

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

1. Title	Develop tools that facilitate network planning, capacity dimensioning and inventory control	
2. Code	ITCSNO510A	
3. Range	When implementing a network, irrespective of its size, many different tools are needed to assist in its planning, development and operation. There are “off the shelf” tools to assist common tasks but often these “CANNED” tools are provided in limited functions or flexibility that is required for certain network planning and capacity dimensioning job. Hence in-house tools may be needed to be developed to assist the tasks. This UOC concerns developing tools that facilitate network planning, capacity dimensioning and inventory control. These tools are software tool.	
4. Level	5	
5. Credit	3	
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"> • Extensive experience in network capacity planning and dimensioning (current and growth forecasting) • Experienced with the tools and functions that are needed to assist in capacity and dimensioning planning • In tune with current and emerging technologies and its applications • Possess extensive experience with network modelling techniques and simulation tools • Conversant with how network elements can be integrated and the performance factors are affected by network size, coverage and peak/off peak usage • Expert in software engineering techniques such as functional requirement gathering, functional design, and development, etc. • Understand health and safety procedures and government regulations <p>6.2 Develop tools that facilitate network planning, capacity dimensioning and inventory control</p> <p>Be able to:</p> <ul style="list-style-type: none"> • Work with stakeholders to comprehend functional requirements of the tools to be developed. These functions may be additional to existing internal or vendor tools • Evaluate the capability of internal staff for the development of the required tool and its feasibility for in-house or outsourced development work • Recommend to stakeholders on estimate of the effort required for the work implementation and confirm the functional requirements with an initial functional design • Develop the applications, perform unit and system integration tests, compile user manuals • Package the newly developed tools for easy installation and work sign-off • Perform appropriate training on the use of tools, if required <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> • Always take into consideration and strike a proper balance among all related technological, political, social, environmental and legal factors • Always strike a proper balance between the organisation and all stakeholders 	
7. Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ol style="list-style-type: none"> i. communicate effectively with stakeholders to identify the tools and functions required ii. analyse the feasibilities and best approach to develop the required tools iii. agree with stakeholder on a solution, with timeline for the development work iv. develop and test the tools to comply with the organisation quality standards v. ensure the tools are packaged for easy installation and sufficient training or instructions are given on usage of the tools 	
Remark		