

SKILLS FRAMEWORK FOR PUBLIC TRANSPORT SKILLS MAP - PRINCIPAL ENGINEER/ENGINEERING MANAGER (POWER)				
Sector	Public Transport			
Track	Rail Engineering			
Sub-Track	Power			
Occupation	Rail Engineer			
Job Role	Principal Engineer/Engineering Manager (Power)			
Job Role Description	<p>The Principal Engineer/Engineering Manager (Power) leads cross-functional teams in collaborative work to support rail power systems maintenance and enhancement. He/She provides in-depth technical advice on critical maintenance issues, participates in engineering studies for the continuous improvement of the rail power maintenance regime, as well as the engagement and management of external contractors.</p> <p>He possesses in-depth rail power engineering knowledge and has excellent problem solving and analytical skills. He also applies managerial skills to fulfil the responsibilities of operational activities and facilitates the implementation of organisational maintenance regimes and continuous improvement initiatives.</p>			
Critical Work Functions and Key Tasks	Critical Work Functions	Maintain power systems	Key Tasks	
			Lead the execution of cross-functional preventive maintenance work involving power systems	
			Lead the execution of cross-functional corrective maintenance work involving power systems	
			Lead technical recovery, complex fault analysis, and testing of power system	
			Isolate low voltage (LV), high voltage (HV), direct current (DC) power supply equipment prior to the execution of maintenance activities	
	Restore LV, high HV, DC power supply equipment upon completion of maintenance activities			
	Support maintenance activities and operational requirements	Manage multiple contractors and stakeholders external to the power team to ensure safety requirements, operating standards and quality standards are met		
		Ensure workplace adherence to Workplace Safety and Health (WSH) policies, procedures and regulations when carrying out work		
		Ensure workplace adherence with the Rapid Transit System (RTS) Codes of Practice		
	Drive continuous improvement activities to enhance service reliability	Formulate improvement plans for maintenance processes		
		Implement enhanced maintenance regimes to improve the reliability and efficiency of power systems		
		Evaluate the feasibility of engineering studies to improve the reliability and efficiency of power systems		
	Manage people and team performance	Evaluate and approve maintenance schedule deviations to re-allocate manpower		
		Implement training plans for staff to meet industry requirements and/or engineering standards		
		Manage annual budget required by the branch		
Manage branch's performance in achieving Key Performance Indicators (KPIs)				
Skills & Competencies	Technical Skills & Competencies		Generic Skills & Competencies (Top 5)	
	Asset Management	Level 5	Leadership	Advanced
	Budgeting	Level 4	Communication	Advanced
	Business Continuity Management	Level 5	Decision Making	Intermediate
	Change Management	Level 5	Resource Management	Intermediate
	Condition-based Assets Monitoring Management	Level 4	Problem Solving	Advanced
	Continuous Improvement Management	Level 5		
	Data and Statistical Analytics	Level 5		
	Engineering Maintenance Management	Level 4		
	High Voltage Power Systems Maintenance	Level 4		
	Innovation Management	Level 5		
	Low Voltage Power Systems Maintenance	Level 4		
	Maintenance Scheduling	Level 5		
	Manpower Planning and Deployment	Level 4		
	Organisational Planning and Target Setting	Level 4		
	People Development	Level 5		
	Project Management	Level 5		

	Rail Regulatory Compliance	Level 5	
	Staff Performance Management	Level 4	
	Stakeholder Management	Level 4	
	Systems Engineering Thinking	Level 5	
	Technology Application	Level 3	
	Vendor Management	Level 4	
	Workplace Facilities Safety Management	Level 4	
	Workplace Safety and Health Culture Development	Level 5	
	Workplace Safety and Health for Incident and Accident Investigation	Level 4	
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.