

**Unit ID:2272**

**Domain**

**BROADCASTING**

**Title:**

**Monitor, diagnose and repair service levels  
for conditional access pay television  
encryption systems**

**Level: 5**

**Credits: 13**

### **Purpose**

This unit standard is intended for those who monitor, diagnose and repair service levels for conditional access pay television encryption systems. People credited with this unit standard are able to demonstrate an understanding of conditional access pay television encryption systems, monitor the service levels, diagnose and solve system faults and solve service level problems.

This unit standard is intended for those who work in the broadcasting working environment.

### **Special Notes**

1. Entry information:

Prerequisites:

- None

2. This unit standard will be essential to technically skilled people who work in the broadcasting environment and need to use sophisticated methods and equipment to install, set-up, operate and fault find professional microwave and satellite broadcasting equipment.

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

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

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 2007(Act No 11, 2007)
- Regulations relating to the health and safety of employees at work under schedule 1 (2) of the Labour Act No.11 of 2007 and all subsequent amendments.

## **Quality Assurance Requirements**

This unit standard and others within this sub-field 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: Demonstrate an understanding of conditional access pay television encryption systems**

#### **Performance Criteria**

- 1.1 Conditional access encryption systems are explained.
- 1.2 Digital encoding for encryption systems in context of MPEG-2 is implemented.
- 1.3 Digital multiplexing in context of MPEG-2 is explained.
- 1.4 Application for conditional access in context of QPSK modulation is explained
- 1.5 Organisation's application in context of conditional access is explained.

### **Element 2: Monitor the service levels**

#### **Performance Criteria**

- 2.1 Equipment and software are operated according to company specific performance criteria.
- 2.2 Functions and uses of system architecture and configurations are described.
- 2.3 Performance of systems is monitored in accordance with the organisation's policies and procedures.

### **Element 3: Diagnose and solve system faults**

#### **Range:**

Systems faults may include but not limited to source-related problem or head-end broadcast chain for that specific service.

### **Performance Criteria**

- 3.1 System faults are identified.
- 3.2 Causes of faults are investigated.
- 3.3 Logical elimination techniques are used to solve problems.
- 3.4 Solutions to solve problems are implemented.
- 3.5 Decisions taken lead to system recovery.
- 3.6 System faults documentation is completed.

### **Element 4: Solve service level problems**

#### **Performance Criteria**

- 4.1 Service Level problems are identified and evaluated for impact on the business.
- 4.2 Service Level problems responses are formulated.
- 4.3 Technical Service Level problems are identified, diagnosed and solutions formulated.
- 4.4 Problems that cannot be resolved are reported.

### **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
<b>Anticipated review:</b>	2025
<b>Body responsible for review:</b>	Namibia Training Authority