



Australian Government

Department of Education, Employment and Workplace Relations

CUFBRT404A Coordinate outside broadcasts

Revision Number: 1

CUFBRT404A Coordinate outside broadcasts

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	<p>This unit describes the performance outcomes, skills and knowledge required to coordinate outside broadcasts in the media industries.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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Application of the Unit

Application of the unit	<p>Broadcast technicians or technologists apply the skills and knowledge described in this unit. Although they work under the direction of a broadcast engineer or technical director, they are expected to work with minimum supervision and, in the context of outside broadcasts, would usually be responsible for supervising others.</p> <p>The person coordinating outside broadcast technical operations requires a broad range of technical skills associated with setting up and monitoring live feeds, as well as the flexibility to rectify faults quickly and efficiently. They also need to understand the requirements of others involved in the production chain.</p> <p>Note: To meet the requirements of this unit, candidates need to demonstrate competency in the coordination of outside broadcasts for either television or radio. The Required Skills and Knowledge section should be tailored accordingly.</p>
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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 for outside broadcasts	<ol style="list-style-type: none"> 1. In consultation with relevant personnel, determine scope of outside broadcast requirements 2. Check functionality of equipment to be used and organise repairs as required in readiness for outside broadcasts 3. Organise link from OB point to program centre, including site surveys as required 4. Participate in pre-production sessions as required to ensure effective coordination of production and technical operations associated with outside broadcasts 5. Anticipate potential problems and negotiate solutions or contingency plans that pay due regard to creative, technical and budgetary requirements
Coordinate technical operations during outside broadcasts	<ol style="list-style-type: none"> 6. Power up the OB vehicle on location according to enterprise procedures 7. Ensure that installation and testing of equipment at OB locations is carried out in a safe manner and in accordance with regulatory and industry standards 8. Establish and maintain signal and communication paths between OB point and the program centre 9. Use appropriate protocols in communication between an OB point and master control 10. Respond promptly and appropriately in the event of equipment failure 11. Monitor quality of signal from OB point and make adjustments as required 12. Assist relevant personnel with OB queries, taking care to communicate without over-use of jargon and technical language
Finalise OB location operations	<ol style="list-style-type: none"> 13. Ensure that equipment is dismantled and stored according to enterprise procedures 14. Return OB location to original or improved condition 15. Complete production documentation and reports as required 16. Ensure that equipment is sent for repair as required 17. Participate in debriefing sessions and note areas for improvement in future outside broadcasts

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication and literacy skills sufficient to:
 - interpret information from system drawings, equipment specifications and technical handbooks
 - complete workplace documentation
 - work and communicate effectively as a team member, including team leadership
- planning and problem solving skills sufficient to:
 - diagnose faults in specified equipment and broadcast system
 - plan operational aspects of outside broadcasts, including contingency planning
- technical skills sufficient to:
 - use test equipment in a safe manner
 - operate equipment in a specified outside broadcast vehicle/facility
 - connect and monitor performance of link between OB point and program centre
- numeracy skills sufficient to interpret and record test measurement data
- self-management skills sufficient to:
 - prioritise work tasks
 - meet deadlines
 - seek expert assistance as required

Required knowledge

- industry knowledge, including:
 - structure of the broadcasting industry
 - roles and responsibilities of personnel in the broadcasting industry
 - impact of technological changes on outside broadcast operations
 - correct terminology, e.g. symbols, terminology and conventions used for electrical, mechanical and electronic drawings and specifications
 - regulatory and industry standards relevant to field of work (see range statement for examples)
 - product knowledge, e.g. manufacturer standards and specifications
 - sources of advice, information, and technical support
 - issues and challenges that arise in the context of coordinating outside broadcasts
- features and operational standards for enterprise-specific outside broadcasting equipment, facilities and systems
- well-developed understanding of the features of communication links used in OB

REQUIRED SKILLS AND KNOWLEDGE

operations

- television standards, e.g. PAL, NTSC, SECAM, digital
- OHS requirements as they relate to outside broadcast operations, e.g. RF awareness, working safely with electrical tools and equipment

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- correct set-up and operation of outside broadcasts for either radio **or** television
- effective team leadership abilities
- efficient organisation and coordination of outside broadcasts
- ability to meet production deadlines.

Context of and specific resources for assessment

Assessment must ensure:

- access to either radio or television outside broadcasting facilities
- coordination of outside broadcasts on at least three occasions
- 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

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance
- observation of the candidate setting up and monitoring technical operations for an outside broadcast
- written or verbal questioning to test knowledge as listed in the required skills and knowledge section of this unit.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- CUFBRT402A Maintain broadcasting facilities and

EVIDENCE GUIDE

	<ul style="list-style-type: none">equipment• CUFBRT403A Ensure quality of broadcast output.
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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.

<i>Relevant personnel</i> may include:	<ul style="list-style-type: none"> • director • equipment operators • floor manager • head of department • producer • production assistant • production designer • production manager • program manager • station manager • subcontracted personnel • supervisor • technical director • volunteers coordinator • other technical/specialist personnel.
<i>Outside broadcasts</i> may be required for:	<ul style="list-style-type: none"> • awards nights • concerts • election coverage • festivals • live events • news coverage • public rallies • sporting events.
<i>Equipment</i> may include:	<ul style="list-style-type: none"> • cables • communication equipment, e.g. two-way communication devices • display devices, e.g. monitor • line equipment, e.g. audio/video DAs • production video and audio equipment, e.g. sound/vision mixer, microphones • record/replay machines, e.g. cameras, audio recorders.

RANGE STATEMENT	
<i>Links</i> may include:	<ul style="list-style-type: none"> • balanced audio cable directly wired • IP streaming • ISDN line • microwave • satellite • telephone line • UHF • VoIP.
<i>Potential problems</i> may include:	<ul style="list-style-type: none"> • audience or general public interference • communication dysfunctions • punctuality of production personnel • technical failures of equipment • topography of land or buildings • weather conditions.
<i>Power</i> may include:	<ul style="list-style-type: none"> • back-up supply • generator • mains.
<i>Testing</i> may include:	<ul style="list-style-type: none"> • assessing error performance levels • checking alarms • checking compliance with equipment parameters: <ul style="list-style-type: none"> • amplitude response • frequency response • distortion • noise performance • phase • timing • data network performance • bit error rate (BER) • mechanical performance • working temperature • checking that performance measurements: <ul style="list-style-type: none"> • accord with predetermined specifications • meet approved operating margins • signal strengths of radio, microwave and satellite links • the testing of protection mechanisms.
<i>Regulatory and industry standards</i> may include:	<ul style="list-style-type: none"> • ACMA technical standards • Australian and international standards • Australian building codes and regulations

RANGE STATEMENT	
	<ul style="list-style-type: none"> • confined spaces regulations • environmental legislation • fire regulations • heritage legislation • industry codes of practice • noise abatement • OHS • trade practices legislation.
Protocols may include:	<ul style="list-style-type: none"> • appropriate timing of communication • means of communication, e.g.: <ul style="list-style-type: none"> • telephone • radio • order wire • talkback • method of identifying source and destination of communication • which personnel communicate with whom.
Problems with the quality of signal may be related to:	<ul style="list-style-type: none"> • audio quality: <ul style="list-style-type: none"> • level • frequency response • noise • crosstalk • distortion • video quality: <ul style="list-style-type: none"> • levels <ul style="list-style-type: none"> • peak white • white • black set-up • sync tip • burst • durations <ul style="list-style-type: none"> • 1 line, 1 field, 1 frame • blanking (vertical and horizontal) • burst duration • back porch • front porch • H sync • degradation

RANGE STATEMENT

	<ul style="list-style-type: none"> • differential phase • differential gain • delta gain • line time non-linearity • chrominance/luminance • gain/delay • inequality response • pre ringing or post-ringing • cable length attenuation • time distortions • frequency response errors • digital characteristics <ul style="list-style-type: none"> • sampling rate for Y and Chroma • level • max jitter • NRZI encoding, e.g. polarity independent • embedded audio • spectral make-up of signal. • start of active picture.
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Unit Sector(s)

Unit sector	
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Competency field

Competency field	Media and entertainment production - broadcast technology
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Co-requisite units

Co-requisite units		