SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY	
SKILLS MAP – HEAD OF QUALITY & RISK	
Sector	Infocomm Technology
Track	Product Development
Sub-track	Quality, Risk and Security
Occupation	Quality and Risk Specialist
Job Role	**Head of Quality & Risk**
Job Role Description	The Head of Quality & Risk is responsible for development a quality and risk assessment strategy that addresses all phases of product development, as well as governance frameworks for managing quality and test automation. He/She reviews quality and risk management policies and standards to ensure compliance with regulatory requirements and international standards. He defines the approaches and procedures in the identification, selection and assessment of quality and risk standards for adoption, documentation for test reporting and risk assessments, and review of quality and risk standards. He provides technical inputs on approaches and conduct of quality testing and risk assessments and recommend solutions to resolve significant quality lapses and potential risks that may emerge. He also reviews quality test reports, risk assessments and outcomes to approve product. He works in a team setting and is proficient in programming languages required by the organisation. He is familiar with international quality and risk management standards and processes, as well as applicable test automation tools. The Head of Quality & Risk manages the quality of and risk in infocomm technology products from end to end and is able to readily integrate and apply knowledge from multiple disciplines. He develops innovative and effective solutions to issues encountered, communicate his plans and advice in a clear and compelling manner that inspires action.

	Critical Work Functions	**Key Tasks**
Critical Work Functions and Key Tasks	**Manage the organisation's quality and risk strategy**	Formulate quality and risk strategies to address all phases of product development
		Develop governance frameworks for managing quality, risk assessments and test automation
		Review quality and risk management policies and standards to ensure compliance with regulatory requirements and international standards
		Drive the application of new technologies, compliance, and security standards
		Act as the organisation's advocate for quality, risk management and excellence
		Anticipate new quality tests required and potential risk areas based on organisational strategy and product development trends
		Develop roadmaps for the implementation of Agile methodologies and practices in a quality testing and risk assessment functions respectively
	Develop quality standards and risk framework	Define the approach and procedures in the identification, selection and assessment of quality standards and risks assessment framework for implementation
		Advise on the selection of quality standards and risk guidelines to ensure quality of outputs and potential risks being mitigated at each stage of the process
		Align quality and risk assessment standards with best practices, industry standards and organisational goals
		Establish processes and mechanisms for inspecting and reporting quality and risk issues
		Develop policies and procedures for documentation of end-user experience
		Formulate the approach to enhance organisational quality standards and risk framework

	Perform quality testing and risk assessments	Lead the implementation of quality and quality assurance testing and risk assessment frameworks, procedures, test infrastructure and tools
		Oversee the execution of risk assessment and quality assurance testing including end-user experience tests
		Provide technical inputs on approaches and conduct of quality testing and risk assessment
		Advise on recommend solutions to resolve significant quality lapses and mitigate potential risks
		Drive the achievement of higher quality and risk standards
		Evaluate outcomes of quality test reports and risk assessments to determine product approval
		Advise on the development of automated test cases and codes for applicable types of quality tests
		Develop guidelines on the selection of quality tests and risk assessments to automate and the implementation of automated quality tests and risk assessments
	Optimise quality and risk assessment processes	Drive continuous improvement in quality and quality assurance testing and risk assessment processes
		Develop sustainable quality and quality assurance testing and risk assessment processes
		Endorse improvements to optimise quality, quality assurance testing and risk assessment processes
		Establish quality improvement programs and risk mitigation programs to detect, address and prevent quality issues and risks in processes
		Secure buy-in for new investments in quality and quality assurance testing and risk assessment testing tools to enhance testing performance
	Manage people and organisation	Review operational strategies, policies and targets across teams and projects
		Develop strategies for resource planning and utilisation
		Review the utilisation of resources
		Oversee the development of learning roadmaps for teams and functions
		Establish performance indicators to benchmark effectiveness of learning and development programmes against best practices
		Implement succession planning initiatives for key management positions
		Establish roles and responsibility of the quality testing and risk assessment functions in an Agile environment

	Technical Skills and Competencies		**Critical Core Skills**	
Skills and Competencies	Business Risk Management*	Level 5	Communication	Advanced
	Emerging Technology Synthesis*	Level 5	Developing People	Advanced
	Internal Controls in Product Development*	Level 5	Decision Making	Advanced
	Learning and Development*	Level 5	Transdisciplinary Thinking	Advanced
	Partnership Management*	Level 5	Problem Solving	Advanced
	People and Performance Management*	Level 5		
	Performance Management*	Level 5		
	Problem Management*	Level 5		
	Process Improvement and Optimisation*	Level 5		
	Quality Assurance*	Level 5		
	Quality Engineering*	Level 5		
	Quality Standards*	Level 6		

	Product Risk Analytics*	Level 5
	Risk and Crisis Management*	Level 5
	Product Risk Assessment*	Level 6
	Risk Compliance and Governance*	Level 6
	Software Testing*	Level 4
	Stakeholder Management*	Level 5
	Strategy Planning*	Level 6
	Systems Thinking*	Level 5
	Agile Software Development	Level 5
	AI Ethics and Governance	Level 5
	Applications Development	Level 5
	Budgeting	Level 5
	Business Agility	Level 5
	Business Continuity	Level 6
	Business Needs Analysis	Level 5
	Business Performance Management	Level 5
	Business Requirements Mapping	Level 5
	Data Analytics	Level 5
	Data Ethics	Level 5
	Data Governance	Level 5
	Manpower Planning	Level 5
	Networking	Level 5
	Process Validation	Level 5
	Product Management	Level 5
	Project Management	Level 5
	Software Design	Level 5
	Test Planning	Level 5
Programme Listing	For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict	

The information contained in this document serves as a guide.

*Note: Technical Skills and Competencies (TSCs) with an asterisk (*) refer to Priority Skills (i.e., TSCs to be prioritised for this role).