

**Functional Area: Network Infrastructure & Operation (Operation / Support & Maintenance)**

1. Title	Perform maintenance and repair of radio antenna
2. Code	ITCSNO319A
3. Range	This UoC includes maintaining or repairing of radio antenna. These antennas are of terrestrial and may be installed on masts, towers, poles or buildings. These antennas are components of mobile network
4. Level	3
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Possess the knowledge in the subject area</p> <ul style="list-style-type: none"> <li>• Comprehend work order</li> <li>• Interpret network plans/drawings</li> <li>• Knowledgeable of antenna drawings and antenna assemblies</li> <li>• Able to locate and diagnose faults with or without using specialised tools</li> <li>• Able to operate testing and RF alignment tools</li> <li>• Experienced with repairing RF equipment</li> <li>• Knowledgeable of radio frequency theory and its hazards</li> <li>• Knowledgeable of occupational health and safety, particularly dealing with work on high buildings</li> </ul> <p>6.2 Perform maintenance and repair of radio antenna</p> <p>Be able to:</p> <ul style="list-style-type: none"> <li>• Identify the magnitude or nature of repair work from work orders or supervisors</li> <li>• Plan a maintenance/repair procedure such as identifying type of antennas to repair, probable faults and types of repair required, the equipment and parts required, the tests to perform, etc</li> <li>• Prepare for the repair work, such as notifying the site management and partners, gathering the appropriate tools, documents and the appropriate parts, etc.</li> <li>• Perform the repair and/or replacement of antenna parts.</li> <li>• Calibrate and configure the RF transmission settings of the antenna as per required by the vendor's specification or the direction of the supervisor</li> <li>• Perform tests to ensure the maintained/repaired antenna is functioning as required</li> <li>• Perform labelling, tidying and cleaning procedures. Old parts may be returned to appropriate departments for refurbishment or disposal</li> <li>• Document all diagnostics, and actions taken during the repairs</li> <li>• Complete the necessary job completion administrative procedures</li> </ul> <p>6.3 Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Follow safety procedures at every step during the repairing process.</li> <li>• Ensure that the repaired antenna is operating at the required level</li> <li>• Ensure all completed works are logged and documented in accordance to the organisation's standards and policy</li> </ul>
7. Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ol style="list-style-type: none"> <li>i. read work orders or follow supervisor's instruction to understand the required types of repair</li> <li>ii. plan and perform preliminary preparations for the repair work</li> <li>iii. perform the repair/maintenance of the antenna according to the required standard</li> <li>iv. align and configure the antenna to the operating requirements</li> <li>v. verify on completion of repair by testing the antenna to ensure it can transmit signals and perform to the required level</li> <li>vi. perform cleaning and tidying work when repair work is completed to leave the area as close as possible to the original state</li> <li>vii. complete administrative work satisfactorily and obtain signoff by supervisors or stakeholders</li> </ol>
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