

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

<b>TSC Category</b>	Airside Operations					
<b>TSC</b>	Runway Safety					
<b>TSC Description</b>	Ensure safe airside operations to prevent runway incursions, excursions and confusions					
<b>TSC Proficiency Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
			<b>ATP-ASO-3003-1.1</b>	<b>ATP-ASO-4003-1.1</b>	<b>ATP-ASO-5003-1.1</b>	<b>ATP-ASO-6003-1.1</b>
			Oversee runway, taxiway and apron conditions to prevent incidents and/or accidents	Review airfield conditions and implement corrective actions to ensure safe airside operations	Develop action plans to optimise runway safety during airside operations	Drive strategies to enhance safety of runways in collaboration with different airport stakeholders
<b>Knowledge</b>			<ul style="list-style-type: none"> <li>Principles of airport operations</li> <li>Emergency response plans and procedures</li> <li>Terminologies used in airport operations</li> <li>Safety Management Systems (SMS)</li> <li>Airside detection systems such as advanced Multilateration (MLAT) and microwave detection</li> <li>Runway safety and security policies and procedures</li> <li>Local and international guidelines such as International Civil Aviation Organisation (ICAO) Manual of Aerodrome Standards (MOAS)</li> </ul>	<ul style="list-style-type: none"> <li>Principles of airport operations</li> <li>Emergency response plans and procedures</li> <li>Safety Management Systems (SMS)</li> <li>Airside detection systems such as advanced Multilateration (MLAT) and microwave detection</li> <li>Runway safety and security policies and procedures</li> <li>Strategies to reduce runway incursions, excursions and confusions</li> <li>Importance of compliance with Airport Certification Manual (ACM) and International Civil Aviation Organisation (ICAO) Manual of Aerodrome Standards (MOAS)</li> <li>Local and international guidelines such as ICAO MOAS</li> </ul>	<ul style="list-style-type: none"> <li>Principles of airport operations</li> <li>Emergency response plans and procedures</li> <li>Safety Management Systems (SMS)</li> <li>Runway safety and security policies and procedures</li> <li>Strategies to reduce runway incursions, excursions and confusions</li> <li>Airport master plans and construction schedules</li> <li>New technologies for monitoring runway safety</li> <li>Impact of non-compliance with Airport Certification Manual (ACM) and International Civil Aviation Organisation (ICAO) Manual of Aerodrome Standards (MOAS)</li> <li>Local and international guidelines such as ICAO MOAS</li> </ul>	<ul style="list-style-type: none"> <li>Principles of airport operations and aerodrome management</li> <li>Emergency response plans and procedures</li> <li>Safety Management Systems (SMS)</li> <li>Runway safety and security policies and procedures</li> <li>Strategies to reduce runway incursions, excursions and confusions</li> <li>Airport master plans and construction schedules</li> <li>New technologies for monitoring runway safety</li> <li>Stakeholder management</li> <li>Impact of non-compliance with Airport Certification Manual (ACM) and International Civil Aviation Organisation (ICAO) Manual of Aerodrome Standards (MOAS)</li> </ul>

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						<ul style="list-style-type: none"> <li>Local and international guidelines such as ICAO MOAS</li> </ul>
<b>Abilities</b>			<ul style="list-style-type: none"> <li>Monitor airfield and runway conditions to ensure safe operations</li> <li>Utilise Foreign Object Debris (FOD) systems to identify and clear FOD at the airside</li> <li>Ensure airside vehicles do not operate on the runways</li> <li>Inspect runways, taxiways, aprons and the associated areas to ensure compliance with the Airport Certification Manual (ACM)</li> <li>Prepare investigation reports on runway safety breaches</li> </ul>	<ul style="list-style-type: none"> <li>Ensure airfield and runway conditions are safe for operations</li> <li>Determine runway hotspots by analysing investigation reports and international best practices</li> <li>Utilise detection systems to monitor aircraft and/or airside vehicles</li> <li>Oversee regular internal audits and safety inspections on runways, taxiways and aprons</li> <li>Validate compliance of markings, lights and signs with the MOAS</li> <li>Evaluate runway incidents by types, severity and frequency of occurrences and implement corrective measures</li> </ul>	<ul style="list-style-type: none"> <li>Develop and implement action plans to prevent and mitigate impact of runway incursions, excursions and confusions</li> <li>Propose enhancements to reduce risks of runway incursions, excursions and confusions</li> <li>Review and update safety documents and manuals for runways, taxiways and aprons</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with Air Traffic Services (ATS) to pilot new programmes and technologies to augment safety of runways, taxiways and aprons</li> <li>Collaborate with airport stakeholders such as flight crew to develop strategies to prevent runway incursions, excursions and confusions</li> <li>Develop solutions to address runway safety challenges and issues</li> </ul>