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Role Profile

Role:	**Infrastructure Engineer**	
Directorate:	Information Systems	
Salary Band:	Associate Infrastructure Engineer	Band 6
	Infrastructure Engineer	Band 8
	Senior Infrastructure Engineer	Band 9
	Lead Infrastructure Engineer	Band 10
Post reference:	IS186	
Job Evaluation Ref & Date:	06/08/19	
Role statement of purpose:	Responsible for maintenance, support & development of IT infrastructure solutions and services, creating and adhering to industry and organisational best practices & standards, service requirements and Key Performance Indicators (KPIs) throughout the lifecycle of products and services.	
Reports to:	Associate Infrastructure Engineer	Senior or Lead IE
	Infrastructure Engineer	Senior or Lead IE
	Senior Infrastructure Engineer	Lead Infrastructure Engineer
	Lead Infrastructure Engineer	Head of IS Systems

	Key Role Outputs (KROs) *these set out what must be achieved for the post holder to be successful in the role*	**Key Actions** *These set out how the KROs will be achieved – the activities required.*
Associate Infrastructure Engineer An Associate Infrastructure Engineer is responsible for assisting in the deployment and maintenance of infrastructure products and services for TfGM. Responsibilities include assisting in the identification of appropriate product and solutions, documenting solutions, reporting on and maintaining service health, identifying and resolving platform issues, deploying updates to maintain platform viability, supporting project delivery and contributing to the Practice.		
1.	Infrastructure designs reflect current best practice and are implemented to a high technical standard.	• Support more senior staff in researching new technologies & solutions; producing outputs such as research papers, risk assessments & recommendations. • Support development & implementation of Proof of Concepts (POCs) across connected infrastructure services. • Execute work packages (under direction) with the Design Practice and with external Partners to create & document new Product & Service Designs. • Support internal and external technical experts to deliver design outcomes. • Assist more senior Practice members in the design process. • Capture & review requirements and specifications. Define test conditions. Analyse and report test activities and results. • Contribute to testing across Infrastructure platform development. • Input to design improvement as well as a solution validation. • Execute tests (e.g. scripts) under supervision. Record results and reports issues.
2.	Infrastructure solutions are secure, cost effective and meet changing operational performance targets and SLAs for performance, capacity and availability; throughout their lifecycle	• Maintain IT assets in one or more significant areas of Infrastructure. • Analyse service and component availability, reliability, maintainability and serviceability. • Analyse logs of Infrastructure assets and verify and report that assets are in a known state and location. • Maintain the capability of service components to meet current business needs in a cost-efficient manner. • Maintain secure configurations (under guidance), maintaining tools, techniques and processes to identify,

		track, log system. • Assist with infrastructure Support activities such as Incident & Problem Management. • Awareness of working with project and product teams, either as a team member or independently, and the delivery of technology products and services through project methodologies and processes.
3.	Operational processes, issues & risks are effectively managed and business disruption is minimised.	• Contribute to the service level compliance of all infrastructure products and services. • Provide data to establish Infrastructure operating risks. • Document & implement (under supervision) appropriate action and risk mitigation for change requests. • Adhere to release policies, procedures and processes. • Assist in executing Infrastructure operating processes to achieve agreed process outcomes. • Comply with agreed standards and procedures. • Assist in establishing a portfolio of product and service improvement actions and implement. Identifying process improvements that can reduce down time through activities such as automation • Prioritise and diagnose incidents. Investigate root causes of incident and implement resolution activity. Facilitate business recovery following resolution of incidents. • Determine problem root causes. Assist with the implementation of agreed remedies and preventative measures. • Assist in establishing a portfolio of product and service improvement actions. Identify process improvements that can reduce down time through activities such as automation • Maintain and monitor infrastructure solutions. Maintain the Condition Monitoring of Infrastructure platforms and implement appropriate responses to alerts. • Contribute to continuous service improvement activity.
4.	An Infrastructure Services Practice & Community of Interest, that implements innovation and best practice.	• Contribute to the operation of the Infrastructure Practice operating model. • Provide data to support resource demand and supply. • Provide data to support investment planning of future Infrastructure technologies across TfGM. • Apply policies and processes to develop the capability of the Practice. • Participate in Communities of Interest associated with Infrastructure capability development

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Infrastructure Engineer

An Infrastructure Engineer is responsible for deploying and maintaining infrastructure products and services for TfGM. Responsibilities include the identification of appropriate product and solutions, documenting solutions, reporting on and maintaining service health, identifying and resolving platform issues, deploying updates to maintain platform viability, supporting project delivery and contributing to the Practice.

1.	Infrastructure designs reflect current best practice and are implemented to a high technical standard	• Execute work packages with the Design Practice and with external Partners to create & document new Product & Service Designs. • Create designs that meet strategic objectives and comply with architectural design principals. • Provide material to the Technical Design Authority to obtain approval for design choices. • Create designs that account for appropriate risk appetite and support the creation and implementation of appropriate risk mitigations. • Support internal and external technical experts in support of identified design outcomes. • Support key stakeholders in the design process. • Capture & review requirements and specifications. • Define test conditions. Analyse and report test activities and results.
2.	Infrastructure solutions are secure, cost effective and meet changing operational performance targets and SLAs for performance, capacity and availability, throughout their lifecycle	• Maintain IT assets in one or more significant Infrastructure domains, ensuring that services and components meet all of their agreed performance targets and service levels. • Maintain service and component availability, reliability, maintainability and serviceability. • Maintain secure configurations, maintaining tools, techniques and processes to identify, track & log system security & performance. • Optimise infrastructure performance and identify and communicate issues that would impact performance requirements • Execute maintenance tasks; including: routine configuration management and the installation and reconfiguration of infrastructure products & services. • Execute infrastructure support activities such as Incident & Problem Management • Monitor, investigate and analyse patterns and trends and apply resolutions to problems in systems, processes and services.

		• Forecast resource needs and maintain infrastructure platforms and deliver project requirements. • Experience working with project and product teams, either as a team member or independently, and the influencing the delivery of technology products and services through project methodologies and processes.
3.	Operational issues are effectively managed and business disruption is minimised.	• Maintain the service level compliance of all Infrastructure products and services, as directed by senior IT stakeholders. • Provide data to establish Infrastructure operating risks. • Implement appropriate actions and risk mitigations for change requests. • Adhere to release policies, procedures and processes. • Execute documented infrastructure operating processes. • Comply with TfGM defined standards and procedures. • Establish and lead a portfolio of product and service improvement actions. Highlight process improvements that can reduce down-time through activities such as automation. • Prioritise and diagnose incidents. Investigate root causes of incidents and implement resolution activities. Facilitate business recovery following resolution of incidents. • Conduct root cause analysis for problems. Assist with the implementation of agreed remedies and preventative measures. • Maintain and monitor Infrastructure solutions. • Contribute to continuous service improvement activities.
4.	An Infrastructure Services Practice & Community of Interest, that implements innovation and best practice.	• Deputise for Senior Infrastructure Engineers as required. • Support the operation of the Infrastructure Practice. • Provide data to the resource demand and supply process. • Provide data to support creation of investment plans. • Develop a Practitioner-level understanding of the technical concepts required in the role and deploy these into the operation of technical solutions and operating processes. • Provide data to support investment planning of future Infrastructure technologies across TfGM. • Implement approved policies and processes to develop the capability of the Practice. • Contribute to Communities of Interest associated with Infrastructure capability development.

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Senior Infrastructure Engineer

A Senior Infrastructure Engineer is responsible for deploying and maintaining a portfolio of infrastructure products and services for TfGM. Responsibilities include ownership of the identification of appropriate product and solutions, ensuring solutions are fully documented, reporting on and maintaining service health across a portfolio of services, identifying and resolving platform issues, governing the deployment of updates to maintain platform viability, supporting project delivery and contributing to the Practice.

1.	Infrastructure designs reflect current best practice and are implemented to a high technical standard	• Lead work packages with the Design Practice and with external Partners to identify, create & document new Product & Service Designs. • Produce complex designs and document, to meet strategic objectives and architectural design principals. • Present to the Technical Design Authority to obtain approval for design choices. • Create designs that take into account organisation risk appetite and create and implement appropriate risk mitigations. • Collaborate with internal and external technical experts to support design outcomes. • Collaborate with senior key stakeholders in the design process. • Lead the design of tests. Supervise testing and production of test reports.
2.	Infrastructure solutions are secure, cost effective and meet changing operational performance targets and SLAs for performance, capacity and availability, throughout their lifecycle	• Manage & maintain IT assets in one or more significant Infrastructure domains, tracking services and components and appropriately managing performance targets and service levels. • Own and manage service and component availability, reliability, maintainability and serviceability. • Define standards for Security and Integrity of components and ensure conformance to Security standards. • Manage & maintain secure configurations, identifying and maintaining tools, techniques and processes to identify, track & log system security & performance. • Own the optimisation of infrastructure performance activities and recommend appropriate changes. • Manage & execute complex configuration, installation and reconfiguration of infrastructure products & services. • Manage & execute action to investigate, analyse patterns and trends and resolves problems in systems, processes and services.

		• Manage the Infrastructure Demand Management process to ensure adequate investment and recruitment of resources. • Deep experience working with project and product teams, either as a team member or independently, and positively collaborating and driving the delivery of appropriate technology products and services through project methodologies and processes.
3.	Operational issues are effectively managed and business disruption is minimised.	• Own and manage the service level compliance of all Infrastructure products and services. • Provide and analyse data to establish Infrastructure operating risks. Communicate and document the risks into the IS risk management process. • Implement appropriate action and risk mitigation for change requests. Manage high impact, complex change requests. • Supervise the activities of Associate Infrastructure Engineers and Infrastructure Engineers. • Track and manage adherence to release policies, procedures and processes. • Manage Infrastructure operating processes to achieve agreed process outcomes and propose changes to improve processes and enhance outcomes for TfGM. • Manage compliance with agreed standards and procedures. • Lead a complex portfolio of product and service improvement actions. Highlighting process improvements that can reduce down time through activities such as automation. • Prioritise and diagnose complex, high-impact incidents. Investigate root causes of incidents and implement resolution activity. Manage business recovery following the resolution of incidents. • Manage complex, high-impact Problems, identifying root causes. Manage the implementation of agreed remedies and preventative measures. • Manage the maintenance and monitoring of Infrastructure solutions. • Manage continuous service improvement activity.
4.	An Infrastructure Services Practice & Community of Interest, that implements innovation and best practice.	• Deputise for Lead Infrastructure Engineers, as required. • Contribute to the design of the Infrastructure Practice operating model. • Support the resource demand and supply, including investment plans, internal people and a supplier ecosystem. • Develop an expert-level understanding of the technical

		concepts required in the role and deploy these into the technical solutions and operating processes. • Provide data to support investment planning of future Infrastructure technologies across TfGM. • Implement and manage policies and processes to develop the capability of the Practice. People, Process & Technology development and investment. • Manage Communities of Interest associated with Infrastructure capability development.

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Lead Infrastructure Engineer

A Lead Infrastructure Engineer is responsible for deploying and maintaining the whole portfolio of infrastructure products and services for TfGM. Responsibilities include ownership of the identification of appropriate product and solutions, ensuring all technology solutions are fully documented, ownership and escalation point for service health across a portfolio of services, owning the identification and resolution of platform issues, governing the deployment of updates to maintain platform viability, directing resources and solutions for project delivery and owning the development of the Practice.

1.	Infrastructure designs reflect current best practice and are implemented to a high technical standard	• Govern the whole portfolio of infrastructure activities with the Design Practice and with external Partners to create & document new Product & Service Designs. • Approve designs, ensuring they meet strategic objectives and architectural design principals. • Consult with the Technical Design Authority to approve design choices. • Own the adherence of designs to organisational risk appetites, ensuring appropriate mitigations are identified. • Lead internal and external technical experts to support design outcomes. • Own and manage relationships with key stakeholders in the design process.
2.	Infrastructure solutions are secure, cost effective and meet changing operational performance targets and SLAs for performance, capacity and availability, throughout their lifecycle.	• Lead the design and documentation of a Security position for Data Centre Services across both on-Premise & Cloud-based infrastructure. • Own the implementation of appropriate Security solutions into Infrastructure products & services. • Establish projects and lead investment plans required to implement the new Products & Services, covering on-Premise & Cloud-based solutions. • Lead and develop a team of experts to deliver service improvements. Drive the identification, prioritisation and implementation of improvements and efficiencies, working towards maximum value for TfGM. • Deep experience working with project and product teams, either as a team member or independently, and owning the delivery of appropriate technology products and services through project methodologies and processes.
3.	Operational issues are effectively managed and business disruption is minimised	• Own, manage and maintain the service compliance of all Infrastructure products and services • Identify, assess and communicate Infrastructure operating risks; ensuring they are included in the IS risk management

		process. • Manage all actions identified for risk mitigations and their implementation for high impact, complex change requests. Track, monitor and own their adherence to release policies, procedures and processes. • Review and ensure that Infrastructure operating processes are well designed, documented and achieve agreed process outcomes. • Own, for the Practice and team, the correct implementation of standards and procedures. • Establish and lead a portfolio of product and service improvement actions. Highlighting process improvements that can reduce down time through activities such as automation
4.	An Infrastructure Services Practice & Community of Interest, that implements innovation and best practice.	• Design & implement the Infrastructure Practice operating model. • Influence the Practice design & outcomes; delivering through others. • Manage resource demand and supply, including investment plans, internal people and a supplier ecosystem. • Develop an expert-level understanding of the technical concepts required in the role and deploy these into the technical solutions and operating processes. • Define the direction of investment in future Infrastructure technologies across TfGM. • Define and implement policies and processes to develop the capability of the Practice. People, Process & Technology development and investment. • Establish and lead Communities of Interest associated with Infrastructure capability development.

	Compulsory Outputs (COs) *these set out what must be achieved for the post holder to be successful in the role*	Key Actions *These set out how the COs will be achieved – the activities required.*
C1	Ensure you comply with all applicable organisational legislation and policy:	• TfGM Safety Management System (In particular section SMS 201 Roles and Responsibilities) • PCI DSS standards, policies and procedures • Bus Operator contractual management • Dignity at Work policy; • Information assurance and security in line with Cabinet Office requirements; • Risk management • TfGM policies and procedures • Equality and diversity legislation • TfGM Vision & Values • Act in accordance with TfGM's behaviours and competencies • IS Operations policies and procedures • IS Security Policies and Procedures
C2	Any other reasonable duties as required	The post holder is representative of IS and is expected to: • Conduct themselves in a professional manner and with due courtesy at all times. • Be flexible within the workplace and adapt to meet the requirements of service, specifically within this role, by providing cover for extended service hours.

Key Interdependencies		
Key Contacts	• Partners and suppliers • People within the IS Department • Practice Leads within IS Department • Heads of Practice within IS Department • Product Owners and "Heads of" across the business	
Direct reports	Associate Infrastructure Engineer Infrastructure Engineer Senior Infrastructure Engineer Lead Infrastructure Engineer	None None None Senior Infrastructure Engineers, Infrastructure Engineers and Associate Infrastructure Engineers
Budgetary responsibility	None	

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Location	TfGM, 2 Piccadilly Place, Piccadilly, Manchester, M1 3BG

Office Use Only	**Updated**	**Updated**	**Updated**	**Updated**	**Updated**
Created					
By: Simon Mather Nov 2018	Jason Higgins, June 2020				

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Person Specification

	ROLE: Infrastructure Engineer		*(Knowledge, skills and experience required at selection stage)*	
E	**Essential Experience:**			
	Associate Infrastructure Engineer	**Infrastructure Engineer**	**Senior Infrastructure Engineer**	**Lead Infrastructure Engineer**
E1	**INFRASTRUCTURE DESIGN, DELIVERY AND OPERATIONS** • Practical use of commercial off the shelf (COTS) and open source technology solutions, virtualised on premises and cloud platforms (AWS, Azure) • Supporting infrastructure services in large organisations • Sizing and scaling of network and hosting services • Design and engineering decisions for data platforms	**INFRASTRUCTURE DESIGN, DELIVERY AND OPERATIONS** • Operation of commercial off the shelf (COTS) and open source technology solutions, virtualised on premises and cloud platforms (AWS, Azure) • Operating infrastructure services in large organisations • Sizing and scaling of highly resilient network, compute and database services • Implementation of repeatable infrastructure services	**INFRASTRUCTURE DESIGN, DELIVERY AND OPERATIONS** • Managing commercial off the shelf (COTS) and open source technology and business solutions, virtualised on premises and cloud platforms (AWS, Azure) • Managing infrastructure services in large organisations • Sizing and scaling of highly resilient network, compute and database services • Design of repeatable infrastructure services	**INFRASTRUCTURE DESIGN, DELIVERY AND OPERATIONS** • Leading teams in the design, implementation, operation and support of infrastructure solutions and services • Evaluating and selecting infrastructure technologies; in particular Compute, Network, Storage, and Database Services • Design and operation of infrastructure at scale; data centre topologies, DR services, HA, network, virtualisation capabilities, data, storage management solutions
E2	**SERVICE MANAGEMENT AND QUALITY PROCESS** Experience of: • Fulfilment, Incident, Problem, Change Management • Service Transition	**SERVICE MANAGEMENT AND QUALITY PROCESS** Responsible for: • Fulfilment, Incident, Problem, Change Management processes	**SERVICE MANAGEMENT AND QUALITY PROCESS** Has led on: • Fulfilment, Incident, Problem, Change processes • Service Transition	**SERVICE MANAGEMENT AND QUALITY PROCESS** Has been accountable for: • Service Management in large scale, complex environments • Defining Formal IT Service

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	• Formal IT Service Management processes • Asset Management • Procurement, commercial and supplier management	• Service Transition • Defining Formal IT Service Management processes • Service reporting • Asset Management • Procurement, commercial and supplier management	• Defining Formal IT Service Management processes • Service reporting • Asset Management • Procurement, commercial and supplier management and contract negotiation	Management processes • Service reporting • Asset Management • Procurement, commercial and supplier management and contract negotiation
E3	**INCIDENT HANDLING AND REMEDIATION** • Monitoring and Alerting solutions • Good analytical and problem-solving skills	**INCIDENT HANDLING AND REMEDIATION** • Implementing Monitoring and Alerting solutions • Strong analytical and problem-solving skills	**INCIDENT HANDLING AND REMEDIATION** • Strong experience of Monitoring and Event Management • Strong analytical and problem-solving skills	**INCIDENT HANDLING AND REMEDIATION** • Advanced analytical and problem solving, problem management and troubleshooting skills
E4	**COMMUNITY COLLABORATION** • Experience working in a collaborative environment	**COMMUNITY COLLABORATION** • Experience working in a collaborative environment	**COMMUNITY COLLABORATION** • Experience of coaching and mentoring teams working in an Agile environment	**COMMUNITY COLLABORATION** • Has dealt with critical paths and risks areas within an Agile project methodology
E5		**SERVICE EXCELLENCE** • Scripting of hosting infrastructure, monitoring and reporting tools	**SERVICE EXCELLENCE** • Scripting and automation of infrastructure services in an HA environment	**SERVICE EXCELLENCE** • Scripting and automation of infrastructure services in an HA environment
E6			**LEADERSHIP** • Planning, estimating and managing multiple projects • Motivational skills and the ability to create a high performing environment •	**LEADERSHIP** • Planning, estimating and managing multiple projects • Motivational skills and the ability to create a high performing environment • Managing a team

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				• Resource management • Performance and capability management • Career development

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Additional experience required of specialists in "Network & Telecommunications"				
E7	**SECURITY AND DATA** • Network security and data protection (GDPR, PCIDSS) • Knowledge of security technologies, including: Firewalls, VPN, encryption (TLS/SSL) and authentication	**SECURITY AND DATA** • Network security and data protection (GDPR, PCIDSS) • Operating security technologies, including: Firewalls, VPN, encryption (TLS/SSL) and authentication	**SECURITY AND DATA** • Responsibility for network security and data protection (GDPR, PCIDSS) • Managing access methods: MPLS, VPN and VRF • Managing firewalls and certificates (TLS/SSL)	**SECURITY AND DATA** • Accountability for network security and data protection (GDPR, PCIDSS) • Leading on delivery of security solutions, including: Firewalls, VPN, encryption (TLS/SSL) and authentication
E8	**NETWORKS AND PROTOCOLS** • Knowledge of virtualisation, Network Functions Virtualised (NFV), Software Defined Networks (SDN) and Software Defined WAND (SD-WAN) • Understanding of TCP/IP, including OSPF and BGP • Awareness of common network services, including: DNS, DHCP, NTP, and load-balancing techniques • Awareness of VoIP services	**NETWORKS AND PROTOCOLS** • TCP/IP routing protocols, including OSPF and BGP • Network services, including: DNS, DHCP, NTP, and load-balancing • Knowledge of server virtualisation techniques, Network Functions Virtualised (NFV), Software Defined Networks (SDN) and Software Defined WAND (SD-WAN) • Knowledge of VoIP services, PBX configuration and SIP	**NETWORKS AND PROTOCOLS** • Significant knowledge of: TCP/IP routing protocols, OSPF and BGP • Significant knowledge of: DNS, DHCP, NTP, and load-balancing • Significant knowledge of server virtualisation techniques, Network Functions Virtualised (NFV), Software Defined Networks (SDN) and Software Defined WAND (SD-WAN) • Significant knowledge of VoIP services, PBX configuration and SIP	**NETWORKS AND PROTOCOLS** • TCP/IP routing protocols, including OSPF and BGP • Network services, including: DNS, DHCP, NTP, and load-balancing • Significant knowledge of server virtualisation techniques, Network Functions Virtualised (NFV), Software Defined Networks (SDN) and Software Defined WAND (SD-WAN) • Significant knowledge of VoIP services, PBX configuration and SIP
E9	**NETWORK PRODUCTS** • Awareness of Cisco switches,	**NETWORK PRODUCTS** • Supporting and	**NETWORK PRODUCTS** • Supporting and	**NETWORK PRODUCTS** • Significant knowledge of Cisco

	routers and firewall products	troubleshooting Cisco switches including – 6800, 4600, 4500, 3700, 2900 • Supporting and troubleshooting Cisco Routers and Firewalls including ASA 5500 and firepower	troubleshooting Cisco switches including – 6800, 4600, 4500, 3700, 2900 • Supporting and troubleshooting Cisco Routers and Firewalls including ASA 5500 and firepower	datacentre products and product roadmaps • Experience procuring and implementing Cisco technologies • Experienced in maintaining, upgrading and replacing Cisco technologies
Additional experience required of specialists in "Compute and Storage"				
E7	**SECURITY AND DATA** • Application security and data protection (GDPR, PCIDSS) • Awareness of O/S and application security techniques, including: server hardening, A/V, encryption (TLS/SSL) and authentication	**SECURITY AND DATA** • Application security and data protection (GDPR, PCIDSS) • Strong grounding in OS and application security: server hardening, A/V, encryption (TLS/SSL) and authentication	**SECURITY AND DATA** • Application security and data protection (GDPR, PCIDSS) • Defining and operating security solutions: server hardening, A/V, encryption (TLS/SSL) and authentication	**SECURITY AND DATA** • Application security and data protection (GDPR, PCIDSS) • Leading on organizational level security solutions: server hardening, A/V, encryption (TLS/SSL) and authentication
E8	**COMPUTE AND STORAGE TECHNOLOGIES** • Server virtualisation techniques (HyperV, Kubernetes, Azure, AWS) • Administration of Microsoft Windows Server and RHEL • Awareness of compute and storage hardware solutions provided by Dell and HP	**COMPUTE AND STORAGE TECHNOLOGIES** • Server virtualisation techniques (HyperV, Kubernetes, Azure, AWS) • Microsoft Windows Server and RHEL administration in enterprise environments • Installation and configuration of hardware solutions (Dell and HP) • Patching and upgrading	**COMPUTE AND STORAGE TECHNOLOGIES** • Server virtualisation techniques (HyperV, Kubernetes, Azure, AWS) • Microsoft Windows Server and RHEL administration in enterprise environments • Installation and configuration of hardware solutions (Dell and HP) • Patching and upgrading	**COMPUTE AND STORAGE TECHNOLOGIES** • Server virtualisation techniques (HyperV, Kubernetes, Azure, AWS) • Microsoft Windows Server and RHEL administration in enterprise environments • Installation and configuration of hardware solutions (Dell and HP)

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		firmware, OS and applications • Database administration for SQL Server or MongoDB in an HA environment	firmware, OS and applications • Database administration for SQL Server or MongoDB in an HA environment	
E9	**APPLICATION MANAGEMENT** • Application monitoring, logging and alerting, service management (incident, problem and change, CMDB) • Packaging and deployment automation • Testing non-functional behavior (deployment configuration, security, resilience, performance)	**APPLICATION MANAGEMENT** • Application monitoring, logging and alerting, service management (incident, problem and change, CMDB) • Packaging and deployment automation • Testing non-functional behavior (deployment configuration, security, resilience, performance)	**APPLICATION MANAGEMENT** • Application monitoring, logging and alerting, service management (incident, problem and change, CMDB) • Packaging and deployment automation • Testing non-functional behavior (deployment configuration, security, resilience, performance) • Application management in complex environments: bespoke, COTS and SaaS	**APPLICATION MANAGEMENT** • Application monitoring, logging and alerting, service management (incident, problem and change, CMDB) • Packaging and deployment automation • Testing non-functional behavior (deployment configuration, security, resilience, performance) • Application management in complex environments: bespoke, COTS and SaaS • Applying maturity models (ISO20000/27000, CMMi)
D	**Desirable Experience – SFIA version 6:**			
	Associate Infrastructure Engineer	**Infrastructure Engineer**	**Senior Infrastructure Engineer**	**Lead Infrastructure Engineer**
D1	Change Management - Level 4	Change Management - Level 4		
D2	Incident Management - Level 3	Incident Management - Level 4		
D3	Problem Management - Level 3	Problem Management - Level 4	Problem Management - Level 4	Problem Management - Level 5
D4	Testing - Level 1	Testing - Level 3	Testing - Level 4/5	Testing - Level 6
D5	Configuration Management - Level 4	Configuration Management - Level 4	Configuration Management - Level 4	Configuration Management - Level 4
D6	Asset Management - Level 4	Asset Management - Level 4	Asset Management - Level 4	Asset Management - Level 4

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D7		Technical Specialism - Level 4	Technical Specialist - Level 5	
EQ	**Essential Qualifications – Technical, Vocational or educational:**			
	General			
EQ1	GCSEs or an equivalent			
	Infrastructure Engineer (Networks)			
EQ2	Cisco CCIE/CCNP/CCDP certification or equivalent experience/skills			
	Infrastructure Engineer (Compute and Storage)			
EQ2	Microsoft MCSE or RHEL administration certification or equivalent experience			
DQ	**Desirable Qualifications – Technical, Vocational or educational:**			
DQ1	A degree or equivalent industry experience			
DQ2	ITIL v.3 Foundation Certificate or ITIL Expert Certificate			
DQ3	CMMi			
	Cisco Nexus 7k switches and NX-OS, UCS integration with Nexus			
	Working at CCNP level for 2 years.			
DQ4	Certifications in VMWare			
DQ6	Certifications in Amazon AWS, Azure or other cloud infrastructure			
DQ7	Agile / Scrum certified			
EA	**Essential Attributes:**			
EA1	**RELIABLE** by doing what we say we will do			
EA2	**HONEST** in our communications and our feedback			
EA3	**RESPECTFUL** in how we behave			
EA4	**REWARDING** by recognising a job well done			
EA5	**EMPOWERING** by enabling potential to be realised			
DA	**Desirable Attributes:**			