

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

TSC Category	Development and Implementation					
TSC Title	Test Planning					
TSC Description	Develop a test strategy and systematic test procedures to verify and ensure that a product, system or technical solution meets its design specifications as well as the performance, load and volume levels set out. This includes the ability to define when different requirements will be verified across the product life stages, the tools used to perform the test, the data and/or resources needed to conduct the tests and testware in test cases, test scripts, test reports and test plans required					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		ICT-DIT-2017-1.1	ICT-DIT-3017-1.1	ICT-DIT-4017-1.1	ICT-DIT-5017-1.1	
		Identify and document the basic tools, testware, resources and processes to carry out required tests	Determine requirements and develop a phase test plan, identifying optimal schedules and means for executing test scripts	Define testing objectives, and design a master test plan including a series of systematic test procedures to achieve them	Develop a test strategy, and establish testing policies, guidelines and metrics according to internal and external standards	
Knowledge		<ul style="list-style-type: none"> Basic testing tools and processes Documentation requirements of software testing Concept and usage of traceability matrix 	<ul style="list-style-type: none"> Different types or levels of testing over product life stages Range of tests, testware and their applications Optimal scheduling times for different tests Critical components of a phase test plan Different means for executing test scripts 	<ul style="list-style-type: none"> Testing objectives and scope Range of tests, testware and their pros, cons, applicability and compatibility Test plans and procedures regarding test automation Critical components of a master test plan Key resources, data and tools required to implement test plans Post mortem activities and root cause analysis 	<ul style="list-style-type: none"> Principles of defining test strategy Industry regulations for product, software or system development Organisation and industry standards and baselines Testing guidelines and metrics 	
Abilities		<ul style="list-style-type: none"> Identify basic tools and processes to carry out required tests Document testware, tools and resources used, in accordance to project test plan across the different product life stages Maintain link between requirements and test done using a traceability matrix 	<ul style="list-style-type: none"> Determine the requirements and specifications of applications or systems to be tested Propose relevant tests for applications or systems to achieve the testing objectives Identify points across the different product life stages for optimal scheduling of tests and 	<ul style="list-style-type: none"> Define testing objectives, taking into account the unique requirements of the application or system to be tested Review a range of tests and select a suitable combination Design a series of systematic test procedures in alignment with the test strategy 	<ul style="list-style-type: none"> Develop the overall test strategy Articulate implications of industry developments and regulatory changes on testing processes or elements that need to be tested Establish testing policies and guidelines according to internal requirements and industry regulations 	

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		<ul style="list-style-type: none"> Gather resources, data and tools required to implement a test plan 	verification of different requirements <ul style="list-style-type: none"> Develop a phase test plan Assess appropriate way for executing test scripts through manual, automated or mixed 	<ul style="list-style-type: none"> Design test plans and procedures that leverages test automation Develop a master test plan, indicating the scope, approach, resources and schedule of intended test activities Select means for executing test scripts Determine the resources, data and tools required to implement the test plan successfully Design plans for post-mortem activities and root cause analysis 	<ul style="list-style-type: none"> Define metrics and desired outcomes for testing activities, in accordance to established standards and baselines 	
Range of Application	Test planning may be applied but are not limited to: <ul style="list-style-type: none"> Stress Tests Load Tests Volume Tests Baseline Tests 					