



S U R U H A N J A Y A  
P E N G A N G K U T A N A W A M D A R A T  

---

L A N D P U B L I C T R A N S P O R T  
C O M M I S S I O N

# SPAD GUIDELINE

## RAILWAY SAFETY REQUIREMENTS

Document Type	Guideline
Document Owner	Rail
Document Reference Number	SPAD/GL/RD/RAIL/019/Rev0
Effective Implementation Date	11/5/2016



RAILWAY SAFETY REQUIREMENTS			
Owner	Rail Division		
Document Ref #	SPAD/GL/RD/RAIL/019/Rev0		
Implementation Date	11/5/2016	Revision No	0

**TABLE OF CONTENTS**

1.0 INTRODUCTION ..... 3

2.0 RAILWAY SAFETY REQUIREMENTS..... 3

3.0 FORMS & OTHER RELATED DOCUMENTS ..... 3



RAILWAY SAFETY REQUIREMENTS			
Owner	Rail Division		
Document Ref #	SPAD/GL/RD/RAIL/019/Rev0		
Implementation Date	11/5/2016	Revision No	0

## 1.0 INTRODUCTION

This document outlines the railway safety requirements for the planning, design, construction, testing and commissioning for opening of the railway.

## 2.0 RAILWAY SAFETY REQUIREMENTS

The railway safety requirements cover all the mandatory process that shall be adhered by the project owner and licensed operator prior to the operation stage of any new railway (including track, station, rolling stock, electrification, signaling and communication system). This includes the requirements at the following stages:

- i) Planning Stage
- ii) Design Stage
- iii) Construction, Manufacturing and Assembly Stage
- iv) Testing and Commissioning (TNC) Stage
- v) Opening Stage

(Refer APPENDIX A for the list of railway safety requirements)

## 3.0 FORMS & OTHER RELATED DOCUMENTS

This guideline must be read together with the following documents:

- i. APPENDIX A - Railway Safety Requirements



SPAD GUIDELINE - RAILWAY SAFETY REQUIREMENTS			
Owner	Rail Division		
Document Ref #	SPAD/GL/RD/RAIL/019/Rev0		
Implementation Date	11/5/2016	Revision No	0

## APPENDIX A - RAILWAY SAFETY REQUIREMENTS

Stages	Description
<b>1</b> <b>Planning</b>	<ul style="list-style-type: none"> <li>• <b>Railway Scheme Final Approval</b> <ul style="list-style-type: none"> <li>- Local council safety requirement</li> <li>- Construction Safety Audit carried out every 3 months</li> <li>- Detailed Design Audit approval by S.P.A.D.</li> <li>- Safety Audit for Detailed Design</li> <li>- Fault Free Run (FFR)</li> <li>- Railway Protection Zone (RPZ)</li> </ul> </li> </ul>
<b>2</b> <b>Design</b>	<ul style="list-style-type: none"> <li>• <b>Detailed Design Review Audit by S.P.A.D.</b></li> <li>• <b>Detailed Design Safety Audit</b></li> <li>• <b>Signalling Plan to be Certified by IRSE PE</b></li> <li>• <b>Detailed Design Risk Assessment &amp; Mitigation</b></li> <li>• <b>Supplementary Proposal for Rolling Stock</b></li> <li>• <b>Fire Strategy for Railway System</b></li> <li>• <b>Railway Protection Zone (RPZ)</b></li> <li>• <b>Road Safety Audit</b></li> <li>• <b>Hazard Identification, Risk Assessment and Risk Control for Roads &amp; Highways</b></li> </ul>
<b>3</b> <b>Construction, Manufacturing and Assembly</b>	<ul style="list-style-type: none"> <li>• <b>Method Statement (MS) / Standard Operating Procedure (SOP)</b></li> <li>• <b>Traffic Management Plan (TMP) / Safety, Health and Environment (SHE)</b></li> <li>• <b>FAI/FAT, Carbody and Bogie Static Test</b></li> <li>• <b>Pre Delivery Inspection (PDI) / Pre Shipment Inspection (PSI)</b></li> <li>• <b>Traffic and Safety Team</b></li> </ul>
<b>4</b> <b>Testing &amp; Commissioning</b>	<ul style="list-style-type: none"> <li>• <b>Testing and Commissioning Program</b></li> <li>• <b>Project Documentation, Safety Case / Safety Report and Manuals</b></li> <li>• <b>Handing Over (Project Owner to Operator) and Operational Readiness</b></li> </ul>
<b>5</b> <b>Opening</b>	<ul style="list-style-type: none"> <li>• <b>Final Careful Inspection</b></li> <li>• <b>Railway License</b></li> <li>• <b>Emergency Response Plan (ERP)</b></li> <li>• <b>Technical Report from Project Owner</b></li> <li>• <b>Engineer's Report from S.P.A.D.</b></li> </ul>