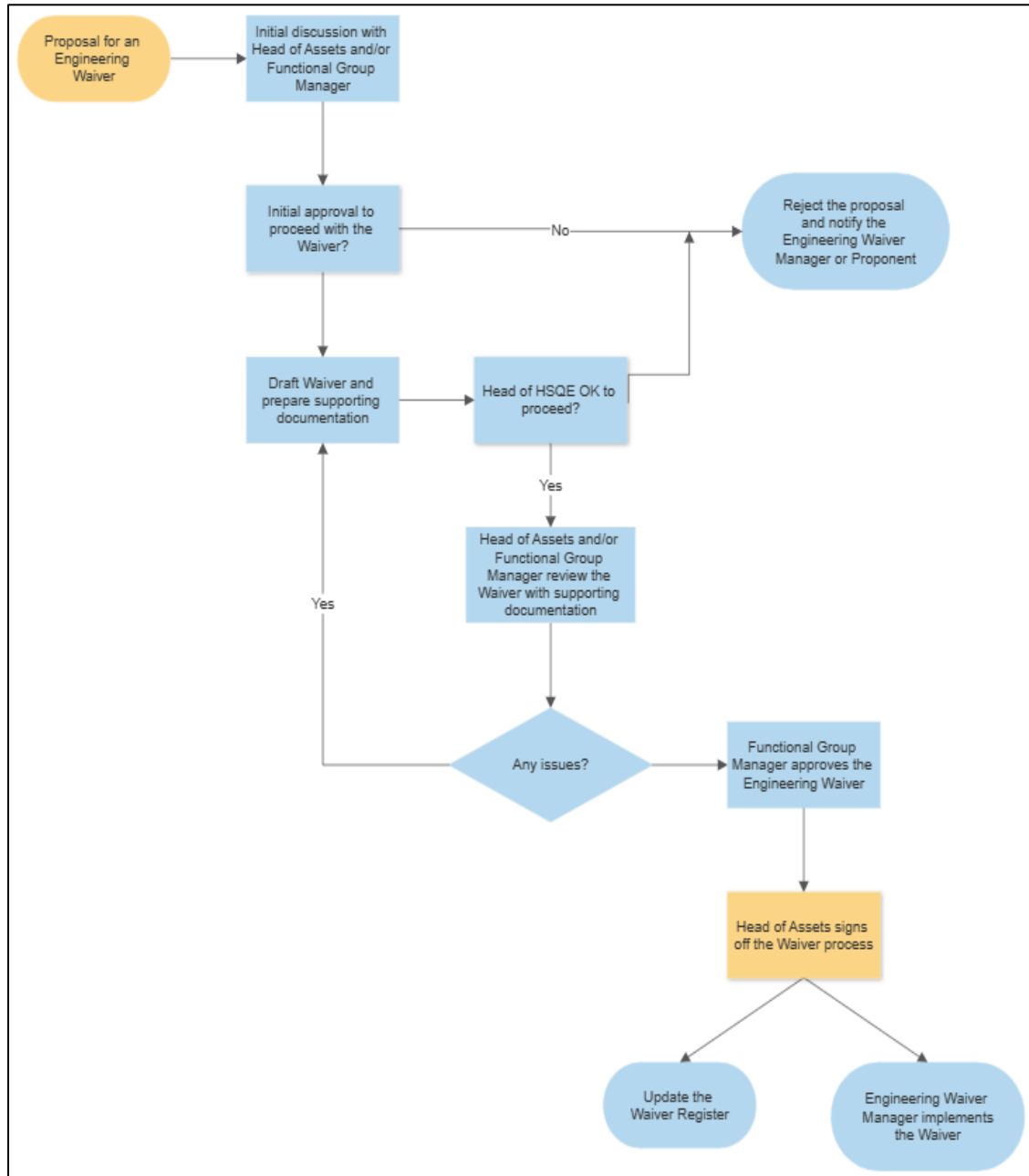


Figure 1: Generic Process for Engineering Waivers

6.2 General Approach

The necessity to waive the Rail Engineering Standard should be identified during the early stage of any project i.e., in the design or pre-construction stage. This general approach will provide sufficient time to do the risk assessment and allow reviewers to review the Waiver and supporting documents in a timely manner.

6.3 Important Warning

The urgency of a Contract Schedule or the costs of rectification of non-compliant work are not in themselves reasons for waiving a Rail Engineering Standard.

A request for a Waiver indicates that an earlier design, procurement, or construction quality assurance process has failed. Caution is required to be sure the failure is not compounding and allowing an unsafe situation to arise.

6.4 Documentation of Waivers

Engineering Waivers are to be recorded using the appropriate form and a signed electronic copy is to be provided to the Engineering Waiver Manager/Proponents for entry into the Waiver Register. The Waiver Register and completed forms can be accessed through MBOS using the following link:

[Torrens Connect Tram Maintenance Waiver Register.xlsx](#)

7 Associated Documents

Table 3: Associated Documents

Document ID	Title
AS 4292.1	Australian Standard 4292.1 Railway Safety Management Part 1 General Requirements
ENG-FRM-NIL-0005	Engineering Waiver Form

