

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

TSC Category	Operations and User Support					
TSC Title	Data Centre Facilities Management					
TSC Description	Manage and maintain data centre resources, facilities and/or physical infrastructure to ensure smooth, stable and sustainable operations within data centres. This includes monitoring and managing energy supply requirements, availability and consumption, ensuring the necessary resources are in place to support a stable power supply and day-to-day management of data centre equipment. This involves the management of the physical environment / conditions within the data centre and implementation of security measures to safeguard the integrity of the data centre					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		ICT-OUS-2004-1.1	ICT-OUS-3004-1.1	ICT-OUS-4004-1.1	ICT-OUS-5004-1.1	
		Maintain required performance and security levels of data centre hardware and facility systems, and conduct routine installation or decommissioning of equipment	Identify ideal environmental conditions for operations and restore data centre performance against security and service level requirements	Undertake capacity and resource planning for data centre facilities, and develop protocols and security guidelines in data centre management	Develop a data centre facilities management plan, defining infrastructure and technical requirements, and chart future plans for capacity enhancements	
Knowledge		<ul style="list-style-type: none"> Standard or basic data centre equipment installation, update and decommissioning process Indicators of infrastructure or equipment malfunctions Resource and energy supply requirements for data centre operations Alerting and reporting systems and tools Security access controls 	<ul style="list-style-type: none"> Current technical and operational standards for data centre technologies, systems, infrastructure and facilities Preventative maintenance procedures of data centre facilities System recovery procedures for data centre facilities and equipment Complex data centre equipment installation, update and decommissioning process Resource and energy consumption patterns Ideal environmental conditions for data centre facilities 	<ul style="list-style-type: none"> Industry-accepted standards and technologies of data centre hardware and related facilities Service-level agreement management Inventory, financial and human resource management Data centre project and equipment lifecycle Data centre capacity planning Regulatory requirements and industry best practices in data centre security 	<ul style="list-style-type: none"> Data centre space planning Infrastructure design tools Cost and schedule control systems Facilities management tools Projection and forecasting techniques for resource and energy requirements and supply 	

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Abilities		<ul style="list-style-type: none">• Check performance levels of data centre hardware and facility systems against established technical standards to ensure proper functioning of existing infrastructure and processes• Conduct basic or routine installation, decommissioning, upgrades and replacements of data centre equipment or facilities, according to a fixed plan and guidelines• Assess energy supply availability and stability against the consumption rate to highlight limitations or red flags• Utilise proactive alerting and reporting systems or tools to highlight abnormal environmental changes in order to optimise system performance• Perform routine checks on data centre facilities against the organisation's security policies so as to highlight any issues or lapses• Maintain logs of physical access controls and environmental controls for compliance and knowledge retention purposes	<ul style="list-style-type: none">• Implement preventive maintenance activities to data centre infrastructure to ensure performance meets service-level requirements• Commission and decommission a broad range of data centre equipment, in line with the data centre infrastructure plan• Monitor data centre performance against service level requirements• Restore operations when lapses occur• Assess current consumption patterns in energy or resource supply and identify potential gaps for resource planning purposes• Propose ideal environmental conditions for data centre facilities operations according to best practices and design specifications• Establish physical access controls for data centre facilities based on organisational security guidelines	<ul style="list-style-type: none">• Undertake capacity planning for data centre facilities based on design specifications• Allocate financial, physical and human resources in accordance to the facilities management plan• Develop Standard Operating Procedure (SOP)s in data centre management, in alignment with the broader facilities management plan and service level agreements• Assess current performance of data centre infrastructure, hardware and equipment• Manage required updates, installation, replacements or decommissioning of hardware and equipment• Determine optimal levels of energy supply capacity, availability and stability to support current and future data centre needs• Establish security guidelines for the storage, management and handling of data centre infrastructure, equipment and information	<ul style="list-style-type: none">• Develop a data centre facilities management plan, detailing the design of data centre infrastructure and projected resource requirements and costs• Translate service level requirements to technical requirements for the data centre• Evaluate established technical standards, technologies and performance feedback against service level requirements• Refine facilities management plan based on evaluation outcomes and considerations of resource availability and costs• Chart future plans for capacity enhancements to data centre facilities	
Range of Application						