



Australian Government

Department of Education, Employment and Workplace Relations

CUFBRD303A Prepare video material for television transmission

Revision Number: 1

CUFBRD303A Prepare video material for television transmission

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to prepare digital video material for television transmission. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
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Application of the Unit

Application of the unit	<p>Ingest operators and video operators apply the skills and knowledge described in this unit.</p> <p>Operators in this context generally work in organisations such as small production houses or community television stations.</p> <p>They work at the front end of video operations, handling video content from source to required digital formats. They are familiar with a reasonable range of video recording, conversion and replay equipment and facilities.</p> <p>They need to be competent with the use of computer technologies and have organisational skills and a good eye detail.</p> <p>Skills associated with this role in more complex broadcasting facilities are covered in:</p> <ul style="list-style-type: none"> • CUFBRD401A Coordinate television transmission operations.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Prepare to ingest video materials	<ol style="list-style-type: none"> 1. Liaise with relevant <i>production personnel</i> to confirm written <i>documentation</i> or verbal instructions for <i>treatment of source materials</i> 2. Ensure <i>source materials</i> are clearly identified, labelled and in a format compatible with available <i>equipment</i> 3. Set up and test equipment according to specified standards as required to meet source materials criteria 4. Report <i>faults</i> or problems and arrange for maintenance where applicable 5. Ensure <i>destination media</i> is prepared correctly and ready to receive inputs, including set-up of <i>equipment signals</i> 6. Handle source materials and destination media with care to avoid damage throughout the production process
Ingest and convert video materials	<ol style="list-style-type: none"> 7. Test that source materials are appropriate to the input of equipment, including standard <i>converter parameters</i> 8. Load and ingest source materials using correct equipment and transfer to required destination media in correct sequence 9. Apply appropriate <i>conversions</i> to source materials to achieve required <i>formats</i>, ensuring <i>time codes</i> and cue points are set to synchronise with equipment where applicable 10. If necessary, select, add or alter appropriate time code and cue points that meet technical and transmission requirements 11. Monitor <i>transfers and recordings</i> to ensure they meet required <i>quality and technical requirements</i> and establish cue points if required 12. Check that the destination media is in suitable condition, of suitable length and on appropriate format for recording
Assist with production activity	<ol style="list-style-type: none"> 13. Undertake additional transfers, dubs or copies of materials as required and save in required location 14. Assist in switching video sources live to air under direction of relevant production personnel 15. Undertake editing of materials as required in close consultation with relevant production personnel 16. Author materials to a range of formats for distribution to clients and relevant production personnel

ELEMENT	PERFORMANCE CRITERIA
	17. Complete documentation and distribute to relevant production personnel, including originals or reformatted versions of source materials where applicable
Document and dispatch recorded material	18. Archive materials as instructed and transfer to appropriate archival format according to enterprise procedures 19. Undertake accurate labelling and logging of materials and check for faults 20. Return source and other materials to originators or owners in accordance with enterprise procedures 21. Review and reflect on performance and note areas for improvement

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communication and organisational skills sufficient to:
 - liaise with relevant production personnel, e.g. editors, directors, station managers
 - understand and carry out instructions
 - complete relevant workplace documentation
 - use intercom and talkback facilities during operations
- technical skills sufficient to:
 - check and operate specific recording equipment
 - handle video materials safely
 - use computer systems to capture, record and convert material for broadcast and for other purposes, such as EDLs, DLS, time codes
 - judge picture-to-sound synchronisation
 - undertake basic maintenance of recording devices, e.g. cleaning of tape path and functional testing
- self-management skills sufficient to:
 - prioritise work tasks
 - meet deadlines
 - make decisions within level of own responsibility
 - seek expert assistance when problems arise
- literacy and numeracy skills sufficient to:
 - undertake a range of routine administrative and clerical duties
 - interpret equipment specifications
 - interpret production schedules, scripts, running sheets
 - accurately record timings and durations of production components

Required knowledge

- industry knowledge, including:
 - roles and responsibilities of personnel in broadcast operations and production
 - types of programs, e.g. pre-recorded, live, commercials, sponsorship announcements
 - sources of advice, information and technical support
 - empathy with artistic and technical elements of productions
 - broadcast terminology
 - basic understanding of the characteristics of television standards - PAL, NTSC,

REQUIRED SKILLS AND KNOWLEDGE**SECAM**

- compression codecs and encoders
- relevant file management protocols across a range of operating systems
- OHS standards as they apply to working in broadcast operations

Evidence Guide

EVIDENCE GUIDE	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • video material prepared for broadcast that: <ul style="list-style-type: none"> • demonstrates an ability to judge picture-to-sound synchronisation • meets production requirements • collaborative approach to work • ability to work to deadlines.
Context of and specific resources for assessment	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • practical demonstration of skills through the preparation of a range of video material for television transmission • access to material to be prepared for broadcast • access to appropriate learning and assessment support when required • use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance • evaluation of a range of video material prepared for transmission by the candidate • written or verbal questioning to test knowledge as listed in the required skills and knowledge section of this unit.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> • CUFGMT301A Repair and maintain production equipment

EVIDENCE GUIDE

- CUFPOS201A Perform basic vision and sound editing.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><i>Production personnel</i> may include:</p>	<ul style="list-style-type: none"> • camera operator • editor • floor manager • head of department • master control • news editor • presentation operators • producer/director • station manager • supervisor • tape editor • tape library personnel • tape operators • technical director • transmission operators • other technical/specialist personnel.
<p><i>Documentation</i> may include:</p>	<ul style="list-style-type: none"> • barcode format • computer generated • cue sheets • equipment manuals • fault reports • logging sheets • manually generated • schedules, e.g.: <ul style="list-style-type: none"> • production • transmission • timelines • scripts • tape information sheets.
<p><i>Treatment of source materials</i> may include:</p>	<ul style="list-style-type: none"> • archiving • audio balance, e.g. noise • authoring, e.g. DVD

RANGE STATEMENT	
	<ul style="list-style-type: none"> • colour balance • compression • dubs • ingestion • transfers.
<i>Source materials</i> may include:	<ul style="list-style-type: none"> • archival footage • camera tapes • captions • DVD/CD sources • external feeds, e.g. satellite feed • graphics • studio recordings • titles.
<i>Equipment</i> may include:	<ul style="list-style-type: none"> • aspect ratio and AR-correction • computer hard drives • disk players, e.g. DVD/CD • monitors • non-linear editing systems, e.g. G5 +, Final Cut Pro, Avid • playback facility, e.g. EVS • servers, e.g. transmission, archival • talkback/two-way communication devices • test equipment • video/audio recorders • video/audio replay machines.
<i>Faults</i> may include:	<ul style="list-style-type: none"> • aspect ratio and AR-correction • blocking/pixellation • cable faults • colour degradation • data entry errors • ghosting • image tears • line breakdown • machine breakdown • picture distortion • picture freeze • picture out of synchronisation with sound • sound distortion • tape machine faults.

RANGE STATEMENT	
<i>Destination media</i> may include:	<ul style="list-style-type: none"> • computer hard drive (internal/external) • DAT • Digi-cart • DVD/CD • iPod • mobiles • non-linear editing systems, e.g. Avid • PDA • servers • tape, e.g. digi-Beta, mini DVC • video/audio recorders.
<i>Equipment signals</i> may include:	<ul style="list-style-type: none"> • black levels • burst phase • chrominance gain • colour balance • colour bars • luminance • test patterns • tone.
<i>Converter parameters</i> may include:	<ul style="list-style-type: none"> • bit rates • channel • frequency.
<i>Conversions</i> may include:	<ul style="list-style-type: none"> • AIFF • containers, e.g.: <ul style="list-style-type: none"> • AVI • QuickTime • Real • converter parameters, e.g.: <ul style="list-style-type: none"> • frequency • channel • bit rates • HD-TV • kine • MIDI • MP3 • MPEG-1, 2, 4 • OGG • PAL to NTSC/SECAM • WAV

RANGE STATEMENT	
	<ul style="list-style-type: none"> • WMA • WMV.
<i>Formats</i> may include:	<ul style="list-style-type: none"> • analogue • analogue tape, e.g. Beta SP • audio, e.g. DAT • CD • computer • computer hard drive, e.g. server • digital • digital tape, e.g. digital Beta, mini DV, digi-cart • disk • DVD.
<i>Time codes</i> may include:	<ul style="list-style-type: none"> • burned-in code • CTL • edge code/number • keyed-in code • MIDI (MTC) • SMPTE/EBU, e.g. VITC, LTC.
<i>Transfers and recordings</i> may include:	<ul style="list-style-type: none"> • dubs and copies, e.g.: <ul style="list-style-type: none"> • tape to tape • tape to disk • disk to disk • hard drive to iPod • switch live to air.
<i>Quality and technical requirements</i> may include:	<ul style="list-style-type: none"> • audio levels, e.g.: <ul style="list-style-type: none"> • mono • stereo • audio/vision balance • closed captions • compression ratios/codecs • NTSC • PAL • SECAM • vision, e.g.: <ul style="list-style-type: none"> • colour balance • black levels • luminance • aspect ratios, e.g. 4:3, 16:9.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Media and entertainment production - broadcasting
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Co-requisite units

Co-requisite units		