SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT

TSC Category	Development and Implementation					
TSC Title	Network Slicing					
TSC Description	Create logically partitioned networks from a shared infrastructure to provide optimised and customised services for different users based on service level agreements					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
				ICT-DIT-4025-1.1	**ICT-DIT-5025-1.1**	
				Design and maintain network slices to fulfil customers' needs	Configure network slices to support multiple end-user services	
Knowledge				• Network Functions Virtualisation (NFV) • Software Defined Networking (SDN) • Virtual Network Function (VNF) • Radio Access Network (RAN) and Core Network (CN) • Enhanced Mobile Broadband (eMBB), massive Machine Type Communication (mMTC), Ultra-Reliable and Low Latency Communication (URLLC) • Network Slice Instance (NSI) and Network Slice Subnet Instance (NSSI), its characteristics, components and service categories • Network resources used to create network slices • Network slice blueprints and catalogue • Benefits and value of network slicing to organisations • Verification tests for network slices	• Network slicing optimisation • Guaranteed Quality of Service (QoS) and Key Performance Indicators (KPIs) • Network Functions Virtualisation (NFV) • Software Defined Networking (SDN) • Virtual Network Function (VNF) • Radio Access Network (RAN) and Core Network (CN) • Enhanced Mobile Broadband (eMBB), massive Machine Type Communication (mMTC), Ultra-Reliable and Low Latency Communication (URLLC) • Network Slice Instance (NSI) and Network Slice Subnet Instance (NSSI), its characteristics, components and service categories • Network resources used to create network slices	

				• Risks and mitigation measures for verification tests • Network slice requirements of vertical and horizontal industries	• Network slice blueprints and catalogue • Verification tests for network slices • Risks and mitigation measures for verification tests • Network slice requirements of vertical and horizontal industries	
Abilities				• Determine the input parameters to create and configure network slices • Check the catalogue if network slice blueprints exist for the network slices requested for • Design the components for the network slices • Determine resources required for creation of network slices • Conduct regression tests to verify the network slice being created • Upload network slices into production system and validate network slice blueprints • Update network slice blueprint catalogue with newly created network slices • Carry out maintenance of network slices	• Analyse the end-user services to determine the requirements for the network slices • Prepare and configure the corresponding network slices • Create dedicated network slices for end-user services • Select existing network slices which the end-user services share with other services • Arrange network functions to be included into network slices if new network slices are created • Modify network slices to satisfy the end-user services • Monitor the service performance of created network slices • Modify network slices to enhance the service performance	
Range of Application						