



**Australian Government**

# **RIIBEF401E Manage non-routine and complex technical situations**

**Release: 1**

## RIIBEF401E Manage non-routine and complex technical situations

### Modification History

| Release   | Comments                                                                                                 |
|-----------|----------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0. |

### Application

This unit describes the skills and knowledge required to manage non-routine, complex technical situations in the resources and infrastructure industries.

It applies to those working in supervisory roles. They are generally responsible for the output of others, contribute to the development of technical solutions to non-routine problems and apply management plans to the workplace.

Licensing, legislative and certification requirements may apply to this unit and can vary between states, territories and industry sectors. Users must check requirements with relevant body before applying the unit.

### Elements and Performance Criteria

| ELEMENT                                           | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>  | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1. Collect and analyse information                | 1.1 Obtain, interpret and confirm work requirements<br>1.2 Access, interpret and apply documentation required to manage non-routine and complex technical situations<br>1.3 Monitor and analyse all available information according to workplace procedures<br>1.4 Assess information for relevance and applicability according to job requirements<br>1.5 Identify operational problems according to job requirements<br>1.6 Access additional sources of information if required to assist in solving the operational problem |
| 2. Identify, determine and solve complex problems | 2.1 Identify and determine problems according to workplace procedures<br>2.2 Identify a range of possible solutions to the problem according to workplace procedures                                                                                                                                                                                                                                                                                                                                                            |

| ELEMENT                                                | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        | 2.3 Communicate the nature and scope of the problem to relevant personnel<br>2.4 Determine any long term impacts of the problem<br>2.5 Determine the most appropriate action to solve the problem according to workplace procedures<br>2.6 Carry out calculations necessary to implement action if requirement and according to workplace procedures<br>2.7 Implement action to resolve the problem according to workplace procedures<br>2.8 Report the action taken to relevant personnel |
| 3. Manage non-routine and complex technical operations | 3.1 Modify own role and responsibilities to meet changing circumstances<br>3.2 Carry out work independently of management according to job requirements<br>3.3 Take responsibility for decision-making processes and quality of own work outcomes<br>3.4 Prepare detailed written reports for a range of relevant topics on activity, requirements and outcomes<br>3.5 Complete written documentation in accordance with workplace requirements and standards                              |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.*

| SKILL              | DESCRIPTION                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Writing            | <ul style="list-style-type: none"> <li>Prepares specific information that complies with a range of regulatory requirements, using sector-specific terminology</li> </ul> |
| Oral communication | <ul style="list-style-type: none"> <li>Conveys information and requirements clearly, and listens carefully</li> </ul>                                                    |
| Reading            | <ul style="list-style-type: none"> <li>Identifies and interprets relevant information from workplace procedures, documentation and regulations</li> </ul>                |
| Problem solving    | <ul style="list-style-type: none"> <li>Demonstrates an understanding of the ways in which variables impact on decision outcomes</li> </ul>                               |

## Unit Mapping Information

Supersedes and is equivalent to RIIBEF401D Manage non-routine, complex technical situations.

## Links

Companion Volume implementation guides is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

# Assessment Requirements for RIIBEF401E Manage non-routine and complex technical situations

## Modification History

| Release   | Comments                                                                                                 |
|-----------|----------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0. |

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- manage non-routine and complex technical situations on at least two occasions, including:
  - assessing and identifying potential problems and their impact through monitoring and analysing the available information
  - carrying out diagnostic activities, considering options to solve the problem and implementing action to solve complex problems
  - reviewing outcomes of problem solving activities and remedying issues prior to recommencing the same work activity
  - preparing detailed written reports on the operational outcomes that identify current and potential problems and offer possible contingencies or solutions in non-routine complex technical situations.

During the above, the candidate must:

- locate and apply relevant documentation, policies and procedures and confirm that the work activity is compliant
- implement the requirements, procedures and techniques for managing non-routine and complex technical situations
- work effectively with others to manage non-routine and complex technical situations in a way that meets all required outcomes
- communicate clearly and concisely with others to receive and clarify work instructions.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key policies, procedures and documentation required to manage non-routine and complex technical situations, including:
  - communications systems, processes and procedures

- principles and techniques for solving technical situations, including:
  - relevant mathematical applications
  - problem solving techniques and decision making
  - extensive operational knowledge
  - relevant scientific and technological principles
- principles and techniques for identifying relevant hazards and emergencies
- techniques for coordinating and communicating job activities with others.

## Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
  - personal protective equipment
  - equipment related to manage non-routine and complex technical situations
  - relevant documentation
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment\* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

## Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces

- demonstrating the performance evidence, and knowledge evidence outlined in this unit of competency, and
- the minimum years of current\*\* work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

| Industry sector                                                                              | AQF indicator level***                                                                                                                                                                                                                                                                                                         | Required assessor or industry subject matter expert experience |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure | 1                                                                                                                                                                                                                                                                                                                              | 1 year                                                         |
|                                                                                              | 2                                                                                                                                                                                                                                                                                                                              | 2 years                                                        |
| Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure | 3-6                                                                                                                                                                                                                                                                                                                            | 3 years                                                        |
| Other sectors                                                                                | Where this unit is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation. |                                                                |

\*Guidance on simulated environments has been stipulated in the Companion Volume Implementation Guide located on VETNet.

\*\*Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

\*\*\* While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

## Links

Companion Volume implementation guides is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>