

Unit ID:2262

Domain

BROADCASTING

Title: Demonstrate an understanding of adding new services to conditional access systems

Level: 4

Credits: 9

Purpose

This unit standard is intended for those who demonstrate an understanding of adding new services to conditional access systems. People credited with this unit standard are able to explain conditional access installation and configuration, demonstrate an understanding of planning process for new services on conditional access systems, add new services to conditional access systems, identify and solve problems when adding new services, comply with workplace health and safety requirements during the adding of new services.

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 measure broadcast transmissions.
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. Tools and equipment may include but are not limited to computer, external devices, storage devices and other and basic computer applications.
6. Performance of all elements in this unit standard must comply with industry standards.
7. MPEG-2 refers to the codec used to compress digital broadcast video and DVDs.
8. 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 and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Explain conditional access installation and configuration

Performance Criteria

- 1.1 Installation and configuration of conditional access are explained.
- 1.2 Installation and configuration of Stand Alone Scrambler (SAS) are explained.
- 1.3 Installation and configuration of Conditional Access Encryptor are explained.
- 1.4 Conditional access code download tool configuration for code download services is explained.
- 1.5 Decoder qualification is explained in terms of conditional access message handling and service information handling.

Element 2: Demonstrate an understanding of planning process for new services on conditional access systems

Performance Criteria

- 2.1 Business requirements for new services are listed and assessed.
- 2.2 Broadcast equipment and tools are identified.
- 2.3 Electronic programme guide information is prepared and explained.
- 2.4 Procedures for adding additional services are listed and explained.
- 2.5 Addition of new service activities are planned and explained to minimize down time.

- 2.6 MPEG-2 is explained in terms of digital video, digital audio, private data, modulation and transmission theory.
- 2.7 Service Information (SI) specifications and Program Specific Information (PSI) are explained as applied in conditional access.
- 2.8 DVB transport stream analyser equipment is explained.

Element 3: Add new services to conditional access systems

Performance Criteria

- 3.1 Specified services are added on the system.
- 3.2 Adding services in the transport streams is explained.
- 3.3 Adding of services to bouquets are explained.
- 3.4 Systems/equipment performance is tested and assessed.

Element 4: Identify and solve problems when adding new services

Performance Criteria

- 4.1 Potential new service problems are identified and evaluated for impact.
- 4.2 Responses are formulated to resolve potential new service problems.
- 4.3 Identified new service problems are diagnosed and solutions are formulated.
- 4.4 Unresolved problems are recorded and escalated to relevant persons.
- 4.5 Test reports of added service are created.
- 4.6 Feedback is provided to relevant stakeholders on new additions.

Element 5: Comply with workplace health and safety requirements during adding of new services

Performance Criteria

- 5.1 Health and safety practices are adhered to.
- 5.2 Health hazards are identified.
- 5.3 Safety precautions when adding new services are taken into consideration.

Registration Data

Subfield:	Information and Communication Technology
Date first registered:	30 July 2020
Date this version registered:	30 July 2020
Anticipated review:	2025
Body responsible for review:	Namibia Training Authority