



**Australian Government**

# **DEFEXO087 Assess the safety and suitability for service of explosives**

**Release: 2**

# DEFEXO087 Assess the safety and suitability for service of explosives

## Modification History

Release 2. Modifications made to Foundation Skills and Assessment Conditions.

Release 1. This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages.

This unit supersedes and is equivalent to DEFEO004 Assess the safety and suitability for service of explosive ordnance.

- Unit code updated
- Content and formatting updated to comply with the new standards
- All PC transitioned from passive to active voice
- PC 1.1 and 3.1 reworded

## Application

This unit describes the skills required to assess if the explosives will present an unacceptable hazard to the lives of Defence personnel or the public while being transported, stored or operated in a defined environment. It will also assess if explosives will function as designed and are not unacceptably degraded by the service environments encountered during the service life. It includes the requirement to identify the scope of the assessment process and to determine the requirement for any testing or trials prior to introduction into service.

The assessment is complex due to:

- scope
- degree of risk
- environmental, political, cultural and social factors that apply
- consequences of failure
- degree of control

This unit applies to those required to conduct an analysis of identified explosives for the purpose of determining their safety and suitability for service.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would make high level, fully independent judgements, applying a detailed knowledge of explosives, analysing complex data and producing specific documents detailing the outcomes of highly specialised technical functions. They would perform sophisticated tasks in highly specialised operational contexts.

No licensing, legislative or certification requirements apply to unit at the time of publication.

## Pre-requisite Unit

Not applicable.

## Competency Field

Explosive Ordnance

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### **1 Prepare for a safety and suitability for service assessment of explosives**

#### **2 Conduct explosive hazard assessment**

#### **3 Conduct explosive design assessment**

### PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- |            |   |
|------------|---|
| <b>1.1</b> | Receive and confirm assessment requirements and the agreed customer requirements              |
| <b>1.2</b> | Identify the design precedents and safety principles of the explosives                        |
| <b>1.3</b> | Identify and confirm life cycle events for the explosives                                     |
| <b>1.4</b> | Identify and define the predicted service environment for the explosives                      |
| <b>2.1</b> | Identify hazards associated with the explosives   |
| <b>2.2</b> | Evaluate hazards and determine the risk index for the explosives                              |
| <b>2.3</b> | Identify system hazards for the explosives  |
| <b>2.4</b> | Identify and record actions to eliminate or control the hazards for stakeholder consideration |
| <b>3.1</b> | Identify explosive chemistry  |
| <b>3.2</b> | Identify and assess explosive train components  |

	<b>3.3</b>	Identify and assess the environmental conditions for the explosives
	<b>3.4</b>	Evaluate the usage and disposal requirements of the explosives
<b>4 Determine the requirement of explosive trials or tests</b>	<b>4.1</b>	Determine the requirement for conduct of trials and/or evaluation of explosives
	<b>4.2</b>	Provide written instructions for trials and/or evaluation to the appropriate testing authority
	<b>4.3</b>	Conduct analysis of trials and/or evaluation outcomes
	<b>4.4</b>	Incorporate trial and/or evaluation outcomes in relevant reports and other documentation
<b>5 Report and provide guidance on explosive safety and suitability for service</b>	<b>5.1</b>	Record and report outcomes to all relevant stakeholders
	<b>5.2</b>	Finalise relevant safety and suitability for service certification and documentation

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

## Unit Mapping Information

This unit supersedes and is equivalent to DEFEO004 Assess the safety and suitability for service of explosive ordnance.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>