

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

TSC Category	Development and Implementation					
TSC Title	Cloud Computing					
TSC Description	Implement cloud solutions to enhance business performance and security of IT systems					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			ICT-DIT-3020-1.1	ICT-DIT-4020-1.1	ICT-DIT-5020-1.1	ICT-DIT-6020-1.1
			Deploy cloud solutions and resolve cloud integration issues	Develop plans to implement cloud solutions	Evaluate the suitability of cloud solutions against organisational requirements and business needs	Build actionable strategy plans and policies for the introduction and adoption of cloud solutions across the organisation
Knowledge			<ul style="list-style-type: none"> Security and quality standards Diagnostic tools for cloud-related problems Types of installation tests for cloud solutions Technical solutions or techniques to resolve cloud integration-related issues Database administration and maintenance tools and techniques 	<ul style="list-style-type: none"> Requirements for implementation of cloud solutions Impact analysis techniques for cloud solutions Types of cloud platform integration tools and techniques Range of installation tests and techniques for cloud solutions Steps to align existing systems with cloud computing components Elements and functioning of automated software deployment Scripting and programming languages Big data tools and techniques Range of cloud computing platforms, software and services 	<ul style="list-style-type: none"> Interactions between various cloud and on-site components and systems Impact of cloud component additions, changes or removals to the organisation infrastructure and operations Cloud solutions and associated components Cloud specifications and implementation techniques Cloud computing migration protocols and strategies Trends and technologies in cloud solutions Industry standards and protocols related to cloud solutions Methods to evaluate the suitability of cloud solutions Cost-benefit analysis techniques 	<ul style="list-style-type: none"> Objectives of cloud solutions adoption and implementation in the organisation Industry best practices in cloud solutions, technologies and implementation processes Business impact of cloud deployment, modification, and migration Organisational requirements and business needs Trends and technologies in cloud solutions
Abilities			<ul style="list-style-type: none"> Set up environment for the implementation of 	<ul style="list-style-type: none"> Assess the performance of cloud solutions based 	<ul style="list-style-type: none"> Evaluate organisational requirements and 	<ul style="list-style-type: none"> Project current and future cloud computing

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

			<p>cloud solutions in accordance to user requirements</p> <ul style="list-style-type: none"> • Run tests for cloud solutions to minimise integration-related issues • Detect issues with cloud solutions to identify solutions • Resolve cloud integration and implementation issues • Conduct implementation tests on cloud solutions to measure its effectiveness against defined metrics • Escalate unresolved issues related to implementation of cloud solutions 	<p>on expected business needs, usage and traffic volume</p> <ul style="list-style-type: none"> • Draft specifications for cloud solutions to address usage, performance and security requirements • Develop implementation plans for implementing cloud solutions • Develop processes for the review of metrics associated with implementation of cloud solutions • Resolve escalated issues related to implementation of cloud solutions 	<p>business needs for cloud solutions</p> <ul style="list-style-type: none"> • Evaluate new and emerging cloud solutions to determine its efficacy and suitability against organisational requirements • Review performance of cloud solutions • Evaluate the benefits and challenges of using cloud solutions • Develop costing for technology requirements for implementation of cloud solutions • Draft recommendations for the introduction of cloud solutions 	<p>requirements based on business direction and organisational priorities</p> <ul style="list-style-type: none"> • Foster a culture of experimentation and innovation in the adoption and usage of cloud solutions • Determine the purpose and functions of adopting and implementing cloud solutions at an organisational level • Define hypotheses to guide the experimental design of cloud solutions • Explore new cloud solutions to determine its suitability for organisational implementation • Endorse recommendations on proposed cloud solutions
Range of Application	<p>Cloud Computing services and skills may include but not limited to:</p> <ul style="list-style-type: none"> • Amazon Web Services (AWS) • Microsoft Azure • Google Cloud Platform • Apache Hadoop • Python • Scala • Python • Perl • Ruby • MongoDB • MySQL • PHP • Java • Microsoft .NET Framework 					