

SKILLS FRAMEWORK FOR PUBLIC TRANSPORT SKILLS MAP - SENIOR ENGINEER/ENGINEER (POWER)				
Sector	Public Transport			
Track	Rail Engineering			
Sub-Track	Power			
Occupation	Rail Engineer			
Job Role	Senior Engineer/Engineer (Power)			
Job Role Description	<p>The Senior Engineer/Engineer (Power) leads multiple teams in performing preventive and corrective maintenance for rail power systems. He/She provides technical analysis and support to the maintenance team to resolve complex rail power systems issues. He also supports and provides innovative recommendations for continuous improvement plans as well as re-prioritises work activities and addresses maintenance needs. He is also involved in the engagement and management of external contractors and ensuring the achievement of operating requirements and quality work standards.</p> <p>He may be required to perform shift duties at various rail premises, and takes an active role in implementing operational improvement and enhanced maintenance regimes. As such he is well-organised, methodical and systematic in approaching his work responsibilities and adds value to the team with his technical knowledge.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Maintain power systems	Key Tasks	
			Manage power systems preventive maintenance work carried out across multiple teams	
			Manage the power systems corrective maintenance work carried out across multiple teams	
			Supervise complex fault analysis and testing of power systems	
			Isolate low voltage (LV), high voltage (HV), direct current (DC) power supply equipment prior to the execution of maintenance activities	
	Restore LV, HV, DC power supply equipment upon completion of maintenance activities			
	Support maintenance activities and operational requirements	Define procurement specifications for the sourcing of vendors		
		Manage contractors and stakeholders external to the power team to ensure safety requirements, operating standards and quality standards are met		
		Manage the condition and quantity of supplies required for maintenance activities at work base		
		Endorse inspection and maintenance documents for work closure		
		Ensure workplace adherence with the Rapid Transit System (RTS) Codes of Practice		
		Ensure workplace adherence to Workplace Safety and Health (WSH) policies, procedures and regulations when carrying out work		
	Support continuous improvement activities to enhance service reliability	Evaluate recommendations on workflow improvements to enhance the reliability and efficiency of power systems		
		Support the implementation of engineering initiatives to enhance the reliability of rail power systems		
		Conduct engineering studies to improve reliability and efficiency of power systems		
	Manage people and team performance	Re-prioritise work activities and manpower allocation to address deviations from planned maintenance schedule		
		Identify team's training needs		
		Track section's expenditure to assist in the forecasting of annual budget		
		Manage section's performance in achieving Key Performance Indicators (KPIs)		
	Technical Skills & Competencies	Generic Skills & Competencies (Top 5)		
Asset Management		Level 4	Communication	Advanced
Budgeting		Level 3	Problem Solving	Intermediate
Change Management		Level 4	Leadership	Intermediate
Condition-based Assets Monitoring Management		Level 3	Decision Making	Intermediate
Continuous Improvement Management		Level 4	Resource Management	Basic
Data and Statistical Analytics		Level 4		
Equipment Maintenance and Housekeeping		Level 3		
High Voltage Power Systems Maintenance		Level 4		
Innovation Management		Level 4		
Inventory Management		Level 3		
Low Voltage Power Systems Maintenance		Level 4		
Maintenance Scheduling		Level 4		

Skills & Competencies	Manpower Planning and Deployment	Level 3
	People Development	Level 4
	Project Management	Level 4
	Rail Regulatory Compliance	Level 4
	Report Writing	Level 3
	Staff Performance Management	Level 3
	Stakeholder Management	Level 3
	Systems Engineering Thinking	Level 4
	Technology Application	Level 2
	Vendor Management	Level 3
	Work at Heights	Level 3
	Workplace Facilities Safety Management	Level 3
	Workplace Safety and Health Culture Development	Level 4
	Workplace Safety and Health for Confined Spaces	Level 3
	Workplace Safety and Health for Electrical Safety	Level 3
	Workplace Safety and Health for Fire Prevention and Fire Fighting	Level 2
	Workplace Safety and Health for Incident and Accident Investigation	Level 3
Programme Listing	For a list of Training Programmes available for the Public Transport sector, please visit: www.skillsfuture.sg/skills-framework/public-transport	

The information contained in this document serves as a guide.