

Domain

ELECTRONICS

Title:

Install Communication Systems

Level: 3

Credits:15**Purpose**

This unit standard specifies the competencies required to install Communication Systems. It includes installing IP networks and Radio Communications systems. This unit standard is intended for those who work in electronics industry.

Special Notes

1. Entry information

Prerequisite

- *Unit E01 - Demonstrate basic knowledge of workplace health and safety*
- *Unit E02 - Plan and organise work in electronic work environment*
- *Unit E015 - Apply knowledge of communication systems*

2. Assessment evidence may be collected from a real or a simulated workplace in which electronics operations are carried out.

3. To demonstrate competence, minimum evidence of installing IP networks and installing radio communications systems (at least 50 percent of all areas in the element) is required

4. Glossary of terms:

- 'OHS' refers to Occupational Health and Safety
- UTP – Unshielded Twisted Pair
- STP – Shielded Twisted Pair

5. IEC 60617-This standard is issued by the **International Electro-technical Commission** and this standard for electrical components symbols.

- IEEE- Institute of Electrical and Electronics Engineers.

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

6. Regulations and legislation relevant to this unit standard include the following:

- Labour Act, No. 11, 2007.
- Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments.

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

Elements and Performance Criteria

Element 1: Install IP networks

Range

Installation includes cabling, cable termination, installation of network devices and configuration.

IP Network devices/hosts include but not limited to PC, switches, routers, access points, firewalls and servers.

Network cables include but not limited to UTP, STP, coaxial and fibre optic.

Performance Criteria

- 1.1 Safety precautions are observed during installation in line with work place safety procedures.
- 1.2 Network devices are identified based on installation requirements.
- 1.3 Tools are selected and safely used according to job requirement.
- 1.3 Cables are terminated and labelled in accordance with specifications and workplace practice.
- 1.4 IP hosts are connected and configured based on the network requirements.
- 1.6 Network is tested to determine if functionality meet network requirements.
- 1.7 Test results are recorded and interpreted.
- 1.8 Adjustments are made where necessary.

Element 2: Install Radio Communications systems

Range

Radio communication systems include but not limited to cellular, two way radio (walky-talky), FM radio, TV broadcasting, satellite based networks, Wi-Fi.

Performance Criteria

- 2.1 Safety precautions are observed during installation in line with work place safety procedures.
- 2.2 Radio network devices are identified based on installation requirements.
- 2.3 Appropriate tools are selected and safely used.
- 2.4 Cables are terminated and labelled in accordance with specifications and workplace practice.
- 2.5 Radio network devices are connected and configured based on the system requirements.
- 2.6 Radio network is tested to determine if functionality meets system requirements.
- 2.7 Test results are recorded and interpreted.
- 2.8 Adjustments are made where necessary.

Registration Data

Subfield:	Electrical Engineering
Date first registered:	
Date this version registered:	
Anticipated review:	
Body responsible for review:	Namibia Training Authority

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