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

TSC Category	Development and Implementation					
TSC Title	Quality Engineering					
TSC Description	Create, deploy and maintain quality-related systems, processes and tools to establish an environment that supports process and product quality					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
			ICT-DIT-3011-1.1	**ICT-DIT-4011-1.1**	**ICT-DIT-5011-1.1**	
			Measure current process capability and identify areas for quality improvement	Investigate process drivers of quality, and recommend quality management infrastructure, techniques and tools to facilitate quality optimisation	Develop quality-related infrastructure and practices, as well as new techniques, tools and control systems, to drive high quality products and processes	
Knowledge			• Tools and techniques to measure process capability • Usage of quality-related processes and tools • Indicators of quality lapses or deviations • Quality management infrastructure maintenance procedures	• Infrastructure and process capability key performance measures and tools • Process drivers of quality and potential causes of quality lapses • Techniques and tools for quality optimisation • Usage of control systems • Quality management infrastructure, their benefits and proper deployment	• Principles of quality management and their application to internal infrastructure or processes • Projection of organisation quality-management needs • Quality management methodologies • New and emerging techniques and tools for process / product quality optimisation • Quality-related infrastructure options, components, and their costs and benefits • Effective application of control systems	
Abilities			• Measure quality of current processes using appropriate tools and techniques • Collect relevant data on current process capability to identify quality lapses and	• Determine key performance measures and tools to evaluate existing systems, for assessment of current infrastructure and process capability • Analyse current process capability to investigate	• Determine current process capability, monitor and evaluate performance of key systems and processes • Anticipate current and future needs of the organisation to preserve	

			possible areas for improvement • Provide clarifications on quality-related processes an d tools to relevant stakeholders • Apply established infrastructure, processes and systems to identify and highlight lapses or deviations from required quality standards • Support communications and implementation of changes to business processes in line with objectives of quality management infrastructure • Maintain quality management infrastructure	cause-and-effect relationships, process drivers of quality, and underlying causes of quality lapses • Recommend techniques and tools to facilitate process or product quality optimisation • Implement control systems to identify and correct deviations from required quality standards before they result in defects or disruptions • Deploy quality management infrastructure and ensure organisation understanding and acceptance of new systems, processes and tools • Manage maintenance of quality-related infrastructure to ensure that systems, processes and tools are properly followed and utilised	required quality standards • Develop quality-related infrastructure for process improvements with reference to relevant quality management methodologies and internal capabilities • Establish organisation-wide practices and norms to create a culture that encourages high quality products and processes • Introduce new techniques and tools to optimise process and product quality • Establish control systems to guide processes toward reaching optimal quality • Drive deployment of quality-related infrastructure that yields business value • Manage implementation of quality systems and processes, in ensuring alignment with business direction	
Range of Application						