

Domain	TELECOMMUNICATION AND WIRELESS TECHNOLOGY	Unit ID: 2285
Title:	Install overhead cables in telecommunications environment	
Level: 4		Credits: 8

Purpose

This unit standard is intended for those who install overhead cables in telecommunications environment. People credited with this unit standard are able to plan and prepare for work, install overhead transmission line accessories, install overhead transmission line, terminate overhead transmission line and complete work and clean up.

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

- *'specifications'* refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements, national and international standards and legislations
- *'ISO'* refers to International Organization for Standards
- *'SANS'* refers to South African National Standards

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 and the Namibia Training Authority on www.nta.com.na.

Elements and Performance Criteria

Element 1: Plan and prepare for work

Range

Planning and preparation is to include but is not limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

Performance Criteria

- 1.1 Work instructions including plans, specifications, quality requirements and operational details are obtained, confirmed and applied.
- 1.2 Work site is prepared according to work procedures.
- 1.3 Safety requirements are followed in accordance with safety plans and policies.
- 1.4 Sign and barricade requirements are identified and adhered to.
- 1.5 Plant tools and equipment selected to carry out tasks are consistent with requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement.
- 1.6 Material quantities appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.
- 1.7 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Install overhead transmission line accessories

Range

Overhead transmission line include and not limited to cable suspension system, catenary wire, cable tray, line poles, back-mount frames for distributors (formally

MDF(Main distribution frame), IDF (Intermediate distribution frame) ,overhead fibre and FDP (Final distribution panel).

Performance Criteria

- 2.1 Overhead transmission line accessories are assembled according to manufacturers' instructions.
- 2.2 Overhead transmission line accessories are fitted and installed according to workplace procedures and manufacturers' instructions.
- 2.3 Overhead transmission line is terminated according to workplace procedures and manufacturers' instructions.

Element 3: Install overhead transmission line

Performance Criteria

- 3.1 Overhead transmission line routes are identified and confirmed.
- 3.2 Feeders are setup in locations to provide ease of access during hauling of cable.
- 3.3 Hauling end of the cable is labelled with unique identifier prior to placement.
- 3.4 Transmission line is hauled into position according to workplace procedures.

Element 4: Terminate overhead transmission line

Performance Criteria

- 4.1 Cable termination requirements for the installation are identified and confirmed.
- 4.2 Incoming and outgoing cables are segregated to ensure ease of access and avoid unnecessary overlaying and backtracking of cable.
- 4.3 Cable pairs are neatly fanned to termination equipment to facilitate accurate termination.
- 4.4 Cable is terminated to manufacturers specifications using correct tool.
- 4.5 Visual inspection is undertaken to confirm that the termination colour code sequence has been followed where appropriate.

Element 5: Complete work and clean up

Performance Criteria

- 5.1 Work is completed and appropriate personnel notified in accordance with workplace procedures.
- 5.2 Work area is cleared of waste, cleaned, restored and secured in accordance with workplace procedures.

- 5.3 Reusable material is collected and stored in accordance with workplace procedures.
- 5.4 Tools and equipment are cleaned, checked and maintained in accordance with workplace procedures.
- 5.5 Work completion details are finalised in accordance with workplace procedures.

Registration Data

Subfield:	Information and Communication Technology
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Body responsible for review:	NTA