



**Australian Government**

# **TLILIC0001 Licence to transport dangerous goods by road**

**Release: 1**

# **TLILIC0001 Licence to transport dangerous goods by road**

## **Modification History**

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

## **Application**

This unit involves the skills and knowledge required to obtain a dangerous goods (DG) driver licence to transport DG by road.

The unit covers compliance with regulatory requirements but does not address all the skills and knowledge for the transportation of DG. On achieving this unit and obtaining a licence, further industry specific training will be required to satisfy legislative requirements to transport DG.

The primary legislative requirement applicable to this unit of competency is the Model Subordinate Law on the Transport of Dangerous Goods by Road or Rail, which is reflected in state/territory legislation.

This law, in relation to the safe transport of DG, references the current version of the Australian Dangerous Goods (ADG) Code, the Model Act on the Transport of Dangerous Goods by Road and Rail, relevant Australian Standards (AS) and relevant work health and safety (WHS)/occupational health and safety (OHS) legislation including licensing and assessment requirements.

Achieving this unit of competency is a necessary requirement for obtaining a licence. However, it is only one of several criteria for obtaining a DG driver licence. More information can be sourced from the regulator in each jurisdiction regarding other criteria that apply, which can vary between states and territories. Compliance with these requirements may be required nationally and/or in specific jurisdictions.

## **Pre-requisite Unit**

Not applicable.

## **Competency Field**

LIC – Licensing

## **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.

|                                                                                                                                   |     |                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Identify individual organisations and systems for the transport of dangerous goods</b>                                       | 1.1 | Responsibilities and duties for the transport of DG are clearly outlined                                                                                      |
|                                                                                                                                   | 1.2 | Systems, organisations, and people who impact on the transport of DG are identified                                                                           |
| <b>2 Identify UN numbers, classes and divisions of dangerous goods including packing groups and categories of dangerous goods</b> | 2.1 | Proper shipping names and other relevant information from the DG Lists are identified                                                                         |
|                                                                                                                                   | 2.2 | UN class and division labels for DG are determined in accordance with the ADG Code and regulatory requirements                                                |
|                                                                                                                                   | 2.3 | Packing groups and categories for DG are identified and confirmed as required                                                                                 |
|                                                                                                                                   | 2.4 | DG List is used to identify packing instructions and special provisions                                                                                       |
|                                                                                                                                   | 2.5 | Goods that are too dangerous to transport are identified                                                                                                      |
|                                                                                                                                   | 2.6 | Hazards of commonly transported DG are identified                                                                                                             |
|                                                                                                                                   | 2.7 | Placard loads are determined from ADG Code criteria and regulatory requirements for the transport of placard loads are identified                             |
| <b>3 Maintain dangerous goods documentation</b>                                                                                   | 3.1 | Transport documentation is completed accurately and is amended as required in accordance with the ADG Code, regulatory requirements and enterprise procedures |
|                                                                                                                                   | 3.2 | Requirements for the correct placement of transport documentation in the cabin are explained                                                                  |
| <b>4 Plan and manage safe transport of dangerous goods</b>                                                                        | 4.1 | Regulatory requirements for carrying passengers while transporting DG are identified                                                                          |
|                                                                                                                                   | 4.2 | Prohibited practices and the carrying of prohibited objects during transport are identified                                                                   |
|                                                                                                                                   | 4.3 | Regulatory requirements for planning routes covering driving, parking, loading and unloading, uncoupling and/or securing the vehicle are explained            |

- |                                                                                   |     |                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   | 4.4 | Transport routes are checked to ensure prohibited areas are avoided and restricted routes are identified                                                                                       |
|                                                                                   | 4.5 | Regulatory requirements for transporting empty or nominally empty DG packaging are identified in accordance with the ADG Code                                                                  |
|                                                                                   | 4.6 | Regulatory requirements and driver role in vehicle breakdown situations are appropriately identified                                                                                           |
| <b>5 Check all safety equipment and its serviceability</b>                        | 5.1 | Safety equipment, including personal protective equipment (PPE), is determined and selected in accordance with the type of DG being transported, the ADG Code and regulatory requirements      |
|                                                                                   | 5.2 | Suitability and serviceability of all safety equipment, including PPE, is identified                                                                                                           |
| <b>6 Check vehicle and assess suitability of transport mode for intended load</b> | 6.1 | Suitability of the vehicle to carry DG is assessed                                                                                                                                             |
|                                                                                   | 6.2 | Suitability of DG packaging is checked to ensure it is fit for purpose                                                                                                                         |
|                                                                                   | 6.3 | Ullage in large compartments is assessed for compliance with the ADG Code                                                                                                                      |
|                                                                                   | 6.4 | Transport documentation is checked to ensure DG markings and vehicle placards are consistent with the load being carried, are legible and are clearly visible, in compliance with the ADG Code |
|                                                                                   | 6.5 | DG loads are checked for compatibility and segregation in accordance with regulatory requirements                                                                                              |
|                                                                                   | 6.6 | Load restraint methods and equipment for transporting DG are identified in accordance with the ADG Code and the National Transport Commission (NTC) Load Restraint Guide                       |
|                                                                                   | 6.7 | Special transport operations are checked in accordance with the ADG Code                                                                                                                       |
| <b>7 Follow emergency procedures</b>                                              | 7.1 | HAZCHEM codes are explained and assigned for a range of DG loads                                                                                                                               |
|                                                                                   | 7.2 | Emergency information required for types of DG being transported is appropriately identified and provided to relevant personnel and emergency services as requested                            |
|                                                                                   | 7.3 | Driver role and obligations in an emergency situation are identified within a Transport Emergency Response Plan                                                                                |

(TERP) and any equipment for containment, clean up or recovery is identified within the plan

**8 Plan, control and manage transfer of dangerous goods**

- 8.1 Positioning of vehicle for DG bulk transfer is planned in accordance with the ADG Code
- 8.2 Suitable safety measures for the transfer of all classes DG being transferred are identified in accordance with the ADG Code
- 8.3 Appropriate transfer equipment is selected for the task and adequate lighting levels are provided in accordance with the ADG Code
- 8.4 Responsibilities of driver during transfer of DG are identified in accordance with the ADG Code
- 8.5 Emergency procedures, in a spill or leak incident, during transfer, are identified and implemented in accordance with the ADG Code
- 8.6 Hoses used to transfer DG are appropriately identified, tested and used in accordance with the ADG Code

## 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 can be found in the Companion Volume Implementation Guide.

## Unit Mapping Information

This unit replaces but is **not** equivalent to TLILIC3013A Preparation to transport dangerous goods by road.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

# Assessment Requirements for TLILIC0001 Licence to transport dangerous goods by road

## Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

## 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 include:

- assessing ullage compliance with the Australian Dangerous Goods (ADG) Code
- assigning HAZCHEM codes for a range of dangerous goods (DG) loads
- checking and amending DG transport documentation
- checking transport routes for suitability using a variety of methods
- completing and amending appropriate documentation as required
- determining proper shipping names for UN numbers
- determining the correct vehicle placarding for co-transport of multiple consignments identified by transport documents
- identifying and deciding what combination of DG labels and emergency information panels (EIPs) is required
- identifying packing groups and implications for transport of DG
- identifying required information on an emergency procedure guide
- identifying the primary hazards for common substances
- **identifying UN numbers, UN classes and divisions of DG including packing groups and categories**
- interpreting the meaning of a range of HAZCHEM codes
- locating information within the ADG Code and National Transport Commission (NTC) Load Restraint Guide
- locating regulatory procedure for carrying passengers
- locating the special provisions and associated instructions in the DG List
- making decisions about suitability to drive vehicle
- matching the primary hazard with the appropriate Class or Division
- selecting appropriate segregation method for incompatible DG
- selecting safety equipment effectively and in accordance with regulatory requirements
- stating the threshold for different Classes/Divisions of DG at which vehicle placarding, emergency procedures guide (EPGs), segregation, load restraint and Transport Emergency Response Plan (TERP) becomes mandatory
- using the ADG Code to identify compatible and incompatible combinations of goods
- using the DG List.

## 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 include knowledge of:

- ADG code requirements for transporting nominally empty DG packaging
- appropriate communications strategies and equipment
- appropriate placarding of vehicles – rigids, combinations, tankers, freight containers, packaged plus placardable units, import/export markings, International Maritime Dangerous Goods (IMDG) Code
- appropriate ullage in large compartment tanks as per the ADG code
- common terms for transporting DG by road
- damaged and defective packages
- definitions for classifying a packaging as an IBC or pressure vessel or multiple element gas container (MEGC) or portable tank or road tanker or bulk container or freight container
- DG identification and classification
- differentiating and following the rules for empty containers
- driver, employer (prime contractor) and members' of the organisations responsibilities when transporting DG by road including:
  - DG transfer activities
  - TERP
  - vehicle breakdowns
- empty containers
- format for proper shipping names
- hose maintenance and testing
- how to access information from a compliance plate from an intermediate bulk container (IBC), portable tank and freight container for identification
- how to assess operational suitability of equipment and vehicles for DG transportation
- how to assess suitability and serviceability of safety equipment including personal protective equipment (PPE)
- how to assess suitability of lighting levels
- how to compare a new package to a damaged package and how to decide on what action to take
- how to determine the placard load level for mixed class loads of DG
- how to identify hazards and how to plan work to minimise risks when transporting DG
- how to identify other persons, organisations and systems involved in the transport of DG by road
- how to identify the common responsibilities drivers share with consignors
- how to identify the regulatory requirements that apply to the transport of placard loads

- how to identify the vehicle placarding threshold for each Class/Division of DG
- how to recognise UN packaging specification
- how to report accidents, incidents or potential difficulties promptly, in accordance with legislation
- how to select appropriate equipment and work systems to enable safe, efficient work
- how to undertake hose assessment, maintenance and testing activities
- load restraint methods for transporting DG
- methods for bulk transfer
- methods of segregation – vehicles, cargo transport units and segregation devices
- methods to select suitable vehicle:
  - as a road vehicle to transport a freight container, portable tank or bulk; container fitted with corner castings – fitted with twist locks or other equipment for securing
  - as a road vehicle to transport a demountable tank or bulk container without corner castings and fitted with devices to secure the container
  - as a tank vehicle (in accordance with the relevant Section of the ADG Code)
  - for transporting goods
  - that it is clean
  - that is free of any defect that is likely to create a risk in transporting goods
- overpacks and how they are used
- primary hazards with Class or Division
- prohibited practices and objects
- rationale for correct vehicle positioning
- rationale for placing transport documentation in the cabin
- regulatory procedures for:
  - driving
  - loading
  - parking
  - planning routes
  - securing vehicle
  - uncoupling
  - unloading
- regulatory procedures for carrying passengers
- relevant emergency information procedures in an accident or incident
- relevant personnel and emergency services
- relevant safety equipment and PPE
- requirements of each individual and organisation to carry out their tasks safely
- role and function of a TERP
- role and purpose of DG transport documentation
- role and purpose of packing groups
- role and responsibilities of each member in the system and organisations related to transporting DG
- role, format and function of HAZCHEM codes

- role, purpose and location of DG Lists including special provisions and instructions it contains
- role, serviceability and use of safety equipment when transporting DG
- role, types and formats of transport documentation requirements as required by regulators
- segregation principles based on Class/ Division
- special segregation provisions
- special transport considerations, including:
  - decontamination of freight containers, prior to removal of placarding for Div. 6.1
  - dry conditions (i.e. exclusion of water) for Div. 4
  - temperature control in refrigerated units for Div. 4.1/5.2
  - ventilation of cargo transport units for Div. 2.1/2.3
- transfer activities, hazards and related emergency procedures
- transport routes, including prohibited areas and restricted routes
- types and functions of safety measures for transferring DG
- types of load restraint equipment
- types of transfer equipment
- UN Classes
- UN Division labels and their use
- where to locate specific load restraint information.

## Assessment Conditions

### Assessors

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment and:

- have at least 5 years relevant DG industry and operational experience or Competent Authority (i.e. the regulator for transporting DG) agreed relevant transport training experience
- meet any additional mandatory skills or qualifications required by the Competent Authority
- pass an assessment test approved by the Competent Authority.

### Assessment

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur through suitable scenarios and where possible, simulated workplace operational situations that replicate 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 include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- Mandatory Assessment Instrument (MAI)
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

### **Mandated Assessment Instrument**

Registered Training Organisations must contact their Competent Authority to obtain a copy of the MAI.

The assessor must use the MAI to conduct the summative competency assessment.

The MAI must be used in accordance with its directions as specified.

Evidence of competence is established using the MAI, which involves responses to questions about knowledge and an assessment of responses to practical scenario-based problems.

### **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>