

<b>TSC Category</b>	Engineering Construction, Operations and Maintenance					
<b>TSC</b>	Equipment and Systems Testing					
<b>TSC Description</b>	Execute equipment and systems testing procedures to ensure continuity of operations and meet standards of performance					
<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>EGS-MAI-2006-1.1-1</b>	<b>EGS-MAI-3006-1.1-1</b>	<b>EGS-MAI-4006-1.1-1</b>		
		Conduct equipment and system tests	Implement equipment and system testing procedures	Develop equipment and system testing procedures and schedules, and lead follow-up actions based on test results		
<b>Knowledge</b>		<ul style="list-style-type: none"> <li>Equipment and system testing techniques</li> <li>Types of testing and measuring instruments and their applications</li> <li>Testing procedures</li> <li>Methods of calibrating, and testing measuring instruments</li> <li>Equipment cleaning and maintenance procedures</li> <li>Testing and calibration documentation procedures</li> <li>Hazards and safety precautions associated with testing</li> <li>Health, Safety and Environment policies, procedures and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Methods of determining testing criteria</li> <li>Equipment manuals, systems diagrams, plans and drawings</li> <li>Techniques for identifying malfunctions and defects</li> <li>Guidelines for calibration and testing of measuring instruments</li> <li>Techniques of interpreting testing results</li> <li>Techniques of digital data analysis, comparisons and representations</li> <li>Follow-up measures according to testing results</li> <li>Health, Safety and Environment policies, procedures and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Equipment and system testing best practices</li> <li>Principles of test planning</li> <li>Principles of mechanical, civil, structural, instrumentation and control, and electrical engineering</li> <li>Applicability and limitations of tests and techniques</li> <li>Testing methodology and limitations</li> <li>Technical reporting standards</li> <li>Documentation protocol</li> <li>Techniques of interpreting testing results</li> <li>Follow-up measures according to testing results</li> <li>Stakeholder communication and management</li> </ul>		
<b>Abilities</b>		<ul style="list-style-type: none"> <li>Identify areas for testing using appropriate procedures and tools</li> <li>Prepare areas for testing in accordance with the relevant legal and safety requirements</li> </ul>	<ul style="list-style-type: none"> <li>Implement testing procedures according to instructions and specifications</li> <li>Implement measuring equipment calibration procedures</li> </ul>	<ul style="list-style-type: none"> <li>Plan equipment and system tests to be conducted according to organisational guidelines and regulatory requirements</li> <li>Incorporate relevant workplace safety and health (WSH) risk control</li> </ul>		

**SKILLS FRAMEWORK FOR ENGINEERING SERVICES  
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE**

		<ul style="list-style-type: none"> <li>• Prepare materials, tools and equipment to be used during testing</li> <li>• Check measuring instruments for functionality, damage and/or missing parts</li> <li>• Calibrate measuring instruments according to organisational procedures</li> <li>• Apply testing procedures to conduct tests on equipment and systems</li> <li>• Escalate test failures in accordance with organisational procedures</li> <li>• Maintain test equipment</li> <li>• Adhere to relevant Health, Safety and Environment (HSE) risk control measures when conducting tests</li> <li>• Maintain complete and accurate records of testing and instrument calibrations</li> </ul>	<ul style="list-style-type: none"> <li>• Perform challenge tests according to established testing procedures</li> <li>• Review accuracy of testing equipment calibration</li> <li>• Oversee testing work and check that it is executed according to work schedules</li> <li>• Implement risk control measures to mitigate possible issues in executing work</li> <li>• Analyse testing results and suggest follow-up measures</li> <li>• Monitor testing works conducted and ensure compliance with Health, Safety and Environment (HSE) policies, procedures and regulations</li> </ul>	<p>measures into test activities</p> <ul style="list-style-type: none"> <li>• Advise others on best practices methods and procedures to conduct required tests</li> <li>• Ensure tools, equipment and testing devices required are obtained and checked for correct operation and safety</li> <li>• Report testing findings to relevant stakeholders</li> <li>• Document any WSH risk control measures and procedures infringements</li> <li>• Validate test results and approve follow-up measures</li> <li>• Recommend actions to rectify any faults identified during testing</li> </ul>		
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