

SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – HEAD OF INFRASTRUCTURE		
Sector	Infocomm Technology	
Track	Infrastructure	
Occupation	Infrastructure Engineer	
Job Role	Head of Infrastructure	
Job Role Description	<p>The Head of Infrastructure establishes organisation's overall IT infrastructure strategy and roadmap to transition the organisation towards its future-state IT infrastructure. He/She advises on the development of IT infrastructure standards and governance policies and processes for operations, as well as capabilities and constraints of the IT infrastructure environment. He establishes governance policies, standards, procedures and guidelines to ensure that IT infrastructure architecture, solutions, and technologies are aligned with the organisation's vision and strategy. He builds strong partnership with key stakeholders from a strategic and operational perspective to ensure alignment with business requirements and expectations.</p> <p>He is an proficient with with enterprise architecture methodologies and frameworks, architecture modelling tools, as well as product development methodologies. He is knowledgeable of various cloud, network, storage and security technologies, as well as cloud computing models and services.</p> <p>The Head of Infrastructure is an influential leader with a broad sense of perspective to be able to drive decisions with key internal and external stakeholders. He is strategic in his approach to managing resources and developing capabilities within the team.</p>	
Critical Work Functions and Key Tasks	Critical Work Functions	Key Tasks
	Establish infrastructure strategy and design	Establish organisation's overall IT infrastructure strategy
		Guide the formulation of a roadmap to transition the organisation towards its future-state IT infrastructure
		Determine the short-term and long-term IT infrastructure needs for current and future business requirements
		Advise on the design for an agile, scalable and secured IT infrastructure with built-in automation tools and workflows
		Provide overall IT infrastructure architecture thought leadership
		Define desired performance standards for IT infrastructure
	Manage infrastructure implementation and optimisation	Solicit buy-in from senior management on the implementation of IT infrastructure strategy and architecture
		Advise stakeholders on capabilities and constraints of the IT infrastructure environment
		Oversee the development of disaster recovery and contingency plans
		Assess performance of IT infrastructure against defined standards and business requirements
		Ensure IT infrastructure architecture, solutions, and technologies are aligned with the organisation's vision and strategy
		Recommend new technologies for security, IT operations and service quality improvement, as well as for cost optimisation
	Establish and oversee standards and governance	Establish metrics, key performance indicators (KPIs), Service Level Agreements (SLAs) and protocols
		Establish governance policies, standards, procedures and guidelines based upon business strategy
		Advise on the development of IT infrastructure standards and governance policies and processes for operations
		Ensure regulatory and legal compliance of both physical and digital infrastructure design
	Manage partners and vendors	Build strategic relationships with key infrastructure partners, vendors and technology providers
		Lead negotiations with external partners and vendors
		Oversee performance of key partners and vendors in the delivery of services

	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		
Skills and Competencies	Technical Skills and Competencies		Generic Skills and Competencies	
	Audit and Compliance	Level 4	Leadership	Advanced
	Budgeting	Level 5	Communication	Advanced
	Business Environment Analysis	Level 5	Decision Making	Intermediate
	Business Innovation	Level 6	Resource Management	Advanced
	Business Needs Analysis	Level 5	Global Mindset	Advanced
	Business Negotiation	Level 5		
	Business Performance Management	Level 5		
	Business Risk Management	Level 5		
	Change Management	Level 5		
	Cloud Computing	Level 6		
	Contract Management	Level 5		
	Cyber and Data Breach Incident Management	Level 6		
	Disaster Recovery Management	Level 5		
	Emerging Technology Synthesis	Level 6		
	Enterprise Architecture	Level 4		
	Infrastructure Strategy	Level 6		
	IT Governance	Level 5		
	IT Standards	Level 5		
	IT Strategy	Level 5		
	Learning and Development	Level 5		
	Manpower Planning	Level 4		
	Networking	Level 5		
	Organisational Analysis	Level 5		
	Partnership Management	Level 5		
	Performance Management	Level 6		
	Project Feasibility Assessment	Level 5		
	Project Management	Level 6		
	Security Architecture	Level 5		

	Stakeholder Management	Level 5	
	Strategy Implementation	Level 4	
	Strategy Planning	Level 5	
	Sustainability Management	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.