

## Overview

This standard is about providing support to network infrastructure services.

Network analysts ensure the continuous reliability of organisational network infrastructure, ensuring it meets operational needs around the clock. They maintain the availability of digital services, systems, and assets, optimising network hardware and software. They promptly address and resolve network issues through logging, diagnosis, and resolution.

This involves monitoring network performance and security, as well as investigating and resolving incidents within the network infrastructure. This also includes providing advice and training, introducing new services and upgrades, and correcting faults.

This standard is for those who need to provide support to network infrastructure services as part of their duties.

## Performance criteria

### *You must be able to:*

1. Monitor network infrastructure performance to promptly identify issues
2. Utilise network management software for proactive remote monitoring, identifying events for further analysis
3. Apply diagnostic tools and techniques to identify the root causes of network service and performance issues
4. Employ structured troubleshooting approaches to investigate network issues in line with organisational procedures
5. Perform remediation activities to resolve network infrastructure faults
6. Close network support requests promptly, in line with organisational Service Level Agreements (SLAs)
7. Maintain a network issue log, documenting all network events for reference
8. Optimise network systems and services performance in line with organisational standards
9. Document remediation work undertaken to resolve network issues in line with organisational procedures
10. Assist in planning upgrades to network infrastructure performance and security in line with organisational requirements
11. Produce both standard and ad hoc network management reports for network performance and issue resolution in line with with organisational requirements

## Knowledge and understanding

### *You need to know and understand:*

1. Industry-standard network hardware and software systems
2. The basic principles of routing and switching
3. Typical enterprise network topologies, encompassing wired and wireless communications
4. The network architectures commonly used in digital and data business systems within organisations
5. How to monitor network infrastructure environments for issues and events
6. How to provide technical support in complex networked environments
7. Industry-standard network management and remote monitoring tools and their application
8. The steps involved in applying structured approaches to root cause analysis, problem-solving, and troubleshooting in network infrastructure environments
9. The various business processes and organisational functions that rely on network infrastructure services
10. Organisational Service Level Agreements (SLAs) for network service requests
11. The range of tools and techniques used for network management and support
12. The tools and techniques used for network diagnostics and their application
13. How to maintain a network issues log
14. The causes and consequences of network issues and systems failures
15. How to optimise network performance, including load balancing, traffic optimisation, and protocol configuration
16. How to troubleshoot network issues and conduct root cause analysis in networked environments
17. The importance of timely monitoring and reporting of network issues
18. How to respond to and escalate network security threats and vulnerabilities
19. Developments in network monitoring and remediation technologies
20. How to create and interpret technical network documentation and reports

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Support network infrastructure services



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