



Australian Government

RIISTD201D Read and interpret maps

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIISTD201A Read and interpret maps
2	Removed irrelevant points in Knowledge Evidence; Editorial corrections
3	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 read and interpret maps in the Resources and Infrastructure Industries.

This unit is appropriate for those working in operational roles.

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

Elements and Performance Criteria

1. Plan and prepare for navigation	1.1 Access, interpret and apply navigation documentation and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm navigation information, work requirements and travel details 1.3 Select maps, equipment and navigation aids, and check for accuracy, currency and operational effectiveness 1.4 Identify faults/errors in maps and equipment, and record, report and address issues 1.5 Establish and maintain communication plan
2. Plan the route	2.1 Assess and select route to destination, consider information from map/plan/field observations 2.2 Examine maps, and identify relevant symbols, information and navigation data 2.3 Identify and locate current position in the field, on map/plan using landmarks and key geographical features

	2.4 Identify and locate required destination on map/plan 2.5 Review the map route/plan, field observations, and local knowledge 2.6 Identify potential hazards and plan risk control measures 2.7 Measure and estimate distance to destination using map scale for selected route 2.8 Document in writing planned route on a navigation data sheet
3. Conduct navigation	3.1 Navigate planned route and schedule 3.2 Orientate the map/plan to surroundings and planned route 3.3 Use and interpret navigation aids 3.4 Navigate alternative routes to bypass obstacles and improve efficiency of route or course 3.5 Maintain clear and concise communication during navigation activity

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

RIISTD201A Read and interpret maps

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 RIISTD201D Read and interpret maps

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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 requirements, procedures and techniques for the safe, effective read and interpret map activities including:
 - applying problem solving skills to resolve issues to navigation route
 - applying mathematical skills, including: basic angles and geometry for compass bearings, estimation and measurement
- works effectively with others to undertake and complete read and interpret map activities that meets all of the required outcomes including:
 - communicating by speaking clearly and listening actively
 - demonstrating the practice of working with others to read and interpret maps
 - maintaining written records and reporting
- demonstrates completion of the reading and interpreting of maps that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - reviewing the map route/plan by identifying and using:
 - symbols
 - navigation data
 - landmarks
 - geographical features

- scale
- identifying obstacles and navigating alternative routes
- undertaking a minimum 2 km navigation following established route
- traversing a 2 km route to specified destination
- orienting the map to ground and surrounds
- documenting the navigation route and details on the navigational data sheet
- communicating the planned navigation route to others

Knowledge Evidence

The candidate must demonstrate knowledge of reading and interpreting maps through:

- identifying fatigue management techniques
- identifying and using various types of communication systems and equipment
- engaging map reading and road navigation techniques
- identifying and interpreting types of maps, charts and scales and their uses
- determining representation of topographic features on maps and plans
- determining common scales used on maps and plans
- identifying and using features and use of a compass and factors that affect compass accuracy
- identifying the applications of a GPS
- advantages and disadvantages of different map and chart types and sources of error
- techniques for estimating distance travelled

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 is best assessed in the context of this sector's work environment;
- where personal safety or environmental damage are limiting factors, assessment may occur in a simulated 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; 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 Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	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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