



Australian Government

RIIEGS305D Navigate in remote or trackless areas

Release: 2

RIIEGS305D Navigate in remote or trackless areas

Modification History

Release	Comment
1	This unit replaces RIIEGS305B Navigate in remote or trackless areas
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to navigate in remote or trackless areas in Metalliferous mining.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare to navigate in remote or trackless areas	1.1. Access, interpret and apply navigation in remote or trackless areas documentation and ensure the work activity is compliant 1.2. Select the type of map(s) suitable for the activity 1.3. Identify possible sources of error and inaccuracies on the map 1.4. Identify symbols and information contained on the map 1.5. Identify the way in which relevant symbols and information on the map can be used in navigation
2. Use a compass	2.1. Identify the essential features of a compass 2.2. Demonstrate the manner in which a compass is used to maintain a designated course 2.3. Demonstrate how compass use reflects understanding of the

	factors that affect accuracy
3. Plan a route for remote or trackless areas	3.1. Apply symbols and information contained on the <i>map</i> to plan an efficient route/course suitable to navigation and activity-specific abilities 3.2. Obtain additional information to assist in the preparation of a navigation data sheet from the map and from other suitable sources of information 3.3. Identify potential hazards associated with navigating through adverse environmental conditions 3.4. Consider other contextual issues in the planning of a route 3.5. Prepare a navigation data sheet/route card 3.6. Identify emergency or contingency escape routes 3.7. Consider environmental impact issues in the planning of a route
4. Navigate in remote or trackless areas	4.1. Maintain orientation of map to surroundings 4.2. Identify possible sources of navigation error in specific locations 4.3. Use combined map, compass and other techniques whilst following a route in unmodified landscapes 4.4. Employ techniques for distance estimations of travel in the absence of identifying features 4.5. Maintain the designated course whilst bypassing obstacles 4.6. Maintain a course in adverse environmental conditions and/or poor visibility 4.7. Fix position accurately and regularly using a combination of appropriate navigation techniques 4.8. Select an efficient route choice for the surroundings and conditions 4.9. Employ suitable combinations of navigation techniques to fix position and identify unknown features when in unfamiliar surroundings/location

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIEGS305A Navigate in remote or trackless areas

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for RIIEGS305D Navigate in remote or trackless areas

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of navigating in remote or trackless areas including:
 - using a compass, and identifying factors that affect their accuracy
 - identifying and applying navigational symbols and information on a map
 - identifying and applying required maps to suit work activity
- identify and apply techniques for estimating distance
 - identify and apply environmental considerations
 - maintaining a compass bearing in poor visibility and/or extreme conditions
- demonstrates completion of navigating in remote and trackless areas that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - preparing a navigation data sheet/route card
 - navigating using combined map, compass and other techniques to follow the planned route
 - observing surroundings
 - fixing position accurately and regularly using appropriate navigation techniques
 - selecting an efficient route choice for the surroundings and conditions
 - employing suitable combinations of navigation techniques to fix position and identify unknown features when in unfamiliar surroundings/location

Knowledge Evidence

The candidate must demonstrate knowledge of navigating in remote or trackless areas through:

- identifying factors affecting navigation techniques in extreme environmental conditions
- identifying map types and sources of error
- identifying navigation techniques and aids
- planning and preparing navigation data sheets
- identifying route planning and issues that should be considered in extreme environmental conditions
- identifying methods for estimation of travelling times in unmodified landscape and/or difficult terrain/conditions
- identifying and applying techniques for estimating distance travelled in poor visibility
- identifying techniques to navigate around obstacles

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal	1	1 Year

Mining, Extractive (Quarrying) and Civil Construction	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 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.	

*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 frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

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