

Australian Government

Department of Defence

LAND VEHICLE OPERATING MANUAL

The Land Vehicle Operating Manual is issued for use by Defence Personnel, Defence Contractors, Defence Civilians, Defence Agencies and visiting Forces Defence vehicles involved in operation of any Defence vehicle and on behalf of Defence and is effective from the date of publication.

All Defence information, whether classified or not, is protected from unauthorised disclosure under the Crimes Act 1914¹, Defence information may only be released in accordance with the Defence Security Principles Framework² as appropriate.

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Cancellation:

Defence Road Transport Manual Ed 3, 2020

Standing Orders for Vehicle Operators 2020 Volume 1 – A Vehicles

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Standing Orders for Vehicle Operators 2011 Volume 3 – C and D Vehicles

Standing Orders for Vehicle Operators 2018 Volume 5 – Special Operations Vehicles

Developer:

Defence Land Vehicle Operations Cell

¹ https://www.legislation.gov.au/Series/C1914A00012

² http://drnet/AssociateSecretary/security/policy/Pages/dspf.aspx

AMENDMENTS

The LVOM is a 'live document' and is not subject to a formal annual review. Amendments are initiated by Services, Groups or Agencies involved in Land Vehicle Operations IAW with the process detailed in Part 1 to this manual. The Land Vehicle Operations Cell (LVOC) will conduct an annual internal review of the LVOM to ensure adherence to legislative changes or internal Defence Policy amendments. Approved changes will be detailed in the table below.

2024 Quarter Two Amendments

Amendment number	Amendment	Paragraph number	Amendment level	Effective date
AL19	Telematics breach reporting	Part 2.2.39	Level 1	06 Sep 24
AL31	Civilians contracted by Defence to deliver driver training to hold Defence drivers licence	Part 4.1.19	Level 2	06 Sep 24
AL35	Restrictions on the conduct of an integrated display	Part 6.2.7	Level 3	06 Sep 24
AL36	Annex 5.2 Interim operator instructions		Level 2	06 Sep 24
AL37	G Wagon SRV Operation	Part 7 Annex 7.2B	Level 2	06 Sep 24
AL39	Short notice waiver for training	Part 4.3.23	Level 2	06 Sep 24
AL41	Electric vehicles	Part 3 Annex 3.2D	Level 4	06 Sep 24
AL42	Private use of a Defence Land Vehicle	Part 6.1.5	Level 3	06 Sep 24

LAND VEHICLE OPERATING MANUAL

PART 1 – DOCUMENT

CHAPTER 1 – APPLICABILITY AND ENFOREABILITY

- 1.1.1. The Land Vehicle Operating Manual (LVOM) supports the Land Movement and Transport Regulations (LMTR) as defined within the Defence Landworthiness Management System Manual (DLMSM). The Chief of Army, as the appointed Defence Landworthiness Authority, has authorised the release of the LVOM with the Director General Logistics Army (DGLOG-A) as the appointed Officer responsible for the management, including amendments, to the LVOM.
- 1.1.2. As the DLMSM has established the mandated, enterprise-wide system of controls for the management of risks to support Land Capability, the LVOM forms part of the regulatory framework system. Additionally, the LVOM provides the means of compliance against Landworthiness requirements and statutory obligations aligned to Defence Land Vehicle operations within Australia.
- 1.1.3. Through the alignment of the LVOM to the DLMSM, the mandatory requirements of this manual constitute a general order to Defence Members and Defence Civilians for the purposes of the *Defence Force Discipline Act 1982* (DFDA). Non-compliance with any mandatory requirement may result in disciplinary action being taken in accordance with the DFDA. In addition, the mandatory requirements of this manual are also intended to have effect as a lawful and reasonable direction to Defence Employees by the Secretary for the purpose of section 13(5) of the *Public Service Act 1999* (section 13(5) forms part of the APS Code of Conduct). As a result, non-compliance by Defence Employees with any mandatory requirement in this manual may be referred for investigation and possible sanction in accordance with the *Public Service Act 1999*. This manual also provides that, Defence Personnel who award or manage contracts must include the requirement that Outsourced Service Providers must comply with the mandatory requirements of the manual in the terms of the contract, where the manual is directly relevant to the work the Outsourced Service Provider is performing in Defence. Failure by an Outsourced Service Provider to comply with the mandatory requirements of this manual may result in a breach of contract.

DOCUMENT PURPOSE

- 1.1.4. This manual sets out how Defence applies and adheres to the Principles of Defence Landworthiness Management System. Individual Parts of the LVOM will provide the 'how' Defence adheres to the Landworthiness Regulations as detailed within the Landworthiness Policy. Personnel must reference the relevant technical user handbook in conjunction with this manual for specific vehicle technical requirements.
- 1.1.5. This manual does not bind operations conducted outside of Australia, not including external Australian territories; however, Operational Commanders are recommended to use this manual as a basis of risk acceptance. Variances in Land Vehicle Operations within a tactical training environment within Australia and Domestic Operations are contained in each part.
- 1.1.6. The Australian Defence Road Transport Exemption Framework (ADFRTEF) supports this manual. The ADFRTEF provides nationally recognised exemptions relating to the use of Defence Vehicles on the Public Road network. The exemptions are applicable to Defence in the conduct of administrative, maintenance, training and tactical tasks.

- 1.1.7. Defence vehicles are allocated to specific categories for the purposes of training, licensing, governance and Command and Control. The governance framework for each vehicle category is outlined in Part 2 to this manual. The definition of Vehicle Categories is contained within the glossary to this manual.
- 1.1.8. The generic parts of this document are categorised into:

a. Part 2 – Land Vehicle Operating System

- (1) Chapter 1 Policy
- (2) Chapter 2 Compliance and Assurance
- (3) Chapter 3 Training
- (4) Chapter 4 Security of Land Vehicles.

b. Part 3 - Safety

- (1) Chapter 1 Accidents and Incidents
- (2) Chapter 2 Vehicle Safety
- (3) Chapter 3 Fatigue management
- (4) Chapter 4 Equipment
- (5) Chapter 5 Guiding of Vehicles
- (6) Chapter 6 Water Operations
- (7) Chapter 7 Vehicle Occupant Extraction.

c. Part 4 – Training and Licencing

- (1) Chapter 1 Licencing
- (2) Chapter 2 Selection of Personnel
- (3) Chapter 3 Responsibilities
- (4) Chapter 4 Administration.

d. Part 5 – Logistic Administration

- (1) Chapter 1 Convoy operations
- (2) Chapter 2 Maintenance
- (3) Chapter 3 Fuel
- (4) Chapter 4 Documentation
- (5) Chapter 5 Placarding and Marking
- (6) Chapter 6 Movement by Road, Sea or Air.

e. Part 6 - Use of Defence Vehicles

- (1) Chapter 1 General
- (2) Chapter 2 Vehicle Displays
- (3) Chapter 3 Movement of Personnel
- (4) Chapter 4 DACC
- (5) Chapter 5 Carriage of Vehicles/Cargo.

f. Part 7 – Public Road Use

- (1) Chapter 1 General Requirements
- (2) Chapter 2 Oversize/ Overmass Land Vehicle Public Road Access.

g. Part 8 – Glossary

- (1) Definitions
- (2) Acronym
- (3) Links.

EVALUATION AND REVIEW

- 1.1.9. The LVOM is a 'live document' and is not subject to a formal annual review. Amendments are initiated by Services, Groups or Agencies involved in Land Vehicle Operations using the following process:
- a. Unit identifies an update to policy or improvement to process. Unit sends submission via email along with supporting evidence to Formation Headquarters
- b. The Formation Headquarters reviews and endorses the submission prior to sending to the Land Vehicle Operation Cell (LVOC)
- c. The LVOC will conduct a quarterly review of all amendments and if supported, action in accordance with paragraph 1.1.10.
- 1.1.10. Formation headquarters will be informed if submissions are not supported with justification. Supported submissions will be included in the quarterly updates and within the LVOM Amendments table in Part 1 to this manual.
- 1.1.11. Submissions are to be emailed to lvom.review@defence.gov.au
- 1.1.12. The LVOC will conduct an annual internal review of the LVOM to ensure adherence to Legislative changes or internal Defence Policy amendments. AHQ will approve the changes and promulgate to all Services/ Groups or Agency.
- 1.1.13. Amendments to the LVOM are facilitated through the LVOC and under following levels:
- a. Level 1 Land Vehicle Operations Cell. This level provides approval for basic typographical and grammatical errors, updating of referencing and technical information arising from internal reviews. These changes do not require endorsement from Content or Capability Managers

- b. Level 2 Capability or Content Managers. This level provides ability to update relevant parts of the LVOM resulting from modernisation activities, including training or new capability. This level requires Capability Manager endorsement with engagement from Services/Groups that are affected by the change
- c. Level 3 Policy Managers. This level provides the ability to update the LVOM resulting from Defence policy and civilian legislation updates. These changes do not require endorsement from Content or Capability Managers
- d. **Level 4 Director General Landworthiness (DGLw).** This level provides ability to update the LVOM resulting from trend analysis from vehicle accidents or industry safety standards. This level only requires endorsement from DGLOG-A, with notification to Capability and Content Managers.

LAND VEHICLE OPERATING MANUAL

PART 7 – PUBLIC ROAD USE

CHAPTER 1

GENERAL REQUIREMENTS

7.1.1. Defence vehicles must operate IAW relevant State/ Territory road legislation when operating on public roads. Where Defence Land Vehicles are operating inside designated Defence Training Areas (DTA), State and Territory road transport legislation does not apply. Defence has a responsibility to ensure that all due care for Defence Personnel and public safety has been taken into account. Public Roads may form part of a Defence Training Area; therefore, these areas must be clearly defined and marked to ensure public awareness of Defence vehicles operating tactically. Commanders and Managers must be aware of the range orders relevant to their area of operations and ensure speed, route and general vehicle operating restrictions are adhered too.

Exemptions against legislation

- 7.1.2. Australian Defence Force Road Transport Exemption Framework (ADFRTEF). The ADF is afforded certain legislative exemptions against civilian road law. These exemptions are found within the <u>ADFRTEF</u>. Drivers operating Defence Land Vehicles must carry a copy of the ADFRTEF. This can be either physical or electronic to ensure coverage by road authorities of the approved legislative exemptions afforded to Defence.
- 7.1.3. When requested by an authorised officer of a State or Territory road transport authority or a police officer, a driver/ operator or commander must produce the copy of the framework, and/ or State/Territory or NHVR issued permit.

Weighbridges

- 7.1.4. All personnel within the Chain of Responsibility (CoR) have an obligation to ensure the vehicle masses are within approved NHVR or State/ Territory issued instruments. To support this obligation, all major Defence bases have approved weighbridges. Additionally, specific units that have an entitlement to the L121 Medium Heavy Capability have been issued portable weigh scales.
- 7.1.5. Formation and Unit Commanders can waive the need to weigh each vehicle individually, when the vehicle is carrying a known load (load list) with a calculated mass and previous weigh dockets have been produced indicating compliance. It is highly recommended that when units are exiting an exercise area the vehicles are weighed in the event a vehicle load/ configuration has changed during the exercise period.
- 7.1.6. Once a vehicle has been weighed, the docket must be scanned and archived within the unit's objective structure IAW Part 5 to this manual. The driver/ operator retains the right to weigh their vehicle if there is doubt in the load configuration prior to operating on public roads.
- 7.1.7. There is no legislative requirement to weigh a vehicle when operating within a Defence establishment or training area. The responsibility remains with the Command Chain to ensure manufacturer's axle limitations are not exceeded.

Complete Equipment Schedule

- 7.1.8. Where issued Land Vehicles must carry their Complete Equipment Schedule (CES) as defined on the LEA Tech Data webpage. Where there is a known deficiency, this must be recorded via the Form SD016 Loss and Damage Report. Where there is a deficiency in wheel changing equipment, the vehicle must not undertake single vehicle movement on public roads.
- 7.1.9. **First aid kits**. In preparation for CL vehicle movement on public roads, it is strongly recommended that CL vehicles are fitted with a first aid kit. In preparation for movement of all other Land Vehicles on public roads, a driver/ operator must ensure that the vehicle first aid kit equipped with the following items:
- a. appropriate PPE such as non-surgical, disposable, nitrile gloves
- b. if any items have been used, identified as unsuitable or have expired use by dates, they must be replaced immediately via the supply chain.
- 7.1.10. **Fire extinguishers.** It is recommended that CL vehicles are provided with a fire extinguisher. The fire extinguisher is to be mounted within an approved bracket. All other Land Vehicles are to have a serviceable fire extinguisher mounted within the vehicle at all times.
- 7.1.11. **Hi-Vis vest**. During tasks, drivers may be required to halt their vehicle close to the roadway to re-adjust loads or assist with road accidents / incidents. Additionally, vehicle related tasks might be conducted at night, when visibility is reduced; it is highly recommended that 'high vis' vests be provided to the vehicle occupants for administrative movement. This will provide the members with an enhanced safety measure when conducting roadside activities e.g. tyre changing or traffic control on a public road.
- 7.1.12. When Defence Land Vehicles are operated as Pilot, Variable Message Board or a Safety Vehicle, the vehicle occupants are to be provided with a Hi-Vis vest.

Land Vehicles operating under an Australian Design Rule (ADR) exemption on public roads

7.1.13. Defence Land Vehicles that do not meet relevant vehicle ADRs may be required, at times, to operate on public roads. The relevant vehicle capability manager is responsible to ensure an approved exemption is reflected within the vehicles safety case report. The use of a Safety Vehicle has been endorsed with procedures detailed within this Part.

Armoured Fighting Vehicles

7.1.14. The use and movement of Armoured Fighting Vehicles (AFV) on public roads are further detailed within Annex 7.1A to this chapter.

Surveillance and Reconnaissance Vehicles

7.1.15. The use and movement of Surveillance and Reconnaissance Vehicles (SRV) on public roads is further detailed within Annex 7.1B to this chapter.

Plant and Materiel Handling Equipment

- 7.1.16. Plant and Materiel Handling Equipment (MHE) must only be operated on public roads where designed and authorised to do so. Where there is a requirement to operate on a public road, this can be done under the following conditions:
- a. personnel must hold the relevant licence applicable to the vehicle type
- b. when operators are involved in the conduct of driver training an appropriate warning vehicle is to be situated front and rear of the plant or MHE
- c. all attachments are secured in either:
 - (1) a vertical or near vertical position
 - (2) in a cage or other protective device
 - (3) removed from the machine.
- d. Where the equipment is classified OSOM IAW Annex 7.2D, the operator must adhere to the requirements detailed within this chapter.

Safety Vehicle

- 7.1.17. A safety vehicle is employed to assist movement of a Defence Land Vehicle where that vehicle is not fitted with lights that meet the Australian Light Vehicle Standards Rules 2015, or Heavy Vehicle National Regulations. A safety vehicle can be instigated as a risk control measure for a specific platform on endorsement from the Capability Manager through the RODUM process.
- 7.1.18. When a safety vehicle is employed, it is recommended that at least one passenger accompanies the driver. If there is a requirement for the safety vehicle to stop and provide warning to other road users, e.g. in the case the primary Defence Land Vehicle breaks down on or adjacent to the road, the passenger on direction by the senior Defence person, can exit the vehicle and move rearward of the safety vehicle. The passenger is to wear a hi-visibility vest and ensure they remain clear of the traffic and conduct a visual signal to indicate to drivers to slow down.

Communications

- 7.1.19. Commanders and managers are to ensure means of communications are available within each vehicle of a packet or convoy when operating on public roads. It is recommended the Primary, Alternate, Contingency and Emergency (PACE) contained within the ADF Joint Doctrine <u>ADF-I-4 Logistics Support</u> to Operations is used.
- 7.1.20. When quantities of communication equipment are limited and devices cannot be allocated to every vehicle, as a minimum, lead and last vehicle in the packets or convoys should be issued communications equipment to maintain control and safety.

Recovery Vehicles

7.1.21. Recovery of Defence Land Vehicles using the 45M and 42M Recovery Vehicles is limited to the use of the Heavy Equipment Trailer.

ARMOURED FIGHTING VEHICLE MOVEMENT ON PUBLIC ROADS

1. The content of this Annex is for Defence use only.

G WAGON SURVEILLANCE AND RECONNAISSANCE VEHICLE MOVEMENT ON PUBLIC ROADS

7.1.1. The content of this Annex is for Defence use only.

PART 7 – PUBLIC ROAD USE

CHAPTER 2

OVERSIZE/ OVERMASS LAND VEHICLE PUBLIC ROAD ACCESS

- 7.2.1. The ADFRTEF provides legislative road law exemptions; it does not provide a complete approved network for ADF OSOM vehicles. Road manager consent and authority to operate on public roads is facilitated through the instruments endorsed by the NHVR. Where a state or territory does not fall under the NHVR, approval is provided through that state or territory authority. Any deviation from this must be supported through a state/territory or NHVR issued instrument. Details of these instruments can be found in Annex 7.2A
- 7.2.2. Where there is additional network access required or a new OSOM vehicle is introduced into service then amendment to an existing or the acquisition of a new State/Territory OSOM instrument must occur. This is executed by following the process detailed in Annex 7.2B.
- 7.2.3. Visiting Forces that operate Land Vehicles in Australia are bound by the same requirements as the ADF to gain State/Territory or NHVR OSOM instruments. The required procedures and timeframes for Visiting Forces are detailed in Annex 7.2C.
- 7.2.4. ADF vehicles that exceed statutory mass and dimension limits are therefore categorised as OSOM, as detailed in Annex 7.2D.
- 7.2.5. Adherence to the approved networks by NHVR State/Territory issued OSOM instruments must be maintained. The failure to adhere to these networks and the supporting conditions imposed by road managers, could lead to civil or Defence prosecution. This forms part of Defences CoR requirements.
- 7.2.6. There is no requirement to gain approval from the state or territory authority when operating fully within a Defence establishment or DTA. It is the responsibility of the commander to ensure vehicles are operated in accordance with manufacturer's specifications. When departing the Defence establishment or DTA and entering public roads, vehicles must be operated IAW NHVR or state /territory issued instruments.
- 7.2.7. Where units are operating within a training area, such non-Defence training areas or national parks, and there are public or private roads, access must be authorised by an NHVR State or Territory issued instruments.
- 7.2.8. The equipment must be driven within the authorised posted speed limit. Drivers/ operators must consider manufacturers specifications, road/ weather conditions and traffic conditions when driving on public roads.
- 7.2.9. **Defence Assistance to Civil Community (DACC).** Prior to the ADF gaining emergency access for OSOM vehicles, the Federal, State or Territory Emergency Management Board must declare an emergency. When OSOM vehicles are used in support of declared emergencies as a DACC operation access is managed through collaborative engagement between Joint Operations Command, relevant Joint Task Force HQ and the LVOC.
- 7.2.10. When the ADF has an incident that requires OSOM vehicle access and this is not supported by extant approved networks, this is managed exclusively between the relevant Service HQ and the LVOC.

7.2.11. When operating a Defence OSOM Land Vehicle under an issued State/Territory or NHVR instrument, the driver must carry a copy in the vehicle. This can be a physical or electronic copy.

Pilot and Warning Vehicles

- 7.2.12. Defence uses a multitude of vehicles to adhere to State/Territory Road Managers travel conditions as detailed in a NHVR state/ territory issued instrument. These vehicles are defined as:
- a. **Pilot vehicle**. A vehicle that is fitted with a Pilot Vehicle Kit (PVK) meeting the requirements detailed within the ADFRTEF. This vehicle is to be operated by an appropriately qualified person in both vehicle operation and Defence piloting training requirements. This vehicle is used to warn other road users of an oversize vehicle, but is not authorised to control traffic.
- b. **Warning Vehicle.** A Warning Vehicle provides notification to other road users of an OSOM vehicle that has travel restriction imposed that may cause a hazard. Additional requirements for the operation of Warning Vehicles can be found within this Part. There are two configurations for a warning vehicle and they are defined as:
 - (1) Vehicle fitted with Variable Message Board (VMB). A VMB is an illuminated sign with programmable text, and is fixed to a vehicle that alerts other road users to the presence of an OSOM vehicle that has a lane or speed restriction placed on it. A VMB is predominantly fitted to a tray type vehicle up to and including Light Rigid.
 - (2) **Vehicle fitted with rotating amber light.** This vehicle provides support to the vehicle fitted with VMB to ensure safe passage across structures. This can be any vehicle up to and including Light Rigid.
- c. **Safety vehicle**. As defined in Chapter 1 to this Part.
- 7.2.13. **Communication**. Oversize vehicles are required to have radio communication when moving on public roads unless the vehicle comes under an exemption within the ADFRTEF.

INSTRUMENTS

1.	The content of this Annex is TBI during the quarter one 2025 LVOM amendment
review.	

PERMIT APPLICATION PROCESS - ADF VEHICLES

priorities accordingly

1. All Defence permit applications are prioritised IAW Table 1.

Table 1

Priority 2 Priority 1 2.A. DACC 1 1.A. Operations 2.B. Strategic Level exercise e.g. EX Talisman 1.B. HADR sabre/Hamel or Pitch Back 1.C. DACC Level 2 and 3 2.C. International forces 1.D. Training supporting IET/RMC Priority 3 Priority 4 3.A. Formation/Functional command e.g. 4.A. Unit level activities e.g. 1 Bde predator 4.B. DACC level 4, 5 and 6 (including DFR) All request are actioned as received in line with these priorities, this may result in the failure to meet other requests deadlines where higher priories are submitted. End users must be prepared for this possibility. Priority 1A, 1B and 1C requests must by directed by task order. Priority 1D are only considered to achieve to training outcomes, and without would result in

2. The permit application process, Figure 1, outlines the process and timeframes for each permit application, excluding emergency and operational, these timeframes can fluctuate depending on existing workloads within NHVR, and competing priorities within Defence.

Priority 2A. LVOC will engage with JTF to assess likelihood of increase to DACC 2 and

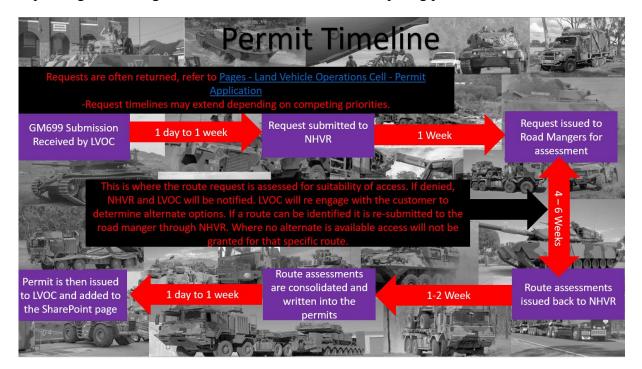


Figure 1

- 3. Additional information on the, prioritisation, timelines and application process is available on the LVOC SharePoint page.
- 4. Where there is no approved route within the ADFRTEF, an issued State/Territory or NHVR permit, or a relevant gazette notice published by the NHVR. Services, Formations or Units must follow the below procedure:

Serial	Event	Weeks before requested date
1	Determine route required and vehicles needed to align to Task Order or Directed Training outcome	12
2	Conduct review of approved networks to analyse gap requirement needing permit submission	11
3	Conduct reconnaissance of the requested route to ensure suitability against the requested platform(s). This can be done either physically or through utilisation of the NHVR Journey Planner within the 'Layers' tab.	10
4	Construct route required through utilisation of the NHVR Journey Planner under the 'Plan' tab to bridge gap between current approved route or complete new route requirement	10
5	Compilation and submission of a GM699, ensuring all data inputs are completed to the roadtransport.permits@defence.gov.au	8
6	Receive updated permit indicating inclusion of requested route	1
7	Access to required public road	Task commencement

5. If there is any doubt on the above steps or detail/ process required, the requester is highly recommended to engage a Land Vehicle Operations Cell Desk officer through emailing the landvehicleoperations.cell@defence.gov.au.

VISITING FORCES OPERATING DEFENCE VEHICLES IN AUSTRALIA

Serial	Event	Day
1	Receipt by LVOC from Visiting Forces Vehicle Data Sheet (one sheet for each Vehicle type)	D – 90
2	Review and validation of the provided dimension and mass data against:	D – 80
	Defence Dimension and Mass Standards (DDMS)	
	National Heavy Vehicle Law Mass and Dimension Regulations	
	State and Territory Dimension and Mass Regulations	
3	Preparation of:	D – 66
	Summarised written advice to LVOC whether the Visiting Forces Vehicles fall within the current standards and regulations	
	Preparation of permit applications or Notice amendment to National Heavy Vehicle Regulator (NHVR) and/or State and Territory transport departments and liaison with local governments.	
4	Review of permit applications or Notice amendments by State and Territory jurisdictions including local governments.	D – 52
5	Negotiation allowance	
6	Receipt of approved permits/ notice and checking to ensure:	D – 10
	 that all requested detail has been included reviewing the conditions included in the permits and identifying any critical requirements 	
7	Issue permits or Notice update to requesting organisations	D-3
8	Access to Public Roads/facility road	D – Day

DEFENCE LAND VEHICLE SPMV AND OSOM DATA

- 1. Certain Defence Land Vehicles exceed statutory Mass and Dimension limits and are therefore required to operate under an approved instrument issued by relevant regulatory body. All vehicle categories include with and without relevant trailer capability. These vehicles have been categorised to gain access as like platforms and are detailed below with relevant data to support road access contained within appendixes to this annex:
- a. Category 1 Bushmaster Family of Vehicles (Appendix 1)
 - (1) Bushmaster Protected Mobility Vehicle (PMV)
 - (2) Bushmaster PMV Mine clearance (Fitted for not with)
 - (3) Bushmaster PMV with trailer
- b. Category 2 40M Family of Vehicles (Appendix 2)
 - (1) 40M tray protected and unprotected
 - (2) 40M tipper/dump protected and unprotected
 - (3) 40M tray with crane protected and unprotected
 - (4) 40M tray (unprotected) Army School of Transport Training only
 - (5) 40M tray- protected and unprotected with single axle trailer (Tactical quiet generator -TQG)
 - (6) 40M tray- protected and unprotected with single axle trailer (Tactical unmanned aerial system -TUAS)
 - (7) 40M tray- protected and unprotected with single axle trailer (Deployable aircraft maintenance rig -DAMR)
 - (8) 40M tray w/crane protected and unprotected with single axle trailer (Deployable aircraft maintenance rig -DAMR)
 - (9) 40M tray unprotected with M2A2 105mm howitzer ceremonial gun
 - (10) 40M tray protected and unprotected with medium weight trailer
 - (11) 40M tipper/dump protected and unprotected with medium weight trailer
 - (12) 40M crane protected and unprotected with medium weight trailer
 - (13) M40 tray protected and unprotected with triaxle boat trailer
 - (14) M40 tipper/dump protected and unprotected with triaxle boat trailer
 - (15) M40 tray w/crane protected and unprotected with triaxle boat trailer
- c. Category 3 HX77 and SX45 Family of Vehicles (Appendix 3)
 - (1) HX77 Integrated Load handling System (ILHS) protected and unprotected

- (2) HX77 dump/tipper protected and unprotected
- (3) HX77 Fuel Tanker unprotected
- (4) HX77 ILHS protected and unprotected with M777 gun trailer
- (5) HX77 ILHS protected and unprotected with medium weight trailer
- (6) HX77 dump/tipper protected and unprotected with medium weight trailer
- (7) HX77 ILHS protected and unprotected with ILHS trailer
- (8) HX77 dump/tipper protected and unprotected with ILHS trailer
- (9) HX77 ILHS protected and unprotected with Heavy Equipment Trailer (HET)
- (10) HX77 dump/tipper protected and unprotected HET
- (11) SX45 mobile radar (CRAMS)
- d. Category 4 42M Recovery vehicle (Appendix 4)
 - (1) 42M protected and unprotected medium recovery vehicle (MRV)
 - (2) 42M protected and unprotected medium recovery vehicle (MRV) with trailer
- e. Category 5 45M Family of vehicles (Appendix 5)
 - (1) 45M protected Dry Support Bridge (DSB) protected
 - (2) 45M protected
 - (3) 45M unprotected
 - (4) 45M Heavy Recovery Vehicle protected
 - (5) 45M Heavy Recovery Vehicle unprotected
 - (6) 45M protected with Medium Weight Trailer
 - (7) 45M unprotected with Medium Weight Trailer
 - (8) 45M protected with ILHS Trailer
 - (9) 45M unprotected with ILHS Trailer
 - (10) 45M protected with HET
 - (11) 45M unprotected with HET
 - (12) US Defence M142 HIMARS
 - (13) US Defence MK37 HIMARS re-supply vehicle
 - (14) US Defence MK37 HIMARS re-supply vehicle with MK38 trailer

- (15) US Defence MK23 cargo truck
- (16) US Defence MK23 cargo truck with 9t trailer
- (17) US Defence MK27 cargo truck
- (18) US Defence MK27 cargo truck with 9t trailer
- (19) US Defence MK18 cargo truck
- (20) US Defence MK18 cargo truck with M1076 trailer
- (21) US Defence LVSR MK15 Recovery Vehicle
- (22) US Defence Oshkosh MTVR MK36 Wrecker (Heavy Recovery Vehicle)
- f. Category 6 HX81 with 3 axle trailer and 2 axle dolly (Appendix 6)
 - (1) HX81 unprotected prime mover
 - (2) HX81 protected prime mover
 - (3) HX81 unprotected prime mover with triaxle semi-trailer
 - (4) HX81 protected prime mover with triaxle semi-trailer
 - (5) HX81 unprotected prime mover with triaxle semi-trailer and road train convertor dolly
 - (6) HX81 protected prime mover with triaxle semi-trailer and road train convertor dolly
- g. Category 7 HX81 with 3 axle trailers and 2 axle dollies road train (Appendix 7)
 - (1) HX81 unprotected type 1 road train 2 x triaxle semi-trailers and road train convertor dolly
 - (2) HX81 protected type 1 road train 2 x triaxle semi-trailers and road train convertor dolly
 - (3) HX81 unprotected type 2 road train-3 x triaxle semi-trailer and 2 x road train convertor dolly
 - (4) HX81 protected type 2 road train-3 x triaxle semi-trailer and 2 x road train convertor dolly
- h. Category 8 HX81 with Medium Equipment Transporter (MET) and 2 axle dolly (Appendix 8)
 - (1) HX81 unprotected prime mover with MET
 - (2) HX81 protected prime mover with MET
 - (3) HX81 unprotected with Medium Dolly Low Loader (MDLL) and MET
 - (4) HX81 protected with Medium Dolly Low Loader (MDLL) and MET

i. Category 9 – HX81 with Heavy Equipment Transporter (Appendix 9) **(1)** HX81 protected with Heavy Equipment Trailer (HET) - unladen travel (2) HX81 unprotected with HET - unladen travel (3) HX81 protected with HET (4) HX81 unprotected with HET j. Category 10 – Mack Superliner with 4x8 low loader and 2x8 dolly (Appendix 10) (1) Mack Superliner prime mover and low loader (2) Mack Superliner prime mover, dolly and low loader Category 11 – Defence Emergency Vehicles – 2 axle (Appendix 11) k. **(1)** RAAF Striker (Oshkosh) (2) Army Striker (Oshkosh) 1. Category 12 – Defence Emergency Vehicles – 3 axle (Appendix 12) (1) Rosenbauer Panther Truck Fire Aircraft (TFA) Category 13 – Material Handling Equipment (Appendix 13) m. **(1)** Grove high mobility crane mine and blast protected Tadano 30t high mobility crane ATF 30-2L (2) (3) Tadano 30t high mobility crane AR200M Manitou MHT7140L 8t all-terrain forklift (4) (5) Manitou 8t tractor Category 14 - ASLAV Family of Vehicles (Appendix 14) n. **(1)** ASLAV Type I (2) ASLAV Type II (3) ASLAV Type III (4) US Marines LAV Category 15 – Boxer (Appendix 15) o. **(1)** Rheinmetall Boxer Multirole 8x8 armoured fighting vehicle Category 16 – Heavy Armoured Vehicles (Appendix 16) p. (1) M1A1Abrams Main Battle Tank (2) M1 FOV (Engineering)

- (3) M88A2 Hercules Equipment Recovery Tank
- q. Category 17 Light Armoured Vehicles (Appendix 17)
 - (1) Armoured Personal Carrier (APC) Tracked Military Vehicle
 - (2) Assault Amphibious Vehicle (AAV) Tracked military vehicle
- r. Category 18 LARC-V (Appendix 18)
 - (1) ADF LARC V Amphibious cargo vehicle
- s. Category 19 Mercedes Combat Support Vehicles (Appendix 19)
 - (1) Mercedes Actros Cargo
 - (2) Mercedes Fuel tanker
 - (3) Mercedes Actros with 2 axel pig trailer

APPENDIX 1 TO ANNEX 7.2D

CATEGORY 1 - BUSHMASTER FAMILY OF VEHICLES

1. The Bushmaster is a 2 axle, with two tyres per axle, armoured vehicle, designed and build by Thales Australia. The vehicle has eight individual variants, all of which are reflected against the PMV data column. The primary purpose of the Bushmaster is a combat vehicle.





Vehicle	Bushmaster	Bushmaster
NHVR Vehicle Category	CATEGORY 1 - I	BUSHMASTER FAMILY OF VEHICLES
ADF Vehicle Category	1A.	1B
Dolly	N/A	N/A
Trailer/Casualty Vehicle	N/A	Pig trailer
Trailer	N/A	N/A
GVM / GCM (T)	15	15
Length (M)	7.18	7.18

	Width (M)	2.5	2.5
	Height (M)	3.75	3.75
	Forward projection (M)	N/A	N/A
	Rear over hanging (M)	1.93	0.96
	1	7.5	7.5
Axle group Mass (T)	2	7.5	7.5
Axie group wass (1)	3	N/A	3.7
	4	N/A	N/A
	1st to 2nd	3.9	3.9
Axle distances (M)	2nd to 3rd	N/A	4.8
	3rd to 4th	N/A	N/A
	1	2	2
Tyres on each axle	2	2	2
Tyres on each axie	3	N/A	2
	4	N/A	N/A
	1	395	395
Tyre size at each axle (mm)	2	395	395
	3	N/A	365
	Minimum ground contact width (M)	2.43	2.33

 Table 1 - Bushmaster – Bushmaster Family of Vehicles

APPENDIX 2 TO ANNEX 7.2D

CATEGORY 2 - 40M FAMILY OF VEHICLES

1. The 40M family of vehicles are based on 2 two axle 4 x 4, with two tyres per axle diesel truck. The 40M can be fitted with a blast and ballistic proof cabin. The primary purpose of the 40M is logistic support vehicle.

40M with Medium Weight Trailer





Vel	nicle	40M Tray (P)	40M Tray (P)	40M Tray (P)	40M Tray (P)	40M Tray (P)	40M Tray (U)	40M Tray (U)	40M Tray (U)	40M Tray (U)	40M Tray (U)	40M Dump (P)	40M Dump (P)	40M Dump (U)	40M Dump (U)	40M Crane (P)	40M Crane (P)	40M Crane (P)	40M Crane (U)	40M Crane (U)	40M Crane (U)	40M Tray (P&U)	40M Tray (U)	Scania Cat
	Vehicle egory		CATEGORY 2 - 40M FAMILY OF VEHICLE																					
ADF \	/ehicle	2A	2B	2C	2D	2E	2F	2G	2H	21	2J	2K	2L	2M	2N	20	2P	2Q	2R	25	2T	2U	2V	2W
	egory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Casualty nicle	N/A	Mediu m weight trl	Single Axle Trailer (Tactic al Quiet Gener ator - TQG)	Single Axle Trailer (Tactic al Unma nned Aerial Syste m - TUAS)	Single Axle Trailer (Deplo yable Aircraf t Maint enanc e Rig - DAMR	N/A	Mediu m weight trl	Single Axle Trailer (Tactic al Quiet Gener ator - TQG)	Single Axle Trailer (Tactic al Unma nned Aerial Syste m -	Single Axle Trailer (Deplo yable Aircraf t Maint enanc e Rig - DAMR	N/A	Mediu m weight trl	N/A	Mediu m weight trl	N/A	Mediu m weight trl	Single Axle Trailer (Deplo yable Aircraf t Maint enanc e Rig - DAMR)	N/A	Mediu m weight trl	Single Axle Trailer (Deplo yable Aircraf t Maint enanc e Rig - DAMR	Tri Axle Trl With Regon al Patrol Craft	M2A2 Cerem onial Gun	Pig Trl
Trailer	N/A	N,	/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GVM / GCM (T)	20.4	3	3	22.3	22.3	24.4	19	33	21	21	23	20.4	33	20	33	21	33	25	20.2	33	24.2	30	21.5	17.56
Length (M)	10.85	1	7	11.05	12.65	16	10.85	17	11.05	12.65	16	9	17	9	17	10.85	17	16	10.85	17	16	2.25	17	19.89
Width (M)	2.6	2	.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.85	2.6	3.12
Height (M)	4.6	4	.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.3	4.3
Forwa rd projec tion (M)	N/A	0.3	394	N/A	N/A	N/A	N/A	0.394	N/A	N/A	N/A	N/A	0.394	N/A	0.394	N/A	0.394	N/A	N/A	0.394	N/A	N/A	N/A	N/A
Rear over hangin g (M)	1.92	1.	08	N/A	N/A	N/A	1.99	1.08	N/A	N/A	N/A	1.65	1.08	1.68	1.08	1.98	1.08	N/A	1.67	1.08	N/A	N/A	N/A	5.15
Axle	1	10.9	10.9	10.9	10.9	10.9	9	9	9	9	9	10.9	10.9	9	9	10.9	10.9	10.9	9	9	9	10.9	9	5.1
group Mass	2	9.5	9.5	9.5	9.5	9.5	10	10	10	10	10	9.5	9.5	11	11	10.1	10.1	10.1	11.2	11.2	11.2	10.1	10	4.01
(T)	3	N/A	6	1.905	1.906	4	N/A	7	1905	1.906	4	N/A	6.5	N/A	6	N/A	6	4	N/A	6	4	9	2.3	8.45

	4	N/A	N/A	N/A	N/A	N/A	N/A	7	N/A	N/A	N/A	N/A	6.5	N/A	7	N/A	6	N/A	N/A	6.8	N/A	N/A	N/A	N/A
	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1st to 2nd	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.09
Axle distan	2nd to 3rd	N/A	5.21	4	4.6	5.2	N/A	5.21	4	4.6	5.2	N/A	5.21	N/A	4.8	N/A	5.03	5.2	N/A	5.03	5.2	7	5.67	8.3
ces (M)	3rd to 4th	N/A	3.78	N/A	N/A	N/A	N/A	3.78	N/A	N/A	N/A	N/A	3.78	N/A	3.78	N/A	3.78	N/A	N/A	3.78	N/A	1.55	N/A	1.2
	4th to 5th	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.55	N/A	1.12
	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tyres	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
on each	3	N/A	4	2	2	2	N/A	4	2	2	2	N/A	4	N/A	4	N/A	4	2	N/A	4	2	2	2	2
axle	4	N/A	4	N/A	N/A	N/A	N/A	4	N/A	N/A	N/A	N/A	4	N/A	4	N/A	4	N/A	N/A	4	N/A	2	N/A	2
	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	2
	1	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	371
Tyre size at	2	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	371
each axle	3	N/A	275	939	939	215	N/A	275	939	939	215	N/A	275	N/A	275	N/A	275	215	N/A	275	215	215	179	220
(mm)	4	N/A	275	N/A	N/A	N/A	N/A	275	N/A	N/A	N/A	N/A	275	N/A	275	N/A	275	N/A	N/A	275	N/A	215	N/A	220
Minim	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	215	N/A	220
um groun d contac t width (M)	2.42	2.	42	2.14	2.14	2.02	2.42	2.42	2.14	2.14	2.02	2.42	2.42	2.42	2.42	2.42	2.42	2.02	2.42	2.42	2.02	2.4	2.1	2.41

Table 2 - 40M – 40M Family of Vehicles

APPENDIX 3 TO ANNEX 7.2D

CATEGORY 3 - HX77 AND SX45 FAMILY OF VEHICLES

- 1. The HX77 family of vehicles are based on four axle (twin steer and dual axle group) with two tyres per axle, diesel truck. The HX77 can be fitted with a blast and ballistic proof cabin. The primary purpose of the HX77 is a logistic support vehicle.
- 2. The SX45 vehicle is based on a four axle (twin steer and dual axle group) with two tyres per axle, diesel truck. The SX45 is fitted with a blast and ballistic proof cabin. The primary purpose of the SX45 is a mobile radar system.



HX77 with ILH Tlr

HX77 Dump with Heavy Equipment Trailer (HET)



Vehic	le	SX-45	HX77 BBI (P&U)	HX77 ILHS (P)	HX77 ILHS (P)	HX77 ILHS (P)	HX77 ILHS (U)	HX77 Dump (P)	HX77 Dump (U)	HX77 Fuel Tanker	HX77 ILHS (P)	HX77 ILHS (U)	HX77 Dump (P)	HX77 Dump (U)	HX77 ILHS (P)	HX77 ILHS (U)	HX77 Dump (P)	HX77 Dump (U)	HX77 ILHS (P)	HX77 ILHS (U)	HX77 Dump (P)	HX77 Dump (U)
NHVR Ve		CATEGORY 3 - HX77 AND SX45 FAMILY OF VEHICLES																				
ADF Vel Catego		3A	3B	3C	3D	3E	3F	3G	3Н	31	3J	31	3K	3L	3M	3N	30	3P	3Q	3R	3S	3Т
Trailer/Ca Vehic	-	N/A	N/A	M777	M777	N/A	N/A	N/A	N/A	N/A	Medium weight trl	Medium weight trl	Medium weight trl	Medium weight trl	ILHS Trl	ILHS Trl	ILHS Trl	ILHS Trl	Heavy Plant Trl	Heavy Plant Trl	Heavy Plant Trl	Heavy Plant Trl
GVM / GC	CM (T)	33	37.5	37.5	40	37.5	35	37	35	35	53.45	50.95	52.95	50.95	60.35	57.85	59.85	57.85	66	66	66	66
Length	(M)	10.67	12.5	21	21	12.5	12.5	10.5	10.5	10.5	19	19	19	19	20	20	20	20	23	23	23	23
Width	(M)	2.6	3.35	2.66	2.66	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Height		4.3	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Forwa projectio		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.394	0.394	0.394	0.394	0.525	0.525	0.525	0.525	1.25	1.25	1.25	1.25
Rear over h (M)		2262	3.85	N/A	N/A	2.16	2.16	1.84	1.84	2.25	1.08	1.08	1.08	1.08	2.05	2.05	2.05	2.05	2.85	2.85	2.85	2.85
	1	15	18	18	16	18	16	17.5	16	16	18	16	17.5	16	18	16	17.5	16	18	16	17.5	16
Axle group	2	18	19.5	19.5	19	19.5	19	19.5	19	19	19.5	19	19.5	19	19.5	19	16.5	19	19.5	19	19.5	19
Mass (T)	3	N/A	N/A	5	5	N/A	N/A	N/A	N/A	N/A	7.5	7.5	7.5	7.5	9	9	9	9	14	15.5	14.5	15.5
	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.45	8.45	8.45	8.45	13.85	13.85	13.85	13.85	14.5	15.5	14.5	15.5
	1st to 2nd	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Axle	2nd to 3rd	3.86	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
distances (M)	3rd to 4th	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	4th to 5th	N/A	N/A	8.16	8.16	N/A	N/A	N/A	N/A	N/A	4.6	4.6	4.6	4.6	4.6	4.6	4.36	4.36	4.6	4.6	4.36	4.36

	6th to 7th	N/A	3.78	3.78	3.78	3.78	3.16	3.16	3.16	3.16	1.25	1.25	1.25	1.25								
	7th to 8th	N/A	1.25	1.25	1.25	1.25	4.33	4.33	4.33	4.33												
	8th to 9th	N/A	1.25	1.25	1.25	1.25																
	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tyres on	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
each axle	5	N/A	N/A	2	2	N/A	N/A	N/A	N/A	N/A	4	4	4	4	4	4	4	4	4	4	4	4
	6	N/A	4	4	4	4	4	4	4	4	4	4	4	4								
	7	N/A	4	4	4	4	4	4	4	4												
	8	N/A	4	4	4	4																
	1	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395
	2	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395
	3	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395
Tyre size at each	4	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395
axle (mm)	5	N/A	N/A	275	275	N/A	N/A	N/A	N/A	N/A	275	275	275	275	275	275	275	275	275	275	275	275
	6	N/A	275	275	275	275	275	275	275	275	275	275	275	275								
	7	N/A	275	275	275	275	275	275	275	275												
	8	N/A	275	275	275	275																
Minimum g contact wid		2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42

Table 3 - HX77 – HX77 Family of Vehicles

CATEGORY 4 – 42M RECOVERY VEHICLE

1. The 42M Medium Recovery Vehicle is based on three axle (single steer and dual axle group) with two tyres per axle, diesel truck. The 42M can be fitted with a blast and ballistic proof cabin. The primary purpose of the 42M is a recovery vehicle.



42M (Unprotected) Medium Recovery Vehicle (MRV)

42M (Protected) Medium Recovery Vehicle (MRV)



Vehicle	42M (P&U)	42M (P &U)
NHVR Vehicle Category	CATE	GORY 4 - 42M RECOVERY VEHICLE
ADF Vehicle Category	4A	4В
Dolly	N/A	N/A
Trailer/Casualty Vehicle	N/A	Heavy Plant Trl
Trailer	N/A	N/A
GVM / GCM (T)	33	63.3

		1	1
	Length (M)	10	21
	Width (M)	2.6	2.6
	Height (M)	4.3	4.3
	Forward projection (M)	N/A	1.25
	Rear over hanging (M)	2.85	2.85
	1	11.3	11.3
	2	16	16
Axle group Mass (T)	3	N/A	18
	4	N/A	18
	5	N/A	N/A
	1st to 2nd	4	4
	2nd to 3rd	1.49	1.49
	3rd to 4th	N/A	4.8
Axle distances (M)	4th to 5th	N/A	1.25
	6th to 7th	N/A	4.3
	7th to 8th	N/A	1.25
	8th to 9th	N/A	N/A
	1	2	2
	2	2	2
Tyres on each axle	3	2	2
	4	N/A	4
	5	N/A	4

	6	N/A	4
	7	N/A	4
	8	N/A	N/A
Tyre size at each axle (mm)	1	406	406
	2	406	406
	3	406	406
	4	N/A	406
	5	N/A	406
	6	N/A	406
	7	N/A	406
	8	N/A	N/A
	9	N/A	N/A
	10	N/A	N/A
	11	N/A	N/A
	12	N/A	N/A
	Minimum ground contact width (M)	2.46	2.46

Table 4 - 42M MRV – 42M Family of Vehicles

APPENDIX 5 TO ANNEX 7.2D

CATEGORY 5 – 45M FAMILY OF VEHICLES

- 1. The 45M Heavy Recovery Vehicle is based on a five axle (twin steer and tri-axle [rear wheel steer] group) with two tyres per axle, diesel truck. The 45M can be fitted with a blast and ballistic proof cabin. The primary purpose of the 45M is a recovery vehicle.
- 2. The family of US Military vehicles depicted in the below tables are based on two to five axle rigid trucks. These vehicles range from single to dual front steer and single to tri-axle rear groups. These vehicles are used in both logistic and combat support roles.



Vehicle	e	45M (P)	45M (U)	45M (P)	45M (U)	U.S ARMY - M142 - HIMARS	USMC - LVSR MK 18 Cargo	USMC - LVSR MK 18 Cargo	USMC - MTVR MK36 Wrecker - Oshkosh	USMC - LVSR MK15 Recovery Vehicle	USMC - MTVR MK37 HIMARS (Re-Supply Veh)	USMC - MTVR MK37 HIMARS (Re-Supply Veh)	USMC - MTVR MK23	USMC - MTVR MK24
NHVR Vehicle (Category	CATEGORY 5 - 45M FAMILY OF VEHICLES												
ADF Vehicle C	ategory	5A	5B	5C	5D	5E	5F	5G	5H	51	5,1	5К	5L	5M
Dolly		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trailer/Casualt	y Vehicle	N/A	N/A	Heavy Equipment Trl	Heavy Equipment Trl	N/A	N/A	M1076 Trailer	N/A	N/A	N/A	MK38 Trl (2 Axle dog Trailer)	N/A	9 tonne Trailer
Trailer		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GVM / GCN	VI (T)	44	42	80	78	22	41	62.5	46.6	42	25.3	40.5	25.3	31.7
Length (I	M)	12.5	12.5	24	24	8		19.2	9.82	11.5		23		13.2
Width (N	VI)	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.5
Height (f	M)	4.6	4.6	4.6	4.6	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Forward projec	ction (M)	N/A	N/A	0.55	0.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rear over hang	ging (M)	4.1	4.1	2.85	2.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1	20	17	20	17	7.19	17	17	8.1	18	8.8	8.8	8.8	8.8
Axle group Mass (T)	2	24	25	24	25	9.76	24	24	16.32	24	16.5	16.5	16.5	16.5
	3	N/A	N/A	18	18	N/A	N/A	9	N/A	N/A	N/A	5	N/A	8.7

	4	N/A	N/A	18	18	N/A	N/A	13.5	N/A	N/A	N/A	5	N/A	N/A
	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1st to 2nd	1.8	1.8	1.8	1.8	3.8	1.5	1.5	4.1	1.55	3.9	3.9	3.9	3.9
	2nd to 3rd	3.2	3.2	3.2	3.2	1.4	3.8	3.8	1.4	3.3	1.4	1.4	1.4	1.4
	3rd to 4th	1.55	1.55	1.55	1.55	N/A	1.5	1.5	N/A	1.5	N/A	4.6	N/A	3.25
	4th to 5th	1.6	1.6	1.6	1.6	N/A	1.5	1.5	N/A	1.55	N/A	3.8	N/A	1.14
Axle distances	6th to 7th	N/A	N/A	4.9	4.9	N/A	N/A	4.6	N/A	N/A	N/A	N/A	N/A	N/A
(M)	7th to 8th	N/A	N/A	1.25	1.25	N/A	N/A	3.8	N/A	N/A	N/A	N/A	N/A	N/A
	8th to 9th	N/A	N/A	4.33	4.33	N/A	N/A	1.5	N/A	N/A	N/A	N/A	N/A	N/A
	9th to 10th	N/A	N/A	1.25	1.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10th to 11th	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	13th to 14th	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3	2	2	2	2	2	2	2	2	2	2	2	2	2
	4	2	2	2	2	N/A	2	2	N/A	2	2	2	N/A	2
Tyres on each axle	5	N/A	N/A	4	4	N/A	2	2	N/A	2	2	2	N/A	2
	6	N/A	N/A	4	4	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
	7	N/A	N/A	4	4	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
	8	N/A	N/A	4	4	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A
	9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1	406	406	406	406	508	508	508	508	508	508	508	508	508
Tyre size at	2	406	406	406	406	508	508	508	508	508	508	508	508	508
each axle (mm)	3	406	406	406	406	508	508	508	508	508	508	508	508	508
	4	406	406	406	406	N/A	508	508	N/A	508	N/A	508	N/A	290

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	5	N/A	N/A	275	275	N/A	508	508	N/A	508	N/A	508	N/A	290
	6	N/A	N/A	275	275	N/A	N/A	508	N/A	N/A	N/A	N/A	N/A	N/A
	7	N/A	N/A	275	275	N/A	N/A	508	N/A	N/A	N/A	N/A	N/A	N/A
	8	N/A	N/A	275	275	N/A	N/A	508	N/A	N/A	N/A	N/A	N/A	N/A
	9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Minimum ground width (M		2.49	2.49	2.42	2.42	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

Table 5 - 45M HRV – 45M Family of Vehicles

APPENDIX 6 TO ANNEX 7.2D

CATEGORY 6 – HX81 WITH 3 AXLE TRAILER WITH/WITHOUT 2 AXLE DOLLY

1. The HX81 vehicle is based on four axle (twin steer and dual rear group) with two tyres per steer axle and four tyres per drive axle, diesel truck tractor. The HX81 can be fitted with a blast and ballistic proof cabin. The primary purpose of the HX81 is a logistic support vehicle that is capable of towing the trailers depicted within this category and category seven, eight and nine.



HX81 With 3 Axle Trailer With/Without 2 Axle Dolly

Vehicle	HX81 (U)	HX81 (P)	HX81 (U)	HX81 (P)	HX81 (U&P)			
NHVR Vehicle Category	CATEGORY 6 - HX81 WITH 3 AXLE TRAILER WITH&WITHOUT 2 AXLE DOLLY							
ADF Vehicle Category	6A	6B	6C	6D	6E			
Dolly	N/A	N/A	N/A	N/A	YES			
Trailer/Casualty Vehicle	N/A	N/A	Tri Axle Trl	Tri Axle Trl	Tri Axle Trl			
Trailer	N/A	N/A	N/A	N/A	N/A			
GVM / GCM (T)	20.5	21.5	60	65	65			
Length (M)	9.4	9.4	20	26	26			
Width (M)	2.8	2.8	3.5	3.5	3.5			

	Height (M)	4.9	4.9	4.9	4.9	4.9
For	ward projection (M)	N/A	N/A	N/A	N/A	N/A
Re	ar over hanging (M)	1.62	1.68	N/A	N/A	N/A
	1	15	16	16	18	16
	2	5.5	5.5	18.5	18.5	18.5
Axle group Mass (T)	3	N/A	N/A	23.5	23.5	23.5
	4	N/A	N/A	N/A	N/A	6
	5	N/A	N/A	N/A	N/A	N/A
	1st to 2nd	1.8	1.8	1.8	1.8	1.8
	2nd to 3rd	3.25	3.25	3.25	3.25	3.25
	3rd to 4th	1.4	1.4	1.4	1.4	1.4
	4th to 5th	N/A	N/A	6.82	6.82	6.82
Axle distances (M)	6th to 7th	N/A	N/A	1.4	1.4	1.4
Axie distances (ivi)	7th to 8th	N/A	N/A	1.4	1.4	1.4
	8th to 9th	N/A	N/A	N/A	N/A	4.74
	9th to 10th	N/A	N/A	N/A	N/A	1.4
	10th to 11th	N/A	N/A	N/A	N/A	N/A
	11th to 12th	N/A	N/A	N/A	N/A	N/A
	1	2	2	2	2	2
Tyres on each axle	2	2	2	2	2	2
Tyres on each axie	3	4	4	4	4	4
	4	4	4	4	4	4

	5	N/A	N/A	4	4	4
	6	N/A	N/A	4	4	4
	7	N/A	N/A	4	4	4
	8	N/A	N/A	N/A	N/A	4
	9	N/A	N/A	N/A	N/A	4
	10	N/A	N/A	N/A	N/A	N/A
	1	385	385	385	385	385
	2	385	385	385	385	385
	3	315	315	315	315	315
	4	315	315	315	315	315
Tyre size at each axle	5	N/A	N/A	279	279	279
(mm)	6	N/A	N/A	279	279	279
	7	N/A	N/A	279	279	279
	8	N/A	N/A	N/A	N/A	279
	9	N/A	N/A	N/A	N/A	279
	10	N/A	N/A	N/A	N/A	N/A
Minimum	ground contact width (M)	2.41	2.41	2.37	2.37	2.37

Table 6 - HX81 3 axel Trailer – HX81 Family of Vehicles

APPENDIX 7 TO ANNEX 7.2D

CATEGORY 7 - HX81 WITH MULTIPLE 3 AXLE TRAILERS WITH 2 AXLE DOLLY

1. The HX81 vehicle is based on four axle (twin steer and dual rear group) with two tyres per steer axle and four tyres per drive axle, diesel truck tractor. The HX81 can be fitted with a blast and ballistic proof cabin. The primary purpose of the HX81 is a logistic support vehicle that is capable of towing the trailers depicted within this category and category seven, eight and nine.

	Vehicle	HX81 (U&P)		
	NHVR Vehicle Category	CATEGORY 7 - HX81 WITH MULTIPLE 3 AXLE TRAILERS WITH 2 AXLE DOLLY		
	ADF Vehicle Category	7A		
	Dolly	YES		
	Trailer/Casualty Vehicle	Tri Axle Trl		
	Trailer	Tri Axle Trl		
	GVM / GCM (T)	100		
	Length (M)	53.5		
	Width (M)	2.6		
	Height (M)	4.9		
	Forward projection (M)	N/A		
	Rear over hanging (M)	N/A		
Axle group Mass (T)	1	16		
Axie group Mass (1)	2	18.5		

	3	23.5
	4	18.5
	5	23.5
	1st to 2nd	1.8
	2nd to 3rd	3.25
	3rd to 4th	1.4
	4th to 5th	6.82
	6th to 7th	1.4
Axle distances (M)	7th to 8th	1.4
Axie distances (W)	8th to 9th	4.74
	9th to 10th	1.4
	10th to 11th	6.9
	11th to 12th	1.4
	12th to 13th	1.4
	13th to 14th	N/A
	1	2
	2	2
	3	4
Tyres on each axle	4	4
	5	4
	6	4
	7	4

	8	4
	9	4
	10	4
	11	4
	12	4
	1	385
	2	385
	3	315
	4	315
	5	279
Tyre size at each	6	279
axle (mm)	7	279
	8	279
	9	279
	10	279
	11	279
	12	279
	Minimum ground contact width (M)	2.37

Table 7 - HX81 with multiple 3 Axel Trailers – HX81 Family of Vehicles

APPENDIX 8 TO ANNEX 7.2D

CATEGORY 8 – HX81 WITH 4 AXLE LOW LOADER WITH/WITHOUT 2 AXLE DOLLY

1. The HX81 vehicle is based on four axle (twin steer and dual rear group) with two tyres per steer axle and four tyres per drive axle, diesel truck tractor. The HX81 can be fitted with a blast and ballistic proof cabin. The primary purpose of the HX81 is a logistic support vehicle that is capable of towing the trailers depicted within this category and category six, seven and nine.

	Vehicle	HX81 (U)	HX81 (P)	HX81 (U)	HX81 (P)		
	NHVR Vehicle Category	CATEGORY 8 - HX81 WITH 4 AXLE LOW LOADER WITH&WITHOUT 2 AXLE DOLLY					
	ADF Vehicle Category	8A	8B	8C	8D		
	Dolly	N/A	N/A	YES	YES		
	Trailer/Casualty Vehicle	MET	MET	MET	MET		
	Trailer	N/A	N/A	N/A	N/A		
	GVM / GCM (T)		74.5	91	93		
	Length (M)		25	29	29		
	Width (M)		3.5	3.5	3.5		
	Height (M)	4.9	4.9	4.9	4.9		
	Forward projection (M)	1.2	1.2	1.2	1.2		
	Rear over hanging (M)	4.09	4.09	4.09	4.09		
	1	16	18	16	18		
Axle group Mass (T)	2	18.5	18.5	18.5	18.5		
	3	38	38	18.5	18.5		
	4	N/A	N/A	38	38		

	5	N/A	N/A	N/A	N/A
	1st to 2nd	1.8	1.8	1.8	1.8
	2nd to 3rd	3.25	3.25	3.25	3.25
	3rd to 4th	1.4	1.4	1.4	1.4
	4th to 5th	10.17	10.17	3.28	3.28
	6th to 7th	1.25	1.25	1.25	1.25
Axle distances (M)	7th to 8th	2.4	2.4	9.43	9.43
	8th to 9th	1.25	1.25	1.25	1.25
	9th to 10th	N/A	N/A	2.4	2.4
	10th to 11th	N/A	N/A	1.25	1.25
	11th to 12th	N/A	N/A	N/A	N/A
	12th to 13th	N/A	N/A	N/A	N/A
	13th to 14th	N/A	N/A	N/A	N/A
	1	2	2	2	2
	2	2	2	2	2
	3	4	4	4	4
	4	4	4	4	4
Tyres on each axle	5	4	4	4	4
	6	4	4	4	4
	7	4	4	4	4
	8	4	4	4	4
	9	N/A	N/A	4	4

	10	N/A	N/A	4	4
	11	N/A	N/A	N/A	N/A
	12	N/A	N/A	N/A	N/A
	1	385	385	385	385
	2	385	385	385	385
	3	315	315	315	315
	4	315	315	315	315
	5	275	275	275	275
Tyre size at each axle (mm)	6	275	275	275	275
	7	275	275	275	275
	8	275	275	275	275
	9	N/A	N/A	275	275
	10	N/A	N/A	275	275
	11	N/A	N/A	N/A	N/A
	12	N/A	N/A	N/A	N/A
	Minimum ground contact width (M)	2.41	2.41	2.41	2.41

Table 8 - HX81 with 4 Axel Low Loader – HX81 Family of Vehicles

APPENDIX 9 TO ANNEX 7.2D

CATEGORY 9 – HX81 WITH 8 AXLE TRAILER

1. The HX81 vehicle is based on four axle (twin steer and dual rear group) with two tyres per steer axle and four tyres per drive axle, diesel truck tractor. The HX81 can be fitted with a blast and ballistic proof cabin. The primary purpose of the HX81 is a logistic support vehicle that is capable of towing the trailers depicted within this category and category six, seven and eight.

	Vehicle	HX81 (U)	HX81 (P)				
N	HVR Vehicle Category	CATEGORY 9 - HX81 WITH 8 AXLE TRAILER					
A	ADF Vehicle Category	9A	9A				
	Dolly	YES	YES				
T	railer/Casualty Vehicle	НЕТ	НЕТ				
	Trailer	N/A	N/A				
GVM / GCM (T)		138.5	140.5				
	Length (M)		29				
	Width (M)		3.5				
	Height (M)	4.9	4.9				
F	orward projection (M)	0.55	0.55				
F	Rear over hanging (M)	1.74	1.74				
	1	16	18				
Axle group Mass (T)	2	18.5	18.5				
Axie group Mass (1)	3	104	104				
	4	N/A	N/A				

	5	N/A	N/A
	1st to 2nd	1.8	1.8
	2nd to 3rd	3.25	3.25
	3rd to 4th	1.4	1.4
	4th to 5th	5.39	5.39
	6th to 7th	1.8	1.8
Axle distances (M)	7th to 8th	1.8	1.8
Axic distances (M)	8th to 9th	1.8	1.8
	9th to 10th	1.8	1.8
	10th to 11th	1.8	1.8
	11th to 12th	1.8	1.8
	12th to 13th	1.8	1.8
	13th to 14th	N/A	N/A
	1	2	2
	2	2	2
	3	4	4
	4	4	4
Tyres on each axle	5	8	8
	6	8	8
	7	8	8
	8	8	8
	9	8	8

	10	8	8
	11	8	8
	12	N/A	N/A
	1	385	385
	2	385	385
	3	315	315
	4	315	315
	5	235	235
Tyre size at each axle	6	235	235
(mm)	7	235	235
	8	235	235
	9	235	235
	10	235	235
	11	235	235
	12	N/A	N/A
Minimu	m ground contact width (M)	2.41	2.41

Table 9 - HX81 with 8 Axle Trailer – HX81 Family of Vehicles

APPENDIX 10 TO ANNEX 7.2D

CATEGORY 10 - MACK SUPERLINER WITH 4 X 8 LOW LOADER WITH/WITHOUT 2 X 8 DOLLY

1. The Mack Superliner is a commercially available three axle prime mover (single steer and dual rear group) with two tyres on steer axle and four tyres per drive axle. The primary purpose of the Mack Superliner is a logistic support vehicle for the movement of the ADF M1A1 and M88A2 fleet.

	Vehicle	Mack Superliner	Mack Superliner	Mack Superliner	
NHVR Vehicle Category		CATEGORY 10 - MACK SUPERLINER WITH 4 X 8 LOW LOADER WITH&WITHOUT 2 X 8 DOLLY			
	ADF Vehicle Category	10A	10B	10C	
	Dolly	N/A	N/A	YES	
	Trailer/Casualty Vehicle	N/A	Low Loader	Low Loader	
	Trailer	N/A	N/A	N/A	
	GVM / GCM (T)	24.5	48.75	99.34	
	Length (M)			30	
	Width (M)	4	4	4	
	Height (M)	5	5	5	
	Forward projection (M)	N/A	N/A	N/A	
	Rear over hanging (M)	N/A	N/A	N/A	
	1	6	6	6	
Axle group Mass (T)	2	18.5	18.5	18.5	
	3	N/A	N/A	26.25	

	4	N/A	48.75	48.75
	5	N/A	N/A	N/A
	1st to 2nd	4.86	4.86	4.86
	2nd to 3rd	1.37	1.37	1.37
	3rd to 4th	N/A		3.5
	4th to 5th	N/A		1.27
Axle distances (M)	6th to 7th	N/A		8.75
	7th to 8th	N/A		1.22
	8th to 9th	N/A	N/A	2.44
	9th to 10th	N/A	N/A	1.22
	10th to 11th	N/A	N/A	N/A
	1	2	2	2
	2	4	4	4
	3	4	4	4
	4	N/A	8	8
Tyres on each axle	5	N/A	8	8
Tyres on each axie	6	N/A	8	8
	7	N/A	8	8
	8	N/A	N/A	8
	9	N/A	N/A	8
	10	N/A	N/A	N/A
Tyre size at each axle (mm)	1	295	295	295

	2	295	295	295
	3	295	295	295
	4	N/A	215	215
	5	N/A	215	215
	6	N/A	215	215
	7	N/A	215	215
	8	N/A	N/A	215
	9	N/A	N/A	215
	10	N/A	N/A	N/A
Minin	num ground contact width (M)	2.4	2.4	2.4

Table 10 – Mack Superliner with 4 x 8 Low Loader – Mack Superliner Family of Vehicles

APPENDIX 11 TO ANNEX 7.2D

CATEGORY 11 – DEFENCE EMERGENCY VEHICLES (2 AXLE)

1. The Defence Emergency Fire Vehicles are commercially available vehicle with two tyres per axle.

Vehicle	Striker Fire (Oshkosh) RAAF	Striker Fire (Oshkosh) Army
NHVR Vehicle Category	CATEGORY 11 - DEFENO	CE EMERGENCY VEHICLES (2 AXLE)
ADF Vehicle Category	11A	11B
Dolly	N/A	N/A
Trailer/Casualty Vehicle	N/A	N/A
Trailer	N/A	N/A
GVM / GCM (T)	18.6	18.6
Length (M)	8.75	8.86
Width (M)	2.97	2.97
Height (M)	3.28	3.24
Forward projection (M)	N/A	N/A
Rear over hanging (M)	N/A	N/A
Axle group Mass (T)	9.3	9.3

	2	9.3	9.3
	3	N/A	N/A
	4	N/A	N/A
	5	N/A	N/A
	1st to 2nd	4.37	5.37
	2nd to 3rd	N/A	N/A
	3rd to 4th	N/A	N/A
	4th to 5th	N/A	N/A
	6th to 7th	N/A	N/A
Axle distances (M)	7th to 8th	N/A	N/A
Axie distances (M)	8th to 9th	N/A	N/A
	9th to 10th	N/A	N/A
	10th to 11th	N/A	N/A
	11th to 12th	N/A	N/A
	12th to 13th	N/A	N/A
	13th to 14th	N/A	N/A
	1	2	2
	2	2	2
Tyres on each axle	3	N/A	N/A
Tyres on each axie	7	N/A	N/A
	8	N/A	N/A
	9	N/A	N/A

	10	N/A	N/A
	11	N/A	N/A
	12	N/A	N/A
	1		
	2		
	3	N/A	N/A
	4	N/A	N/A
	5	N/A	N/A
Tyre size at each	6	N/A	N/A
axle (mm)	7	N/A	N/A
	8	N/A	N/A
	9	N/A	N/A
	10	N/A	N/A
	11	N/A	N/A
	12	N/A	N/A
	Minimum ground contact width (M)	2.41	2.41

Table 11 – Defence Emergency Vehicles (2 Axle)

CATEGORY 12 – DEFENCE EMERGENCY VEHICLES (3 AXLE)

1. The Defence Emergency Fire Vehicles are commercially available vehicle with two tyres per axle.

	Vehicle	Rosenbauer Panther Truck Fire Aircraft	Rosenbauer Panther HRET		
NHVR Vehicle Category		CATEGORY 12 - DEFENCE EMERGENCY VEHICLES (3 AXLE)			
ADF Ve	chicle Category	12A	12B		
	Dolly	N/A	N/A		
Trailer/0	Casualty Vehicle	N/A	N/A		
	Trailer	N/A	N/A		
GVN	и / GCM (T)	36	39		
Le	ength (M)	11.75	11.76		
V	Vidth (M)	3.3	3.3		
н	eight (M)	3.6	3.95		
Forward	d projection (M)	1.4	N/A		
Rear ov	er hanging (M)	N/A	N/A		
	1	9.5	13		
Avia grava Mass (T)	2	19	26		
Axle group Mass (T)	3	N/A	N/A		
4		N/A	N/A		
Axle distances (M)	1st to 2nd	4.8	4.8		
Axie distances (M)	2nd to 3rd	1.6	1.6		

	3rd to 4th	N/A	N/A
	4th to 5th	N/A	N/A
	1	2	2
Tyres on each axle	2	2	2
Tyres on each axie	3	2	2
	4	N/A	N/A
	1	439	608
	2	439	608
	3	439	608
	4	N/A	N/A
	5	N/A	N/A
Tyre size at each axle	6	N/A	N/A
(mm)	7	N/A	N/A
	8	N/A	N/A
	9	N/A	N/A
	10	N/A	N/A
	11	N/A	N/A
	12	N/A	N/A
Minimum grou	und contact width (M)	2.5	3

Table 12 – Defence Emergency Vehicles (3 Axle)

APPENDIX 13 TO ANNEX 7.2D

CATEGORY 13 – MATERIAL-HANDLING EQUIPMENT

1. The Defence Material Handling Equipment are commercially available vehicle.



Vehicle	Manitou MHT 7140 L (Forklift)	Grove Crane	Liebherr Crane (60T)		
NHVR Vehicle Category	CATEGORY 13 - MATERIAL HANDLING EQUIPMENT				
ADF Vehicle Category	13A	13B	13C		
Dolly	N/A	N/A	N/A		
Trailer/Casualty Vehicle	N/A	N/A	N/A		
Trailer	N/A	N/A	N/A		
GVM / GCM (T)	24	48	40.5		

	Length (M)	8.04	10.31	12.4
Width (M)		2.66	2.88	2.69
	Height (M)	3.24	3.9	3.8
For	ward projection (M)	1.8	1.81	2.16
Re	ar over hanging (M)	N/A	0.41	0.79
	1	12	12	13.5
	2	12	12	13.5
Axle group Mass (T)	3	N/A	12	13.5
	4	N/A	12	N/A
	5	N/A	N/A	N/A
	1st to 2nd	3.4	1.65	3
	2nd to 3rd	N/A	2.1	1.65
Axle distances (M)	3rd to 4th	N/A	1.65	N/A
	4th to 5th	N/A	N/A	N/A
	6th to 7th	N/A	N/A	N/A
	1	2	2	2
	2	2	2	2
Tyres on each axle	3	N/A	2	2
Tyres on each axie	4	N/A	2	N/A
	5	N/A	N/A	N/A
	6	N/A	N/A	N/A
Tyre size at each axle (mm)	1	601	525	525

	2	601	525	525
	3	N/A	525	525
	4	N/A	525	N/A
	5	N/A	N/A	N/A
	6	N/A	N/A	N/A
Minimum ground contact width (M)		2.34	2.75	2.69

 Table 13 – Materiel Handling equipment

APPENDIX 14 TO ANNEX 7.2D

CATEGORY 14 - ASLAV FAMILY OF VEHICLES

1. The ASLAV family of vehicles is a purpose designed and built military combat vehicle. The vehicle is an 8 wheeled amphibious capable platform that has 4 wheel per side. The vehicle is operated by a crew of two.





Vehicle		ASLAV
	NHVR Vehicle Category	CATEGORY 14 - ASLAV
	ADF Vehicle Category	14A
	Dolly	N/A
	Trailer/Casualty Vehicle	N/A
	Trailer	N/A
	GVM / GCM (T)	15
	Length (M)	7.32
	Width (M)	2.6
Height (M)		3.23
Forward projection (M)		N/A
Rear over hanging (M)		N/A
	1	7.5
Axle group Mass (T)	2	7.5
	3	N/A
	1st to 2nd	1.09
Axle distances (M)	2nd to 3rd	1.33
	3rd to 4th	1.41
	4th to 5th	N/A

	6th to 7th	N/A
	7th to 8th	N/A
	1	2
	2	2
Tyres on each axle	3	2
	4	2
	5	N/A
	1	395
	2	395
Tyre size at each axle (mm)	3	395
	4	395
	5	N/A
	Minimum ground contact width (M)	2.18

 Table 14 - ASLAV – Family of Vehicle

APPENDIX 15 TO ANNEX 7.2D

CATEGORY 15 – BOXER

1. The Boxer family of vehicles is a purpose designed and built military combat vehicle. The vehicle is an 8 wheeled armoured platform that has 4 wheel per side. The vehicle is operated by a crew of three.

Vehicle		BOXER
NHVR Vehicle Category		CATEGORY 15 - BOXER
	ADF Vehicle Category	15A
	Dolly	N/A
	Trailer/Casualty Vehicle	N/A
	Trailer	N/A
	GVM / GCM (T)	36.5
	Length (M)	8.93
Width (M)		3.38
Height (M)		3.4
	Forward projection (M)	2.25
	Rear over hanging (M)	2.9
	1	18.1
Axle group Mass (T)	2	18.1
	3	N/A
Avia dietanaes (M)	1st to 2nd	1.55
Axle distances (M)	2nd to 3rd	2.04

	3rd to 4th	1.55
	4th to 5th	N/A
	1	2
	2	2
Tyres on each axle	3	2
Tyres on each axie	4	2
	5	N/A
	6	N/A
	1	425
	2	425
Tyre size at each axle (mm)	3	425
	4	425
	5	N/A
	Minimum ground contact width (M)	3

Table 15 - Boxer – Family of Vehicles

APPENDIX 16 TO ANNEX 7.2D

CATEGORY 16 – HEAVY ARMOURED VEHICLES

1. The M1A2 SEP-v3 Tank and M88A2 Recovery vehicle are a purpose designed and built military combat vehicles. The vehicles are a tracked, armoured platforms that are driven by two independent tracks, fitted with rubber pad inserts for road movement. The vehicles is operated by a crew of two to four.

Vehicle		M88A2	M1A1
NHVR Ve	hicle Category	CATEGORY 16 - HEAVY ARMOURED VEHICLES	
ADF Veh	icle Category	16A	16B
1	Dolly	N/A	N/A
Trailer/Ca	sualty Vehicle	N/A	N/A
Т	railer	N/A	N/A
GVM	/ GCM (T)	65	65
Len	gth (M)	8.64	9.83
Width (M)		3.66	3.66
Height (M)		2.97	2.59
Forward p	projection (M)	N/A	N/A
Rear over	hanging (M)	N/A	N/A
	1	N/A	N/A
Axle group Mass (T)	2	N/A	N/A
	3	N/A	N/A
Axle distances (M)	1st to 2nd	N/A	N/A

	2nd to 3rd	N/A	N/A
	1	N/A	N/A
Tyres on each axle	2	N/A	N/A
	1	N/A	N/A
Town size at each only (com)	2	N/A	N/A
Tyre size at each axle (mm)	3	N/A	N/A
	4	N/A	N/A
Minimum grour	nd contact width (M)	1.6	1.6

Table 16 – Heavy Armoured Vehicles – M1A2 and M88A2 Family of Vehicles

CATEGORY 17 – LIGHT ARMOURED VEHICLES

1. The M113AS4 Family of Vehicles are a purpose designed and built military combat vehicles. These vehicles are a tracked, armoured platforms that are driven by two independent tracks, fitted with rubber pad inserts for road movement. These vehicles are operated by a crew of two.

Vehicle		M113AS4
	NHVR Vehicle Category	CATEGORY 17 - LIGHT ARMOURED VEHICLES
	ADF Vehicle Category	17A
	Dolly	N/A
	Trailer/Casualty Vehicle	N/A
	Trailer	N/A
	GVM / GCM (T)	18
	Length (M)	6.4
Width (M)		2.7
Height (M)		2.71
	Forward projection (M)	N/A
	Rear over hanging (M)	N/A
	1	N/A
	2	N/A
Axle group Mass (T)	3	N/A
	4	N/A
	5	N/A

	1st to 2nd	N/A
	2nd to 3rd	N/A
	3rd to 4th	N/A
	4th to 5th	N/A
	6th to 7th	N/A
Axle distances (M)	7th to 8th	N/A
Axie distances (M)	8th to 9th	N/A
	9th to 10th	N/A
	10th to 11th	N/A
	11th to 12th	N/A
	12th to 13th	N/A
	13th to 14th	N/A
	1	N/A
	2	N/A
	3	N/A
	4	N/A
Tyres on each axle	5	N/A
Tyres on each axie	6	N/A
	7	N/A
	8	N/A
	9	N/A
	10	N/A

	11	N/A
	12	N/A
	1	N/A
	2	N/A
	3	N/A
	4	N/A
	5	N/A
Tyre size at each axle	6	N/A
(mm)	7	N/A
	8	N/A
	9	N/A
	10	N/A
	11	N/A
	12	N/A
	Minimum ground contact width (M)	1.6

Table 17 – Light Armoured Vehicles

APPENDIX 18 TO ANNEX 7.2D

CATEGORY 18 – LARC-V

1. The LARC-V is a purpose designed and built military amphibious logistics vehicle. The vehicle is based on a front steer, two axle, with two wheels per axle platform. The vehicle is operated by a crew of two.



Vehicle	LARC-V
NHVR Vehicle Category	CATEGORY 18 - LARC-V
ADF Vehicle Category	18A
Dolly	N/A

Trailer/Casualty Vehicle		N/A
Trailer		N/A
	GVM / GCM (T)	11.8
	Length (M)	10.67
	Width (M)	3.05
	Height (M)	3.4
	Forward projection (M)	2.3
	Rear over hanging (M)	3.3
	1	5.36
	2	6.44
Axle group Mass (T)	3	N/A
	4	N/A
	5	N/A
	1st to 2nd	5.47
Axle distances (M)	2nd to 3rd	N/A
	3rd to 4th	N/A
	1	2
	2	2
Tyres on each axle	3	N/A
	4	N/A
	5	N/A
Tyre size at each axle (mm)	1	480

	2	480	
	3	N/A	
Minimum ground contact width (M)		nimum ground contact width (M)	3.05

 Table 18 - LARC Family of Vehicles

APPENDIX 19 TO ANNEX 7.2D

CATEGORY 19 - MERCEDES COMBAT SUPPORT VEHICLES

1. The Mercedes combat support vehicles are a commercially available platform.

Mercedes Fuel Tanker



Mercedes Actros Cargo



Vehicle	Mercedes Actros	Mercedes Fuel Tanker	Mercedes Actros Cargo
NHVR Vehicle Category	Category 19 - MERCEDES COMBAT SUPPORT VEHICLES		
ADF Vehicle Category	19A	19B	19C
Trailer/Casualty Vehicle	Pig Trl	N/A	N/A
Trailer	N/A	N/A	N/A
GVM / GCM (T)	35	28	28
Length (M)	16.1	10.5	10
Width (M)	2.6	2.6	2.6

Height (M)		4.2	4.3	4
Forward projection (M)		N/A	N/A	N/A
	Rear over hanging (M)	N/A	N/A	N/A
	1	6	6	6
	2	6	6	6
Axle group Mass (T)	3	8	8	8
	4	8	8	8
	5	N/A	3.5	N/A
	1st to 2nd	1.7	1.7	1.7
	2nd to 3rd	3.93	3.93	3.93
Axle distances (M)	3rd to 4th	1.32	1.32	1.32
	4th to 5th	5.08	N/A	N/A
	6th to 7th	1.25	N/A	N/A
	7th to 8th	N/A	N/A	N/A
	1	2	2	2
	2	2	2	2
Towns on each only	3	4	4	4
Tyres on each axle	4	2	N/A	N/A
	5	2	N/A	N/A
	6	N/A	N/A	N/A
Type size at each cyle (my)	1	315	315	365
Tyre size at each axle (mm)	2	315	315	365

	3	315	315	365
	4	315	315	365
	5	375	N/A	N/A
	6	375	N/A	N/A
Minimum ground contact width (M)		2.41	2.41	2.41

Table 19 – Mercedes Combat Support – Mercedes Family of Vehicles

DEFENCE VEHICLE OPERATIONS MANUAL

Part 8 – Glossary

A – Vehicle	See Vehicle Classification
Accountable COMSEC Material (ACM)	Any document, device, equipment or apparatus associated with or essential for the encryption, decryption or authentication of telecommunications.
Accountable Officer	A member of the Enterprise Business Committee, appointed by, and accountable to, the Secretary and the Chief of the Defence Force for policies residing in their policy domain and the administrative policy framework documents that explain those policies.
Administrative Movement	This movement is conducted predominately on public roads including movement within Defence establishment, from barracks to field training area and inclusive of field firing ranges to enable commencement of tactical movement. This movement can also be conducted within a Defence training area to enable future tactical movement.
Aggregate Trailer Mass	The total mass of the laden Trailer when carrying the maximum Load recommended by the manufacturer. This includes any mass imposed upon the drawing Vehicle when the Combination Vehicle is resting on the horizontal supporting plane.
All-Terrain Vehicle (ATV)	A 4 x 4 or 6 x 6 Vehicle with a seat that is straddled by the operator, along with handlebars for steering with hand controls which is used exclusively for off-highway use with a Gross Vehicle Mass (GVM) less than or equal to 1200 kg.
Amphibious Landing	is defined as the transition from landing craft to the shoreline. All in-service AFV can conduct Amphibious Landings.
Approving Authority	A prescribed person who has been designated the authority to authorise tasks or to grant a waiver or exemption from instructions or guidelines.
Armoured Fighting Vehicle (AFV)	An AFV is an armoured platform designed and used specifically for employment in close mounted combat. This includes Main Battle Tanks (MBT), Combat Reconnaissance Vehicles and variants (CRV), Infantry Fighting Vehicles and variants (IFV) Armoured Personnel Carriers and variants (APC), Heavy Armoured Recovery assets, heavy Armoured Engineering Vehicles (AEV), Armoured Self Propelled

	Artillery, and may include protected mobility vehicle variants
	when used in a mounted close combat role.
AFV Crew	An AFV Crew Commander is qualified and appointed to
Commander	command and control an AFV as a member of an AFV crew,
	and by appointment, holds overall responsibility for the safe operation of the platform and its weapons by all crewmembers.
AFV Crewmen	An AFV Crewmen is an AFV gunner / AFV Loader/ AFV
	Operator / AEV operator / SP Gunner Crewmen who assist the AFV Crew Commander in the control of the vehicle.
Army Logistic	The Army training institution responsible to provide specialised
Training Centre	logistic training. These responsibilities include Driver, transport
(ALTC)	management and movement training to Defence and
	monitoring and advising on Driver training to ensure standards
	are maintained throughout Defence. Commander ALTC is the
	training adviser for Defence Driver training.
Army School of	AST is a sub-Unit of ALTC which delivers Driver, transport
Transport (AST)	management and movement training to the Royal Australian
	Corps of Transport, selected other Corps and Services. The
	Chief Driving Instructor Army Cell that works within AST.
	Commanding Officer (CO) AST is the approval authority for
	exported Drivers' courses.
Articulated Low	A Vehicle consisting of a Prime Mover and a 'gooseneck' Low-
Loader	loader float with the Loading area of the semitrailer a
	maximum of 1 m off the ground.
Articulated Vehicle	A Combination of Prime Mover and a semitrailer.
Attendant	A person who, in accordance with an arrangement made under
	Explosive Transport Regulations 2002 (ETR) (Statutory Rules
	2002, No 92), accompanies a road Vehicle or a Convoy of road
	Vehicles as an Attendant.
Australian Design Rule	A national standard under the Motor Vehicle Standards Act
(ADR)	1989.
Australian Standard	A standard, approved for publication on behalf of Standards
	Australia as updated from time to time.
Authorised Defence	A person employed by Defence who is authorised to task a
Representative	Contractor to perform or provide contracted services.

Authorised Official	An Official authorised by a group head to approve the Home
	Garaging of a Defence Vehicle, as detailed in Defence Finance
	Group, Cost Recovery Manual.
Authorised Passenger	A person whose carriage in a Defence Vehicle:
	• is in the interests of Defence
	is necessary for, or incidental to, the performance of the member's appointment
	when required, has been duly authorised on a minute attached to the form AD 049—Vehicle authorisation and task form
Authorising Officer	A person who is appointed by a Unit CO (Equivalent (E)) to authorise the use of Defence Vehicles by Defence Personnel. An Authorising Officer is also a person who is appointed by a Unit Commander (E) to authorise the use of lights and sirens on an emergency vehicle (less Defence Ambulances) by a suitably qualified Driver in an Emergency Situation. This individual needs to have regard for the implications associated with their decision
Axle	One or more shafts positioned in a line across a vehicle, on which one or more wheels intended to support the vehicle turn.
B Vehicle	See vehicle Classification.
B-Double.	A Combination of Vehicles consisting of a Prime Mover
	towing two semitrailers e.g. two pivot points.
Chain of Responsibility	The Chain of Responsibility (CoR) is the part of the Heavy Vehicle National Law (HVNL) that makes parties other than drivers responsible for the safety of heavy vehicles on the road.
Comcover	The Australian Government's self-managed insurance fund for insurable risks. Comcover protects the Australian Government's financial standing and reputation.
Commander	In the context of this publication, this means a Defence Member appointed as a CO, officer commanding or a designated Commander. The member in the appointment may be responsible for commanding members of the Australian Defence Force (ADF) in a Defence Establishment, an independent Unit or a branch within a headquarters.

Commercial Vehicle	B Vehicles which are available for purchase 'off the shelf' from commercial sources for the purposes of performing general transport tasks, and can be supported normally by the local commercial infrastructure. These Vehicles are also referred to as Commercial Line (CL) Vehicles. Vehicles specifically designed and constructed to military pattern or specification are not considered Commercial Vehicles. Vehicles commercially constructed to perform specialist functions (i.e. fire trucks, aircraft Tow Motors etc.) are not considered Commercial Vehicles.
Commercial Vehicle Management	The management of Defence's Commercial Vehicles by financial criteria (cost analysis) to ensure the provision of a cost-effective, appropriately sized fleet (both owned and hired). Land Systems Division is responsible for the management of the program.
Commonwealth Explosives	Explosives to which part II of the Explosives Act 1961 applies.
Commonwealth Vehicle	A Vehicle that is owned leased or hired by a Commonwealth Government Department. This includes Defence Vehicles (see definition).
Compatibility Group	Ammunition and explosives are considered compatible if they are stored or carried together without significantly increasing the probability of an accident / incident or, for a given quantity, the magnitude of the effects of such an accident / incident. Consequently, ammunition is assigned to a particular Compatibility Group depending upon the known/potential hazard characteristics of the item concerned.
Competent Authority	A person appointed under Regulation 10 of the ETR to be a CA. The Defence Competent Authority for Commonwealth Explosives is the Commander Joint Logistics.
Competency	The capacity of an individual to effectively and safely complete a task to a required standard of performance through the application of appropriate skills and knowledge.
Complete Equipment Schedule (CES)	An entitlement schedule-listing individual items which, when combined, constitute a complete equipment item of a Defence Vehicle. A Complete Equipment Schedule will often include items such as a Vehicle jack, wheel brace and tools.
Consultant	A person or organisation engaged by Defence under a contract to undertake a consultancy that meets the following Department

	of Finance criteria for reporting on Aus Tender: a. the services to be provided involve the development of an intellectual output that assists with Defence decision-making; • the output will reflect the independent views of the Consultant; and • the output is the sole or majority element of the contract, in terms of relative value and importance.
Controlled Route	A Route, the use of which is subject to traffic or movement restrictions, which may be supervised.
Converter Dolly	A Trailer with one Axle group or single Axle and a Fifth Wheel Coupling designed to convert a semitrailer into a Dog Trailer (see definition).
Convoy	Two or more Packets organised for the purpose of control and orderly movement, with or without escort protection, forms a Convoy. When required, a Convoy of Vehicles may be subdivided into groups of two to ten Vehicles, known as 'Packets'. Packets travel independently but conform to the overall Convoy plan and under the control of a Convoy Commander.
Convoy Commander	A person appointed by a Commander/Manager to have overall command and control of a Convoy.
Course Manager	An officer, Warrant Officer (E), non-commissioned officer or Defence Civilian Employee of equivalent rank, appointed by a Commander/Manager for the efficient conduct of a Driver training course.
Custodian	A Commander's/Manager's delegate who is responsible for the management and control of a Defence Vehicle. The Custodian is ultimately responsible for all matters concerning a particular Defence Vehicle.
D Vehicle	See Vehicle Categories.
Dangerous Goods (DG)	Dangerous Goods are articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of Dangerous Goods in the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Dangang T 1	A Danasana Insidant account insidant is
Dangerous Incident	A Dangerous Incident means an incident in relation to a
	workplace that exposes a worker or any other person to a
	serious risk to a person's health or safety emanating from an
	immediate or imminent Exposure (as defined by the WHS Act
	2011).
Dangerous Occurrence	See Dangerous Incident.
Dangerous Occurrence	See Dangerous meldent.
Daytime	That period of beginning at sunrise and ending at sunset.
Deep Fording	Defined as the crossing of a body of water that requires a
	vehicle operator to conduct fording preparations IAW relevant
	UHB. This also includes the attachment and use of deep
	fording equipment.
Defence	Is the Department of Defence and the Australian Defence
	Force.
Defence Civilian	A Defence Civilian, as defined in the Defence Force Discipline
	Act 1982 (DFDA), means a person (other than a Defence
	Member) who
	• with the authority of an authorised officer as defined in
	the DFDA, `accompanies a part of the ADF that is outside Australia, or on Operations against the enemy
	outside Australia, of oil Operations against the enemy
	• has consented, in writing, to subject themselves to
	ADF discipline while so accompanying that part of the
	ADF
Defence Contractor	A Defence Contractor Vehicle Assessor (DCVA) is qualified
Vehicle Assessor	and current IAW Part 4 of this manual. The DCVA is appointed
, , , , , , , , , , , , , , , , , , , ,	by the relevant TA to conduct assessment and instruction
Defence Contractor	A Defence Contractor Vehicle Instructor (DCVI) is qualified
Vehicle Instructor	and current IAW Part 4 of this manual. The DCVI is appointed
	by the relevant TA to conduct instruction.
Defence Contractor	A Defence Contractor Vehicle Testing Officer (DCVTO) is
Vehicle Testing Officer	qualified and current IAW Part 4 of this manual. The DCVTO
, entere resuing Officer	is appointed by the relevant TA to conduct assessment and
	issue drivers licences
	issue directs neclices
Defence Driver/	Defence Drivers/ Operators are categorised into three sub-
Operator	categories
_	
	• Professional Driver/ Operator. Defence uniformed
	personnel who operate Land Vehicles as their primary
	task and driving/ operating is specifically associated

	 with their primary employment. For example, the Driver trade within the Royal Australian Corps of Transport. Licence holder. All other Defence uniformed members who are required to operate Defence Vehicles in order to complete their assigned duties, but their designated employment is other than Driver. An example of a licence holder is a Vehicle mechanic who drives Vehicles as part of their routine duties as a
	 Civilian. Civilian Drivers are all other Drivers and operators of Defence Vehicles including Defence Employees, Defence Civilians, civilian Defence Exchange Officials, Contractors
Defence Emergency Vehicle (DEV)	An ADF ambulance, an ADF Fire Services Vehicle, an ADF Explosive Ordnance Demolition Vehicle and any other Vehicles designated from time to time by the Chief of the Defence Force (CDF). The following Vehicles constitute emergency Vehicles under the Defence Road Transport Exemption Framework:
	Defence ambulances—Defence Vehicles with specific ancillary shelters or equipment to evacuate and sustain treatment regimes in transit situations.
	Defence Fire Service Vehicles—Defence Vehicles with specific ancillary equipment to prevent or eliminate fires in domestic or field environments.
	Defence Explosive Ordnance Demolition (EOD)— Defence Vehicles carrying EOD equipment for the emergency demolition of unexploded ordnance.
Defence Employee	Defence Australian Public Service employee is a person employed under the Public Service Act 1999 in the Department of Defence
Defence Establishment	Any Defence Garrison area, base or facility.

Defence Industry	Is an organisation engaged by Defence, and is subject to direct
Partner Partner	management by Defence, whether through a contract or agreement that provide a service, or skill to support Defence capabilities. This applies where the engagement is for labour hire involving specific personnel remunerated at hourly or daily rates. Defence Members and Defence Australian Public Service employees are not included in this definition. This includes personnel referred to as: Defence Civilian Vehicle Testing Officer Defence Civilian Vehicle Assessors Defence Civilian Vehicle Instructor Defence Logistic Contractors This excludes Outsourced Service Provider
Defence Member	As defined in section 3 of the DFDA
Defence Personnel	Are all Australian Public Service employees in the Department of Defence, Defence Members, Defence locally engaged employees, Defence Civilians, and foreign personnel on exchange to Defence.
Defence Training Area	An area that has been publicly gazetted under Part 11 of the Defence Regulation 2016 or has been negotiated between Defence and appropriate government authorities, for conducting Defence Operations or practices. The area is to be clearly defined and have limited or controlled access to the public. Public Roads may form part of a Defence area once relevant DOTAM SOPs for that training area reference those public roads.
Defence Vehicle	Any Vehicle, including Trailers that are owned by, leased or hired by, the Department of Defence. It can be plated with Defence, Commonwealth, or civilian number plates. Also referred to as an A, B, C, D or Special Operations Vehicle (SOV).
Demonstration	Mobile/capability demonstration and observation by the members of the public

Design Acceptance	Design Acceptance Authority (DAA). As defined in the Land
Authority (DAA)	Material Safety Manual (LMSM), the DAA is an appointed
	competent engineer within Defence, who is responsible for:
	 the design acceptance of land materiel, including maintenance engineering, modifications or changes safety and environmental compliance of land materiel designs
	 delegating design acceptance responsibility to appropriate individuals.
Difficult Terrain	is an area that covers ground not transited by vehicles and
	includes unmaintained tracks. This area can range from open
	desert to dense forest areas, including open water crossings and variation of ground coverage.
Display	Land Vehicle remains static (no or minimum use of vehicular sub-systems)
Divisible Load	A Load that is made up of more than one indivisible item, or a
	substance or commodity, the amount of which can be reduced
	in size or mass without extreme effort, expense or risk of damage.
Dog Trailer	A Trailer (including a Trailer consisting of a semitrailer and Converter Dolly) with:
	one Axle group or single Axle at the front that is steered by connection to the towing Vehicle by a Drawbar
	• one Axle group or single Axle at the rear.
Drawbar	A part of a Trailer (other than a Semi-Trailer) which connects the Trailer body to a coupling for towing purposes.
Driving Assessor	A Defence member who has attended training and been deemed competent against the relevant LMP. Once qualified is authorised to conduct assessments under supervision of a TO.
Driver	See Operator
Driver Currency	Driver Currency is a prescribed period during which a qualification or Endorsement is valid without further assessment. Currency is the evaluation of the skills and

	knowledge of a Driver to ensure they meet the minimum standard.
Driver General Appraisal	The Driver General Appraisal (GA) is a performance appraisal for a Driver or trainee during a supervised practice driving session in a simulated work environment. A GA is to be conducted by a qualified DTO/ADI/DCVI. The driving GA can be conducted to evaluate qualifications, Competency and currency on specific Vehicle variants, driving on 1st and 2nd class roads, Difficult Terrain and operating ancillary equipment. A GA can be used as evidence to inform CoC, Manager, Supervisor's or a licencing authority that the Driver / operator has demonstrated the skills and knowledge to meet a required competent standard.
Driving Instructor	Land Vehicle Operators/drivers that are deemed suitably experienced and competent that have successfully completed relevant training. A DI is authorised to perform instruction against current ADF licence codes held
Driving and Servicing Instructor	A Defence Member who has attended the relevant A Vehicle Instructor Course, or is appointed by the relevant Training Authority. A member who holds the minimum rank of CPL, has completed 12 months as a Crew Commander and holds an unrestricted licence for the relevant vehicle.
Driver Testing Officer (DTO)	A Defence Member, who has attended a relevant vehicle category Testing officer course or been appointed by the respective Training Authority. It is a senior member who holds a high level of Subject Matter Expertise in their respective vehicle operations and has been authorised to assess and issue Defence Driver's licence codes and Endorsements within the bounds of their qualification.
Driving Duty	Whenever a Driver is operating a Defence Vehicle, they are deemed to be on duty for the purpose of these orders, if correctly authorised to drive that Vehicle. It includes time spent Loading, unloading, assisting passengers in getting on and off a Vehicle, inspecting, maintaining, or refuelling a Vehicle and any Break less than 30 minutes.
Emergency Response Situation	A situation requiring an emergency response Vehicle or a Military Police Vehicle to respond; this may necessitate the use

	of the Vehicle's emergency warning devices such as sirens and
	flashing lights.
Emergency Situation	Any situation in which there is the immediate risk of:
	death or serious injury
	damage to property
	damage to equipment.
Endorsement	An approval or acknowledgment of a qualification or skill that
	enables a Driver to operate the endorsed equipment.
Equivalent Danks	An axial anation on the neal convive lents course Defence is
Equivalent Ranks	An explanation on the rank equivalents across Defence is available in the ADF Pay and Conditions Manual (PACMAN),
	Chapter 1, Part 4.
	Chapter 1, 1 art 7.
Escort Vehicle (for	A Vehicle that is being used to transport a police officer or
Oversize Vehicles)	other person authorised to direct traffic, and which is being
	used to warn other road users of the presence of an Oversize
	Vehicle or Combination. An Escort Vehicle is not a Pilot
	Vehicle.
E (ID:	Deline decining and account and all all all a France
Exported Driver	Driver training not resourced and scheduled by Forces
Training	Command on PMKeyS, (i.e. a Unit conducted Driver course).
Exposure	Where an Exposure and or potential Exposure to a
•	substance/material including workplace hazards or Exposure to
	a traumatic event has occurred that does not result in any
	immediate effects, and does not fall within the Dangerous
	Incidents definitions for immediate or imminent Exposure.
Familiarisation	Familiarisation training is used to address a gap in training on
	Land Vehicles within the same licence and mobility
	category. Vehicles. This also includes training against a
	Defence member's or Defence Contractor's civilian licence, as
	detailed in Part 4 to this Manual. Familiarisation training is not to be used for training on GS Vehicle (see Recognition
	training).
	duming).
Fifth Wheel Coupling	A device, other than the upper rotating element and the kingpin
	(which are parts of a semitrailer), used with a Prime Mover,
	Semi-Trailer or a Converter Dolly to permit quick coupling and
	uncoupling and to provide for articulation.

Flat Towing	Towing of a similar sized disabled Vehicle by use of a rigid frame connection. All wheels of the disabled Vehicle remain in contact with the road surface.
Flatrack	The Flatrack, palletised Loading, Integrated Load Handling (ILH), module is a welded steel frame, steel floored, flat cargo body with a folding front end A frame. Utilised with a Truck Heavy, Integrated Load Handling System (ILHS).
Fleet Management	The function of acquiring, introducing, distributing, managing, maintaining, repairing and disposing of equipment and stores. These actions are performed at all levels of the supply chain, through methods and requirements specified by the ADF Logistics Manager, in accordance with Capability Manager Directives. (Refer to the Electronic Supply Chain Manual).
Fording	Defined as the crossing of a body of water, where there is no requirement to conduct fording preparations on the vehicle by the operator; however, can include additional preparation (hatches, flaps and bilge pumps etc.)
Formed Roads	See Road types.
Garaging	The overnight, off street parking of a Defence Vehicle.
Garrison	Is a Defence Establishment with controlled access that is not open to the public without being briefed.
Gazette	A gazette is similar to a permit; however, it is not vehicle specific it permits access based on mass and dimensions. A gazette is often issued for a longer period than a permit, usually 5 years.
General Assessment (GA)	General Assessment is a practical assessment by a qualified DTO, DCVI, or ADI that requires the assesse to demonstrate the ability, skills, and knowledge to meet the acceptable standard, a GA is to take place in a simulated workplace environment.
General Service (GS) Vehicle	B Vehicles designed to military specifications to conduct tasks required in an area of Operations. GS Vehicles combine road mobility with cross-country mobility, including the ability to cross water obstacles with minimum preparation and assistance. Certain GS Vehicles are designed for air portability in appropriate aircraft. GS Vehicles normally have inherent durability and are designed to have a longer life of type (LOT)

	than an off-the-shelf CL Vehicle. Also known as GS B
	Vehicles.
Government Furnished Equipment	Government Furnished Equipment. That equipment/materiel which is to be supplied by the Australian Government and delivered to the Contractor at no charge to the Contractor except for that equipment/materiel delivered to a Contractor for sales overseas. Government Furnished Equipment should not incur any costs to the Commonwealth when delivery of the equipment/materiel to the Commonwealth is complete.
Gross Combination Mass (GCM)	The greatest possible sum of the maximum Loaded mass of the motor Vehicle and of any Vehicles that may be towed by it at one time:
	as specified by the motor Vehicle's manufacturer
	as specified by the Vehicle registration authority if:
	o the manufacturer has not specified the sum of the maximum Loaded masses
	o the manufacturer cannot be identified; or
	o the Vehicle has been modified to the extent that the manufacturer's specification is no longer appropriate.
Gross Vehicle Mass (GVM)	Is the maximum operating weight of a Vehicle as specified by the manufacturer on the compliance plate and including the Vehicle's chassis, body, engine, engine fluids, fuel, accessories, Driver, passengers and cargo but excluding that of any Trailer or trailers.
Gross Weight	The weight of a Vehicle including fuel, lubricants, coolant, Vehicle tools and spares cargo and operating personnel.
Group	In relation to explosives specified in Schedule 1 of the Commonwealth Explosives Regulations, means the United Nations (UN) Compatibility Group in which, under Regulation 4 (CER), those explosives are included.
Hazard Warning Lights	Yellow signal lights, fitted on each side of a Vehicle at its front and rear that can be operated to flash simultaneously and regularly.
Heavy Vehicles	A Vehicle or Trailer that has a GVM greater than 4.5t.

Heavy Vehicle National	Is one set of civilian law for heavy vehicles over 4.5t gross
Law	vehicle mass.
Hire Vehicle	A vehicle that is hired by Defence using Defence funds.
Home Garaging	The secure, overnight, off-street parking of a Defence Vehicle
Trome Garaging	at the Private Residence of an Official. When a Defence
	Vehicle is located at a member's residence, it is deemed
	available for Private Use. The use of a Defence Vehicle may
	result in a reportable fringe benefit. Home Garaging may be
	either permanent or temporary:
	ettier permanent or temporary.
	• Permanent Home Garaging means an ongoing arrangement that is valid for up to 12 months, or to the end of the FBT Year.
	Temporary Home Garaging means a short-term arrangement of continuous periods up to 10 working days, or to the end of an FBT year, whichever occurs first.
Instructor of Cadets	An IOC is defined as a person who is appointed or reappointed
(IOC)	as an instructor in the ADF Cadets under the Cadet Forces Regulations 2013.
Integrated Load	Integrated Load Handling System (ILHS). Is a mechanical,
Handling System	hydraulically powered, diagonally lifting Load and unload
(ILHS)	mechanism, fitted to the MAN HX77 used to lift and dismount
	Flat-racks, modules and ISO 20ft containers.
	, and the second
Laden Vehicle	A Vehicle carrying a Load.
Land Vehicle	A vehicle designed to operate on Land and encompasses
	Armoured, Logistic, Earthmoving equipment, Materiel
	Handling Equipment and General Light Cars, Trucks.
Large Indivisible Load	An item that:
	cannot be divided without extreme effort, expense or risk of damage to it
	• cannot be carried on any Vehicle or Combination
	without exceeding a mass or dimension limit in the Mass and Loading Regulations.
Learning Management	The curriculum and all additional documentation needed to
Package	conduct a course. Includes validation concept, Recognition
1 ackage	policy, competencies, assessment, training objectives, joining
	poncy, competencies, assessment, training objectives, joining

	instructions, pre-course study advice, instructor briefs, lesson
	plans, and details of learning strategies.
Load	In relation to a Vehicle or Combination, includes anything that
	is normally removed from the Vehicle or Combination when
	not in use, but does not include:
	• tools, equipment or substances necessary for the
	Vehicle or Combination to function, or for any Load to be restrained; or
	oc restrained, or
	• personal items for the use of the Driver.
Load Restraint Guide	Load Restraint Guide. Publication produced by the National
	Transport Council (NTC) and Road & Traffic Authority (RTA)
	NSW.
Load-Carrying Vehicle	In relation to a Vehicle or Combination, means a Vehicle or
Load-Carrying venicle	Combination that is carrying, or is built to carry, a Load.
	Combination that is carrying, of is built to carry, a Load.
Local Training	See Movement Types.
Movement	
Long Halt	A Long Halt is a halt which is for 30 minutes or longer. Long
	Halts must be taken after five hours driving which includes
	Short Halts. Time spent at a Long Halt is not calculated as
	driving time.
T 1 J	A
Low-loader	A gooseneck Semi-Trailer with a Loading deck no more than
	one metre above the ground.
Low-loader Dolly	A mass-distributing device that:
J J	
	• is usually coupled between a Prime Mover and a low
	Loader
	a consists of a googeneak rigid from
	consists of a gooseneck rigid frame
	does not directly carry any Load on itself
	• is equipped with one or more Axles, a king pin and a
	Fifth Wheel Coupling.
Maintenance	See Land Materiel Safety Manual (LMSM)
Management Plan	
(MMP)	
. ,	
Manager	Means Defence Personnel or Contractors who direct a range of
	human and physical resources and their associated financial

	responsibilities to achieve corporate objectives. A Manager
	may be a first-level Supervisor or perform the role of a first-
	level Supervisor where they have immediate subordinates, as
	well as the role of a second-level Supervisor where they have
	Defence Personnel supervised by those subordinates.
	Described a discount of the second substitutions.
Materials Handling	MHE includes all Vehicles and machinery used for Loading
Equipment (MHE)	and unloading of material.
Materiel Specific	Documentation pertaining to the operation and maintenance of
Instructions	specific items of materiel, e.g. Electrical and Mechanical
	Engineering Instructions (EMEI), user/operator handbooks,
	CASG Fleet instructions and Technical Integrity Management
	Plans.
Military Establishment	See Defence Establishment.
-	
Military Police	A member of the police corps or Service and includes a provost
	marshal and a deputy provost marshal: DFDA, section 3(1).
Military Police Vehicle	A Vehicle operated by Military Police in the conduct of their
	duties. Military Police vehicles have no exemptions from State
	and Territory road rules.
2.500	
Military Specific	A vehicle that is designed as a purpose built military vehicle
Vehicle	and is not maintained by sgfleet.
Minor Injury	Any Minor Injury that did not regult in a fatality Serious Injury
Minor Injury	Any Minor Injury that did not result in a fatality, Serious Injury
Minor Injury	or Illness or a Dangerous Incident, that was a direct result of
Minor Injury	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence
Minor Injury	or Illness or a Dangerous Incident, that was a direct result of
	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace.
Mobility Category	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace. MC is utilised to support the current fleet of Defence Vehicles
	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace.
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Mobility Category	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace. MC is utilised to support the current fleet of Defence Vehicles and is defined as: Category 1. High. Vehicles able to make maximum use of terrain to enable rapid deployment to optimal firing positions, weapon sites, surveillance points etc. and be able to out-manoeuvre highly capable threat Vehicles.
Mobility Category	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace. MC is utilised to support the current fleet of Defence Vehicles and is defined as: Category 1. High. Vehicles able to make maximum use of terrain to enable rapid deployment to optimal firing positions, weapon sites, surveillance points etc. and be able to out-manoeuvre highly capable threat Vehicles. Category 1. Low. Vehicles able to make maximum use
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Mobility Category	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace. MC is utilised to support the current fleet of Defence Vehicles and is defined as: Category 1. High. Vehicles able to make maximum use of terrain to enable rapid deployment to optimal firing positions, weapon sites, surveillance points etc. and be able to out-manoeuvre highly capable threat Vehicles. Category 1. Low. Vehicles able to make maximum use of terrain to enable routine deployment to optimal firing positions, weapon sites, surveillance points etc. Category 2. High. Vehicles able to make use of terrain
Mobility Category	or Illness or a Dangerous Incident, that was a direct result of either a Defence undertaking and or occurred in a Defence controlled workplace. MC is utilised to support the current fleet of Defence Vehicles and is defined as: Category 1. High. Vehicles able to make maximum use of terrain to enable rapid deployment to optimal firing positions, weapon sites, surveillance points etc. and be able to out-manoeuvre highly capable threat Vehicles. Category 1. Low. Vehicles able to make maximum use of terrain to enable routine deployment to optimal firing positions, weapon sites, surveillance points etc.

Motor Vehicle, Loss, Destruction or Damage Insurance (also known as Comprehensive Insurance)	 Category 2. Low. Vehicles able to make use of terrain to enable routine deployment to good firing positions, weapon sites, surveillance points etc. Category 3. Vehicles with sufficient off-road capabilities to reach echelons, distribution points, worksites and circumvent road damage or blockages. Category 4. Vehicles with limited off-road capability. Insurance cover for accidental loss or damage (including theft) to an insured Vehicle including third party property damage claims in which the Driver of the insured Vehicle is found legally liable.
Motor Vehicle Compulsory Third Party (CTP) Personal Injury Insurance	This insurance is mandatory for every motor Vehicle registered in Australia. CTP insurance indemnifies Vehicle owners and Drivers who are legally liable for personal injury to other road users (such as Drivers, passengers, pedestrians and cyclists) as a result of a motor Vehicle Accident.
Motor Vehicle Third Party Property Damage Insurance	Insurance cover for third party property damage claims arising from the use and operation of a motor Vehicle where the Driver of the insured Vehicle is held legally liable. It does not cover accidental loss or damage to the insured Vehicle.
Motorcycle	 A Motorcycle is defined as: a two-wheeled motor Vehicle; or a two-wheeled motor Vehicle to which a sidecar or a Trailer is attached.
Mounted Leader	Includes a Logistic Combat Support Vehicle or Support Vehicle Commander in command of a single Land Vehicle
Mounted Commander	Includes Logistic Combat Support or Support Vehicle Commander in command of multiple Land Vehicles
National Transport Commission (NTC)	A national organisation established under the intergovernmental agreement to develop, monitor, and maintain uniform or nationally consistent regulatory and operational reforms relating to road transport, rail transport, and intermodal transport.

National Transport Policy Framework	The establishment and maintenance of nationally agreed and accepted road transport rules and regulations through the auspices of the NTC.
National Transport Policy Framework (2)	Represent industry best practice in regards to heavy Vehicle Operations, therefore all elements of Defence must comply with it throughout Australia, except where specific exemptions are detailed under the Australian Defence Road Transport Exemption Framework.
Near Miss	An Incident where no person is injured, but could have been injured, resulting in Serious Injury or Death but where the risk to a person's health that was not immediate or imminent and the incident does not fall within the definitions of a Dangerous Incident.
Network	Is the collection of approved routes for the purpose of OSOM vehicle movement.
Network map	Is the digital representation of the approved network(s), inclusive of travel conditions, for the purpose of OSOM vehicle movement.
Night Vision Equipment (NVE)	NVE, is an electro-optic system used to enhance and intensify night images.
Night-time	That period of time beginning at sunset and ending at sunrise depending on actual location.
Non-Technical Inspection (NTI)	NTI are conducted by competent, qualified and authorised operators, utilising appropriate tools, gauges and test equipment, and in accordance with authorised procedures contained in Materiel Specific Instructions. NTI is a preventative maintenance measure that permits early identification of faults and deterioration of the condition of materiel. NTI should identify outstanding maintenance actions where they exist and may initiate technical maintenance.
Officer of Cadets (OOC)	An OOC is defined as an adult who is appointed or reappointed as an officer in the ADF Cadets under the Cadet Forces Regulations 2013.
Official	An Official means Defence Employees, Defence Civilians, Defence Members, OOC and Instructors of Cadets (IOC) and non-public servants (such as a Contractor) who performs a

	financial task for Defence, where the non-public servant is specifically designated and assigned particular responsibilities.
Official Purposes	See Business Use.
Official Travel	Official Travel is travel undertaken for duty purposes and is at the expense the Commonwealth. Official Travel may be movement via air, sea or land transport modes and could be provided by the private sector or the Commonwealth.
Operate Under load	When the Vehicle ancillary attachments are utilised to move or lift materiel (e.g. moving earth or lifting a container).
Operations	Any activity needed to gain the objectives of any battle or campaign, any UN peacekeeping activity, or an emergency declared by the CDF. It does not include Defence Assistance to the Civil Community or any training, including training for warlike Operations.
Operator	An Operator can be a Defence Member, Defence Civilians, civilian Defence exchange Officials, Instructors of Cadets, Officers of Cadets or Contractors, Consultants and Outsourced Service Providers or Defence Volunteers, who are both qualified and authorised to drive a Defence Land Vehicle regardless of category/type. See Defence Operator for licence categorisation.
Operator Servicing	Tasks which are carried out by Drivers on Defence Vehicles prior to, during and after completion of driving tasks, to ensure that the Vehicle is serviceable and roadworthy.
Outsourced Service Provider	Is a person or organisation engaged by Defence to provide an external platform and/ or maintenance service capability.
Overmass	In relation to a Vehicle or Combination, means having a mass that, including the mass of any Load, exceeds a relevant mass limit in the Road Transport Reform (Mass and Loading) Regulations.
Oversize Vehicle	In relation to a Vehicle or Combination, means a Vehicle or Combination, which, with any Load, exceeds a relevant dimension, limit in the Road Transport Reform (Heavy Vehicle Standards) Regulations or the Road Transport Reform (Mass and Loading) Regulations. A Vehicle or Combination is oversize if one or more of the general dimension limits of 2.5 m

	wide, 4.3 m high and 12.5 m long for a rigid Vehicle and 19 m long for an Articulated Vehicle, are exceeded.
Packet	A group, of two to ten Vehicles, moving together under the control of a Packet Commander. A Packet is part of a Convoy.
Packet Commander	A member appointed by a Convoy Commander for each Packet of Vehicles in the Convoy. When Vehicles are carrying troops, Packet Commanders must be appointed from the Units being carried.
Payload	The Load (expressed in tonnes of cargo or equipment, litres of liquid, or number of passengers) which the Vehicle is designed to transport under specified conditions of operation, in addition to its unladen weight.
Permanent Use	Where a Defence Official uses a Defence Vehicle including regular Garaging at a Private Residence. Permanent Use will also apply to any situation where a continuing agreement is broken intermittently due to alternative use of a Defence Vehicle for a short period.
Permit	A permit authorises specific vehicle combinations to use part of the road network, the permit may include conditions to travel on that route. All permits are issued by NHVR.
Pig Trailer	A Trailer with one Axle group or single Axle near the middle of its Load carrying surface, and connected to the towing Vehicle by a Drawbar.
Pillion Passenger	a person who travels in a seat or place behind the Rider of a Motorcycle, scooter, horse, etc.
Pilot Vehicle	A Vehicle fitted with 'OVERSIZE' signs and rotating yellow flashing lights being used to warn other road users of the presence of an Oversize Vehicle or Combination.
Pole-Type Trailer	Is a Trailer that:
	• is attached to a towing Vehicle by means of a pole or an attachment fitted to a pole
	• is ordinarily used for transporting Loads, such as logs, pipes, structural members or other long objects, which are generally capable of supporting themselves like beams between supports.

Powered plant	The Work Health and Safety Regulation 2011 (WHS Regulation) defines Powered Mobile Plant to mean any plant with some form of self-propulsion that is ordinarily under the direct control of an operator.
Prime Mover	A motor Vehicle built to tow a semitrailer/s.
Private Residence	A place of permanent or long-term residence of a Defence Official.
Private Use	The use of a Defence Vehicle by Defence personnel which is not directly attributable to the performance of their duties. Based on this definition and the principles governing the use of Defence Vehicles outlined in the Tax Management site, the kilometres travelled to and from work for Garaging Defence Vehicles at a Private Residence are considered to be private travel
Procedural Fairness	Procedural Fairness describes the rules and procedures to be followed by any person who can make adverse decisions about others. Refer to Defence Instruction – Administrative policy and Good Decision-Making in Defence: A guide for decision makers and those who brief them.
Prohibited Area	Refer ADFP 101—Glossary.
Proficiency	Gained when an individual is well advanced, expert or skilled in a task or duty. A proficient individual is both competent and experienced. Proficiency is developed through regular practice, by performing the skill or task to a higher standard or in a more complex environment.
Public Roads	Roads that are maintained by Government bodies, other than the Department of Defence, for use by all road transport groups. Defence Establishments and Defence areas can be a Combination of Public Roads and Defence gazetted roads. The main road of a Defence Establishment maybe a public road, however numerous branch streets and roads could be gazetted Defence roads.
Purpose Designed Passenger Carrying Vehicles	Purpose Designed Passenger Carrying Vehicles include: commercial cars and 4 x 4 Vehicles which allow for the carriage of passengers in a forward seated position and where seatbelts are fitted

	 mini-buses, buses and coaches which allow for the carriage of passengers in a seated position, whether seatbelts are provided or not trucks and semitrailers where the passenger compartment is fitted with seat belts General Service Vehicles which are fitted with a Passenger Cargo Restraint and Segregation System or Rollover Protective System.
Qualified Assessor	A Qualified Assessor (QA) is a person registered under Comcare that is competent in, and holds a current Vocational Education Training qualification in Training and Assessment
Recognition	Recognition Also known as Recognition of Prior Learning (RPL), is the formal process of acknowledging a members previous training, work or life experience against a qualification framework, units of competency or learning outcomes. This allows members to be granted either part or full RPL for military courses.
Recovery	The process of extricating a Vehicle or equipment casualty from the place where it has become disabled or defective and moving it to the first place where repairs can be effected, or from which it can be back Loaded. In its broader sense the term not only covers this process, but also back Loading and evacuation. The Australian Defence Doctrine Publication 4.5—Materiel Engineering and Maintenance provides the definitions of Recovery Operations and Types of Recovery Support.
Regulatory Sign	Regulatory Sign. A sign used by a competent Local, State, Federal Government or military authority to regulate and control traffic.
Relevant Property	Property in the custody or under the control of the Commonwealth, or property in the custody or under the control of any person acting for or on behalf of the Commonwealth, in respect of the custody or control of the property.
Rental Vehicle	See hire vehicle
Rest	Rest (in relation to fatigue management) is to be taken outside of the Land Vehicle and over a period of eight hours. The location in which the rest is taken must also be conducive to the driver/ operator being able to achieve sleep.

Restricted space	Is when a Land Vehicle operates within a high-density residential or commercial location or a wooded area that impacts a vehicles turning circle. Additionally, the area can be an open terrain where the road surface is equal to or less than the vehicle track width. A public parking area that is purpose designed to accommodate CL Passenger vehicles, is not a restricted space.
Rider	Person riding and responsible for controlling an All-Terrain Vehicle, Motorcycle, bicycle or animal.
Risk Management	The process of identifying hazards, evaluating the degree of risk associated with identified hazards and taking that action necessary to eliminate or reduce Exposure to those hazards so far as is reasonably practicable.
Road Movements Officer	An Air Force appointment for the control of Defence Vehicles. Refer to Chapter 2—'Roles and responsibilities'.
Road Train	A Combination, other than a B-double, consisting of a motor Vehicle towing at least two Trailers (counting as one Trailer a Converter Dolly supporting a Semi-Trailer).
Road Types (Class)	Road types are categorised as:
	Formed road (class one). A sealed and marked road which is governed by road rules and regulations
	Unsealed formed road (class two). An unsealed road that was made by some form of plant to allow use by non-four wheel drive vehicles. This road may be governed by road rules and regulations
	Track (class 3). A defined Route (unsealed) established by frequent human, Vehicle or animal movement, not purpose built for Vehicle movement.
Route	The prescribed course to be travelled from a specific point of origin to a specific destination.
Safe Driving Area (SDA)	A suitable Defence area or establishment with control measures in place to inform military and civilian road users, that the area may be used to train Drivers in a risk managed environment. For training purposes, this area should be equipped with a wide range of road conditions, intersections, signs and road surfaces. If the road network within a Defence Establishment is used as a SDA, a warning sign advising that Driver training is being conducted, is to be placed at the establishment entrance

	checkpoints. If a non-Defence area is to be utilised, the area is
	to be closed to the public and suitable insurance agreements
	must be in place.
	must be in place.
Safe Location	An area as near as practicable away from an emergency site,
	taking into account the relative safety distances pertaining to
	the type of Load.
	, , , , , , , , , , , , , , , , ,
Safety Vehicle	A Defence Land vehicle operated within the vehicle licence
	category of Light Rigid or lower to assist with public road
	movement of Defence Land Vehicles.
Scheduled Driver's	A Driver's course which has been approved resourced and
Course	scheduled to be conducted at ALTC or another training
	establishment.
	A C 4' C 1 (CDL) Pl 4' NGO 'C 11
Section Commander	A Section Commander (CPL) Plant is an NCO specifically
Construction	appointed by the Commanding Officer/Officer Commanding.
	To carry out duties including earth moving and MHE. Ad must
	be a fully qualified CPL IAW employment specification for
	ECN 270
Semi-Trailer	Semi-Trailer. A Trailer (including a Pole-Type Trailer) that
Seill-Trailer	has:
	nas.
	• one Axle group or single Axle towards the rear
	one rance group or onight rance to this the room
	a means of attachment to a Prime Mover that would
	result in some of the Load being imposed on the Prime
	Mover.
Senior Executives	APS employees with a classification of Senior Executive
Schot Baccutyes	Service Band 1 and above (or E O–7 one-star).
	Service Band I and above (of D. O. I one Star).
Serviceable	A Vehicle is fit for its intended use and complete with all
	components in working order. Associated stores are
	Serviceable when they are fit in every respect for use with their
	Serviceable when they are fit in every respect for use with their parent equipment. This term has now been replaced by 'Fully
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	parent equipment. This term has now been replaced by 'Fully Functional' in accordance with TRAMM-L.
Shipping Document	parent equipment. This term has now been replaced by 'Fully
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Shipping Document	parent equipment. This term has now been replaced by 'Fully Functional' in accordance with TRAMM–L. Any document which accompanies goods being transported or is transmitted electronically in conjunction with the movement of goods, and includes an invoice, delivery note, consignment
	parent equipment. This term has now been replaced by 'Fully Functional' in accordance with TRAMM–L. Any document which accompanies goods being transported or is transmitted electronically in conjunction with the movement of goods, and includes an invoice, delivery note, consignment note, Load manifest, export receipt advice, bill of lading, contract of carriage or subcontractors payment advice.
Shipping Document Short Halt	parent equipment. This term has now been replaced by 'Fully Functional' in accordance with TRAMM–L. Any document which accompanies goods being transported or is transmitted electronically in conjunction with the movement of goods, and includes an invoice, delivery note, consignment note, Load manifest, export receipt advice, bill of lading,

Special Operations Vehicle (SOV)	be taken are given in the orders relating to the movement, however, not less frequently than every two hours, plus or minus a half hour. A Short Halt is normally for 10 minutes but not more than 15 minutes. A vehicle that has undergone varying degrees of customisation and sub-system integration across mobility, weapons, equipment carriage, force protection, personnel seating and communications systems. These vehicles are utilised within SOCOMD and other units integrated with SOCOMD.
Special Purpose Military Vehicle (SPMV) Class 1	Class 1 SPMVs are classes of wheeled Vehicles and Trailers that are built or permanently modified for ADF-related purposes and:
	 that are primarily used for the protected movement of ADF personnel, or that are Load moving Vehicles such as military cranes and forklifts that are not an Articulated Vehicle
	that exceed a dimension limit under road transport laws that are based on the Australian Vehicle Standards Rules (AVSRs) or a statutory dimension or Axle mass limit under road transport laws that are based on the Road Transport Reform (Mass and Loading) Regulations.
Special Purpose Military Vehicle (SPMV)-Class 2	Class 2 SPMVs are classes of specially adapted Vehicles or Vehicle Combinations that are designed for the movement of military modules and specialised stores and equipment, or that have a specialised military purpose such as ADF Recovery Vehicles and ADF fire and rescue Vehicles. They usually have an armoured protected cabin.
Supervisor	Means Defence Personnel or Contractors who have direct or line supervisory responsibilities for Defence Personnel. In relation to the handling of Commonwealth Explosives, or a part of that handling, means a person appointed under the CER to supervise that handling, or that part of that handling, as the case may be.
Tactical Movement	This movement occurs predominately within a Defence training area to enable military specific training to meet a preparedness requirement; however, can include restricted movement on public roads where an authorised training activity includes such roads. Additionally, the movement of Defence and civilian

	personnel during Defence Aid to the Civil Community (DACC)	
	tasks can be classified as Tactical Movement.	
Tare mass	The mass of a Vehicle without its Load (i.e. when unloaded,	
	without fuel etc.).	
Task Worthy	A Vehicle, which is fit to carry out, specified tasks in the short	
	term even though it may be in need of further work to bring it	
	to a Serviceable standard. Restricted Use in accordance with	
	LMSM has now replaced this term.	
Technical Inspection	A Technical Inspection in accordance with EMEI or other	
1 centical inspection	approved instructions that are intended to identify all faults,	
	outstanding maintenance tasks and outstanding modifications.	
	It must result in a land materiel classification. The relevant	
	EMEI or other approved documentation against which the	
	inspection is conducted must be recorded	
	inspection is conducted mass of recorded	
Engineering	An organisation's EMSD consists of its documented	
Management System	engineering or maintenance management system. An	
Directive (EMSD)	organisation's EMSD is sometimes called an Engineering	
	Management Plan (EMP). For further detail, refer to the	
	LMSM.	
Temporary Use	The use of a Defence Vehicle, including limited Garaging at a	
	Private Residence, for a period less than an annual amount of	
	10 days.	
Testing Officer	Any Defence Member, Defence Employee or Defence	
	Contractor, who has attended a relevant vehicle category	
	Testing officer course or holds and equivalent civilian	
	qualification and, has been appointed by a respective Training	
	Authority procedures. It is a senior member who holds a high	
	level of Subject Matter Expertise in their respective vehicle	
	operations and has been authorised to assess and issue Defence	
	Driver's licence codes and Endorsements within the bounds of	
	their qualification.	
	•	
Tie Down	Fasten or secure a Load to its carrier by use of ropes, cables or	
	other means to prevent it shifting during transport in	
	accordance with the Load Restraint Guide.	
Tow Motor	Classified as common GSE the Treaton Aircraft Towing in	
1 OW MOTOLOL	Classified as common GSE, the Tractor Aircraft Towing is	
	managed by Aerospace Materiel Systems Program Office	
	(AMSPO) and has a different servicing regime to that of other Defence Vehicles.	
	Detence venicles.	

Trailer Transport Operations Manager	A Vehicle that is built to be towed (including artillery guns), or is towed, by a motor Vehicle, but does not include a motor Vehicle being towed. This includes caravans, which have been procured by a Service or Group. Trailers can be plated with Defence, Commonwealth, or civilian number plates. The term Transport Operations Manager refers to a duly appointed member who has management responsibilities in
	relation to Motor Transport. Appointment holders who are members of the ADF may be referred to as a Transport Operations Manager, or Road Movements Officer depending on the Service with which an establishment is aligned.
Two-Up Driving	The Driver is the authorised operator; however, in the case were the authorised Driver can no longer continue, the relief Driver is authorised to take control of the Vehicle; however is not to exceed 12 hours driving from the commencement of the task start time. Both Drivers are then to take the mandatory eight hours of continuous rest away from the Vehicle.
Unit	Any Defence element whose structure is prescribed by Competent Authority, such as a table of organisation and equipment. (See ADFP 101—Glossary.)
United Nations Classification System	Means the system of classification commonly known as the UN classification system for Dangerous Goods.
United Nations Number	A number allocated to a substance or article in accordance with the UN classification system.
Unladen Vehicle	An unoccupied Vehicle not carrying a Load in the Load space, however includes: • all fluids to full capacity, including fuel jerry cans, water jerry cans and fuel tanks • all items identified in Part 2A of the Vehicles Complete Equipment Schedule (CES), including winch and winch CES if fitted • the Vehicle installation kit for radios (fitted for) Note: Unladen weight does not include the weight of personnel, removable communications equipment, weapons or other
	Loads. When calculating the laden weight of a Vehicle, the weight of all personnel, personal field equipment and other equipment must be considered.

Unscheduled Driver	See Exported Driver Training.		
Course			
Utility Cart	A lightweight, off-road—capable Vehicle with seating for two		
	personnel fitted with a steering wheel and seatbelts and a GVM		
	less than or equal to 1200 kg. This does not include golf carts.		
Vehicle Cabin/the	The inside of a Vehicle, which is connected to both the		
Cabin of a Vehicle	passenger area and Driver's compartment, is considered to be		
	classified as the Cabin of a Vehicle. (I.e. the complete interior		
	of a station wagon/van including the area separated by the		
	cargo barrier is classified as the cabin.)		
X7 1 • 1 A • 1 A			
Vehicle Accident	A Vehicle Accident involves one or more Vehicles, of which at least one is moving, undergoing Loading or is otherwise		
	directly engaged in a task that results in a fatality, serious injury		
	or illness, Dangerous Incident, Minor Injury or a Near Miss		
	during a Defence undertaking.		
Vehicle Capacity	Vehicle Capacity. The number of passengers, or the tonnage (o		
	volume), which can be carried by the Vehicle under given		
	conditions.		
Land Vehicle	Vehicle Categories:		
Categories			
	• 'A' Vehicles are all AFV, their variants and derivatives.		
	derivatives.		
	'B' Vehicles are all road transport vehicles designed to		
	transport freight and/or passengers, their variants or		
	derivatives. This includes any B vehicle that has		
	ballistic armour protection, such as Hawkei, Bushmaster and RMMV-A.		
	• 'C' vehicles are all engineer plant vehicles designed to		
	carry out earthmoving and engineer activities such as bulldozer, Front End Loaders and Excavators.		
	oundozer, Front End Loaders and Excavators.		
	• 'D' Vehicles are all materials handling equipment		
	designed to lift stores and equipment, such as forklifts and cranes.		
	and cranes.		
Vehicle Custodian	See Custodian.		
Vehicle Commander	Is a person that has been trained as either an AFV Commander,		
	A Mounted Leader or a Mounted Commander		

Vehicle Incident	Any breaches of legislation, which in itself is a risk to safety Additionally any damage sustained through unknown causes.
Vehicle occupant	This term includes co driver, passenger and AFV Specialist. Where a vehicle occupant is to be used as a co-driver for Land Vehicles.
Vehicle Operator	See Driver.
Visiting Force	In accordance with the Defence (Visiting Forces) Act 1963 Section 5, 'Forces' in relation to a country means the naval, military or air force authorities of that country. Further, Visiting Force means anybody, contingent or detachment of the forces of a country that is for the time being present in Australia. For the purpose of this manual, the term also includes the civilian component of the Visiting Force.
Vehicle Fleet Manager	A person with minimum rank of CPL (e) who is in direct supervision (e.g.: Transport Manager/ Road Movements Officer/ Motorised/Mechanised WO) of Defence vehicles for the purposes of compliance, assurance, training, maintenance or any other associated Land Vehicle Operations requirements.
Volunteer	For the purpose of this manual, a Volunteer is a person who consents to undertake duties under the direction or at the request of the Defence, receives nil or nominal reward, and does so on a temporary or casual basis.
Water obstacle crossing	Defined as the crossing of a body of water that does not require any vehicle preparation in IAW relevant vehicle UHB.
Winch Controller	The controller must be a member that has been assessed as competent in the handling of winches and associated stores on an approved Defence Driver courses.
Workers' Compensation Insurance	Workers' Compensation Insurance. Workers' Compensation Insurance is a statutory requirement under State or Territory legislation. Employers must have insurance to cover their legal liabilities for work related injuries suffered by their workers.

SHORTENED FOR	MS OF WORDS
AARV	Artillery Ammunition Resupply Vehicle
ADDP	Australian Defence Doctrine Publication
ADF	Australian Defence Force
ADFP	Australian Defence Force Publication
ADFRTEF	ADF Road Transport Exemption Framework
AFIC	Air Force Interoperability Council
AFV	Armoured Fighting Vehicle
APC	Armoured Personnel Carrier
APSU	Army Personnel Support Unit
C2	Command and Control
CDI	Chief Driving Instructor
CDF	Chief of the Defence Force
CLB	Currency Log Book
CoR	Chain of Responsibility
CRV	Combat Reconnaissance Vehicle
CTP	Compulsory Third Party (Insurance)
DCVA	Defence Civilian Vehicle Assessor
DCVI	Defence Contractor Vehicle Instructor
DCVTO	Defence Contractor Vehicle Testing Officer
DFDA	Defence Force Discipline Act
DGSOMOD	Director General Special Operations Modernisation
DSOD	Director Special Operations Development
DLC	Defence Logistics Contractor
DLwAA	Defence Landworthiness Assurance A
DLwMS	Defence Landworthiness Management System
DOWR	Degrees of Weapons Readiness
DSPF	Defence Security Principle Framework
DTO	Driver Testing Officer
EMSD	Engineering Management System Directive
FBT	Fringe Benefit Tax
HRWL	High Risk Work Licence
HVNL	Heavy Vehicle National Law
IFV	Infantry Fighting Vehicle
JAB	Joint Assault Bridge
LCO	Licence Certifying Officer
LVOC	Land Vehicle Operations Cell
LVOM	Land Vehicle Operations Manual
MBT	Main Battle Tank
NHVR	National Heavy Vehicle Regulator

OSOM	Over Size Over Mass	
PMV	Protected Mobility Vehicle	
QA	Qualified Assessor	
RMMV-A	Rheinmetall MAN Military Vehicles – Australia	
SPH	Self-Propelled Howitzer	
SPMV	Special Purpose Military Vehicle	
TO	Testing Officer	
WHS	Work Health and Safety	