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| **TSC Category** | Development and Implementation | | | | | |
| **TSC Title** | Network Configuration | | | | | |
| **TSC Description** | Configure network hardware and software components according to organisational guidelines and technical requirements. This includes the implementation and configuration of multiple servers, network devices and network management tools as well as the management of user network access to ensure stable and reliable network operations | | | | | |
| **TSC Proficiency Description** | **Level 1** | **Level 2** | **Level 3** | **Level 4** | **Level 5** | **Level 6** |
|  | **ICT-DIT-2009-1.1** | **ICT-DIT-3009-1.1** | **ICT-DIT-4009-1.1** |  |  |
|  | Perform basic configuration of network components and monitor user network access | Implement and configure servers and devices in line with network blueprint, and manage user network access | Evaluate organisational network requirements and develop a network configuration blueprint |  |  |
| **Knowledge** |  | * Basic techniques in network configuration * Basics of user network access * Types and usage of network management tools * Elements of network testing | * Key network components – their functions and interdependencies * Techniques in implementation and configuration of servers, devices and other network components * Features of network management tools * Configuration of network servers and devices * Network acces management * Network tracking and assessment tools | * Industry network standards * Blueprint development techniques for networks and their components and connections * Key considerations in user network access * Pros, cons and applicability of network management tools * Best practices in network reporting and assessment |  |  |
| **Abilities** |  | * Carry out basic configuration of servers and devices in accordance with vendor and organisational specifications * Support user network access according to organisational specifications * Use network management tools appropriately * Report network status in accordance to established protocols * Conduct basic tests on the network to verify their reliability and ability to meet organisational requirements | * Translate the organisational requirements to technical requirements * Identify the key network components to be configured to meet the technical requirements * Implement multiple servers and devices in line with the organisation’s network blueprint * Manage user network access in accordance to organisational guidelines and specifications * Identify suitable network management tools to be used * Implement procedures to ensure regular network reporting, administration and assessment of stability | * Determine organisation’s network requirements and priorities * Develop a configuration blueprint for multiple servers and devices, in accordance with vendor and organisational specifications * Establish guidelines for user network access in accordance with organisational specifications * Evaluate network management tools to be used in accordance with industry and organisational standards * Design procedures for regular network reporting and metrics or indicators for assessing reliability and stability of network |  |  |
| **Range of Application** | Types of networks may include but are not limited to:   * LAN network (e.g., SOHO network, WLAN) * Radio network * Telecommunications network * Next generation network (NGN)   Wide area network (WAN) | | | | | |