Technical and Vocational Education and Training (TVET) Council

Occupational Standards of Competence

Events and Entertainment Technology

Level 3

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Qualification Overview

NVQB

in

Events and Entertainment Technology

Level 3

Who is the qualification for?

This unit is aimed at persons who have extensive experience in technical event production. Candidates should be familiar with the skills and technical requirements of the events and entertainment industry and the principles involved in the execution of all technical aspects of such productions. They should also be capable of safely setting up events on their own, dealing with emergency situations and liaising with clients, producers and talent.

Some units require successful completion of pre-requisite units from A05802 Events and Entertainment Technology Level 2 and are likely to be assessed in conjunction with other mandatory and optional units as defined by the technical definition and assessment specifications of the industry.

Jobs within the occupational area

Relevant occupations include:

- Event Producer
- Lighting Designer
- Sound Designer
- Staging Designer
- A/V Specialist
- Technical Director
- Technical Producer
- Stage Manager

This list is not exhaustive and only serves to illustrate the breadth of the qualification.

Where could it be used?

These competencies are for persons who are likely to be in roles where, for example, their duties include:

- Planning the technical aspects of a production
- Managing and executing the technical aspects of a production

A06503 - APPROVED NATIONAL VOCATIONAL QUALIFICATION STRUCTURE

EVENTS AND ENTERTAINMENT TECHNOLOGY - LEVEL 3

To achieve the full qualification, candidates must complete twelve (12) mandatory units in total. Candidates can also take additional units, although these are not required to complete the qualification.

Mandatory units (all must be completed)	Code
1. Contribute to maintaining health, safety and security in the entertainment and events industry	**U97203**
1.1 Maintain health and safety standards	
1.2 Manage hazards and risks	
1.3 Maintain security in area of work	
1.4 Deal with emergency situations	
2. Develop and sustain productive working relationships	**U56702**
2.1 Develop productive working relationships	
2.2 Sustain productive working relationships	
3. Provide leadership in your area of responsibility	**U58303**
3.1 Provide leadership within own area of responsibility	
3.2 Provide support to persons within own area of responsibility	
4. Manage a technical production project	**U97303**
4.1 Develop the project plan	
4.2 Implement project plan	
4.3 Review project	
5. Interpret a performance brief and rehearse technical aspects of performance	**U97403**
5.1 Clarify creative and production requirements	
5.2 Design and manage technical requirements	
5.3 Rehearse the technical aspects of a performance	
6. Supervise implementation of lighting designs	**U97503**
6.1 Clarify design requirements	
6.2 Supervise set-up and focusing of lighting	
6.3 Focus and patch lighting	
6.4 Monitor lighting operations during productions	

Prerequisite: U90602 Operate lighting control systems and follow spot

Mandatory units (all must be completed)	**Code**
7. Supervise load in, set up and load out of equipment	**U97603**
7.1 Coordinate the load in, set up and load out	
7.2 Prepare for rigging and de-rigging	
7.3 Use equipment for rigging and de-rigging	
7.4 Confirm the safe and efficient loading of vehicles	
8. Coordinate the implementation of a sound brief	**U97703**
8.1 Clarify the sound design brief	
8.2 Plan the production of sound designs	
8.3 Direct the production of sound	
8.4 Coordinate the rehearsal of sound	
Prerequisite: U90702 Set up and operate sound system	
9. Coordinate the staging of an ongoing production	**U97803**
9.1 Coordinate crew on an ongoing production	
9.2 Maintain communications between technical teams	
10. Supervise the set-up of flying equipment	**U97903**
10.1 Install flying components	
10.2 Prepare for flying	
10.3 Supervise flying equipment for an event	
11. Supervise the set-up and operation of special effects for event	**U98003**
11.1 Supervise the set-up and operation of special effects	
11.2 Prepare special effects and stage electrics	
11.3 Operate special effects and stage electrics	
Prerequisite: U91002 Prepare and operate special effects for a live performance	
12. Participate in workplace communication	**U53802**
12.1 Gather and convey workplace information	
12.2 Participate in workplace meetings and discussions	
12.3 Complete work related documents	

U97203 Contribute to maintaining health, safety and security in the entertainment and events industry

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to contribute to maintaining health, safety and security in the entertainment and events technology industry. Candidates will be required to identify and minimize potential safety risks and hazards, follow emergency procedures and maintain records pertaining to health, safety and security. They must also have knowledge of industry health and safety standards as well as those at the event.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Maintain health and safety standards	1.1 Confirm compliance with health and safety policies and procedures in the entertainment and events industry.
	1.2 Confirm that own duties and that of others are carried out efficiently in accordance with health and safety policies and procedures in the entertainment and events industry.
	1.3 Deal with health and safety issues promptly within the limits of own authority and report to **relevant persons**.
	1.4 Select and correctly use appropriate personal protective equipment where required according to organizational and industry standards.
	1.5 Use and store tools, materials and equipment correctly according to manufacturers', industry and organizational guidelines.
	1.6 Dispose of waste and debris safely and correctly according to organizational and industry policies and procedures.

		1.7 Take **appropriate measures** to prevent injury or impairment to self or others according to organizational guidelines.
		1.8 Use correct handling and lifting techniques according to health and safety.
2.	Manage hazards and risks	2.1 Identify **hazards, potential hazards and risks** to clients, staff or patrons.
		2.2 Minimize or correct **hazards, potential hazards and risks** within the limits of own authority.
		2.3 Report **hazards or risks** which cannot be immediately rectified or are outside the limits of own authority to **relevant persons.**
3.	Maintain security in area of work	3.1 Identify threats to personal safety and promptly deal with them within limits of own authority or report to **relevant persons**.
		3.2 Identify and report security breaches to **relevant persons** promptly according to organizational procedures.
		3.3 Secure work area and storage facilities against unauthorized access.
		3.4 Monitor the work area to detect unexpected situations or suspicious behaviour, items or packages.
		3.5 Leave suspicious items or packages undisturbed and immediately report to **relevant persons** in accordance with organizational procedures.
		3.6 Place safety barriers and signage in appropriate locations to warn clients, staff or patrons of **hazards or potential hazards.**
		3.7 Confirm that keys and access passes are secure and accounted for according to organizational requirements.

	3.8 Confirm that electronic devices and equipment are operated within industry guidelines and noise levels.
4. Deal with emergency situations	4.1 Locate and identify the **incident** accurately according to organizational guidelines.
	4.2 Determine the nature of the emergency and deal with it within the limits of own authority or capabilities.
	4.3 Notify **relevant persons** of the emergency and promptly seek assistance from **appropriate persons** where necessary.
	4.4 Monitor the situation and confirm that the correct procedures are followed according to organizational guidelines.
	4.5 Confirm that evacuations are carried out where necessary, in a calm and safe manner in accordance with relevant policies and industry standards.
	4.6 Follow organizational policies and procedures to accurately report details of the emergency.
	4.7 Complete relevant documentation and maintain records according to organizational procedures.

RANGE STATEMENT

All range statements must be assessed:

1. **Relevant persons:**

- Supervisor
- Manager
- Event coordinator
- Stage manager
- Other persons associated with the event

2. **Appropriate measures:**

- Following relevant policies and procedures i.e. health and safety, organizational
- Wearing personal protective equipment
- Undergoing relevant training

3. **Hazards, potential hazards and risks:**

- Faulty tools, equipment and materials
- Limited space
- Slippery or wet floor surfaces
- Environmental issues, i.e. weather, lighting, ventilation etc.
- Trip hazards i.e. cords, ladders, signage etc.
- Behaviour or actions which threaten personal safety or that of others
- Unauthorized entry into prohibited areas
- Discovery of suspicious items or packages

4. **Appropriate persons:**

- Emergency personnel i.e. fire, police, ambulance
- Manager/supervisor

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the health and safety requirements of the entertainment and events technology industry.
2. What are the limits of your own authority in relation to health and safety.
3. How to select and use personal protective equipment.
4. What are the manufacturers' and organizational guidelines for using and storing tools.
5. What are the industry and organizational procedures for disposing of waste.
6. What measures can be taken to prevent injury or impairment to self and others.
7. What are correct handling and lifting techniques.
8. How to identify and minimize hazards, potential hazards and risks.
9. How to identify threats to personal safety and that of others.
10. How to identify and report breaches of health and safety.
11. What are the procedures for reporting hazards, potential hazards and risks.
12. How to secure the work area and storage facilities.
13. How to monitor the work area to detect unexpected situations or suspicious behaviour, items or packages.
14. What are the procedures for dealing with suspicious behaviour, items or packages.
15. Why it is important to secure and account for keys and access passes and what are the procedures for doing so.
16. What are the industry guidelines and accepted noise levels for electronic devices and equipment.
17. What are the organizational policies and industry procedures for erecting barriers and signs and how to do so.
18. How to locate and identify different types of incidents.
19. What are the limits of your authority for dealing with emergencies.
20. Who to notify in the event of an emergency and from whom assistance should be sought.
21. What are the correct procedures for dealing with emergencies.
22. What are the procedures for carrying out evacuations and how to do so.
23. What are the organizational policies and procedures for reporting details of an emergency.
24. How to complete relevant documentation.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on more than one occasion.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U56702 Develop and sustain productive working relationships

Unit Descriptor:

This unit deal with the knowledge, skills and attitudes required to develop and sustain productive and positive working relationships with colleagues within your own organization.

ELEMENT	PERFORMANCE CRITERIA

To be competent you must achieve the following:

1. Develop productive working relationships	1.1 Establish productive and positive relationships with colleagues within the organization.
	1.2 Acknowledge and respect the responsibilities, interests and concerns of colleagues.
	1.3 Develop trust and mutual respect, particularly where you have no authority/shared authority over those with whom you are working.
	1.4 Deal with difficult situations and challenges in a sensitive manner.
2. Sustain productive working relationships	2.1 Provide individuals with sufficient information to enable them to perform effectively.
	2.2 Consult individuals in relation to key decisions and activities and take their views into account.
	2.3 Fulfil agreements made and inform colleagues.
	2.4 Advise individuals promptly of any challenges encountered.
	2.5 Identify **conflicts** of interest, values and disagreements and resolve in ways that minimize damage to performance and to the individuals involved.

2.6 Monitor and review working relationships to identify areas for improvement.

2.7 Seek and provide **feedback** to improve the performance of those involved.

RANGE STATEMENT

All range statements must be assessed:

1. **Conflicts:**

    - Undermining of persons' self-interest and values
    - Undermining professional interest and values
    - Undermining of organizational interests and values

2. **Feedback:**

    - Oral
    - Written

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the benefits of developing productive and positive working relationships.
2. What are the principles of effective communication and how to develop productive relationships.
3. Why it is important to create trust and mutual respect.
4. Why it is important to understand how to deal with difficult situations and issues.
5. How to identify and meet the needs of other persons.
6. What information is appropriate to provide to colleagues and the factors that need to be taken into consideration.
7. How to consult with colleagues in relation to key decisions and activities.
8. Why it is important to take account, and be seen to take account, of the views of colleagues.
9. Why communication with colleagues on fulfilment of agreements or any problems affecting or preventing fulfilment is important.
10. How to identify conflicts of interest and values with colleagues and the techniques that can be used to manage or remove them.
11. How to identify disagreements with colleagues and the techniques for resolving them.
12. What type of damage conflicts of interest and values and disagreements with colleagues can cause to individuals and organizations.
13. How to monitor and review working relationships.
14. How to obtain and make use of feedback from colleagues to improve own performance.
15. How to provide colleagues with feedback designed to improve their performance.
16. What are the mechanisms for consulting with colleagues on key decisions and activities.
17. What are your organization's planning and decision-making processes.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates have to prove that they can carry out all of the elements, meeting **all** the performance criteria, range and underpinning knowledge **on more than one occasion**. This evidence must come from a real work environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U83403 Provide leadership in your area of responsibility

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to provide direction to persons in a defined area, whilst motivating and supporting them to achieve the vision and objectives for that area.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Provide leadership within own area of responsibility	1.1 Motivate and encourage persons within own area of responsibility to define their direction and commit themselves to achieving results.
	1.2 Communicate the shared vision and values of the organization clearly and enthusiastically to relevant persons.
	1.3 Communicate clearly the link between the vision, objectives and operational plans of own area of responsibility and those of the overall organization and confirm that they are understood by persons within own area of responsibility.
	1.4 Lead your own area of responsibility successfully through difficulties, challenges and times of crisis.
	1.5 Develop and appropriately use a range of **leadership styles** in situations and when dealing with others.
	1.6 Motivate persons to present ideas and provided them with feedback to show that they are heard and understood.
2. Provide support to persons in own area of responsibility	2.1 Encourage persons to identify and take responsibility for their own development needs.

2.2 Provide persons with support, advice and guidance when they need it, especially during periods of setback and change.

2.3 Motivate and support persons to achieve their work and development objectives and give recognition for their successes.

2.4 Encourage persons to take the lead in their own area of responsibility when they have the knowledge and expertise and show a willingness to accept leadership.

2.5 Achieve the trust and support of persons across the organization and key stakeholders through own performance and behaviour.

2.6 Seek feedback regularly on own performance from key stakeholders and persons across the organization.

RANGE STATEMENT

All range statements must be assessed:

1. **Leadership styles:**

    - Collaborative
    - Democratic
    - Coaching
    - Affiliated
    - Autocratic

2. **Communicated:**

    - Oral
    - Written
    - Visual

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. Who are the individuals within own area of responsibility, their roles, responsibilities, competencies and potential.
2. What are your own values, motivations and emotions.
3. What are your strengths and limitations in the leadership role.
4. What are your role, responsibilities and level of authority.
5. How to engage persons within own area of responsibility, across the organization and other stakeholders, in defining the organization's direction and obtaining commitment to achieving results.
6. What are the differences between managing and leading.
7. What are the vision, objectives and culture of the overall organization.
8. What are the vision, objectives, culture and operational plans for own area of responsibility.
9. How to create a compelling vision for own area of responsibility.
10. What are organizational values and why these are important.
11. What are the different leadership styles and how to select and apply these to different situations and persons.
12. What are the leadership styles used across the organization.
13. What are the different techniques and methods for communicating with persons across the organization and how these should be applied.
14. How to select and successfully apply different methods for communicating with people across own area of responsibility.
15. How to obtain and make use of feedback from persons on own leadership performance.
16. What are the strengths, limitations and potential of people whom you lead.
17. What are the types of difficulties and challenges that may arise and ways of identifying and addressing them.
18. How to support and nurture a culture which encourages and recognizes creativity and innovation.
19. Why it is important to encourage others to take the lead and the ways in which this can be achieved.
20. How to effectively empower persons in own area of responsibility.
21. How to select and successfully apply different methods for encouraging, motivating and supporting persons and recognizing achievement.
22. What types of support and advice persons are likely to need and how to respond to them.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates have to prove that they can carry out **all** of the elements, meeting **all** the performance criteria, range and underpinning knowledge **on more than two occasions over a period of time.** This evidence must come from a real work environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Direct observation
- Oral/written questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is, the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used,** except in exceptional circumstances where natural work evidence is unlikely to occur.

U97303 Manage a technical production project

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to manage a project related to a technical production for which you have been given responsibility. This involves developing and agreeing on a plan for the project and monitoring and controlling implementation and changes to the plan. It also involves ensuring that the project achieves its key objectives and is completed to the satisfaction of the project sponsor(s) and any key stakeholders.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Develop the project plan	1.1 Discuss and agree on the key objectives, scope and available **resources** of the proposed **project** with **stakeholders**.
	1.2 Develop a realistic and thorough plan for undertaking the project and achieving the key objectives in consultation with relevant persons.
	1.3 Discuss and agree upon the project plan with key stakeholders, and make any necessary changes.
2. Implement project plan	2.1 Brief team members on the project plan and their roles and responsibilities and provide ongoing support, encouragement and information.
	2.2 Present information clearly, concisely and accurately and in ways that promote understanding.
	2.3 Put sustainable processes and resources in place to manage potential risks arising from the project and to deal with contingencies.
	2.4 Implement the project plan, selecting and applying a range of basic project management tools and techniques to monitor, control and review progress.

	2.5	Communicate the progress of the project to key stakeholders and project team members on a regular basis.
	2.6	Identify problems and make required changes after gaining agreement from project sponsors and key stakeholders where necessary.
	2.7	Pursue project objectives making the best use of agreed resources.
3. Review project	3.1	Monitor work against agreed objectives, timescales, budgets, quality standards and agree upon any other requirements with clients.
	3.2	Confirm satisfactory completion of the project with key stakeholders.
	3.3	Review the success of the project, identifying what lessons can be learned and recognizing the contributions of project team members.

RANGE STATEMENT

All range statements must be assessed:

1. **Resources:**

    - Physical
    - Financial
    - Human

2. **Stakeholders:**

    - Production team
    - Event management
    - Sponsors
    - Venue management

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the role and key responsibilities of a project manager.
2. What are the stages in the project life cycle.
3. What is the importance of the relationship between the project manager, project sponsor(s) and any key stakeholders.
4. Why it is important to discuss and agree on the key objectives and scope of a proposed project with the project sponsor(s) and any key stakeholders before detailed planning commences.
5. What information is required for effective project planning.
6. Why it is important to be able to identify and understand how a project fits in with the overall vision, objectives and plans of the organization and any programmes of work or other projects being undertaken.
7. Why it is important to consult with relevant persons in developing a project plan and how to do so effectively.
8. How to write a project plan, inclusive of particular activities, required resources and timescales and why the plan needs to be discussed and agreed on the project sponsor(s) and any key stakeholders.
9. Why it is important for project team members to be briefed on the project plan, their roles and responsibilities and how to do so effectively.
10. What are the ways of providing ongoing support, encouragement and information to any project team members.
11. What are the ways of identifying and managing potential risks in relation to the project.
12. How to plan for contingencies and the importance of doing so.
13. How to select from and apply a range of basic project management tools and techniques to monitor, control and review progress of the project.
14. What are effective ways of communicating with key stakeholders during a project.
15. What are the types of changes that might need to be made to a project plan during implementation.
16. Why it is important to confirm satisfactory completion of the project with any key stakeholders and how to do so effectively.
17. How to establish effective systems for evaluating the success of projects and identifying lessons for the future.
18. What are the ways of recognizing the contributions of project team members to the success of projects and why it is important to do so.

19. What project management tools and techniques are commonly used in the industry or sector.
20. What risks and contingencies are common to the entertainment industry.
21. What are the industry/sector specific legislation, regulations, guidelines and codes of practice.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on more than one occasion.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

Candidates must have access to all tools, equipment, materials and documentation required. Candidates must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U97403 Interpret a performance brief and rehearse technical aspects of performance

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to clarify the creative and production requirements both in advance or throughout the production process. Candidates will be required to manage expectations, resources and constraints and make sure all team members understand what they will be expected to do and any changes that may affect their work.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Clarify creative and production requirements	1.1 Agree upon the requirements and constraints for the production with **stakeholders**.
	1.2 Maintain accurate records of agreements and any make any required changes.
	1.3 Identify opportunities, limitations and constraints of work promptly.
	1.4 Deploy **resources** appropriate to design requirements, agreed priorities and organizational policy.
2. Design and manage technical requirements	2.1 Identify factors significant to planning, budgeting, supply and health and safety.
	2.2 Consult specialists for options and solutions which are outside your competence.
	2.3 Research and identify options for achieving any special or mechanical effects.
	2.4 Prepare specifications for sound and lighting according to identified requirements.
	2.5 Prepare specifications for scenic components and props according to identified requirements.

	2.6 Explain technical issues clearly to non-technical persons to enable understanding.
3. Rehearse the technical aspects of a performance	3.1 Confirm details of technical input with relevant persons.
	3.2 Confirm the availability of all required resources and equipment to meet technical requirements.
	3.3 Rehearse technical aspects of performance according to design and direction.
	3.4 Monitor technical contributions regularly against production requirements.
	3.5 Return equipment and resources to the correct place for safe and secure storage.
	3.6 Take effective corrective action in consultation with relevant persons where products, services or processes do not meet technical or production requirements.
	3.7 Communicate changes to technical aspects promptly and accurately to relevant personnel.

RANGE STATEMENT

All range statements must be assessed:

1. **Stakeholders:**

    - Producer
    - Director
    - Technical team
    - Performers
    - Attendees
    - Sponsor and donors
    - External service providers
    - Venue management

2. **Resources:**

    - Performance space
    - Rehearsal space
    - Departmental briefs
    - 2D and 3D models
    - Technical team
    - External service providers

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the roles and responsibilities of the members of the creative and production teams.
2. What are the production requirements, constraints and deadlines.
3. What financial and resource constraints exist in your area.
4. What are the current regulations, environmental and health and safety considerations with which members of your team need to comply.
5. How to analyze and breakdown the requirements in your area of specialization.
6. How to keep up to date with any changes to the creative requirements that may affect work in your area throughout the production and rehearsal process.
7. What are the agreed creative requirements and the intended look and feel of the production.
8. Who is responsible for the final interpretation of the design and how you will be able to clarify any questions, issues or problems that emerge in your work.
9. How you will be briefed on any changes to the design requirements that may affect your work.
10. What are the technical requirements and constraints of different realization methods.
11. What information you need to determine the set, props or scenic art requirements.
12. What information you need to determine the lighting and sound requirements.
13. How to specify set or props requirements correctly.
14. How to specify sound requirements correctly.
15. How to specify lighting requirements correctly.
16. Why it is important to check requirements with relevant persons and how to negotiate your requirements.
17. What are the roles and responsibilities of different technical departments.
18. What are the factors to be taken into account when monitoring implementation of the technical schedule and how these should be monitored.
19. What problems might occur during the production period and the types of corrective action that can be taken to maintain the technical schedule.
20. What are the organizational policies and procedures that affect the production period and implementation of the technical schedule.
21. How to determine health and safety issues related to the change of venue from rehearsal to performance areas.
22. How to interpret the creative brief and its technical implications.
23. What are the working parameters and sources of information about them.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on more than one occasion.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by c working alone or as part of a team. The assessment environment should not disadvantage the candidate.

Candidates must have access to all tools, equipment, materials and documentation required. Candidates must also be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U97503 Supervise implementation of lighting designs

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to implement lighting designs for entertainment productions. It involves briefing others on the set-up and focusing of lighting equipment and the set-up and checking of control systems and any other accessories and equipment. Work must also be checked to ensure that it meets the production requirements and solutions devised for any obstacles or problems that arise.

Prerequisite: U90602 Operate lighting control systems and follow spot (Level 2)

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Clarify design requirements	1.1 Discuss lighting designs with relevant production personnel to determine overall **production** needs.
	1.2 Seek feedback on ideas from relevant production personnel to maximize creative input into lighting effects.
	1.3 Confirm availability of **lighting equipment** and **accessories t**o implement different options for lighting effects.
	1.4 Confirm selected options s to provide a correct visual interpretation of the script.
2. Supervise set-up and focusing of lighting	2.1 Communicate lighting plans and specifications clearly communicated to the technical team in sufficient detail for them to realize plans accurately.
	2.2 Encourage the technical team to identify any constraints and develop feasible solutions, whilst maintaining overall integrity of design.
	2.3 Coordinate rigging and focusing of lighting safely and efficiently.

		2.4 Amend lighting plans and specifications accordingly in consultation with other creative and technical staff.
		2.5 Test **lighting equipment and accessories** and follow approved procedures for dealing with identified faults.
3.	Focus and patch lighting	3.1 Prepare the work area in a manner that will assist safe and efficient focusing.
		3.2 Use accessed equipment and tools safely following approved procedures.
		3.3 Conduct the focusing process to achieve the lighting design.
		3.4 Check **follow spot accessories** to ensure that they are in correct working order.
		3.5 Lock off adjustments once the desired focus is achieved.
		3.6 Perform hard patching and programme soft patching at lighting desk in accordance with lighting design.
4.	Monitor lighting operations during production	4.1 Set-up and check operational aspects of lighting equipment and set-up to ensure correct preparation for production.
		4.2 Confirm the placement of lighting equipment and mapping of accessories and connections to correct power sources and consoles.
		4.3 Maintain lighting conditions throughout the production to ensure that image and light quality meet stylistic effect required.
		4.4 Identify ad rectify basic problems and faults using appropriate test equipment according to company and occupational safety and health procedures.
		4.5 Confirm the technical quality is consistent with production requirements.

RANGE STATEMENT

All range statements must be assessed:

1. **Production:**

    - Indoor
    - Outdoor

2. **Lighting equipment and accessories:**

    - Dimmers
    - Lighting consoles and peripherals
    - Luminaires and lanterns
    - Rigging accessories (e.g. safety chains, hook clamps, boom arms, spigots, telescopic stands, scaffold clamps, truss, chain blocks/motors
    - Follow spot
    - Conventional units
    - Digital moving lights (intelligent lights)
    - Architectural fixtures
    - Special effects units (e.g. electrical/electronic props, strobes, mirror balls and motors, ultraviolet light, effects projectors)

3. **Follow spot accessories:**

    - Counterbalance
    - Dowser
    - Colour changer

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What pre-performance checks are required and how to conduct them.
2. What is the correct order for powering up and powering down equipment.
3. What are the relevant health and safety regulations relating to all aspects of working with electricity and electrical equipment.
4. How to operate a lighting console and how to achieve the requirements listed.
5. What is the difference between operating equipment during rehearsal and operating equipment during performance.
6. How to achieve consistency in lighting.
7. What are the likely problems that may occur during performance and how to deal with these whilst minimizing disruption.
8. Why it is important to note problems that have occurred and find ways of avoiding these in future performances.
9. How to replace faulty light sources and the health and safety and handling requirements that must be followed, including the safe isolation of equipment.
10. What are the emergency procedures, especially for power cuts or fires.
11. How to make all equipment and consumables safe and secure and the importance of doing so.
12. How to identify a fault and the correct procedures to follow.
13. How to identify consumables in need of replacement and the correct procedures to follow.
14. How to operate a follow spot and how to achieve the requirements identified.
15. How to convey changes to production staff in an effective and efficient manner.
16. How to modify production documentation as required, e.g. lighting plan, cues.
17. How to interpret script requirements in both creative and technical contexts.
18. How to implement and adjust lighting set-ups.
19. How to undertake basic maintenance of lighting equipment.
20. How to accurately document the positions of luminaires/lanterns.
21. How to use light meters and different types of light-measuring devices.
22. Why it is important to maintain the overall integrity of the design.
23. What are the types of problems that may occur and what are the possible solutions.
24. Why it is important to liaise with technical and creative staff when making amendments to lighting plans.

25. How to carry out focusing so that it achieves the desired effect in terms of beam focus, colours and characteristics and use of accessories.
26. What are the different types of filters, frames and changers.
27. What are the principles behind data driven devices and control protocols.
28. How to determine the correct cable type, connector and line termination.
29. Why and how to avoid light leaks.
30. Why filters and accessories should be labelled correctly and clearly.
31. What is the safe practice for the connection of lighting equipment, appropriate to the environment, including the use of correct size cables and plugs for the load.
32. How to connect lighting equipment according to the requirements of the lighting plan and the use of hard patches and soft patches.
33. What is the correct practice regarding single and three phase electrical supplies.
34. What faults are likely to occur once the equipment is connected to control circuits.
35. How to align and use follow spot sights.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on more than one occasion.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U97603 Supervise load in, set up and load out of equipment

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to coordinate activities to transport performance components to the location, into the venue and fit up correctly. It also involves clarifying requirements, facilitating good team work and finding ways to solve problems. At the end of the event, the candidate will supervise de-rigging and removal of components.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Co-ordinate the load in, set up and load out of equipment	1.1 Identify and sequence tasks to ensure that the work is carried out safely and efficiently.
	1.2 Obtain packing material and agree transport arrangements to meet deadlines.
	1.3 Disassemble and check components against schedules and arrange so that they can be accurately identified, labelled and recorded and returned or stored appropriately.
	1.4 Assess items as damaged or report lost items to relevant personnel.
	1.5 Handle and pack items to facilitate safe and secure transportation.
	1.6 Return items no longer required or store, recycle appropriately or safely dispose of.
	1.7 Store items safely, hygienically and appropriately to maintain their condition and security and to provide ease of access for future use.
	1.8 Items problems, seek resolutions and refer unresolved problems to appropriate personnel.

	1.9 Monitor equipment to ensure safe operation.
2. Prepare for rigging and de-rigging	2.1 Read, scale and interpret rigging plans accurately.
	2.2 Identify **hazards** that may make plans difficult or impossible to achieve and suggest alternatives.
	2.3 Identify equipment and components from the rigging plan correctly based on required load capacity.
	2.4 Assess supporting structures and fixings for suitability and advice obtained from an authorized person if necessary.
	2.5 Use **modular structures** according to manufacturer's instructions.
	2.6 Use rigging points or supports according to the plan approved by an authorized person.
	2.7 Advise relevant persons clearly of any hazards arising as work progresses.
	2.8 **Communicate** rigging intentions clearly to persons affected by the work.
	2.9 Use accessed equipment safely in accordance with company policy.
	2.10 Supervise the use of safety equipment is to ensure correct usage.
	2.11 Define work areas with sensitivity to the venue or site and other contractors.
	2.12 Mark out work from the plan in line with organizational procedures and rigging codes of practice.

3. Use equipment for rigging and de-rigging	3.1 Establish safe working loads for all lifting equipment and accessories used.
	3.2 Prepare lifting and assembly equipment and accessories in line with procedures, method statements or codes of practice to contribute to safe and efficient working.
	3.3 Confirm correct compatibility and alignment of lifting accessories.
	3.4 Check rigging assemblies to ensure that hazards are not created when used at height.
	3.5 Handle and maneuver equipment in compliance with good manual handling practice, health and safety legislation and the employer's safety policy.
	3.6 Rig secondary suspensions in line with best practice.
	3.7 Use techniques **to rig** attachment points to supporting structures.
	3.8 Use appropriate **lifting equipment,** accessories and techniques to select, lift, lower and transfer loads as required.
	3.9 Respond appropriately to difficulties or problems that arise during lifting operations; seeking help and advice where necessary.
	3.10 Use appropriate methods to safely de-rig and/or unsling loads.
	3.11 Disassemble and store lifting equipment correctly and appropriately, leaving a tidy worksite.
	3.12 Complete required records in line with organizational requirements.

4. Confirm the safe and efficient loading of vehicles	4.1 Confirm the compatibility of the vehicle and load.
	4.2 Verify that the loading area is suitable and safe.
	4.3 Take appropriate actions when there are problems with loading.
	4.4 Load vehicles appropriately for the various types of load.
	4.5 Follow correct manual handling techniques and employ assisting devices when appropriate.
	4.6 Select appropriate handling, packing and securing methods.
	4.7 Secure load using appropriate restraining devices and equipment.
	4.8 Secure loose materials, restraints and ancillary equipment to prevent shifting or becoming loose during transportation.
	4.9 Follow relevant health and safety statutory requirements for loading the vehicle.
	4.10 Follow approved procedures and practices in the context of the work and workplace.

RANGE STATEMENT

All range statements must be assessed:

1. **Lifting equipment:**

    - Electrical
    - Manual

2. **Modular structures:**

    - Trusses
    - Grid systems
    - Pipe and drap**e**
    - Tension display systems

3. **Communicate:**

    - Verbal
    - Non-verbal
    - Electronic

4. **Techniques:**

    - Knots
    - Clamps
    - Other fasteners

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What health and safety issues have to be taken into account when following a briefing or method statement.
2. What current legislation, including health and safety, codes of practice and relevant standards must be followed.
3. What is the range of rigging and safe working practices used in entertainment industry rigging.
4. How to use safe manual handling and manoeuvring techniques and requirements.
5. What personal protective equipment (PPE) and clothing should be worn for different rigging tasks.
6. How to make pre-use checks and use PPE for working at heights.
7. Which fastening methods are required for different applications.
8. Which knots should be used in different applications.
9. How and why to use the correct methods to make terminations in wire ropes.
10. What are durable common methods of terminations.
11. What is the range of rigging and lifting equipment and accessories commonly used for rigging in the entertainment industry, their use, advantages, disadvantages, incompatibilities and misuses.
12. Why pre-use checks are important.
13. How to determine sling tension.
14. How to interpret load tables and loading conditions.
15. Why it is important to know and understand safe working loads and working load limits of rigging materials and their compatibility.
16. Why accurate weight information is important.
17. How to establish the load capacities of rigging or support points in relation to their intended load.
18. How to identify the load capacity of lifting equipment and how it changes with its configuration.
19. How to establish the weight and distribution of proposed loadings from the plan.
20. Why it is important to understand the rigging requirements of the production.
21. How the structural members in the venue can be used.
22. What are rigging plans and how to interpret them.
23. What are method statements and why they are required.
24. How to work within the confines of method statements.
25. How to correctly interpret a risk assessment.

26. How to scale from rigging plans and marking out conventions.
27. Why it is important to sign off completed work in line with organizational procedures.
28. How heat affects different rigging materials.
29. What are the factors that influence safety and the correct use of chain hoists, chain handling and management, chain bag safety, chain hoist controllers and their power supply and distribution.
30. How rigging accessories are correctly used in the attachment or slinging of loads.
31. What is the effect of distribution of load on structures when operating hoists simultaneously.
32. What is best practice for rigging secondary suspensions.
33. When are secondary suspensions necessary and not necessary.
34. How to organize equipment for use and how to deal with problems that may occur.
35. Why it is important not to deviate from the rigging plan without authorization.
36. What is best practice for slinging with wire rope slings, shackles, round slings, clutch chain slings.
37. What are the common methods to get components to the workstation, which may be at height.
38. What are the likely problems that will occur in assembling rigging and how to deal with these.
39. How to deal with deviations from the designs.
40. What problems and dangers may occur in de-rigging and how to respond to them.
41. Why lifting equipment and accessories must be correctly aligned.
42. What are the typical tasks involved in a load in or load out and how to assign them to the appropriate person so that they know what is expected of them.
43. What problems might occur when moving a production and the sorts of corrective actions that can be taken to resolve these.
44. What are the procedures for checking and confirming the condition and identity of scenery and set components.
45. What are the procedures for dealing with lost or damaged items.
46. Which items and materials can be recycle and what are the relevant recycling methods.
47. How to identify which items will be needed in future and which will not.
48. What are the organizational guidelines for planning and carrying out strikes.
49. What are the organizational guidelines on wearing personal protective equipment (PPE).
50. How to prepare the vehicle for loading.
51. When to re-distribute the load and how to do so.

52. How to ensure the load is secure and stable.
53. What types of problems may occur with the loading.
54. What are the relevant health and safety statutory requirements for loading the vehicles.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

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(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

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U97703 Coordinate the implementation of sound brief

Unit Descriptor:

This unit deals with the knowledge, skills and attitudes required to plan sound requirements for a production and coordinate the rehearsing of sound. It also deals with the knowledge and skills required to use the rehearsal period, including technical rehearsals, to determine how the sound design will achieve the desired effect, refine it as necessary and find practical or technical solutions to problems.

Prerequisite: U90702 Set up and operate sound system (Level 2)

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Clarify sound design brief	1.1 Facilitate preliminary concept meetings with relevant personnel to discuss **sound design specifications** for productions.
	1.2 Read and interpret sound-design specifications to determine and confirm **production requirements.**
	1.3 Identify and confirm required personnel for the production.
	1.4 Take into consideration financial and time constraints in creating sound designs.
	1.5 Document operational requirements for production of sound designs.
2. Plan production of sound designs	2.1 Secure required facilities and equipment in a timely fashion.
	2.2 Consider and meet copyright requirements.
	2.3 Contract and brief personnel as required.

		2.4 Anticipate and address issues that may arise during production of sound designs..
3.	Direct production of sound	3.1 Comply with relevant safety legislation and facility guidelines throughout all stages of production.
		3.2 Develop final mix, including recording, mixing and editing sound components to achieve the desired sonic finish and spatial placement.
		3.3 Obtain feedback from **relevant personnel** about sound design and negotiate changes as required.
		3.4 Deal with conflict that arises promptly and effectively.
		3.5 Maintain required documentation through all stages of sound design implementation.
4.	Coordinate rehearsal of sound	4.1 Attend technical and dress rehearsals and assess the effects of sound design together with other aspects of the production.
		4.2 Provide relevant sound cues during rehearsal.
		4.3 Establish radio microphone positions with performers and sound operators, liaising with wardrobe and costume staff as required.
		4.4 Amend equipment plans and sound plots in consultation with other creative and technical staff, whilst maintaining the integrity of the design.
		4.5 Obtain confirmation that stage management personnel have an accurate sound plot with cue positions incorporated into prompt copy of production.

RANGE STATEMENT

All range statements must be assessed:

1. **Sound design specifications:**

    - Dubbing charts
    - Cue sheets
    - Scripts
    - Storyboards
    - Scores
    - Oral descriptions
    - Recording formats
    - Stage layout/plot

2. **Production requirements:**

    - Equipment
    - Human resources

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the agreed design concepts or designs.
2. Who is responsible for the creative and technical requirements for the production and the lines of communication.
3. How to keep up to date with any changes to the design requirements that may affect work in your area during the rehearsal process.
4. What are the project constraints and deadlines.
5. Which members of the creative and production teams you will be working with and their roles and responsibilities.
6. What are the statutory and procedural requirements for safety in different sorts and sizes of venues.
7. What are the relevant regulations, environmental and health and safety considerations in the use of materials, processes and technology.
8. What types of sound style and quality are typically associated with different kinds of productions.
9. What are the typical staging characteristics associated with different kinds of productions including live music, theatre, dance, opera, corporate events or arenas.
10. What formats and conventions are used in diagrammatic and written specifications, including schematic drawings.
11. Who needs to be given confirmation about the system and what are appropriate means of communication.
12. What is the difference between rehearsals, technical rehearsals, dress rehearsals and previews and the role the sound designer can play in these.
13. What is the range of possible problems and improvements that can be identified.
14. Why it is important in the rehearsal period to test whether particular cues do or do not work, identifying onstage locations from which effects will operate and whether new cues need to be added.
15. How to organize the sound control position and the capabilities and operation of the sound equipment in use, including fault finding and first line maintenance.
16. How to plot and modify sound cues so that they meet requirements.
17. Why it is important to communicate effectively with other members of staff whilst plotting sound.
18. How to document the plot clearly and accurately.
19. What are the types of equipment and their functions.

20.

21. Why it is important to document alterations to the plot.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

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(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. . Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

Candidates must have access to all tools, equipment, materials and documentation required. Candidates must also be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

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U97903 Supervise the set-up of flying equipment

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to prepare for flying by making final fits of any equipment in the performance area or on the performers (e.g., flying harnesses). The candidate will be required to operate flying equipment for persons, scenery or other production elements and to cue during a live performance, including carrying out pre- and post show checks.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Install flying and flown components	1.1 Use safe and secure handling, lifting and lowering techniques in installation.
	1.2 Locate flying lines accurately in required positions.
	1.3 Clear pathways and follow the route of least friction.
	1.4 Secure and line-up blocks.
	1.5 Thread lines to produce required movement.
	1.6 Terminate and tie off lines securely, conforming to safety policies.
	1.7 Confirm load notices and point markings as rated for the intended load.
	1.8 Clear travel path and handle slack safely.
	1.9 Hang **flown components** in the required position and secure against unwanted movement.
	1.10 Select and secure appropriate brail using appropriate knots.
	1.11 Mark deads clearly and accurately.

		1.12 Identify handling requirements for lifting or lowering the load.
2.	Prepare for flying	2.1 Confirm the availability of sufficient **equipment** and consumables.
		2.2 Check safety and correct order of flown components for the performance.
		2.3 Check communications, mechanical equipment and cue systems are to ensure they are working correctly.
		2.4 Identify irregularities or problems and correctly deal with or report to relevant persons.
		2.5 Respond to standby promptly.
		2.6 Operate flying system to cue and achieve the correct final positions.
		2.7 Conduct operations safely in line with specifications and approved procedures, practices and statutory requirements.
		2.8 Identify and record defects in performance and report to appropriate person(s).
		2.9 Conduct post-stop checks according to specifications.
3.	Supervise flying for a live performance	3.1 Confirm the availability of sufficient staff with relevant skills to carry out the work.
		3.2 Provide clear signals to correct individual(s) in sufficient time for appropriate actions to be performed.
		3.3 Inform appropriate persons immediately about problems performing an action.
		3.4 Rectify errors with minimum disruption to the audience's attention and the performance.

3.5 Carry out flying actions according to cue.

3.6 Complete work in line with approved procedures, practices and statutory requirements.

RANGE STATEMENT

All range statements must be assessed:

1. **Flown components:**

    - Drapery
    - Set pieces
    - Equipment

2. **Equipment:**

    - Rope
    - Tape
    - Personal protective equipment (PPE)

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the required types of equipment and consumables and how to check these.
2. What to look for when checking the condition of flown components and equipment and how to report faults and damage.
3. What is the range of faults that may occur and what to do about them.
4. How to perform post-stop check procedures.
5. What is the cue system and it should be responded to.
6. How to read and amend a plot sheet and the importance of liaising with the responsible person over any amendments.
7. What aspects of relevant legislation, organizational requirements and codes of practice are relevant to the setting up and installation of flying systems.
8. What are the types of problems and emergencies that may occur when working with flying systems and how to deal with them.
9. What are the correct procedures and techniques for safe manual handling, lifting and lowering.
10. What are the required positions for flying lines and the importance of locating lines correctly.
11. What may happen if the pathways are not clear and how to follow the route of least friction.
12. Why it is important to line up the blocks at right angles to the axis of the block spindle and how to do so.
13. How to thread lines correctly.
14. Why lines must be securely terminated and how to do so.
15. How to make sure that the system works without excessive wear.
16. Who is the person responsible for the flying operation and why it is important to take instructions from that person only.
17. How to secure load fixings.
18. Why it is important to take up an operating position that gives a clear view of flown components against unwanted movement.
19. What is the range of brail systems, their uses and advantages and disadvantages.
20. What types of knots can be used, particularly tensioning knots, how to tie them and what types of situations to use them in.
21. What types of cord, cable and rope can be used and what types of situations to use them in.

22. How to mark deads accurately and securely for different suspension systems and why this is important.
23. What are the dangers of lack of co-ordination with the stage action effects of atmospheric changes.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

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(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

Candidates must have access to all tools, equipment, materials and documentation required. Candidates must also be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **must not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U98003 Supervise set-up and operation of special effects for event

Unit Descriptor:

This unit describes the knowledge, skills and attitudes required to oversee the set up and operation or initiation of special effects and relevant equipment. It also deals with becoming compliant with relevant regulations and health and safety guidelines and liaising with relevant performers and technical team to ensure they are aware of plans and their role and responsibilities.

Pre-requisite: U91002 Prepare and operate special effects for a live performance (Level 2).

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Supervise the set-up and operation of special effects	1.1 Research venue permissions and restrictions.
	1.2 Obtain relevant licenses, insurances, permissions and facilities are for purchase and safe transportation, storage and use of hazardous materials.
	1.3 Brief relevant members of the technical team and performers on how, when and why special effects will be used during the performance, along with who will be operating them and the precautions that need to be taken.
2. Prepare special effects and stage electrics	2.1 Prepare required **tools and resources** to allow safe and efficient installation.
	2.2 Install **special effects** where necessary, to meet production requirements, organizational policies and health and safety requirements.
	2.3 Confirm special effects as safe and secure following installation.
	2.4 Test protective and safety devices to confirm correct operation.

	2.5 Confirm appropriate circuits that provide adequate protection when installing electrical devices.
	2.6 Connect special effects to correct supply, ensuring cables are placed tidily and discreetly.
	2.7 Test special effects and identified faults and deal with hazards following approved procedures.
	2.8 Explain safety devices and operation of special effects clearly to those involved.
	2.9 Place stage electrics and effects accurately according to the plot positions.
3. Operate special effects and stage electrics	3.1 Power up equipment in the correct order and in good time for performance.
	3.2 Power down equipment in correct order and manner.
	3.3 Secure equipment and consumables safely and clear away debris.
	3.4 Identify and follow correct procedures for any consumables in need of replacement.
	3.5 Operate stage electrics and effects safely according to cue and plot.
	3.6 Report problems in achieving the plot to the responsible person and suggest feasible solutions in keeping with design intentions.
	3.7 Utilize backup procedures as necessary.

RANGE STATEMENT

All range statements must be assessed:

1. **Tools and resources:**

    - Hand tools
    - Power tools
    - Consumables

2. **Special effects:**

    - Stage electrics
    - Computer controlled devices
    - Physical effects, including weather effects, fire and smoke
    - Motion control electronics and systems

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. How to use special effects to meet the designer's requirements.
2. What are the regulations, licenses and insurances covering the purchase, transportation, storage and use of hazardous materials.
3. What are the physical properties of special effects and how these are controlled in terms of fallout, colour, angle, intensity (heat or sound), distribution and movement.
4. What are the hazards associated with producing special effects and how they can be minimized.
5. Why it is important to adequately brief members of the technical team and performers about the purpose and use of special effects during the performance.
6. What is the range of special effects (excluding pyrotechnics) that may be used and how to install and test these items.
7. How to place special effects (excluding pyrotechnics) accurately and according to the plot and the importance of doing so.
8. What are the likely problems that will occur with the setting up or installation of special effects and how to deal with these.
9. What are the current regulations and correct procedures regarding special effects material and equipment, including use, handling, storage and disposal.
10. What are the safe and secure methods of connecting equipment.
11. When and how special effects should be tested and the approved procedures for doing so.
12. How to set up backup procedures and the importance of these.
13. What are the regulations and policies governing the use, installation and testing of special effects equipment.
14. How to perform electrical bonding safely.
15. Why it is important to install cables to minimize mechanical damage and how to do so.
16. How to determine the correct size and type of temporary cables required.
17. How to utilize protective devices to minimize the risk of shock or fire.
18. How to safely identify and correct faults.
19. Why it is important to make equipment safe and secure following installation.
20. How to perform pre- and post-performance checks.

21. How to check special effects and safety devices to ensure they are in safe working order.
22. How to carry out repairs and replace consumables safely and according to approved procedures.
23. What is the correct order for powering up.
24. What are the correct procedures for powering down.
25. Why it is important to make all equipment and consumables safe and secure and where necessary, clean up any debris.
26. Why the working area should be prepared and how to deal with any problems that may occur.
27. How to provide stage electrics and effects that meet the requirements of the production.
28. What are strobes and ultra-violet sources.
29. What are the risks associated with discharging light sources.
30. What are the regulations and policies governing the use, installation and testing of such equipment.
31. How to create a plot according to the requirements of the production.
32. How to place stage electrics and effects accurately and according to the plot.
33. How to test stage electrics and effects.
34. How to record alterations to existing plot records and the importance of doing so.
35. Why rehearsing is important and how to make the best use of rehearsal opportunities.
36. What are the correct procedures for using, handling, storing and disposing of materials used in effects.
37. What are the situations in which cues would be aborted.
38. Why it is important to respond promptly to requested alterations.
39. What problems are likely to occur in achieving the plot, with whom to liaise over these and the types of solutions that may be necessary.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** the elements, meeting **all** of the performance criteria, range and underpinning knowledge **on more than one occasion.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

Candidates must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **must not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

U53802 Participate in workplace communication

Unit Descriptor: This unit describes the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

ELEMENT	PERFORMANCE CRITERIA
To be competent you must achieve the following:	
1. Gather and convey workplace information	1.1 Access relevant and up-to-date information from **appropriate sources**.
	1.2 Use effective **communication strategies** to gather and convey information.
	1.3 Use an appropriate **medium** to transfer information and ideas.
	1.4 Identify and follow lines of communication with management and colleagues.
	1.5 Define procedures for the location and **storage** of information.
	1.6 Record information according to organizational procedures.
2. Participate in workplace meetings and discussions	2.1 Make useful contributions in meetings and discussions.
	2.2 Express opinions clearly in a courteous and respectful manner.
	2.3 Participate in discussions appropriate to the purpose and proposed outcome of the meeting.
	2.4 Interpret and implement meeting outcomes.
3. Complete work related documents	3.1 Select the correct documentation and complete it accurately and legibly according to organizational requirements.
	3.2 Identify and properly correct errors on forms and documents.

RANGE STATEMENT

All range statements must be assessed:

1. Appropriate sources:

- Team members
- Suppliers
- Trade personnel
- Public sector
- Industry

2. Communication strategies:

- Questioning
- Listening
- Writing
- Non-verbal communication

3. Medium:

- Memorandum
- Circular
- Notice
- Information discussion
- Follow up or verbal instruction
- Face-to-face communication

4. Storage:

- Manual filing system
- Electronic filing system

5. Protocols:

- Organizational policies and procedures
- Legislation

6. Workplace interactions:

- Face to face
- Telephone
- ICT
- Written (electronic, memos, instructions, forms)
- Non-verbal (gestures, signals, signs, diagrams)

UNDERPINNING KNOWLEDGE AND SKILLS

You need to know and understand:

1. What are the organizational policies and procedures that relate to the communication of information.
2. How to locate, interpret and provide information in response to organizational requirements or customer requests.
3. What are appropriate sources of information.
4. What is effective communication.
5. What are the different modes of communication and how to use them.
6. What are the different communication strategies and how to use them.
7. How to communicate effectively with management, colleagues and clients to provide information and feedback.
8. How to participate in workplace meetings and discussions.
9. How to identify the purpose and proposed outcomes of a meeting and make positive contributions to achieve them.
10. How to express opinions in a clear and courteous manner.
11. How to use basic ICT resources (fax, telephone, computer).
12. What is the range of work related documentation and how this should be completed.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Candidates must prove that they can carry out **all** of the elements, meeting **all** of the performance criteria, range and underpinning knowledge on more than one occasion**.** This evidence must come from a real working environment.

(2) Methods of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be collected in a variety of ways including:

- Observation
- Written/oral questioning
- Written evidence
- Witness testimony
- Professional discussion

Questioning techniques should not require language, literacy or numeracy skills beyond those required in this unit of competency.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by a candidate working alone or as part of a team. The assessment environment should not disadvantage the candidate.

The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Simulation **should not be used**, except in exceptional circumstances where natural work evidence is unlikely to occur.

Level 2 Glossary of Terms

Assessment methods

The methods which can be used to determine competence in performance and underpinning knowledge.

Assessors

The Assessor's role is determined whether evidence presented by a candidate for assessment within the programme, meets the required standard of competence in the relevant unit or element. The Assessor needs to be competent to assess to national standards in the area under assessment.

Approved Centre

Organization/Centre approved by the TVET Council to offer full National Vocational Qualifications.

Case Studies

In situations where it is difficult for workplace assessment to take place, case studies can offer the candidate an opportunity to demonstrate potential competence.

A case study is a description of an actual or imaginary situation presented in some detail. The way the case study is presented will vary depending upon the qualification, but the most usual methods are written, taped or filmed.

The main advantage of a case study is the amount of evidence of underpinning knowledge they can generate and the specific nature of the evidence produced.

Competence

In the context of vocational qualifications, competence means: the ability to carry out prescribed activities to nationally pre-determined standards in an occupation. The definition embraces cognitive, practical and behavioural skills, underpinning knowledge and understanding and the ability to react appropriately in contingency situations.

Elements

An element is a description of an activity which a person should be able to do. It is a description of an action, behaviour or outcome which a person should be able to demonstrate.

Explanation of NVQ Levels

NVQs cover five (5) levels of competence, from entry level staff at Level 1 through to senior management at Level 5.

Level 2 Glossary of Terms

Level 1 - Entry Level

Recognizes competence in a range of varied work activities performed in a variety of contexts. Most work activities are simple and routine. Collaboration with others through work groups or teams may often be a requirement. Substantial supervision is required especially during the early months evolving into more autonomy with time.

Level 2 - Skilled Occupations:

Recognizes competence in a broad range of diverse work activities performed in a variety of contexts. Some of these may be complex and non-routine and involve some responsibility and autonomy. Collaboration with others through work groups or teams and guidance of others may be required.

Level 3 - Technician and Supervisory Occupations:

Recognizes competence in a broad range of complex, technical or professional work activities performed in a wide variety of contexts, with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and the allocation of resources are often a requirement. The individual is capable of self-directed application, exhibits problem solving, planning, designing and supervisory capabilities.

Level 4 - Technical Specialist and Middle Management Occupations:

Recognizes competence involving the application of a range of fundamental principles and complex techniques across a wide and unpredictable variety of contexts. Requires very substantial personal autonomy and often significant responsibility for the work of others, the allocation of resources, as well as personal accountability for analysis, diagnosis, design, planning, execution and evaluation.

Level 5 - Chartered, Professional and Senior Management Occupations:

Recognizes the ability to exercise personal professional responsibility for the design, development or improvement of a product, process, system or service. Recognizes technical and management competencies at the highest level and includes those who have occupied positions of the highest responsibility and made outstanding contribution to the promotion and practice of their occupation.

External Verifier

The External Verifier is trained and appointed by the TVET Council and is competent to approve and ensure an approved Centre's quality of provision.

Internal Verifier

The Internal Verifier acts in a supporting role for Assessors to ensure consistent quality of assessment and competence. They need to be competent to assess to national standards in the area under assessment.

Level 2 Glossary of Terms

NVQs

National Vocational Qualifications (NVQs) are work-based qualifications that assess an individual's competence in a work situation and certify that the individual can perform the work role to the standards expected in employment.

NVQs are based on national occupational standards of competence drawn up by standards-setting bodies known as Industry Lead Bodies. The standards describe the level and breadth of performance that is expected of persons working in the industry or sector which the NVQ covers.

NVQ Coordinator

Within each approved Centre offering NVQs, there is a centre contact who has overall responsibility for the operation and administration of the NVQ system.

Observation

Observation of the candidate carrying out his/her job in the workplace is the assessment method recommended in the vast majority of units and elements. Observation of staff carrying out their duties is something that most supervisors and managers do every day.

Performance criteria

Performance criteria indicate what is required for the successful achievement of an element. They are descriptions of what you would expect to see in competent performance.

Product of Work

This could be items produced during the normal course of work, which can be used for evidence purposes such as reports, menus, promotional literature, training plans, etc.

Questioning

Questioning is one of the most appropriate ways to collect evidence to assess a candidate's underpinning knowledge and understanding.

Questioning can also be used to assess a candidate in those areas of work listed in the range which cannot be assessed by observation. Guidance on when this assessment method can be used is given in the assessment guidance of each individual element.

Appendix 2

Level 2 Glossary of Terms

As an assessment method, questioning ensures you have all of the evidence about a candidate's performance. It also allows you to clarify situations.

Range statements

The range puts the element of competence into context. A range statement is a description of the range of situations to which an element and its performance criteria is intended to apply.

Range statements are prescriptive therefore each category must be assessed.

Role-plays

Role-plays are simulations where the candidate is asked to act out a situation in the way he/she considers "real" people would behave. By using role-play situations to assess a candidate you are able to collect evidence and make a judgment about how the candidate is most likely to perform. This may be necessary if the range specified includes a situation in which the candidate is unlikely to find himself/herself in the normal course of their work, or where the candidate needs to develop competence, before being judged competently, for example, in a disciplinary situation,

Simulations

Where possible, assessment should always be carried out by observing **natural performance** in the workplace. **Simulated performance,** however, can be used where specified to collect evidence about an aspect of the candidate's work which occurs infrequently or is potentially hazardous; for example, dealing with fires.

By designing the simulated situation, briefing the candidate and observing his/her performance, you will be able to elicit evidence which will help you judge how a candidate is **most likely** to perform in real life.

Supplementary evidence

Supplementary evidence can be used to confirm and support performance evidence. Types of supplementary evidence include witness testimonies, reports, journals or diaries, records of activities, personal statements, simulation (see note in glossary).

Underpinning knowledge

Underpinning knowledge indicates what knowledge is essential for a person to possess in order to successfully achieve an element and prove total competence.

Appendix 2

Level 2 Glossary of Terms

Units

A unit of competence describes one or more activities which form a significant part of an individual's work. Units are accredited separately but in combination can make up a vocational qualification. There are two categories of units:

Mandatory units - are core to a qualification and must to be completed.

Optional units - candidates must choose the required number of individual units, specified in the qualification structure, to achieve the qualification.

Work-based projects

Work-based projects are a useful way for you to collect evidence to support any decision you make about a candidate's performance. They are particularly appropriate in determining the level of a candidate's underpinning knowledge and understanding where it may be insufficient to rely only on questioning observation.

A project often involves the identification of a solution to a specific problem identified by you and/or the candidate (such as looking at ways to redress a recent drop in sales), or may be a structured programme of work built around a central situation or idea (such as the introduction of a new job rostering process).