

Unit ID: 2276

**Domain** TELECOMMUNICATION AND WIRELESS TECHNOLOGY

**Title:** Apply safety rules and procedures in a telecommunications work environment

**Level: 3**

**Credits: 4**

### Purpose

This unit standard is intended for those who apply safety rules and procedures in a telecommunications work environment. People credited with this unit standard are able to apply safety when planning and preparing for work in a telecommunication environment, follow safety work procedures, assess risks, apply knowledge of isolation and lockout procedures, apply knowledge of isolation and lockout procedures and demonstrate safe work on heights.

This unit standard is intended for those who work in the telecommunication and wireless technology working environment.

### Special Notes

1. Entry information:

Prerequisites:

- None

2. This unit standard is to be delivered and assessed in the context of information and communication technology.

3. Assessment evidence may be collected from a real or a simulated workplace in which telecommunication and wireless technology operations are carried out.

4. Tools and equipment may include but are not limited to computer, external devices, storage devices and other and basic computer applications.

5. Performance of all elements in this unit standard must comply with industry standards.

6. Glossary of terms:

- '*ISO*' refers to International Organization for Standards
- '*SANS*' refers to South African National Standards
- '*TT system*' refers to *terra* and *terra* where *terra* is a direct connection point to earth
- '*TN-S system*' refers to *terra* and *neutral separate*
- '*TN-C-S system*' refers to *terra* and *neutral combined* from the supply and then *separated* in an installation
- '*TN-C system*' refers to *terra* and *neutral combined*.

7. Regulations and legislation relevant to this unit standard include the following:
- Labour Act No. 11 of 2007
  - Petroleum Products and Energy Amendment Act No. 2 of 2005
  - National Energy Fund Act of 2000
  - Gas Act (Draft 2b)
  - Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments
  - ISO 14001 (Environmental Management Standard)
  - Electricity Act No.4 of 2007
  - SANS 10142-1 and SANS 10142-2 electrical wiring codes and all subsequent amendments to any of the above.

### **Quality Assurance Requirements**

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on [www.namqa.org](http://www.namqa.org) and the Namibia Training Authority on [www.nta.com.na](http://www.nta.com.na).

### **Elements and Performance Criteria**

#### **Element 1: Apply safety when planning and preparing for work in a telecommunication environment**

##### **Performance Criteria**

- 1.1 Safety requirements are followed in line with safety plans and policies.
- 1.2 Safety tools and equipment are selected to carry out tasks is consistent with safety standards and requirements.
- 1.3 Material requirements are identified and safely obtained and/or stored as per requirement.
- 1.4 Materials are safely handled and located ready for use in line with workplace procedures.
- 1.5 Environmental protection requirements are identified and applied in line with environmental plans and legislative requirements.

#### **Element 2: Follow safety work procedures**

##### **Range**

Personal protective equipment may include but is not limited to overalls, steel capped boots, jacket, gloves, safety glasses or goggles, dust mask or respirator, ear muffs/plugs, safety helmets, rubber mats and safety belts.

Signs may include but are not limited to hazard identification, facility or location signs, site safety, traffic and warning signs and symbols.

### **Performance Criteria**

- 2.1 Tasks are performed in a safe manner and in line with legislative and workplace requirements.
- 2.2 Tools, equipment and materials are safely used in line with workplace procedures.
- 2.3 Work environment is safely arranged to minimize accidents and injury.
- 2.4 Approved personal protective equipment and clothing are used and stored according to workplace procedures.
- 2.5 Appropriate work attire are safely worn near working machinery.
- 2.6 Safety signs and symbols are identified and followed.
- 2.7 Correct posture is maintained when performing work.

### **Element 3: Assess risks**

#### **Range**

Hazards in a telecommunications environment may include but are not limited to electrical hazards, chemical spills, gases, liquids under pressure, moving machinery and equipment, hazardous materials, work in confined spaces, work on heights, manual handling, high temperatures, noise, dust, vapours, fires, elements of nature, sharp equipment, traffic and moving equipment.

Designated persons may be manager, supervisor, safety personnel or any other person given the overall responsibility of safety in a workplace.

### **Performance Criteria**

- 3.1 Hazards in the work area are identified, assessed and reported to designated persons.
- 3.2 Safety issues and risks in the work area are identified, assessed and reported to designated persons.
- 3.3 Safe workplace procedures and safe work instructions are followed for controlling risks.
- 3.4 Safety, hazard, accident or incident reports are completed in accordance with workplace and legislative requirements.

### **Element 4: Apply knowledge of isolation and lockout procedures**

## **Range**

Isolation and lockout procedures to be applied considering legislative and workplace requirements and are carried out in line with workplace requirements.

## **Performance Criteria**

- 4.1 Circuit breakers are switched off in line with workplace procedures.
- 4.2 Where applicable, fuses are pulled out according to workplace procedures.
- 4.3 Lock with identification tag at power source is put on according to workplace procedures.
- 4.4 Verification of no-start equipment is demonstrated.
- 4.5 Procedures for zero-voltage test are explained in line with workplace procedures.
- 4.6 Earthing of equipment is applied according to workplace procedures.

## **Element 5: Demonstrate safe work on heights**

### **Range**

Equipment needed for work at height may include but is not limited to step ladder, single ladder, extension ladder, and trestle ladder, scaffolding safety harness karabiners, decenters, lines, anchors and ascenders.

Equipment maintenance may include but is not limited to defect identification, rectification of cracks, splinters, replacement of loose or damaged hinges, replacement of missing or bending parts, deterioration, malfunction of working parts missing and loose bolts or rivets.

### **Performance Criteria**

- 5.1 Reasons for maintaining three points of contact while climbing on telecommunications network structures are explained.
- 5.2 Equipment defects are identified according to safe working practices.
- 5.3 Equipment appropriate for carrying out the task is selected, erected and used to meet job requirements in line with safe workplace procedures.
- 5.4 Equipment is handled, maintained and stored in safe condition in line with workplace procedures.
- 5.5 Safe working and minimum approach distances for hazards on telecommunications network structures are described in accordance with workplace procedures.

## **Element 6: Apply safety when completing work**

### **Range**

Work completion details may include but is not limited to accident report forms and permit to work form.

### **Performance Criteria**

- 6.1 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures and waste management principles.
- 6.2 Reusable material is collected and stored in line with workplace procedures.
- 6.3 Tools and equipment are cleaned, checked and maintained in line with workplace procedures.
- 6.4 Work completion details are finalised in line with workplace procedures.

### **Registration Data**

<b>Subfield:</b>	Information and Communication Technology
<b>Date first registered:</b>	30 July 2020
<b>Date this version registered:</b>	30 July 2020
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<b>Body responsible for review:</b>	NTA