

# NAS Level 4 Network Engineer End-Point Assessment Specification



## Table of Contents

|                                                                              |           |
|------------------------------------------------------------------------------|-----------|
| <b><i>Introduction to Notebook Assessment Services</i></b> .....             | <b>4</b>  |
| <b><i>Key facts of the Network Engineer standard</i></b> .....               | <b>5</b>  |
| <b><i>Overview of the Network Engineer</i></b> .....                         | <b>6</b>  |
| <b><i>Assessment methods summary</i></b> .....                               | <b>8</b>  |
| <b><i>On-programme requirements</i></b> .....                                | <b>9</b>  |
| <b><i>Registration</i></b> .....                                             | <b>10</b> |
| <b><i>Gateway Requirements</i></b> .....                                     | <b>10</b> |
| <b><i>Gateway</i></b> .....                                                  | <b>10</b> |
| How to prepare for gateway .....                                             | <b>10</b> |
| The gateway meeting .....                                                    | <b>11</b> |
| <b><i>Reasonable Adjustments and Special Consideration</i></b> .....         | <b>12</b> |
| <b><i>Photographic ID requirements</i></b> .....                             | <b>12</b> |
| <b><i>The End-Point Assessment</i></b> .....                                 | <b>13</b> |
| Before the assessment.....                                                   | <b>13</b> |
| Assessment method 1: Simulation Assessment and Questioning.....              | <b>14</b> |
| Assessment method 2: Professional Discussion .....                           | <b>18</b> |
| Grading.....                                                                 | <b>19</b> |
| <b><i>Assessment Method Grading</i></b> .....                                | <b>20</b> |
| Assessment method 1: Simulation Assessment and Questioning .....             | <b>20</b> |
| Assessment method 2: Professional discussion underpinned by portfolio .....  | <b>23</b> |
| <b><i>Apprenticeship Overall Grading</i></b> .....                           | <b>27</b> |
| Aiming for top grade.....                                                    | <b>27</b> |
| Grading Summary Table .....                                                  | <b>27</b> |
| <b><i>Retake and resit information</i></b> .....                             | <b>28</b> |
| <b><i>Appeals</i></b> .....                                                  | <b>28</b> |
| <b><i>Quality assurance</i></b> .....                                        | <b>29</b> |
| <b><i>Contact information</i></b> .....                                      | <b>29</b> |
| <b><i>Appendix A – Key Duties and Tasks</i></b> .....                        | <b>30</b> |
| <b><i>Appendix B – Published Knowledge, Skills, and Behaviours</i></b> ..... | <b>32</b> |
| Knowledge .....                                                              | <b>32</b> |
| Skills .....                                                                 | <b>32</b> |
| Behaviours .....                                                             | <b>33</b> |

|                                                                             |           |
|-----------------------------------------------------------------------------|-----------|
| <b>Mapping of Knowledge, Skills, and Behaviours (KSBs).....</b>             | <b>34</b> |
| Assessment method 1: Simulation Assessment and Questioning .....            | 34        |
| Assessment method 2: Professional discussion underpinned by portfolio ..... | 35        |
| <b><i>Appendix C – Roles and Responsibilities .....</i></b>                 | <b>37</b> |

## Introduction to Notebook Assessment Services

Welcome to the Notebook Assessment Services End-Point Assessment specification Level 4 Network Engineer Apprenticeship Standard (ST0127). This specification is designed for Version 1.2 of the standard.

The information for this apprenticeship standard can be accessed on the website of the Institute for Apprenticeships & Technical Education (IfATE):  
<https://www.instituteforapprenticeships.org/>.

Notebook Assessment Services (NAS) is an independent end-point assessment organisation (EPAO) that has been approved to offer and carry out the independent end-point assessments for the Standard Name Apprenticeship Standard. NAS mark and Internally Quality Assure (IQA) all End Point Assessments (EPAs) in accordance with marking and quality assurance processes.

Additionally, all end-point assessments are Externally Quality Assured (EQA) by Ofqual.

This specification is designed to outline all you need to know about the End-point Assessment (EPA) for this Standard and will also provide an overview of the on-programme delivery requirements.

In addition, advice, and guidance for training providers on how to prepare apprentices for the end-point assessment is included. The approaches suggested are not the only way in which an apprentice may be prepared for their assessments, but trainers may find them helpful as a starting point.

## Key facts of the Network Engineer standard

### Key facts

|                                  |                                                                                                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Apprenticeship Standard:</b>  | Network Engineer                                                                                                                                                                              |
| <b>Reference Code:</b>           | ST0127                                                                                                                                                                                        |
| <b>Version:</b>                  | 1.2                                                                                                                                                                                           |
| <b>Level:</b>                    | 4                                                                                                                                                                                             |
| <b>LARS Code:</b>                | 1                                                                                                                                                                                             |
| <b>On Programme Duration:</b>    | 24 Months (Minimum 12 Months)<br>with 20% off the job training                                                                                                                                |
| <b>EPA Period:</b>               | 3 months                                                                                                                                                                                      |
| <b>Overall Grading:</b>          | Fail/ Pass/ Merit/ Distinction                                                                                                                                                                |
| <b>Assessment methods:</b>       | <ol style="list-style-type: none"><li>1. Simulated Assessment (2 x Virtual Labs) and Questioning</li><li>2. Professional discussion requiring submission of a portfolio of evidence</li></ol> |
| <b>Assessment Order:</b>         | Assessments can be taken in any order                                                                                                                                                         |
| <b>Professional Recognition:</b> | BCS, The Chartered Institute for IT for Register of IT Technicians (RITTech) level 4                                                                                                          |

## Overview of the Network Engineer

The role of the Network Engineer is found in large and small businesses, in all sectors, and within public, private, and voluntary organisations. Network Engineers are a key occupation in most organisations which are increasingly dependent on their digital networks.

Organisations of all types are increasingly applying digital technologies across all their business functions to maximise productivity. Large organisations will have sophisticated complex systems whilst smaller consultancies offer support to clients on a contract basis.

For example, a Network Engineer may work within a network of hotels to ensure that the booking system functionality and performance is maintained and customer access to courtesy systems such as Wi-Fi are managed appropriately for performance.

In a large infrastructure project, a Network Engineer may work in a team to ensure that significant project milestones are reached in delivering network services both within the project and by servicing the project teams with reliable network capability to enable them to deliver that project successfully.

Large communications organisations use Network Engineers to service world-leading global networks at the cutting edge - adapting and evolving with changes to new technologies to give customers the very best digital experience from delivering major communications installations to monitoring nationwide networks.

The demand for people who can manage, build, maintain virtual and physical networks is increasing. This is because of technological developments such as, 5G and Cloud. The broad purpose of the occupation is to install computer networks, maintain them, and offer technical support to users where necessary.

A Network Engineer provides networks and systems to deliver the objectives of varied organisations. They will make sure that systems are working at optimum capacity and problem solve where they are not. To be able to do this effectively a Network Engineer must interpret technical information and understand organisational requirements and expectations. They support delivery of legislatively compliant solutions to challenges in network and infrastructure.

Network Engineers deal with both hardware and software issues. They are a key part of putting things right quickly when networks fail, and they communicate problems that they have identified with network integrity or performance rapidly to ensure service is resumed and downtime minimised. Network Engineers help customers both technical and non-technical to install computer networks, maintain them, and offer technical support to users where necessary.

Network Engineers can be customer facing or internal. In their daily work, an employee in this occupation interacts with management within organisations, team members, staff, clients, customers, and suppliers. They may interact face to face or remotely by using a range of technologies. They may be working independently or collaboratively as part of a team. They will be aware of their organisational escalation routes and understand their role in their team.

The work of a Network Engineer is office-based, although they may need to work across different sites depending on the size of the organisation and their network. When working as a consultant a Network Engineer may spend a lot of time at clients' offices and on large installations, which may mean spending time away from home or their usual work base.

**Typical job titles include:**

Desk based engineer, Dynamic network engineer, Field based engineer, Infrastructure engineer, Network administrator, Network architect, Network engineer, Systems engineer

## Assessment methods summary

### **Assessment Method 1: Simulation Assessment and Questioning**

**2 simulation assessments** in a **virtual lab** environment online over 2 consecutive days. Each assessment has a maximum time of **7 hours** (total 14 hours).

Apprentices required to submit a **virtual lab report** at the end of each lab.

Invigilated in person and/or remotely using proctoring software / live streaming.

Requires good Internet connection, Reliable IT equipment, webcam, and microphone.

Conducted at the Training Provider's or Employer's premises.

**Breaks / Meals are permitted**  
(invigilated)

**Questioning** on a separate day after completion of the two simulated assessments.

Apprentices given **at least 5 days' notice** for the questioning session.

The outputs from the simulated assessment will be shared with the apprentice by the independent assessor online throughout the questioning. The apprentice will not be allowed access to the outputs beforehand.

The questioning will be **conducted remotely** using video conferencing and will last **45 minutes (+10%)** and comprise a **minimum of 10 open questions**.

Covers KSBs mapped to this method.

**Grading: Fail / Pass / Distinction**

### **Assessment Method 2: Professional discussion underpinned by portfolio**

Apprentice is required to compile a **portfolio** containing at least one piece of evidence **mapped to each** Knowledge, Skill and Behaviour (KSBs) assigned to this method.

The Professional Discussion will be based on the Portfolio and comprise a **minimum of 15 open questions** lasting **60 minutes (+10%)** during a 1-1 conversation with the assessor.

The discussion will be **conducted remotely** using video conferencing.

Apprentices must be given **at least 5 days' notice** for the discussion.

Covers KSBs mapped to this method.

**Grading: Fail / Pass/ Distinction**



## On-programme requirements

The process of learning, development and on-programme assessment is crucial to ensure that the apprentice develops the knowledge, skills and behaviours required to achieve full competence in line with the Network Engineer Level 4 Apprenticeship Standard.

Apprentices will be required to demonstrate continuous and sustained progress towards the end-point assessment by completing work set out by their employer and demonstrating the KSBs required in the relevant role.

The on-programme aspect of the apprenticeship is typically expected to take 24 Months (or a minimum of 12 months) to complete and should include specific milestones to ensure that the apprentice continues to make good progress towards their end-point assessment.

Therefore, it is recommended that quarterly milestone meetings with the training provider, employer and apprentice are scheduled:

- To check progress against the Standard
- For everyone to give feedback.

The milestone meetings could take the form of one-to-one tutorials, interviews, or professional conversations to support development of the apprentice's communication and employability skills.

The apprentice's Manager/Mentor will must support the development of the portfolio which underpins the professional discussion by:

1. Providing sufficient time for the apprentice to prepare a portfolio
2. Provide work-based opportunities for the apprentice to gather evidence
3. Authenticating that the content of the portfolio is the apprentice's own work

Managers/mentors shall not:

- Provide evidence for the apprentice to include in the portfolio
- Assess or review the portfolio

This period of learning and associated assessments must be complete before the end-point assessment can take place.

All training leading to End Point Assessment should cover the breadth and depth of the Standard that integrate the Knowledge, Skills and Behaviour (KSBs) components of the assessment plan and which ensure that the apprentice is sufficiently prepared to undertake the end-point assessment.

The Training Provider will conduct a necessary Mock EPA with each apprentice which will align with the assessment methods specified within the assessment plan. Mock Virtual labs are available for use by the Training Provider.

## Registration

Apprentices should be registered onto **ACE 360** as soon as they start their apprenticeship programme, and the employer has decided to use NAS for their EPAO.

## Gateway Requirements

Before the End-Point Assessment, an apprentice must first pass-through gateway. This stage is driven by the employer being satisfied that the apprentice is consistently working at or above the level set out in the occupational standard. Essentially stating that the apprentice has achieved occupational competence. This decision is often made at a gateway meeting involving the employer, the apprentice, and the training provider. The decision must ultimately be made by the employer.

For Network Engineer Level 4, the following requirements must be met and evidenced for an apprentice to pass through gateway:

- The employer must be satisfied that the apprentice is consistently working at, or above, the level of the occupational standard.
- The apprentice must have achieved English and Mathematics at Level 2 (or equivalent)
- The apprentice must compile and submit a portfolio of evidence sufficient to evidence the apprentice can apply the knowledge, skills and behaviours required as mapped to the Professional Discussion.
- NAS gateway form.
- NAS Apprentice portfolio mapping document.

For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

## Gateway

### How to prepare for gateway

After apprentices have completed their on-programme learning, they should be ready to pass through 'Gateway' to their end-point assessment.

Gateway is a meeting that is arranged between the apprentice, their employer and training provider to determine that the apprentice is ready to undertake their end-point assessment.

The apprentice should prepare for this meeting by bringing along relevant work-based evidence, including:

- Customer feedback
- Recordings
- Manager statements
- Witness statements
- Portfolio
- A Portfolio KSB mapping document

As well as evidence from others, you may include:

- Mid and end-of-year performance reviews
- Feedback to show how they have met the apprenticeship Standards while on programme

Apprentices should be advised by employers and providers to gather evidence and undertake the required qualifications during their on-programme training.

It is recommended that employers and providers complete regular checks and reviews of this evidence to ensure the apprentice is progressing and achieving the Standards before the formal gateway meeting is arranged.

## The gateway meeting

The gateway meeting should last around 1 hour and must be completed on or after the apprenticeship on-programme end date.

It should be attended by the apprentice and the relevant people who have worked with the apprentice on-programme.

During the meeting, the apprentice, employer, and training provider will discuss the apprentice's progress to date and confirm if the apprentice has met the full criteria of the apprenticeship Standard during their on-programme training.

The **gateway readiness report** should be used to log the outcomes of the meeting and agreed by all 3 parties. This report is available to download from ACE 360 for each standard. The report should then be submitted to NAS via ACE 360 along with the other required documents to initiate the end-point assessment process. If you require any support completing the gateway readiness report, please contact your employer engagement manager at Notebook Assessment.

**Please note:** a copy of the Standard should be available to all attendees during the gateway meeting.

## Reasonable Adjustments and Special Consideration

A reasonable adjustment, as defined by Ofqual, is an adjustment to an assessment to enable a disabled Learner to demonstrate his or her knowledge, skills and understanding to the levels of attainment required by the specification for that qualification.

A special consideration, as defined by Ofqual, is consideration to be given to a Learner who has temporarily experienced an illness or injury, or some other event outside of his or her control, which has, or is reasonably likely to have, materially affected the Learner's ability to:

- a. take an assessment, or
- b. demonstrate his or her level of attainment in an assessment

Please also refer to the NAS Reasonable Adjustments and Special Consideration Policy for full information on eligibility for and applying for a reasonable adjustment or special consideration. This policy is accessible via the NAS website and ACE 360.

## Photographic ID requirements

All employers are required to ensure that each apprentice has their identification with them on the day of assessment so the end-point assessor/Notebook Assessment can check that the person undertaking the assessment is indeed the person they are claiming to be.

Notebook Assessment will accept the following as proof of an apprentice's identity:

- A valid passport (any nationality)
- A signed UK photocard driving licence
- A valid Identity card issued by HM forces or the police
- Another photographic ID card, e.g., employee ID card, travel card, etc.

## The End-Point Assessment

The end-point assessment for the Network Engineer Level 4 Apprenticeship Standard is made up of 2 main assessment methods:

- 1. Simulated Assessment and Questioning**
- 2. Professional Discussion**

Each assessment will cover differing elements of the knowledge, skills, behaviours from the standard and assessment plan.

As an employer/training provider, you should agree a plan and schedule with the apprentice to ensure all assessment components can be completed effectively.

### **Before the assessment**

The employer/training provider should brief the apprentice on the areas that will be assessed in the End-point Assessment.

Employers/training providers should:

- Ensure the apprentice knows the date, time, and location of the assessment
- Brief the apprentice on the activities to be carried out and the duration of the assessments
- Ensure the apprentice knows which criteria will be assessed
- Encourage the apprentice to reflect on their experience and learning on-programme to understand what is required to meet the Standard
- Be prepared to provide clarification to the apprentice, and signpost them to relevant parts of their on-programme experience in preparation for their assessment

# Assessment method 1: Simulation Assessment and Questioning

## Assessment method 1 component 1: Simulation Assessment - Virtual Network Lab

### Overview

Apprentices must complete **2 simulation assessments** in a **virtual lab** environment online where they will demonstrate the KSBs mapped to this assessment method. NAS Ltd. will arrange for the simulation assessments to take place, in consultation with the employer and training provider. A suitable venue will be selected and booked that has suitable IT equipment and reliable Internet connectivity. An invigilator will be on-site to open the venue and ensure the suitable IT equipment is ready for the assessment.

Each simulation assessment will be proctored remotely using **ROGO proctoring software**. All relevant account and login details will be sent to each apprentice prior to starting each virtual lab.

Simulation assessments must be carried out over an assessment time of 14 hours total, which must be completed over **2 consecutive days**. Each assessment task will take up to a maximum permitted time of **7 hours**.

Assessment task 1 (Network Failure) will be completed and submitted online by the end of day 1 and assessment task 2 (Network Optimisation) will be completed and submitted online by the end of day 2 to ensure the security of each assessment is maintained. NAS Ltd. will select the specific simulation assessments the individual apprentice will take.

As part of each simulation assessment task the apprentice will be required to submit a **virtual lab report** consisting of evidence of each lab activity. This will include screen shot evidence and answers to questions which will be in the form of free-text, multi-choice and multi-select types.

The virtual lab report will be stored securely within the virtual lab environment. At the end of each day the apprentice is required to send the virtual lab report to NAS Ltd so that it can be marked by a nominated assessor. A group mailbox ([results@notebook-epa.co.uk](mailto:results@notebook-epa.co.uk)) has been configured specifically for this. Instructions to the apprentice for this process are included within each virtual lab and will also be briefed verbally by the nominated assessor.

By submitting these items, the assessor will be able to make a judgement against the KSBs mapped to this assessment method and can determine whether the tasks have been completed competently. The assessor will also have access to each virtual lab to view configurations that have been completed by the apprentice.

## Delivery

Before each simulated assessment begins, the apprentice will be provided with a brief by the nominated assessor, which will include instructions on the tasks they must complete, including the timescales they are working to. This will not be included in the assessment time. The briefing will be conducted remotely via **MS Teams**.

Each simulation assessment will be overseen by an independent assessor and invigilator to ensure that the apprentice completes the assessment independently.

Each of the simulation tasks will have detailed instructions embedded within the virtual lab software that details all relevant information required to complete each task. These instructions will include network diagrams, virtual devices available and specific information detailing the requirements of each sub-task within the virtual lab.

The Simulation Assessment will allow the following activities to be undertaken as a simulation assessment to provide the opportunity for the apprentice to demonstrate occupational competence against the KSBs assigned to this assessment method:

- *Detect and resolve network failures:*
  - o *Switch or Router configuration fault for remote access*
  - o *Configure dynamic routing protocols*
- *Improve network performance:*
  - o *Poor / insecure Wi-Fi configuration*
  - o *Network response time is low*
  - o *IPv4 or / IPv6 problems*
- *Install and manage network architectures*
- *Test and analyse network issues*
- *Plan and work effectively*
- *Troubleshooting*
- *Fault diagnostics*

Outputs from the lab activities will be included within the virtual lab report submitted at the end of each day.

Each assessment task once begun may not be split, other than to allow comfort breaks as necessary. Meal breaks are permitted to ensure that the assessment complies with the working time directive legislation on breaks and lunchtimes. Any planned or unplanned breaks will be invigilated to ensure the security of the assessment is maintained. The virtual lab software allows the apprentice to log out to take a break which will automatically pause the timer. When the apprentice returns from a break and subsequently logs back in, the virtual lab will continue from the last point after logging out previously. The virtual lab also provides the facility to be reset back to the start state if required by the apprentice.

There may be others undertaking the simulated assessment at the same time, but they must be at least two meters apart, at separate workstations and with their own system access. Each apprentice will undertake a different combination of simulated assessment tasks at any one time to mitigate against malpractice in the assessment.

NAS Ltd is responsible for ensuring a controlled environment is available and that local management arrangements are in place to ensure the security of this assessment method.

The independent assessor will make all grading decisions.

### **Venue**

Simulation assessments must be conducted in a suitable venue such as a training provider's premises or an employer's premises and will be agreed beforehand by NAS Ltd.

The venue must:

- Have reliable internet connectivity
- Have access to reliable suitable IT devices to be able to operate the online assessment software including proctoring software. Each device **MUST** have a webcam and microphone.
- The proctoring software has been configured to monitor the apprentice using the webcam, microphone and will record all desktop activity.

The virtual online lab will comprise a virtual Wide Area Network configuration made up of the following virtual features, assets, and components as a minimum:

- *1 x File server*
- *1 x Email server*
- *1 x Web server*
- *4 x Clients per location*
- *Main location (head office) and Branch location (remote office) connected*
- *Each location to have a router. These will be pfSense virtualised routers.*
- *Each location to have minimum a desktop switch, master switch and Wi-Fi access point switch. These are provided by means of pfSense virtualised devices and Hyper-V virtualised switches.*
- *Default gateway*
- *Main and guest Wi-Fi access*



## Assessment method 1 component 2: Questioning

### Overview

This component will take the form of questioning by the independent assessor which will be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve questions that will focus on coverage of the simulated assessment activity completed by the apprentice.

The rationale for this assessment method is:

It is usual for people in this occupation to engage in detailed technical discussions, so this assessment method mirrors their day-to-day work.

### Delivery

The NAS Ltd. independent assessor will conduct and assess the questioning and will make all grading decisions.

Questioning will happen after both simulated assessment tasks have been completed and assessed by the independent assessor.

The apprentice will be given a **minimum of 5 working days' notice** of the date for their questioning session. The questioning session will be conducted remotely using **MS Teams**.

The outputs from the simulated assessment will be shared with the apprentice by the independent assessor online throughout the questioning. The apprentice will not be allowed to have access to the simulated assessment outputs in advance of the questioning session to maintain the security of the assessment method.

The questioning will last for **45 minutes**. The independent assessor has the discretion to increase the time of the questioning by up to 10% to allow the apprentice to complete their last answer. The assessor will ask a minimum of **10 open questions**.

During this method, the independent assessor will use questions generated by themselves in addition to those from an NAS Ltd. generated question bank.

The purpose of questioning will be to check the knowledge & skills shown in the simulated assessment and explore the underpinning reasoning where the supporting notes may be insufficiently detailed or ambiguous.

Prior to starting the actual questioning, the identity of the apprentice will be checked during the initial briefing by the independent assessor. The independent assessor will ensure the apprentice is not being aided in some way during the questioning and the MS Teams session will be recorded.

Outputs from the simulated scenario and answers to questions will be assessed holistically.

## Venue

The questioning must be conducted in a suitable venue such as a training provider's premises or an employer's premises and will be agreed beforehand by NAS Ltd.

The venue must:

- Have reliable internet connectivity
- Have access to reliable suitable IT devices. Each device **MUST** have a webcam and microphone.

## Assessment method 2: Professional Discussion

The professional discussion is a 1:1 conversation between the assessor and the apprentice.

The discussion will last for **75 minutes**, and the assessor has the discretion to increase the time allowance by up to 10% to allow the apprentice to complete their last answer. The apprentice will be asked a minimum of **15** questions during the discussion. The questions will align to the KSBs assigned to the professional discussion.

The discussion will be supported by the apprentice's portfolio, submitted at gateway, and can be accessible to the assessor and the apprentice during the discussion. The portfolio itself will not be directly assessed.

The portfolio submitted at gateway must evidence that the apprentice can apply the KSBs to the professional discussion and include the completed Apprentice Portfolio Checklist.

The portfolio must contain at least one piece of evidence mapped to each KSB, and one piece of evidence can be referenced against more than one KSB. It is expected that there will typically be a minimum of 5 pieces of evidence.

The portfolio should contain written accounts of activities that have been completed and referenced against the KSBs, supported by appropriate evidence, including photographic evidence and work products such as:

- work instructions
- safety documentation
- company policies and procedures as appropriate to the activities.

Progress review documentation should also be included. Self-reflective accounts or self-assessment are not permissible.

## Venue

The questioning must be conducted in a suitable venue such as a training provider's premises or an employer's premises and will be agreed beforehand by NAS Ltd.

The venue must:

- Have reliable internet connectivity
- Have access to reliable suitable IT devices. Each device MUST have a webcam and microphone.

## Grading

Each component of the end-point assessment will be assessed against the appropriate criteria laid out in this specification, which will be used to determine a grade for each individual component. An overview of how each component is graded is provided below.

## Assessment Method Grading

### Assessment method 1: Simulation Assessment and Questioning

| KSBs                       | Fail                            | Pass<br>Apprentices must meet all the pass descriptors to achieve a pass                                                                                                           | Distinction<br>In addition to the pass criteria apprentices must meet all the following distinction descriptors to achieve a distinction |
|----------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Across all tasks B1</b> | Does not meet the pass criteria | Demonstrates independent working initiative being resourceful when faced with the online simulation tasks and taking responsibility for solving problems within their own remit B1 |                                                                                                                                          |

|                                                                                                                   |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Detecting and resolving Network Failures</b></p> <p><b>K1 K12 K17</b></p> <p><b>S1</b></p> <p><b>B6</b></p> | <p>Does not meet the pass criteria</p> | <p>Identifies network failures, setting out the rationale behind the identified task. K1 K12</p> <p>Demonstrates a diagnostic strategy when faced with a network failure to establish the root cause and the options available and reason for the choice of solution. B6</p> <p>Implements a secure fix to resolve network failure proportionate to the need describing the constraints and considerations within the Network Failure solution. S1 K17</p>                                                 | <p>Evaluates the long- and short-term impacts of network failure solutions within the simulation. K1</p> <p>Analyses and reviews the effectiveness of maintaining the security of the network within the simulation. S1 K17</p>                                                                                                                                                                                 |
| <p><b>Improving Network Performance</b></p> <p><b>K3 K4 K5</b></p> <p><b>S6 S12</b></p>                           | <p>Does not meet the pass criteria</p> | <p>Identifies network performance issues within specified parameters K3</p> <p>Demonstrates a working solution to resolve performance issues showing a response in real time K4</p> <p>Selects uses and justifies diagnostic tools to deliver improved system performance S6</p> <p>Uses organizational procedures to deal with recording information effectively and in line with protocols K5</p> <p>Delivers service performance optimisation with a rationale for why this is the best option. S12</p> | <p>Reviews the effectiveness of methods used to securely troubleshoot network service performance' K4</p> <p>Compares and contrasts the effectiveness of methods used to securely trouble shoot network service performance including analytical approaches to diagnosis of network issues and recommendations of future requirements based on outcomes and results of the simulation tests carried out. S6</p> |

|                                                                            |                                        |                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Install and Manage Network Architecture</b><br/><b>K2 S2 S10</b></p> | <p>Does not meet the pass criteria</p> | <p>Plans and carries out their installation and configuration activity to show the stages of activity required and explains the choice and use of hardware and or software to manage and maintain a secure network K2 S2</p> <p>Manages network architecture tasks in line with tickets raised by customers to resolve or escalate as necessary S10</p> | <p>'Reviews their choice of network architecture and evaluates the effectiveness of their choice' K2</p> <p>Analyses customer response to determine the suitability of hardware and software choice S10</p> |
| <p><b>Test and Analyse Network issues</b><br/><b>S3 S6 S9</b></p>          | <p>Does not meet the pass criteria</p> | <p>Tests the network to identify issues using more than one method and compiles test plans in line with identified faults S3 S9</p> <p>Demonstrates analytical approaches to diagnose Network Issues S6</p>                                                                                                                                             |                                                                                                                                                                                                             |
| <p><b>Planning and working effectively</b><br/><b>S17 B4 B8</b></p>        | <p>Does not meet the pass criteria</p> | <p>Plans and prioritises tasks arising balanced with costs and efficiencies S17 B4</p> <p>Works within the simulation tasks effectively under pressure showing resilience B8</p>                                                                                                                                                                        |                                                                                                                                                                                                             |

## Assessment method 2: Professional discussion underpinned by portfolio

| KSBs                                   | Fail                            | Pass<br>Apprentices must demonstrate all the pass descriptors to pass                                                                                                                                                                        | Distinction<br>In addition to the pass criteria apprentices must demonstrate all the following distinction descriptors to get a distinction |
|----------------------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Planning Work</b><br><b>S13 S14</b> | Does not meet the pass criteria | <p>Outlines how they have organised and prioritised clients/stakeholders' requests and explains the use of Service Level Agreements S13</p> <p>Describes how they have outlined their role as a Network Engineer to key stakeholders S14</p> |                                                                                                                                             |

|                                                                  |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                               |
|------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Define<br/>Network Tasks<br/>K8 K9 K10<br/>S18 S20</b></p> | <p>Does not meet the pass criteria</p> | <p>Explains the purposes and uses of ports and protocols in Network Engineering activities K8</p> <p>Describes features and factors that play a role in deployment of devices, applications, protocols, and services at their appropriate OSI and/or TCP/IP layers. K9</p> <p>Explains the concepts and characteristics of routing and switching in Network Engineering activities K10</p> <p>Explains how to apply numerical skills in Network Engineering activities to ensure that outcomes meet the defined specifications for the network task S18</p> <p>Describe how they have selected the appropriate tools regarding specific Network activities and comply with organisation policies and processes when upgrading systems S20</p> | <p>Analyses how the use of different hardware and software required for network engineering activities could provide benefits to the organisation and evaluates the associated risks. S20</p> |
| <p><b>Maintain<br/>Security<br/>K19<br/>S4 S15<br/>B2</b></p>    | <p>Does not meet the pass criteria</p> | <p>Explains the types of current security threats to networks and describes K19</p> <p>Describes how they have maintained the security and performance of the system against known standard threats. S4</p> <p>Explains how they have applied the appropriate process, policies, and legislation to ensure security and performance requirements have been met S15 B2</p>                                                                                                                                                                                                                                                                                                                                                                     | <p>Analyses the evolving landscape of security threats to networks and how they mitigate threats S4 B2</p>                                                                                    |



|                                                                                                  |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                      |
|--------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Trouble shooting Network Issues</b></p> <p><b>S5</b></p>                                   | <p>Does not meet the pass criteria</p> | <p>Explains how they use diagnostic tools to trouble-shoot problems within the Network environment S5</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Explains how they investigate new approaches and tools to troubleshoot the organisations network with a focus on security. S5</p> |
| <p><b>Implement Solutions</b></p> <p><b>K11 K13 K14 K15 K16 K18 K20</b></p> <p><b>S8 S11</b></p> | <p>Does not meet the pass criteria</p> | <p>Identifies the characteristics of network topologies, types, and technologies K11</p> <p>Explains cloud concepts and their purposes within the network engineering environment. K13</p> <p>Describes the functions of network services K14</p> <p>Explains how they have undertaken Network maintenance activities K15 S11</p> <p>Explains how current legislation relates to network engineering activities K16</p> <p>Describes the integration of a server into a network and explains how they have maintained system performance and integrity. K18</p> <p>Explains how they have upgraded, applied, and tested components to systems configurations ensuring that the system meets the organisation’s requirements and minimises downtime. This should include backup processes and an understanding of the use of automated tools K20 S8</p> | <p>Compare and contrast approaches to maintaining system performance and integrity K15 K18 S8 S11</p>                                |

|                                                                                       |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                           |
|---------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Recordkeeping</b><br/><b>K6 S7 S16</b></p>                                      | <p>Does not meet the pass criteria</p> | <p>Describe how they have communicated and recorded Network Engineering outcomes to stakeholders in line with organizational procedures and Service Level Agreements taking into consideration an organisation's cultural awareness and its technical ability K6 S7 S16</p>                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                           |
| <p><b>The bigger picture</b><br/><b>K7 K21</b><br/><b>S19</b><br/><b>B3 B5 B7</b></p> | <p>Does not meet the pass criteria</p> | <p>Describes their role in the organisations Business Continuity and Disaster Recovery process. K7</p> <p>Explains the principles of change management within the network engineering environment and how they have ensured compliance. K21 S19</p> <p>Explains how they have worked within the goals, vision, and values of the organisation B3</p> <p>Describe how they have met or exceeded customers' requirements and expectations B5</p> <p>Explains how they take responsibility for their own CPD and technical skill developments and reflects on the outcome of feedback on their own performance based on the expectations of the organisation' B7</p> | <p>Justifies how they have utilised a new approach or technical development to network engineering and evaluates the outcome. K21 S19</p> |

## Apprenticeship Overall Grading

The final apprentice grade is based on performance across both end-point assessment methods.

The NAS Ltd independent assessor will combine the result of the simulation assessment and questioning, and professional discussion to produce a final grade recommendation. The final grading recommendation will be submitted by the assessor within 3 working days of the final EPA activity, for IQA moderation and confirmation of the final grade.

### Aiming for top grade

For the apprentice to give themselves the best chance of achieving a distinction, they should prepare as best they can by making sure they sell themselves to the assessor.

The assessor may ask questions or prompts to explore why the apprentice has approached a task in a certain way and to provide them with more opportunities to demonstrate the distinction criteria which may require them to justify or explain their thinking to a higher level.

### Grading Summary Table

The following table details the final grade determinant for the apprenticeship. The apprentice must achieve a pass in all components to pass and gain a distinction in all components to gain a distinction.

| Simulation Assessment & Questioning | Professional Discussion | FINAL GRADE |
|-------------------------------------|-------------------------|-------------|
| Fail                                | Fail                    | Fail        |
| Fail                                | Pass                    | Fail        |
| Pass                                | Fail                    | Fail        |
| Pass                                | Pass                    | Pass        |
| Distinction                         | Pass                    | Merit       |
| Pass                                | Distinction             | Merit       |
| Distinction                         | Distinction             | Distinction |

NAS will issue a results statement to the Training Provider via ACE360. The results statement will detail the result for each of the end-point assessment activities,

alongside the overall grade. It will also provide details of the apprentice's rights to appeal, and how to arrange resits or retakes.

NAS will apply for the apprenticeship certificates after the 10 working days appeals window has elapsed from the results being sent to the training provider. Where an appeal is submitted, the apprenticeship certificate will not be applied for. Certificates will be sent direct to the Employer from the Education and Skills Funding Agency.

## Retake and resit information

Where an apprentice fails an assessment component or the assessment is voided, they will have the opportunity to undertake a re-sit or re-take for that component.

Resits can be arranged immediately whilst retakes require the apprentice to go back into a period of learning. Resits and retakes can be for individual components or all components of the apprenticeship and will incur additional fees as stated in NAS' price list. Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

When undertaking a resit or retake, the whole assessment method(s) will need to be reattempted in full, regardless of any individual assessment criteria that were passed on any prior attempt. The EPA Report will contain feedback on areas for development and resit or retake guidance.

Any assessment method re-sit or re-take must be taken during the maximum EPA period, otherwise the entire EPA must be taken again, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Where any assessment method must be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

## Appeals

Appeals must be submitted to NAS within 10 working days of the issue of the result to the training provider and must follow the process outlined within the NAS Appeals Policy. Appropriate grounds for appeal are outlined within the policy that can be found on ACE 360.

## Quality assurance

**Internal** – Notebook Assessment Services have in place quality assurance procedures adhering to best practice and regulatory requirements.

This includes minimum occupational competence requirements for Independent End Point Assessors (IEPAs) including Standardisation training to ensure consistency across End Point Assessment.

**External** – External quality assurance will be undertaken by Ofqual.

## Contact information

[enquiries@notebook-epa.co.uk](mailto:enquiries@notebook-epa.co.uk)

## Appendix A – Key Duties and Tasks

| DUTY                                                                                                                                                                    | KSBS                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Duty 1</b> Install, configure, and test appropriate network components or devices securely to well-defined specifications whether physical or virtual                | K2 K4 K9 K10 K11 K12 K13 K14 K15 K16 K17 K18 K19<br>K20<br>S1 S2 S4 S18<br>B1 B2 B6                  |
| <b>Duty 2</b> Acquire and analyse network performance data to monitor network activity                                                                                  | K1 K3 K4 K6 K14 K15 K17 K19<br>S3 S5<br>B1 B2 B6                                                     |
| <b>Duty 3</b> Optimise and maintain the performance of network systems or services in line with well-defined specification whether physical or virtual                  | K2 K3 K4 K6 K9 K10 K11 K12 K13 K14 K15 K16 K17 K18<br>S11 S12<br>B1 B2 B6                            |
| <b>Duty 4</b> Investigate and problem solve to address technical performance issues in networks to return the network to successful operation and escalate as necessary | K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12 K13 K14 K15<br>K16 K17 K19 K20 K21<br>S6<br>B1 B2 B3 B4 B6 B8 |
| <b>Duty 5</b> Undertake upgrades to a network including physical or virtual systems                                                                                     | K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12 K13 K14 K15<br>K16 K17 K18 K19 K20 K21<br>S20<br>B1           |
| <b>Duty 6</b> Interpret written requirements and technical specifications in relation to delivery of network systems and services                                       | K2 K5 K6 K7 K14 K16 K21<br>S10<br>B2 B4 B6                                                           |
| <b>Duty 7</b> Maintain accurate logical records in line within organisational policy when carrying out network tasks                                                    | K1 K14 K15 K21<br>S9 S13<br>B2 B3 B5                                                                 |
| <b>Duty 8</b> Use operational data to manage weekly work schedule in an efficient and cost-effective way                                                                | K5 K6<br>S17<br>B1 B2 B4 B5 B6                                                                       |
| <b>Duty 9</b> Consider the impact and risks when implementing network changes in line with work activities and escalating as required by organisational policies        | K1 K4 K5 K6 K7 K16 K19 K21<br>S8 S19<br>B2 B4 B8                                                     |

| DUTY                                                                                                                                                                                                                                   | KSBS                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <p><b>Duty 10</b> Communicate technical network requirements effectively and professionally with a range of stakeholders ensuring stakeholder relationships are maintained</p>                                                         | <p>K5 K6 K16<br/>S7 S16<br/>B4 B5 B8</p>                   |
| <p><b>Duty 11</b> Practice continuous self-learning to keep up to date with technological developments to enhance relevant skills and take responsibility for own professional development</p>                                         | <p>K5 K6 K16<br/>B1 B7</p>                                 |
| <p><b>Duty 12</b> Incorporate considerations of the requirements of the wider digital context in which they operate to ensure that network engineering activities are carried out effectively</p>                                      | <p>K1 K5 K6 K7 K16<br/>S14<br/>B1 B2 B3 B4 B6</p>          |
| <p><b>Duty 13</b> Ensure all network engineering activity complies with organisational policies, technical standards, Health and Safety legislation, data security requirements, professional ethics, privacy, and confidentiality</p> | <p>K5 K6 K16 K21<br/>S15<br/>B1 B2 B3 B4</p>               |
| <p><b>Duty 14</b> Deliver and manage a high-quality service under pressure</p>                                                                                                                                                         | <p>K6 K7 K21<br/>S6 S7 S13 S14 S16 S19<br/>B4 B5 B6 B8</p> |

## Appendix B – Published Knowledge, Skills, and Behaviours

### Knowledge

- K1:** the causes and consequences of network and IT infrastructure failures
- K2:** the architecture of typical IT systems, including hardware, OS, server, virtualisation, voice, cloud, and applications
- K3:** the techniques for systems performance and optimisation
- K4:** diagnostic techniques and tools to interrogate and gather information regarding systems performance
- K5:** organizational procedures to deal with recording information effectively and in line with protocols
- K6:** Service Level Agreements (SLAs) and their application to delivering network engineering activities in line with contractual obligations and customer service
- K7:** their role in Business Continuity and Disaster Recovery
- K8:** the purposes and uses of ports and protocols
- K9:** devices, applications, protocols, and services at their appropriate OSI and, or TCP or IP layers
- K10:** the concepts and characteristics of routing and switching
- K11:** the characteristics of network topologies, types and technologies
- K12:** wireless technologies and configurations
- K13:** cloud concepts and their purposes
- K14:** functions of network services
- K15:** the different types of network maintenance
- K16:** how current legislation relates to or impacts occupation
- K17:** troubleshooting methodologies for network and IT infrastructure
- K18:** how to integrate a server into a network
- K19:** the types of security threats to networks and IT infrastructure assets
- K20:** how to use tools to automate network tasks
- K21:** approaches to change management

### Skills

- S1:** apply the appropriate tools and techniques when securely operating and testing networks
- S2:** install and configure the elements required to maintain and manage a secure network
- S3:** implement techniques to monitor and record systems performance in line with defined specifications
- S4:** maintain security and performance of the system against known and standard threats
- S5:** apply the appropriate tools and techniques to identify systems performance issues
- S6:** apply the appropriate tools and techniques to gather information to troubleshoot issues and isolate, repair or escalate faults
- S7:** communicate outcomes of tasks and record in line with organisational procedures and SLAs including adherence to customer service standards



- S8:** upgrade, apply and test components to systems configurations ensuring that the system meets the organisation's requirements and minimises downtime. This should include backup processes
- S9:** record task details whether face-to-face, remote or in writing in line with organisational requirements
- S10:** interpret information received from a manager, customer or technical specialist and accurately implement the defined requirements
- S11:** monitor, identify and implement required maintenance procedures
- S12:** implement techniques to optimise systems performance in line with defined specifications
- S13:** organise and prioritise clients or stakeholders' requests in line with SLAs and organization processes
- S14:** explain their job role within the business context to stakeholders to enable a clear understanding on both sides of what their remit is and convey technical constraints in appropriate language considering accessibility and diversity implications
- S15:** operate securely and apply the appropriate process, policies, and legislation within their business responsibilities
- S16:** communicate with a range of stakeholders taking into consideration the organisations cultural awareness and technical ability
- S17:** apply the appropriate level of responsibility when planning and prioritising work tasks
- S18:** apply the relevant numerical skills (Binary, dotted decimal notation) required to meet the defined specifications
- S19:** ensure compliance of network engineering outputs with change management processes
- S20:** select the appropriate tools and comply with organisation policies and processes when upgrading systems

## Behaviours

- B1:** work independently and demonstrate initiative being resourceful when faced with a problem and taking responsibility for solving problems within their own remit
- B2:** work securely within the business
- B3:** work within the goals, vision, and values of the organisation
- B4:** take a wider view of the strategic objectives of the tasks or projects they are working on including the implications for accessibility by users and diversity
- B5:** works to meet or exceed customers' requirements and expectations
- B6:** Identifies issues quickly, investigates and solves complex problems and applies appropriate solutions. Ensures the true root cause of any problem is found and a solution is identified which prevents recurrence
- B7:** Committed to continued professional development to ensure growth in professional skill and knowledge
- B8:** Work effectively under pressure showing resilience

## Mapping of Knowledge, Skills, and Behaviours (KSBs)

### Assessment method 1: Simulation Assessment and Questioning

| Knowledge                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>K1</b> the causes and consequences of network and IT infrastructure failures                                                                                                                                                                                    |
| <b>K2</b> the architecture of typical IT systems, including hardware, OS, server, virtualisation, voice, cloud, and applications                                                                                                                                   |
| <b>K3</b> the techniques for systems performance and optimisation                                                                                                                                                                                                  |
| <b>K4</b> diagnostic techniques and tools to interrogate and gather information regarding systems performance                                                                                                                                                      |
| <b>K5</b> organizational procedures to deal with recording information effectively and in line with protocols                                                                                                                                                      |
| <b>K12</b> wireless technologies and configurations.                                                                                                                                                                                                               |
| <b>K17</b> troubleshooting methodologies for network and IT infrastructure                                                                                                                                                                                         |
| Skills                                                                                                                                                                                                                                                             |
| <b>S1</b> apply the appropriate tools and techniques when securely operating and testing Networks                                                                                                                                                                  |
| <b>S2</b> install and configure the elements required to maintain and manage a secure Network                                                                                                                                                                      |
| <b>S3</b> implement techniques to monitor and record systems performance in line with defined specifications                                                                                                                                                       |
| <b>S6</b> apply the appropriate tools and techniques to gather information to troubleshoot issues and isolate, repair or escalate faults                                                                                                                           |
| <b>S9</b> record task details whether face-to-face, remote or in writing in line with organisational requirements                                                                                                                                                  |
| <b>S10</b> interpret information received from a manager, customer or technical specialist and accurately implement the defined requirements                                                                                                                       |
| <b>S12</b> implement techniques to optimise systems performance in line with defined specifications                                                                                                                                                                |
| <b>S17</b> apply the appropriate level of responsibility when planning and prioritizing work tasks                                                                                                                                                                 |
| Behaviours                                                                                                                                                                                                                                                         |
| <b>B1</b> work independently and demonstrate initiative being resourceful when faced with a problem and taking responsibility for solving problems within their own remit                                                                                          |
| <b>B4</b> take a wider view of the strategic objectives of the tasks/ projects they are working on.                                                                                                                                                                |
| <b>B6</b> Identifies issues quickly, enjoys investigating and solving complex problems and applies appropriate solutions. Has a strong desire to push to ensure the true root cause of any problem is found and a solution is identified which prevents recurrence |
| <b>B8:</b> work effectively under pressure showing resilience                                                                                                                                                                                                      |

## Assessment method 2: Professional discussion underpinned by portfolio

| Knowledge                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>K6:</b> Service Level Agreements (SLAs) and their application to delivering network engineering activities in line with contractual obligations                                                  |
| <b>K7:</b> their role in Business Continuity and Disaster Recovery                                                                                                                                  |
| <b>K8:</b> the purposes and uses of ports and protocols                                                                                                                                             |
| <b>K9:</b> devices, applications, protocols, and services at their appropriate OSI and/or TCP/IP layers.                                                                                            |
| <b>K10:</b> the concepts and characteristics of routing and switching                                                                                                                               |
| <b>K11:</b> the characteristics of network topologies, types and technologies                                                                                                                       |
| <b>K13:</b> cloud concepts and their purposes                                                                                                                                                       |
| <b>K14:</b> functions of network services                                                                                                                                                           |
| <b>K15:</b> the different types of network maintenance                                                                                                                                              |
| <b>K16:</b> how current legislation relates to or impacts occupation                                                                                                                                |
| <b>K18:</b> how to integrate a server into a network                                                                                                                                                |
| <b>K19:</b> the types of security threats to networks and IT infrastructure assets                                                                                                                  |
| <b>K20:</b> how to use tools to automate network tasks                                                                                                                                              |
| <b>K21:</b> approaches to change management                                                                                                                                                         |
| Skills                                                                                                                                                                                              |
| <b>S4:</b> maintain security and performance of the system against known and standard threats                                                                                                       |
| <b>S5:</b> apply the appropriate tools and techniques to identify systems performance issues                                                                                                        |
| <b>S7:</b> communicate outcomes of tasks and record in line with organisational procedures and SLAs                                                                                                 |
| <b>S8:</b> upgrade, apply and test components to systems configurations ensuring that the system meets the organisation's requirements and minimises downtime. This should include backup processes |
| <b>S11:</b> monitor, identify and implement required maintenance procedures                                                                                                                         |
| <b>S13:</b> organise and prioritise clients/stakeholders' requests in line with SLAs and organization processes                                                                                     |
| <b>S14:</b> explain job role within the business context to stakeholders                                                                                                                            |
| <b>S15:</b> operate securely and apply the appropriate process, policies and legislation within their business responsibilities                                                                     |
| <b>S16:</b> communicate with a range of stakeholders taking into consideration of organisations cultural awareness and technical ability                                                            |
| <b>S18:</b> apply the relevant numerical skills (Binary, dotted decimal notation) required to meet the defines specifications                                                                       |
| <b>S19:</b> ensure compliance of network engineering outputs with change management processes                                                                                                       |

**S20** select the appropriate tools and comply with organisation policies and processes when upgrading systems

**Behaviours**

**B2:** work securely within the business

**B3** work within the goals, vision, and values of the organisation

**B5** works to meet or exceed customers' requirements and expectations

**B7** committed to continued professional development in order to ensure growth in professional skill and knowledge.

## Appendix C – Roles and Responsibilities

| Role       | Responsibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Apprentice | <p>As a minimum, apprentices should:</p> <ul style="list-style-type: none"> <li>• participate in and complete on-programme training to meet the KSBs as outlined in the occupational standard for a minimum of 12 months</li> <li>• undertake 20% off-the-job training as arranged by the employer and training provider</li> <li>• understand the purpose and importance of EPA</li> <li>• undertake the EPA including meeting all gateway requirements</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Employer   | <p>As a minimum, employers should:</p> <ul style="list-style-type: none"> <li>• work with the training provider (where applicable) to support the apprentice in the workplace to provide the opportunities for the apprentice to develop the KSBs</li> <li>• arrange and support a minimum of 20% off-the-job training to be undertaken by the apprentice</li> <li>• decide when the apprentice is working at or above the occupational standard and so is ready for EPA</li> <li>• select the EPAO</li> <li>• ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan</li> <li>• remain independent from the delivery of the EPA</li> <li>• confirm arrangements with the EPAO for the EPA (who, when, where) in a timely manner (including providing access to any employer specific documentations as required, for example company policies)</li> <li>• ensure that the EPA is scheduled with the EPAO for a date and time which allow appropriate opportunity for the KSBs to be met</li> <li>• ensure the apprentice is well prepared for the EPA</li> <li>• ensure the apprentice is given sufficient time away from regular duties to prepare for and complete all post gateway elements of the EPA, and that any required supervision during this time (as stated within this EPA plan) is in place</li> <li>• where the apprentice is assessed in the workplace, ensure that the apprentice has access to the resources used on a daily basis</li> </ul> |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <ul style="list-style-type: none"> <li>• work collaboratively with the EPAO to ensure a suitable EPA venue is available.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EPAO | <p>As a minimum, EPAOs should:</p> <ul style="list-style-type: none"> <li>• make all necessary contractual arrangements, including agreeing the price of the EPA</li> <li>• understand the occupational standard</li> <li>• appoint administrators (and invigilators where required) to administer the EPA as appropriate</li> <li>• provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading</li> <li>• provide adequate information, advice, and guidance documentation to enable apprentices, employers, and training providers to prepare for the EPA</li> <li>• arrange for the EPA to take place, in consultation with the employer</li> <li>• conform to the requirements of this EPA plan and deliver its requirements in a timely manner</li> <li>• develop and provide appropriate assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders</li> <li>• have no direct connection with the apprentice, their employer or training provider. In all instances including when the EPAO is the training provider (i.e., HEI) there must be no conflict of interest</li> <li>• have policies and procedures for internal quality assurance (IQA), and maintain records of regular and robust IQA activity and moderation for external quality assurance (EQA) purposes</li> <li>• conform to the requirements of the nominated external quality assurance provider (EQAP)</li> <li>• conform to the requirements of the Register of End-Point Assessment Organisations (RoEPAO)</li> <li>• deliver induction training for independent assessors, and for invigilators and markers where used</li> <li>• undertake standardisation activity on this apprenticeship standard for all independent assessors before they conduct an EPA for the first time, if the EPA is updated and periodically as appropriate (a minimum of annually)</li> </ul> |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | <ul style="list-style-type: none"> <li>• manage invigilation of apprentices in order to maintain security of the assessment in line with their malpractice policy</li> <li>• verify the identity of the apprentice being assessed</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> <li>• request certification via the Apprenticeship Service upon successful achievement of the EPA</li> <li>• develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material)</li> <li>• appoint suitably qualified and competent independent assessors</li> <li>• provide details of the independent assessor’s name and contact details to the employer</li> <li>• have and apply appropriately an EPA appeals process</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Independent assessor | <p>As a minimum, an independent assessor should:</p> <ul style="list-style-type: none"> <li>• have the competence to assess the apprentice at this level and hold any required qualifications and experience in line with the requirements of the independent assessor as detailed in the IQA section of this EPA plan</li> <li>• understand the occupational standard and the requirements of this EPA</li> <li>• have, maintain and be able to evidence up to date knowledge and expertise of the subject matter</li> <li>• deliver the end-point assessment in-line with the EPA plan</li> <li>• comply with the IQA requirements of the EPAO</li> <li>• have no direct connection or conflict of interest with the apprentice, their employer or training provider; in all instances including when the EPAO is the training provider (i.e. HEI)</li> <li>• attend induction training</li> <li>• attend standardisation events when they begin working for the EPAO, before they conduct an EPA for the first time and a minimum of annually on this apprenticeship standard</li> <li>• assess each assessment method, as determined by the EPA plan, and without extending the EPA unnecessarily</li> <li>• assess against the KSBs assigned to each assessment method, as shown in the mapping of assessment methods,</li> </ul> |

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|                   | <p>and as determined by the EPAO, and without extending the EPA unnecessarily</p> <ul style="list-style-type: none"> <li>• make all grading decisions</li> <li>• record and report all assessment outcome decisions, for each apprentice, following instructions and using assessment recording documentation provided by the EPAO, in a timely manner</li> <li>• use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      |
| Training provider | <p>As a minimum, the training provider should:</p> <ul style="list-style-type: none"> <li>• work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the knowledge, skills and behaviours as listed in the occupational standard</li> <li>• conduct training covering any knowledge, skill or behaviour requirement agreed as part of the Commitment Statement (often known as the Individual Learning Plan).</li> <li>• monitor the apprentice's progress during any training provider led on-programme learning</li> <li>• advise the employer, upon request, on the apprentice's readiness for EPA</li> <li>• remain independent from delivery of the EPA. Where the training provider is the EPA (i.e. a HEI) there must be procedures in place to mitigate against any conflict of interest</li> <li>•</li> </ul> |
| Invigilators      | <p>As a minimum, invigilators should:</p> <ul style="list-style-type: none"> <li>• attend induction training as directed by the EPAO</li> <li>• have no direct connection or conflict of interest with the apprentice, their employer or training provider; in all instances, including when the EPAO is the training provider (i.e., HEI)</li> <li>• invigilate and supervise apprentices during tests and in breaks during assessment methods to prevent malpractice in accordance with the EPAO's invigilation procedures</li> </ul>                                                                                                                                                                                                                                                                                                                                                 |