

**Functional Area: Network Infrastructure & Operation (Operation / Support & Maintenance)**

1. Title	Perform maintenance of software switching systems
2. Code	ITCSNO323A
3. Range	This UoC concerns the maintenance of software switching (SOFTSWITCH) systems. Maintenance work may involve running standard automatic checking routines provided by vendors or locally developed applications. Software enhancement, patches, routing or configuration adjustments may be required.
4. Level	3
5. Credit	2
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Possess the knowledge in the subject area</p> <ul style="list-style-type: none"> <li>• Experienced with software engineering processes such as gathering functional requirements and software designing, programming, testing and module or system integration</li> <li>• Knowledgeable of the software switching functions, API (Application Programming Interface), various technical documents such as operation manuals, drawings, configuration manuals, and maintenance manuals</li> <li>• Knowledgeable of the organisation maintenance policies regarding vendor or supplier products</li> <li>• Knowledgeable of vendor product usage / license policies regarding enhancement or maintenance of switching devices</li> <li>• Experienced with network software tools, network technology and protocols</li> <li>• Experienced with troubleshooting, fault management, and software debugging techniques</li> <li>• Familiar with vendor's switching systems</li> <li>• Able to use computerised system software in telecommunication systems, embedded systems, firmware, etc</li> </ul> <p>6.2 Perform maintenance of software switching systems</p> <p>Be able to:</p> <ul style="list-style-type: none"> <li>• Confirm the type/level/task of maintenance required from internal maintenance schedule or colleagues</li> <li>• Plan the maintenance procedures and co-ordinate with various affected parties, if necessary</li> <li>• Use appropriate tools to perform auto check routines to determine any problems or inefficiencies</li> <li>• Perform problem fixing and/or enhancement of the software switch, such as installing new software patches and perform new configuration adjustments</li> <li>• Perform automatic/manual tests to ensure the enhancements or maintenance work performing are per required and conforms to vendor's requirements or standards</li> <li>• Document and log the completion of maintenance work in accordance with the organisation standards and procedures</li> </ul> <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Respect vendor product license/usage agreements</li> <li>• Follow the organisation software development and maintenance standards, quality assurance policies</li> </ul>
7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: <ul style="list-style-type: none"> <li>i. systematically troubleshoot switching problems and derive a solution for resolving the issues</li> <li>ii. use product manuals to understand device specifications</li> <li>iii. acquire configuration details for adjusting network switching components</li> </ul>
Remark	