

**SKILLS FRAMEWORK FOR PUBLIC TRANSPORT
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Rail Systems Maintenance					
TSC	Travel Information System Maintenance					
TSC Description	Implement preventive and corrective maintenance activities of travel information system					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	PTP-RSM-1043-1.1	PTP-RSM-2043-1.1	PTP-RSM-3043-1.1	PTP-RSM-4043-1.1		
	Carry out scheduled preventive maintenance on travel information system	Conduct corrective maintenance on travel information system	Troubleshoot faulty travel information system to locate faults and recommend rectification methods	Diagnose root causes of travel information system failure and review maintenance plans to prevent fault recurrence		
Knowledge	<ul style="list-style-type: none"> Operating principles, instructions and functions of travel information system Components of rail travel information system that includes: <ul style="list-style-type: none"> Display panels Servers or controllers Travel information system architecture and components Types of tools and equipment for carrying out preventive maintenance on travel information system Procedures of travel information system preventive maintenance in accordance to organisational maintenance procedures, Work Instructions (WI) and/or Original Equipment Manufacturer (OEM) technical manuals Safety guidelines on use of tools and equipment for preventive 	<ul style="list-style-type: none"> Operating principles, instructions and functions of travel information system Components of rail travel information system that includes: <ul style="list-style-type: none"> Display panels Servers or controllers Travel information system architecture and components Procedures to normalise software faults on travel information system Types of software and hardware tools and equipment for carrying out corrective maintenance on travel information system Procedures of travel information system corrective maintenance in accordance to manufacturer technical manuals Safety guidelines on use of tools and equipment for preventive maintenance on travel information system 	<ul style="list-style-type: none"> Common fault symptoms in travel information system Procedures for conducting system performance checks Methods of locating and rectifying faults Types of troubleshooting techniques, equipment and tools Safety guidelines for usage of tools and equipment to execute troubleshooting on travel information system Procedures for system software configuration and/or upgrade 	<ul style="list-style-type: none"> Factors affecting equipment and system performance Failure investigation and prevention methods Methods and tools for diagnostic analysis Organisational maintenance procedures, Work Instructions (WI) and Original Equipment Manufacturer (OEM) technical recommendations Types and methods of system performance checks on travel information system Functional relationships between travel information system, other communication systems and the overall rail system 		

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	<p>maintenance on travel information system</p> <ul style="list-style-type: none"> Organisational maintenance documentation and fault reporting procedures 	<ul style="list-style-type: none"> Organisational maintenance documentation and fault reporting procedures 				
Abilities	<ul style="list-style-type: none"> Perform preparation work to conduct maintenance on travel information system Check serviceability of surveillance system according to organisation procedures, WI and/or OEM technical manuals Adhere to tools and equipment operating and safety guidelines during maintenance work Perform serviceability test on travel information system Adhere to tools and equipment operating and safety guidelines during maintenance activities Record travel information system maintenance activities and report occurrences of faults identified 	<ul style="list-style-type: none"> Interpret work orders and prepare for corrective maintenance Normalise software faults on travel information system Dismantle faulty components in travel information system and components for corrective maintenance Carry out repair and/or replacement faulty components Reassemble and reinstate travel information system Perform system software reconfiguration and/or upgrade Perform travel information system functional tests Apply operating and safety measures in operating tools and equipment during maintenance work Record and collate documentation of travel information system maintenance activities 	<ul style="list-style-type: none"> Use troubleshooting tools, equipment and methods to locate and analyse causes of travel information system faults Perform system software reconfiguration and/or upgrade Apply fault identification procedures to determine causes of travel information system equipment faults Recommend corrective actions for identified faults on travel information system Implement procedures on safety usage of tools and equipment during maintenance work Analyse maintenance work documented for travel information system to identify possible workflow improvements 	<ul style="list-style-type: none"> Establish structured failure investigation and specify functional testing requirements Perform fault tree analyses to diagnose root cause failure of travel information system Review organisational travel information system maintenance procedures and/or WI Propose new and/or enhanced maintenance procedures and/or WI in reference to OEM technical recommendations Monitor overall maintenance progress of travel information system to determine system performance reliability and effectiveness Develop solutions through analysing diagnostic data to prevent faults and failures recurrence Develop test procedures for system performance checks Develop test procedures for system performance checks Coordinate travel information system maintenance with other rail systems maintenance needs 		

