



**Australian Government**

# **DEFEXO088 Conduct explosive capability analysis**

**Release: 2**

# DEFEXO088 Conduct explosive capability analysis

## 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 DEFEO005 Conduct explosive ordnance capability analysis.

- Unit code updated
- Content and formatting updated to comply with the new standards
- All PC transitioned from passive to active voice
- Unit title changed to better reflect unit outcomes
- PC 1.1 and 1.2 merged
- Element 1 reworded

## Application

This unit describes the skills required to undertake a technical analysis to identify the explosive capability to satisfy a requirement. The capability analysis is a process that is undertaken because of requirements identified by the customer. It involves the requirement to analyse the operational outcomes, identify the target characteristics and detail the design specifications for explosive to satisfy the explosive capability required.

This unit applies to those required to analyse an explosive capability requirement then match the requirement to known explosives or identify the capability required.

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.

### PERFORMANCE CRITERIA

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

#### **1 Prepare for analysis**

**1.1** Identify and apply safety and security requirements

**1.2** Identify and confirm target characteristics

**1.3** Identify and confirm required explosive effects

**1.4** Seek specialist advice when issues are beyond own capability

#### **2 Analyse the data**

**2.1** Identify the purpose of the analysis

**2.2** Assemble relevant data to undertake the analysis

**2.3** Conduct research to fill information gaps as required

**2.4** Conduct analysis of data

**2.5** Draw conclusions in accordance with analysis purposes

#### **3 Develop explosive design solutions**

**3.1** Develop explosive design requirements in accordance with required effects

**3.2** Consider comparisons between requirements and known explosive characteristics

**3.3** Develop options and determine and document impacts, risks and costs

**3.4** Consult with stakeholders to ensure design meets requirements

#### **4 Produce requirement documents**

**4.1** Prepare design solutions

- 4.2** Present explosive design solutions and explain recommendations to required stakeholders
- 4.3** Finalise and distribute design solutions

## **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 DEFEO005 Conduct explosive ordnance capability analysis

## **Links**

Companion Volume implementation guides are found in VETNet -

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

# Assessment Requirements for DEFEXO088 Conduct explosive capability analysis

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## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and includes:

- applying explosive design principles
- applying weaponeering
- applying weapons design cycle
- identifying and confirming explosive effects
- interpreting and applying technical instructions

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and includes:

- in-depth knowledge of:
  - analysis and research techniques
  - characteristics and limitations of explosive
- operational knowledge of:
  - explosive chemistry, physics, materials and structures
  - theory of explosive design
  - weapons design cycle

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

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