

**SKILLS FRAMEWORK FOR AIR TRANSPORT
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Airport Engineering					
TSC	Airfield Specialised Systems Maintenance and Design					
TSC Description	Maintain and enhance airfield specialised systems to meet operational requirements of the airports					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		ATP-APE-2002-1.1	ATP-APE-3002-1.1	ATP-APE-4002-1.1	ATP-APE-5002-1.1	ATP-APE-6002-1.1
		Inspect airfield specialised systems with reference to established performance standards	Administer maintenance schedules and remedial actions to improve performance of airfield specialised systems	Analyse performance of airfield specialised systems to recommend maintenance and new design measures	Develop maintenance strategies for airfield specialised systems to ensure optimal operating conditions and serviceability	Drive integration of new technologies to current specialised systems to meet future needs of the airfield
Knowledge		<ul style="list-style-type: none"> Types of airfield specialised systems Technical knowledge in airport specialised systems such as sky trains, baggage handling systems and passenger loading bridges Operational performance requirements for airfield specialised systems Routine maintenance procedures of the organisation Techniques to extract data from airfield specialised systems Common faults found in airfield specialised systems Local and international guidelines such as International Civil Aviation Organisation (ICAO) and Federal Aviation Authority (FAA) Annex for Aerodromes 	<ul style="list-style-type: none"> Technical knowledge in airport specialised systems such as sky trains, baggage handling systems and passenger loading bridges Installation requirements and procedures for airfield specialised systems Principles of maintaining airfield specialised systems Fundamentals of airfield electrical circuits and their application to airfield specialised systems Common faults found in airfield specialised systems Troubleshooting techniques for airfield specialised systems Local and international guidelines such as International Civil Aviation Organisation (ICAO) and Federal 	<ul style="list-style-type: none"> Technical knowledge in airport specialised systems such as sky trains, baggage handling systems and passenger loading bridges Installation requirements and procedures for airfield specialised systems Principles of maintaining airfield specialised systems Electrical requirements for airfield electrical circuits, electrical connections and transformer housings Tools and test equipment to measure and calibrate performance of airfield specialised systems Local and international guidelines such as International Civil Aviation Organisation (ICAO) and Federal Aviation Authority (FAA) Annex for Aerodromes 	<ul style="list-style-type: none"> Technical knowledge in airport specialised systems such as sky trains, baggage handling systems and passenger loading bridges Electrical and mechanical requirements of airfield specialised systems New international developments in the construction and maintenance of airfield specialised systems Local and international guidelines such as International Civil Aviation Organisation (ICAO) and Federal Aviation Authority (FAA) Annex for Aerodromes 	<ul style="list-style-type: none"> Electrical and mechanical requirements of airfield specialised systems Local and international airport business strategies New technologies used in construction and maintenance of airfield specialised systems Local and international guidelines such as International Civil Aviation Organisation (ICAO) and Federal Aviation Authority (FAA) Annex for Aerodromes

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			<p align="center">Aviation Authority (FAA) Annex for Aerodromes</p>			
<p>Abilities</p>		<ul style="list-style-type: none"> • Conduct serviceability testing for airfield specialised systems • Document findings from inspections according to requirements in operational logbooks • Prepare reports to summarise findings from serviceability testing • Coordinate with external contractors to fix identified defects 	<ul style="list-style-type: none"> • Prepare maintenance schedules for airfield specialised systems • Review reports to identify faults in airfield specialised systems • Examine the impact of faults in airfield specialised systems on airport operations • Perform remedial actions to restore airfield specialised systems 	<ul style="list-style-type: none"> • Analyse data from airfield specialised systems to determinate frequently occurring faults • Fulfil additional maintenance needs to minimise incidences of faults in airfield specialised systems • Recommend design improvements to airfield specialised systems 	<ul style="list-style-type: none"> • Evaluate the overall serviceability of airfield specialised systems against performance objectives • Evaluate the effectiveness of maintenance works in accordance with planned objectives • Develop follow-up actions for the upgrade, acquisition and disposal of airfield specialised systems • Develop plans to enhance the overall efficiency and effectiveness of airfield specialised systems 	<ul style="list-style-type: none"> • Establish airfield specialised systems needs based on the airport future business strategies • Develop solutions to boost capabilities of airfield specialised systems • Lead research on potential technologies that can be deployed to upgrade airfield specialised systems • Quantify cost and impact of implementing new technologies to enhance airfield specialised systems