Functional Area: Network Infrastructure & Operation (Security)

1. Title	Implementing controls to prevent operational security violation
2. Code	ITCSNO433A
3. Range	Network security is one of the main concerns of the operation team. This UoC describes the competencies for implementing controls to prevent operational security violations. In every network the operation team will use various means to protect the physical network and the information that is being transmitted. Protections include preventing DOS (Denial of Services), hacking, and other system or operational errors that affect the network normal operation.
4. Level	4
5. Credit	4
6. Competency	Performance Requirement 6.1 Possess the knowledge in the subject area • Critically understand the benefits and reasons for network security, in particular network operations controls • Experienced in applying security principles and best practices to protect the network infrastructures and network services • Knowledgeable of risk management principles and able to identify different network security risks • Knowledgeable of day to day routines of the network operations team and its security application • Experienced with various Information Security Standards like ISO27000, and ITIL on security controls and information security frameworks • Knowledgeable of health and safety rules and hazards. 6.2 Implementing controls to prevent operational security violation Be able to: • Work with colleagues such as the Security Officer to determine the network operations security needs and comprehend the security policies and the information security framework of the organisations • Observe and study the network infrastructure and the operation centre to determine where security controls are needed to be applied and the level of security risk or weakness that exists • Formulate appropriate controls and procedures to mitigate the security risks, such as: on certain event alarm is triggered, emails sent to certain person, accessed or logged, etc. • Work with stakeholders (head of operations or security officer) to agree on suitable controls to be implemented • Design and implement the operation controls. Also test the controls to ensure they function as required • Formulate suitable operational and training materials to instruct users on how the operational controls can be used • Formulate and implement monitoring procedures which determine the long term effectiveness of the operational controls • Document the implemented controls and monitoring procedures. The documents should also include when the controls should be next reviewed to determine its continual effectiveness • Package the relevant documents with other materials (test results, training manuals, etc.) to be signed off by the stakeholder 6.3 Exhibit professionalism • Follow the heath and safety guidelines of the organisation • Ensure all documents, user manuals, training material are prepared at a level which the readers can comprehend

7. Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: i. work and communicate effectively with stakeholders and colleagues to determine the appropriate operational controls to implement ii. implement the controls effectively and test thoroughly to fulfil their designed functions iii. formulate, at the correct level, training and/or instructional manuals that instruct the use of the operational control most effectively iv. package the controls and documents to be signed off
Remark	