

Proposal to develop an apprenticeship standard

L3: Radio Network Technician

Trailblazer name

Radio Network Technician

Trailblazer reference number

TB0309

Title of occupation

Radio Network Technician

UOS reference number

ST0757

Core and options

No

Level of occupation

Level 3

Route

Digital

Typical duration of apprenticeship

18months

Target date for approval

31 December 2018

Resubmission

No

Occupational profile

This occupation is found in...

Telecommunications operators, Ministry of Defence and their vendors and suppliers responsible for broadcasting digital voice and data services via a mobile telecommunications network. This network will deliver these services to specific corporate, public, emergency services and military organisations

The broad purpose of the occupation is...

to ensure that digital data and voice networks operate at an optimal level. This is to provide the best possible service to their customers, working as part of a national or regional radio network team. The individual would set up, configure, maintain and monitor radio networks to deliver data services.

To operate processes for the design, installation, test, implementation, fault finding and optimisation of radio telecoms networks.

In their daily work, an employee in this occupation interacts with...

internal and external customers, owners of potential new cell site locations, equipment suppliers, internal teams, and cross function leaders. The occupation is a mix of office, on site work and field based work.

An employee in this occupation will be responsible for...

managing radio network equipment to achieve network performance objectives in terms of service, coverage, quality and availability. Ownership of initiating and completing processes, tasks and procedures. Supporting wider team to deliver long-term and short-term project priorities. Using their own initiative and with minimal supervision, reporting into a manager

Transferability

The Institute expects that being competent in the duties you have listed in this proposal will mean that an individual will be able to undertake the occupation in all relevant types of employer. Please outline the steps you have taken to ensure that this will be the case.

During the research completed towards this standard we have consulted with a number of employers of large and small scale.

In the telecoms industry we have consulted with large companies as part of the trailblazer group who have actively been involved in the development of the occupational proposal. They have been directly involved, attended calls and meetings to work to build the occupational proposal and shared experience and supporting the standard to ensure that this would cover roles broad enough in their companies. The large companies are

Telefonica

BT,

Virgin media,

Mono

The Ministry of Defence and the Army Air Corps have also been directly involved bringing their wealth of knowledge and also the wide range of roles covered in the MOD that this role would encompass.

SME tech companies have also been directly involved in consultation and the creation of the occupational proposal as an active part of the trail blazer group and contributed to building the occupational proposal

The SME involved are

Arquiva,

Arc

Iris

8 point 8

I wireless solutions

Other companies have been involved as employers indirectly where we have consulted with them to ensure the standard we are developing and the occupational proposal also fit their needs although they do not want to be directly involved in creating the standard. These include Vodaphone who have also been widely consulted and confirm they feel that this occupational standard would enable them to take more apprentices and develop them for

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their business.

We have also consulted BCS, the Chartered Institute for IT who are in support of development of such standard. Also the ITP (Institute for Telecommunications Professionals) who would support our standard.

See quotes below

‘We can certainly support the standard We could look at which professional registration it would align well with upon completion of the apprenticeship. The end point assessment and professional registration would therefore prove competency in this field.- Crissi William from the Institute of Telecommunications Professionals

‘We would definitely look to endorse from the RITTech (professional register)’ -John Pritchard Head of Apprenticeships BCS

Stand-alone occupation

Please confirm that the proposed apprenticeship relates to a stand-alone occupation and explain how it will fit in with any associated apprenticeship standards.

We have completed a wide search to establish that there are no apprenticeship standards that fit our requirements for a Radio Network Technician apprenticeships. This includes reviewing the Network Technician standard which is IT focused and not at all radio network related. We have also explored Infrastructure Technician which is based on setting users up on IT systems, supporting and helping the user by rectifying issues with the system setup.

We have compared our proposed occupational standard to the Unified Communications Technician standard. The Unified Communications Technician standard develops skills and knowledge to service communications through different mediums ie a voicemail message could be accessed through email. The Unified Communications Troubleshooter is also not comparable as this develops skills to fault find and resolve issues with unified communications not radio communications. The Radio Network Technician standard is unique as it focuses on development in digital technology carried by radio waves. We are confident that the standard proposed here is distinct from the other live standards mentioned.

We have been in consultation with a couple of other trailblazer groups, specifically Rigging apprenticeship level 2 and the level 5 Broadcast and Media Services Technician which do not fit the context of what we are looking to develop. We are therefore confident that this is a stand-alone occupation with no matching apprenticeship standard in a growing industry.

| Duty | Criteria for measuring performance | OTJ training (days) |
|---|--|---------------------|
| <p>Select new cell site locations and design new cell sites to meet site specific targets including containment of coverage, taking into account Health & Safety procedures and applicable national and international legislation and regulations. This may include sites to be permanently part of the network or for a temporary purpose.</p> | <p>Meets specific geographic coverage and quality targets Cell sites successfully implemented Complies with Health & Safety procedures, and applicable national and international legislation and regulations.</p> | 19 |
| <p>Perform user level maintenance and testing on the digital radio and data network using associated test equipment ie. TEMS (testing mobile systems tool) or CW (constant carrier wave testing) or other testing systems such as built in test facilities for digital radios and user data terminals. Test and monitor the network performance and signal, analyse log files to identify faults and key issues. Report on the information contained in generic log files or system generated fault codes and how this information provides insight into the performance of their own network and that of their competitors. React and correct issues within their control. Identify issues that require support from other people or teams and request network support at the correct level following process. Inspect and test internal and external distribution systems of static sites and mobile network platforms.</p> | <p>Effective testing and monitoring of network performance carried out within set timescales Proficient use of proprietary generic log file tools to correctly identify, locate, rectify or report issue/faults is demonstrated within timescales to ensure optimisation. Faults are correctly analysed using all available tools including network applications and on line support in compliance with equipment care directives and policy. After action review has taken place to analyse and identify trends or common factors affecting network performance. Log files shared with support teams others who need them in accordance to defined timescales; Insight gathered and signed off for quality to specifications.</p> | 23 |
| <p>Follow security policies relating to people security, information and process security, physical security and computer and network security policies, General Data Protection Regulation (GDPR) and non-disclosure agreements</p> | <p>Reports any areas of concern and raises any potential hazards/risks to the relevant people</p> | 10 |
| <p>Manage faults using fault management systems and state the responsibilities of team to support this.</p> | <p>Faults correctly identified and managed. Meets targets for service availability and consistent and reliable network provided for customers use.</p> | 3 |
| <p>Monitor network statistics, make adjustments or corrections to improve the network and identify where changes can be made. Make the corrections or adjustments needed and review if the changes have made improvements. Complete any further changes based on reviews which could include reversal of changes. Escalate any adjustments or corrections outside of their control to the appropriate areas.</p> | <p>Reacts appropriately to triggers in the required timescale. Takes action or makes recommendations following process. Records recommendations accurately. network services meets company objectives for area under this employees control.</p> | 5 |
| <p>Review customers' feedback and make adjustments to improve the network by monitoring sources of input (including customer complaints via customer care, social media ,customer satisfaction surveys) and recognize which issues can and should be addressed.</p> | <p>Records and reports recommendations or requests made to others where the fix is outside of employee's direct control. Takes action or makes adjustments and recommendations following process. Network Key Performance Indicators (KPIs) meet minimum standard for area under employee's direct control.</p> | 5 |

| Duty | Criteria for measuring performance | OTJ training (days) |
|--|--|---------------------|
| install and commission radio network equipment and systems. | Network equipment built to plan specification within timescales required. Once complete, work signed off by technical lead. | 20 |
| Support frequency and code planning for radio networks to ensure optimisation of network capacity available to customers. | Deliver level of capacity required to meet customer expectations. Optimisation efforts agreed and signed off by technical expert. | 10 |
| Independently create and implement a prioritised plan of own workload to meet deadlines and company priorities | Deadlines of work activity and duties met Priorities are achieved | 3 |
| Recognise the purpose of networking settings and parameters and ensures that the network continues to adhere to any controls for these parameters. | Technical expert signs off that area under employees control following any guidance set in place. | 4 |

Trailblazer group membership details

Chair

Angela Hassell (Telefonica)

Facilitator

No facilitator

Employer members

| Name | Employer |
|-----------------|----------------|
| David Robertson | Army Air Corps |
| Jenny Atkinson | 8POINT8 |
| John Druce | Arqiva |
| Ravi Mondair | iwireless |
| Robin Conway | ARCC |
| Simon Woodland | IRIS |
| Wayne Vickery | BT |

Other members

| Name | Employer |
|------|----------|
|------|----------|