

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

1. Title	Identify/estimate cost of performing network upgrade/expansion
2. Code	ITCSNO501A
3. Range	This UOC applies to estimate cost of performing network upgrade. Networks can be voice, data, LAN, WAN, MAN, wired or wireless, mobile 2G/3G/4G, WiMAX, LTE or NGN, etc.
4. Level	5
5. Credit	3
6. Competency	<p><u>Performance Requirement</u></p> <p>6.1 Possess the knowledge in the subject area</p> <ul style="list-style-type: none"> • Experienced with risk management, planning and business needs in network deployment • Experienced with network capacity planning (current and growth forecast) • In tune with current and emerging technologies and its applications • Possess extensive knowledge of network architecture and network technologies • Knowledgeable in the network components required for the modelling and its cost • Experienced with financial modelling and use of computer application tools such as Excel, etc. • Critically understand the upgraded network features and/or new network requirement specifications and design specifications <p>6.2 Identify/estimate cost of performing network upgrade/expansion</p> <p>Be able to:</p> <ul style="list-style-type: none"> • Consider different network upgrade reasons, such as change of network architecture, increase component performance, resilience, etc. • Evaluate all constituents involved in the upgrade, such as hardware, software, manpower, site, materials, etc • Evaluate the cost of removal of old components and installation of new components • Acquire component cost from appropriate parties, such as vendors, marketing, contractors, HR, etc. • Feed appropriate parameters into calculation tools and produce CAPEX and OPEX reports • Package all documents, including estimated CAPEX cost report and/or estimated OPEX cost report, and dispatch them to stakeholders. • Present report and estimated costs to stakeholders as needed <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> • Always comply with the organisation business and network operation policies and strategies • Construct networks complying to government regulations • Always take into consideration and strike a proper balance among all related technological, political, social, environmental and legal factors
7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: <ol style="list-style-type: none"> i. identify the necessary network components (including manpower) required for network upgrade from network design plans ii. use appropriate tools or the organisation standard calculation methodology to produce reports on cost such as CAPEX, OPEX for upgrading of a particular network iii. effectively present the reports to assist in decision making process
Remark	