

Functional Area: Network Infrastructure & Operation (Security)

1. Title	Implement logging of access and usage	
2. Code	ITCSNO528A	
3. Range	A telecom operator provides many services to its customer. It is essential that it can monitor when their customers are connected to the network. There are many reasons for this, including security control, bandwidth control, network loading control, etc. This UoC describes the competencies for implementing functions that can log a user access and usage. Log management is part of an OSS (Operational Support System) function which usually is the responsibility of the NOC (Network Operation Centre).	
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"> • Possess knowledge of the functions and responsibility of the NOC • Experienced with security policies, operation principles and best practices • Possess extensive knowledge of the network infrastructure and the services it provides • Possess extensive knowledge of OSS functions, particularly in the area of logging, monitoring and security • Possess extensive knowledge of OSS control with commands or other scripting or programming languages. • Possess extensive knowledge of the API (Application Programming Interface) of OSS or network components • Work with others to acquire requirements and convey technical knowledge regarding security and OSS logging features and functions • Knowledgeable of health and safety rules and hazards. <p>6.2 Implement logging of access and usage</p> <p>Be able to:</p> <ul style="list-style-type: none"> • Work with stakeholders (internal or cross departments) to acquire access and usage logging requirements, such as where (OSS level, device level), level of information details to capture, format of output (alarm, report, screen message, etc), interface to other systems (billing), etc • Evaluate options that can be used to implement the logging requirements in conjunction with existing security features of the OSS or other network components e.g. manual based, automatic with standard functions, automatic with added self developed routines, or purchasing additional OSS modules, etc • Design procedures, tools, or manual routines to accomplish the required output for logging of access and usage requirement with existing security interfaces • Perform programming or purchasing of new OSS module enhancement • Perform testing of newly implemented access and usage logging functions • Document the requirements, designs, and interfaces, programs of new access and usage functions. Create user manual on operations of the new functions and perform training, if necessary <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> • Follow the health and safety guidelines of the organisation while implementing logging functions • Always take into consideration and strike a proper balance among all related technological, environmental and legal factors • Always strike a proper balance among all stakeholders 	

7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: i. communicate effectively with stakeholders to understand the logging and security requirements, types of reports and interfaces to other systems, if needed ii. evaluate different options to satisfactorily implement the logging requirement iii. perform implementation of the logging functions with tests to demonstrate it is performing as expected iv. effectively transfer operational knowledge of the logging functions by means of training, and/or documentation
Remark	