

**Functional Area: Network Infrastructure & Operation (Planning & Design)**

1. Title	Identify/evaluate new network technologies
2. Code	ITCSNO503A
3. Range	Applying new technologies is a fundamental means in which network companies optimises its operations, cost, services, network growth, etc. This UOC concerns identifying or evaluating new technologies to accomplish the organisation business strategies or goals. New technologies imply newly released telecommunication technologies (wireless, mobile, high speed optical, modulation, etc.), products, systems (hard or soft, OSS, transmission, cable, switch, etc.), components, procedures (standards, design, installation, operational, maintenance) etc.
4. Level	5
5. Credit	5
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 network capacity planning (current and growth forecast)</li> <li>• In tune with the current market and emerging network technologies</li> <li>• Comprehend new product specifications, critically understand its applications and/or integration capabilities</li> <li>• Experienced with product testing and evaluation techniques</li> <li>• Possess extensive knowledge of network standards and product performance standards</li> <li>• Understand government regulations</li> </ul> <p>6.2 Identify/ evaluate new network technologies</p> <p>Be able to:</p> <ul style="list-style-type: none"> <li>• Identify where there is a need of new technology and where new technologies can be applied such as network systems, component upgrade or replacements, or just vendor product launched</li> <li>• Determine the evaluation metrics. The evaluation metrics should be agreed by relevant parties</li> <li>• Collect information (technical specification, performance figures, operating characteristics, user manual, costs, user reviews, etc.) related to the particular new technology from vendors, developer, standards organisation, users, media, etc.</li> <li>• Create RFI (Request for Information) for evaluating specific new products / components / technologies that will be used for a certain project</li> <li>• Formulate the evaluation process. The evaluations can range from a simple study of the specification, requesting vendor demonstrations, to building prototypes model to validate the technology's claim</li> <li>• Document the evaluation process with evaluation metrics and the collected evidence to support the evaluation results</li> <li>• Make recommendation on the evaluated new technology to relevant parties with supporting arguments. Package the documents for internal filing and submission</li> </ul> <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Identification or evaluation of the new technology must comply with the organisation's policies and any regulations</li> <li>• Always take into consideration and strike a proper balance among all related technological, political, social, environmental and legal factors</li> </ul>
7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: <ol style="list-style-type: none"> <li>i. determine the objectives for the evaluation of the new technology</li> <li>ii. communicate effectively with relevant parties to identify and formulate evaluation metrics, and agree on deliverable report formats, time and supported evidence</li> <li>iii. formulate a comprehensive evaluation plan</li> <li>iv. perform the evaluation process effectively by following an evaluation plan</li> <li>v. document and package the evaluation with well supported recommendation of the new technology to the relevant parties</li> </ol>
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