



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.

Sponsor:

Director General Logistics - Army

Cancellation:

Defence Road Transport Manual Ed 3, 2020

Standing Orders for Vehicle Operators 2020 Volume 1 – A Vehicles

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.

Amendment number	Amendment	Amendment level	Effective date

LAND VEHICLE OPERATING MANUAL

PART 1 – DOCUMENT

CHAPTER 1 – DOCUMENT PURPOSE

1.1.1. 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.

1.1.2. Operations conducted outside of Australia are not bound by this manual; 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.

1.1.3. This manual is supported by the Australian Defence Road Transport Exemption Framework (ADFRTEF). 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.

1.1.4. 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.

1.1.5. The generic parts of this document are categorised into:

a. **Part 2 – Governance and Control**

- (1) Chapter 1 – Roles and Responsibilities
- (2) Chapter 2 – Policy
- (3) Chapter 3 – Security

b. **Part 3 - Safety**

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

c. **Part 4 – Training and Licensing**

- (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 – Mass and Loading
 - (2) Chapter 1 – Road Movement
 - (3) Chapter 3 – Traffic Infringements
 - (4) Chapter 4 – Fatigue Management
- g. **Part 8 – Glossary**
 - (1) Definitions
 - (2) Acronym
 - (3) Links.

EVALUATION AND REVIEW

1.1.6. 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 1.1.9.

1.1.7. 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.

1.1.8. Submissions are to be emailed to lvom.review@defence.gov.au

1.1.9. 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.

1.1.10. 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 vehicle safety standards. This level only requires endorsement from DGLOG-A, with notification to Capability and Content Managers.

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PART 7 – PUBLIC ROAD USE

CHAPTER 1

MASS AND LOADING

7.1.1. **General.** 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, for the purpose of tactical or operational training, whilst State and Territory road transport legislation do not apply, Defence has 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 awareness by the general public that Defence vehicles are operating tactically. Commanders and Managers must be aware of the range orders relevant to their area of operations and note alignment of speed, route and general vehicle operating requirements are affected.

7.1.2. The ADFRTEF provides details of approved routes for specific vehicles that are classified as Special Purpose Military Vehicles (SPMV) and which are OSOM vehicles by civilian legislation. Only OSOM/ SPMV vehicles that are referenced in the ADFRTEF are authorised to use the aligned routes. Any deviation from this must be supported through a State/Territory or NHVR issued permit.

7.1.3. When a Defence Land Vehicle exceeds the Statutory Mass and Dimension limits, and there is no coverage within the ADFRTEF, then acquisition of a State/Territory issued OSOM permit must occur. This is conducted by following the process detailed in Annex A to this Chapter.

7.1.4. A detailed list of the current Defence Land Vehicles that must operate under the ADFRTEF or State/Territory and NHVR permits are detailed in Annex B to this Chapter. Statutory Mass and Dimension limits can be found on the National Heavy Vehicle Regulator webpage under General Mass and Dimension Limits.

7.1.5. Adherence to the approved routes within either the ADFRTEF or State/Territory issued OSOM permits must be maintained. Failure to adhere to these routes and supporting conditions imposed by Road Managers, could lead to civil or Defence prosecution. This forms part of Defences Chain of Responsibility requirements when operating Heavy Vehicles.

7.1.6. Visiting Forces that operate Land Vehicles in Australia are bound by same requirements as the ADF to gain State/Territory or NHVR OSOM permits. The required procedure and time frames for Visiting Forces is detailed in Annex C to this Chapter.

7.1.7. To assist with the task management of OSOM vehicles through multiple levels, the flow chart contained within Annex D to this Chapter should be used as a guide by operations staff.

7.1.8. There is no requirement when operating fully within a Defence Establishment or training area to utilise NHVR, State or Territory issued Oversize/Overmass (OSOM) permits. It is the responsibility of the command chain to ensure vehicles are operated in accordance with manufacturer's specifications.

7.1.9. When there are public roads as part of the Defence training area, issued OSOM permits must be carried and conditions adhered to as detailed in the permit.

7.1.10. **Defence Assistance to Civil Community (DACC).** When operations are conducted within Australia, such as DACC, then all road movement must be supported by either an issued NHVR/ State or Territory issued OSOM permit or utilisation of approved routes within the Australian Defence Force Exemption Framework (ADFRTEF).

Carriage of Defence Road Transport Exemption Framework or Permit

7.1.11. **ADFRTEF.** All Defence drivers operating Defence Land Vehicles utilising an ADF issued licence, must carry a copy of the ADFRTEF. This can be either physical or electronic and to ensure coverage by road authorities of the approved legislative exemptions afforded to Defence.

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

7.1.13. When requested by an authorised officer of a State or Territory road transport authority or a police officer, a Driver, operator or Packet Commander must produce the copy of the framework, and/ or State/Territory or NHVR issued permit.

7.1.14. When a Vehicle does not comply with jurisdictional exemptions or the ADFRTEF; Formations/Services or Groups are responsible for submitting a GM699 Defence Heavy vehicle Permit Application to the Land Vehicle Operations Cell (LVOC). All requests for road access are prioritised at LVOC on receipt and submitted to NHVR, Defence requests are not prioritised over existing requests within the NHVR portal unless they relate to emergency or operation requirements IAW the priority matrix found in Annex 7.1.

Weighbridges

7.1.15. All personnel within the Chain of Responsibility (CoR) have an obligation to ensure the vehicle masses are within approved limits defined in either the ADFRTEF or issued jurisdictional permit. To enable this verification, all major Defence bases have approved weigh bridges which can be accessed all year round. Additionally, specific units that have an entitlement to the L121 Medium Heavy Capability have been issued portable weigh scales.

7.1.16. Drivers of all heavy Defence Land Vehicles (vehicles with a GVM over 4.5t) must ensure their vehicle axle and overall masses are within approved limits. This is regardless of whether the vehicle is travelling under a Permit or the ADFRTEF.

7.1.17. 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 vehicles are exiting an exercise area that all vehicles are weighed due to changes in vehicle mass and/or load/ configuration during the exercise period.

7.1.18. Once a vehicle has been weighed, the docket must be maintained and archived for governance purposes. Units are approved to scan and load the docket electronically into objective thereby negating the need to retain physical dockets. A driver/ Operator retains the right to weigh their vehicle if there is doubt in the load configuration prior to operating on public roads.

7.1.19. There is no legislative requirement to weigh a vehicle when operating within a Defence establishment or training area. A responsibility remains extant on the Command Chain to ensure manufacturer's axel limitations are not exceeded.

Pilot and Warning Vehicles

7.1.20. State/Territory Road Managers can impose a requirement for the use of a pilot vehicle where a road position or speed limitation is enforced within the permit conditions. The requirements for a Pilot Vehicle are contained within the ADFRTEF and relevant State/Territory guidelines, which indicate sign and lighting requirements.

7.1.21. Additional control measures such as vehicles fitted with 'Variable Message Boards (VMS)' can be enforced. A VMS is an illuminated sign with programmable text, either fixed to or towed by a vehicle that alerts other road users to the presence of an OSOM load.

7.1.22. Any vehicle up to and including Light Rigid can be utilised as a warning vehicle with the following requirements:

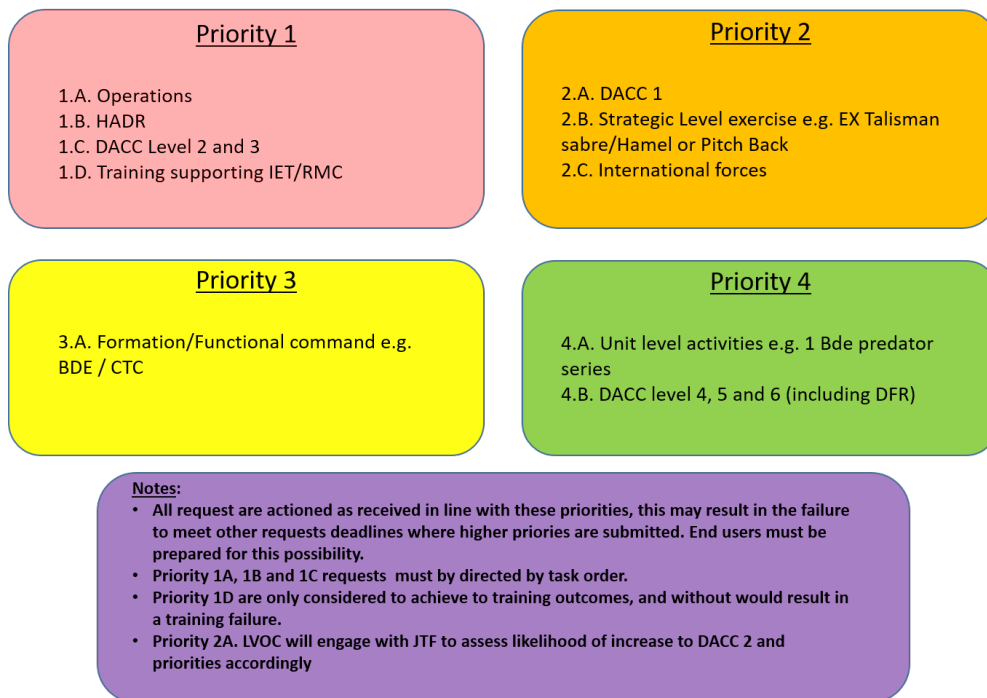
- a. there must be one or more warning lights fixed either above or below the warning sign or at each side
- b. there must be means of electronic communication between the warning vehicle driver, the accompanying Defence vehicle and other Heavy Vehicles
- c. the vehicle must be fitted with a VMS that is visible from the front and rear with following requirements:
 - (1) sign dimensions approximately 1000mm (H) x 1500mm (W)
 - (2) the sign must be capable of operating at 100kmh
 - (3) the text is to be amber colour, on a matt black back ground, legible to other road users at a distance of 100m
 - (4) the wording is to reflect, "Caution Slow moving vehicles ahead (or behind)" pending the position of the warning vehicle. This can be altered to reflect any message that aids in traffic management

7.1.23. Drivers of Pilot Vehicles must be appropriately qualified in both the vehicle operation and relevant vehicle piloting training requirements.

PERMIT APPLICATION PROCESS

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

Table 1



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.



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 either the ADFRTEF or approved and released State/Territory or NHVR permits; 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 routes 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	9
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 roadtransport.permits@defence.gov.au.

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)
 - i. Bushmaster Protected mobility vehicle (PMV)
 - ii. Bushmaster PMV Mine clearance
 - iii. Bushmaster PMV with trailer

- b. Category 2 - 40M Family of Vehicles (Appendix 2)
 - i. 40M tray protected and unprotected
 - ii. 40M tipper/dump protected and unprotected
 - iii. 40M tray with crane protected and unprotected
 - iv. 40M tray (unprotected) Army School of Transport - Training only
 - v. 40M tray- protected and unprotected with single axle trailer (Tactical quiet generator -TQG)
 - vi. 40M tray- protected and unprotected with single axle trailer (Tactical unmanned aerial system -TUAS)
 - vii. 40M tray- protected and unprotected with single axle trailer (Deployable aircraft maintenance rig -DAMR)
 - viii. 40M tray w/crane protected and unprotected with single axle trailer (Deployable aircraft maintenance rig -DAMR)
 - ix. 40M tray unprotected with M2A2 105mm howitzer ceremonial gun
 - x. 40M tray protected and unprotected with medium weight trailer
 - xi. 40M tipper/dump protected and unprotected with medium weight trailer
 - xii. 40M crane protected and unprotected with medium weight trailer
 - xiii. M40 tray protected and unprotected with triaxle boat trailer
 - xiv. M40 tipper/dump protected and unprotected with triaxle boat trailer
 - xv. M40 tray w/crane protected and unprotected with triaxle boat trailer

- c. Category 3 - HX77 and SX45 Family of Vehicles (Appendix 3)

- i. HX77 Integrated Load handling System (ILHS) protected and unprotected
 - ii. HX77 dump/tipper protected and unprotected
 - iii. HX77 Fuel Tanker unprotected
 - iv. HX77 ILHS protected and unprotected with M777 gun trailer
 - v. HX77 ILHS protected and unprotected with medium weight trailer
 - vi. HX77 dump/tipper protected and unprotected with medium weight trailer
 - vii. HX77 ILHS protected and unprotected with ILHS trailer
 - viii. HX77 dump/tipper protected and unprotected with ILHS trailer
 - ix. HX77 ILHS protected and unprotected with heavy equipment trailer (HET)
 - x. HX77 dump/tipper protected and unprotected with heavy equipment trailer (HET)
 - xi. SX45 mobile radar (CRAMS)
- d. Category 4 - 42M Recovery vehicle (Appendix 4)
- i. 42M protected and unprotected medium recovery vehicle (MRV)
 - ii. 42M protected and unprotected medium recovery vehicle (MRV) with trailer
- e. Category 5 - 45M Family of Vehicles (Appendix 5)
- i. 45M protected Dry Support Bridge (DSB) protected
 - ii. 45M protected
 - iii. 45M unprotected
 - iv. 45M Heavy Recovery Vehicle protected
 - v. 45M Heavy Recovery Vehicle unprotected
 - vi. 45M protected with medium weight trailer
 - vii. 45M unprotected with medium weight trailer
 - viii. 45M protected with ILHS trailer
 - ix. 45M unprotected with ILHS trailer
 - x. 45M protected with heavy equipment trailer (HET)
 - xi. 45M unprotected with heavy equipment trailer (HET)
 - xii. US Defence M142 HIMARS
 - xiii. US Defence MK37 HIMARS re-supply vehicle

- xiv. US Defence MK37 HIMARS re-supply vehicle with MK38 trailer
 - xv. US Defence MK23 cargo truck
 - xvi. US Defence MK23 cargo truck with 9t trailer
 - xvii. US Defence MK27 cargo truck
 - xviii. US Defence MK27 cargo truck with 9t trailer
 - xix. US Defence MK18 cargo truck
 - xx. US Defence MK18 cargo truck with M1076 trailer
 - xxi. US Defence LVSR MK15 Recovery Vehicle
 - xxii. US Defence Oshkosh MTVR MK36 Wrecker (Heavy Recovery Vehicle)
- f. Category 6 – HX81 with 3 axle trailer and 2 axle dolly (Appendix 6)
- i. HX81 unprotected prime mover
 - ii. HX81 protected prime mover
 - iii. HX81 unprotected prime mover with triaxle semi trailer
 - iv. HX81 protected prime mover with triaxle semi trailer
 - v. HX81 unprotected prime mover with triaxle semi trailer and road train convertor dolly
 - vi. 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)
- i. HX81 unprotected type 1 road train – 2 x triaxle semi trailers and road train convertor dolly
 - ii. HX81 protected type 1 road train – 2 x triaxle semi trailers and road train convertor dolly
 - iii. HX81 unprotected type 2 road train-3 x triaxle semi trailer and 2 x road train convertor dolly
 - iv. 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 and 2 axle dolly (Appendix 8)
- i. HX81 unprotected prime mover with medium equipment trailer (MET)
 - ii. HX81 protected prime mover with medium equipment trailer (MET)
 - iii. HX81 unprotected with Medium Dolly Low Loader (MDLL) and medium equipment trailer (MET)

- iv. HX81 protected with Medium Dolly Low Loader (MDLL) and medium equipment trailer (MET)
- i. Category 9 – HX81 with Heavy Equipment Transporter (Appendix 9)
 - i. HX81 protected with heavy equipment trailer (HET) - unladen travel
 - ii. HX81 unprotected with heavy equipment trailer (HET) - unladen travel
 - iii. HX81 protected with heavy equipment trailer (HET)
 - iv. HX81 unprotected with heavy equipment trailer (HET)
- j. Category 10 – Mack Superliner with 4x8 low loader and 2x8 dolly (Appendix 10)
 - i. Mack Superliner prime mover and low loader
 - ii. Mack Superliner prime mover, dolly and low loader
- k. Category 11 – Defence Emergency Vehicles – 2 axle (Appendix 11)
 - i. RAAF Striker (Oshkosh)
 - ii. Army Striker (Oshkosh)
- l. Category 12 – Defence Emergency Vehicles – 3 axle (Appendix 12)
 - i. Rosenbauer Panther Truck Fire Aircraft (TFA)
- m. Category 13 – Material Handling Equipment (Appendix 13)
 - i. Grove high mobility crane mine and blast protected
 - ii. Tadano 30t high mobility crane ATF 30-2L
 - iii. Tadano 30t high mobility crane AR200M
 - iv. Manitou MHT7140L 8t all terrain forklift
 - v. Manitou 8t tractor
- n. Category 14 - ASLAV Family of Vehicles (Appendix 14)
 - i. ASLAV Type I
 - ii. ASLAV Type II
 - iii. ASLAV Type III
 - iv. US Marines LAV
- o. Category 15 – Boxer (Appendix 15)
 - i. Rheinmetall Boxer Multirole 8x8 armoured fighting vehicle
- p. Category 16 – Heavy Armoured Vehicles (Appendix 16)
 - i. M1A1 Abrams Main Battle Tank

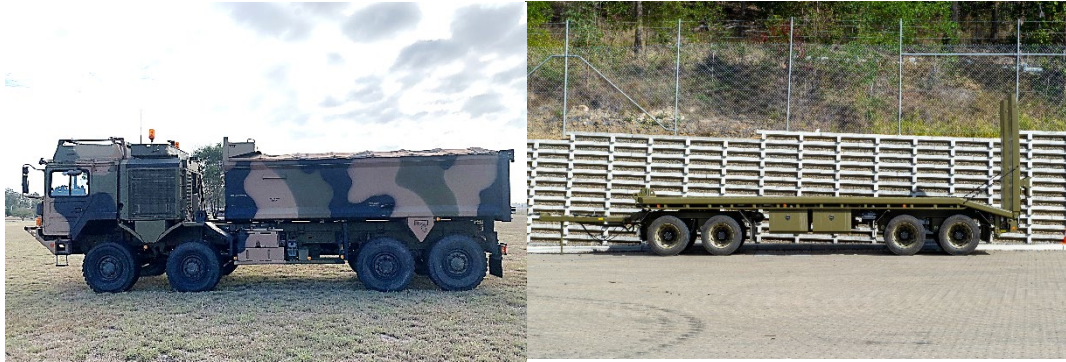
- ii. M88A2 Hercules Equipment Recovery Tank
- q. Category 17 – Light Armoured Vehicles (Appendix 17)
 - i. Armoured Personal Carrier (APC) Tracked Military Vehicle
 - ii. Assault Amphibious Vehicle (AAV) Tracked military vehicle
- r. Category 18 – LARC-V (Appendix 18)
 - i. ADF - LARC V - Amphibious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

CATEGORY 1 - BUSHMASTER FAMILY OF VEHICLES

	PMV	PMGMV w Tlr
Width	2.50m	2.50m
Height	3.75m	3.75m
Length	7.18m	11m
GVM	15000kg	18700kg
1st axle group mass	7500kg	7500kg
2nd axle group mass	7500kg	7500kg
3rd axle group mass	N/A	3700kg
4th axle group mass	N/A	N/A
Distance from 1st axle	3.90m	N/A
Distance from 2nd axle	N/A	4.805m
Distance from 3rd axle	N/A	N/A
Distance from 4th axle	N/A	N/A
Distance from 5th axle	N/A	N/A
Distance from 6th axle	N/A	N/A
Distance from 7th axle	N/A	N/A
Distance from 8th axle	N/A	N/A
Tyre Size	375mm	365mm
Ground Contact Width	2430mm	2330m







HX77 Dump with Hvy Equip Tlr



HX77 with ILH Tlr

CATEGORY 4 – 42M RECOVERY VEHICLE

	42M Medium Recovery Vehicle (unladen)	42M Medium Recovery Vehicle (laden)	42M Medium Recovery Vehicle with 4 axle dog tlr
Width	2.60m	2.60m	2.6m
Height	3.92m	4.30m	4.3m
Length	8.93m	10.00m	21m
GVM	26000kg	32200kg	63300kg
1st axle group mass	11300kg	11300kg	11300kg
2nd axle group mass	16000kg	16000kg	16000kg
3rd axle group mass	N/A	N/A	18000kg
4th axle group mass	N/A	N/A	18000kg
Distance from 1st axle	4.00m	4.00m	4m
Distance from 2nd axle	1.49m	1.49m	1.49m
Distance from 3rd axle	N/A	N/A	4.8m
Distance from 4th axle	N/A	N/A	1.25m
Distance from 5th axle	N/A	N/A	4.3m
Distance from 6th axle	N/A	N/A	1.25m
Distance from 7th axle	N/A	N/A	N/A
Distance from 8th axle	N/A	N/A	N/A
Ground Contact Width	2.46m	2.46m	2.42m

CATEGORY 5 – 45M FAMILY OF VEHICLES

	45M Heavy Recovery Vehicle (U)	45M Heavy Recovery Vehicle (P)	45M Heavy recovery Vehicle with Heavy Equipment Trailer (U)	45M Heavy recovery Vehicle with Heavy Equipment Trailer (P)
Width	2.60m	2.60m	2.60m	2.60m
Height	4.60m	4.60m	4.60m	4.60m
Length	12.50m	12.50m	24.00m	24.00m
GVM	42000kg	44000kg	78000kg	80000kg
1st axle group mass	17000kg	20000kg	17000kg	20000kg
2nd axle group mass	25000kg	24000kg	25000kg	24000kg
3rd axle group mass	N/A	N/A	18000kg	18000kg
4th axle group mass	N/A	N/A	18000kg	18000kg
Distance from 1st axle	1.80m	1.80m	1.80m	1.80m
Distance from 2nd axle	3.20m	3.20m	3.20m	3.20m
Distance from 3rd axle	1.55m	1.55m	1.55m	1.55m
Distance from 4th axle	1.60m	1.60m	1.60m	1.60m
Distance from 5th axle	N/A	N/A	4.90m	4.90m
Distance from 6th axle	N/A	N/A	1.25m	1.25m
Distance from 7th axle	N/A	N/A	4.33m	4.33m
Distance from 8th axle	N/A	N/A	1.25m	1.25m
Ground Contact Width	2.49m	2.49m	2.42m	2.42m



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

	HX81 (U)	HX81 (P)	HX81 with tri-axle tlr (U)	HX81 with tri-axle tlr (P)	HX81 with tri-axle tlr and 2 axle dolly (U)	HX81 with tri-axle tlr and 2 axle dolly (P)
Width	2.6m	2.6m	2.6m	2.6m	2.6m	2.6m
Height	4.9m	4.9m	4.9m	4.9m	4.9m	4.9m
Length	9.4m	9.4m	20m	20m	26m	26m
GVM	20500kg	21500kg	58000kg	60000kg	65000kg	65000kg
1st axle group mass	18000kg	18000kg	18000kg	18000kg	18000kg	18000kg
2nd axle group mass	5500kg	5500kg	18500kg	18500kg	18500kg	18500kg
3rd axle group mass	N/A	N/A	23500kg	23500kg	23500kg	23500kg
4th axle group mass	N/A	N/A	N/A	N/A	6000kg	6000kg
Distance from 1st axle	1.8m	1.8m	1.8m	1.8m	1.8m	1.8m
Distance from 2nd axle	3.25m	3.25m	3.25m	3.25m	3.25m	3.25m
Distance from 3rd axle	1.4m	1.4m	1.4m	1.4m	1.4m	1.4m
Distance from 4th axle	N/A	N/A	6.82m	6.82m	6.82m	6.82m
Distance from 5th axle	N/A	N/A	1.4m	1.4m	1.4m	1.4m
Distance from 6th axle	N/A	N/A	1.4m	1.4m	1.4m	1.4m
Distance from 7th axle	N/A	N/A	N/A	N/A	4.74m	4.74m
Distance from 8th axle	N/A	N/A	N/A	N/A	1.4m	1.4m
Ground Contact Width	2.41m	2.41m	2.41m	2.41m	2.41m	2.41m



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

	HX81 (U)	HX81 (P)	HX81 with Medium Equipment Transporter (U)	HX81 with Medium Equipment Transporter (P)	HX81 with Medium Equipment Transporter and Medium dolly low loader (U)	HX81 with Medium Equipment Transporter and Medium dolly low loader (P)
Width	2.6m	2.6m	3.5m	2.6m	2.6m	2.6m
Height	4.9m	4.9m	4.9m	4.9m	4.9m	4.9m
Length	9.4m	9.4m	25m	20m	26m	26m
GVM	20500kg	21500kg	72500kg	60000kg	65000kg	65000kg
1st axle group mass	18000kg	18000kg	18000kg	18000kg	18000kg	18000kg
2nd axle group mass	5500kg	5500kg	18500kg	18500kg	18500kg	18500kg
3rd axle group mass	N/A	N/A	38000kg	38000kg	18500kg	18500kg
4th axle group mass	N/A	N/A	N/A	N/A	38000kg	38000kg
Distance from 1st axle	1.8m	1.8m	1.8m	1.8m	1.8m	1.8m
Distance from 2nd axle	3.25m	3.25m	3.25m	3.25m	3.25m	3.25m
Distance from 3rd axle	1.4m	1.4m	1.4m	1.4m	1.4m	1.4m
Distance from 4th axle	N/A	N/A	10.17m	10.17m	3.28m	3.28m
Distance from 5th axle	N/A	N/A	1.25m	1.25m	1.25m	1.25m
Distance from 6th axle	N/A	N/A	2.4m	2.4m	9.43m	9.43m
Distance from 7th axle	N/A	N/A	1.25m	1.25m	1.25m	1.25m
Distance from 8th axle	N/A	N/A	N/A	N/A	2.4m	2.4m
Distance from 9th axle	N/A	N/A	N/A	N/A	1.25m	1.25m
Ground Contact Width	2.41m	2.41m	2.67m	2.67m	2.67m	2.67m

CATEGORY 9 – HX81 WITH 8 AXLE TRAILER

	HX81 (U)	HX81 (P)	HX81 with Heavy Equipment Transporter (U)	HX81 with Heavy Equipment Transporter (P)
Width	2.6m	2.6m	3.7m	3.7m
Height	4.9m	4.9m	4.9m	4.9m
Length	9.4m	9.4m	29.0m	29.0m
GVM	20500kg	21500kg	138000kg	140500kg
1st axle group mass	18000kg	18000kg	16000kg	18000kg
2nd axle group mass	5500kg	5500kg	18500kg	18500kg
3rd axle group mass	N/A	N/A	104000kg	104000kg
4th axle group mass	N/A	N/A	NA	NA
Distance from 1st axle	1.8m	1.8m	1.80m	1.80m
Distance from 2nd axle	3.25m	3.25m	3.25m	3.25m
Distance from 3rd axle	1.4m	1.4m	1.40m	1.40m
Distance from 4th axle	N/A	N/A	5.39m	5.39m
Distance from 5th axle	N/A	N/A	1.80m	1.80m
Distance from 6th axle	N/A	N/A	1.80m	1.80m
Distance from 7th axle	N/A	N/A	1.80m	1.80m
Distance from 8th axle	N/A	N/A	1.80m	1.80m
Distance from 9th axle	N/A	N/A	1.80m	1.80m
Distance from 10th axle	N/A	N/A	1.80m	1.80m
Distance from 11th axle	N/A	N/A	1.80m	1.80m
Ground Contact Width	2.41m	2.41m	2.41m	2.41m

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

	Mack superliner	Mack superliner with low loader	Mack superliner with low loader with Dolly
Width	4m	TBC	4m
Height	5m	TBC	5m
Length	30m	TBC	30m
GVM	24.5t	TBC	99.34t
1st axle group mass	6t	6t	6t
2nd axle group mass	18.5t	18.5t	18.5t
3rd axle group mass	N/A	N/A	26.25t
4th axle group mass	N/A	48.75t	48.75t
Distance from 1st axle	4.86m	4.86m	4.86m
Distance from 2nd axle	1.37m	1.37m	1.37m
Distance from 3rd axle	N/A	TBC	3.5m
Distance from 4th axle	N/A	TBC	1.27m
Distance from 5th axle	N/A	TBC	8.75m
Distance from 6th axle	N/A	TBC	1.22m
Distance from 7th axle	N/A	N/A	2.44m
Distance from 8th axle	N/A	N/A	1.22m
Ground Contact Width	2.4m	4m	4m

CATEGORY 11 – DEFENCE EMERGENCY VEHICLES (2 AXLE)

	RAAF Striker (Oshkosh)	Army Striker (Oshkosh)
Width	2.97m	2.97m
Height	3.28m	3.24m
Length	8.75m	8.86m
GVM	18600kg	18600kg
1st axle group mass	9300kg	9300kg
2nd axle group mass	9300kg	9300kg
Distance from 1st axle	4.37m	4.37m
Ground Contact Width	2.41m	2.41m

CATEGORY 12 – DEFENCE EMERGENCY VEHICLES (3 AXLE)

	Rosenbauer Panther Truck Fire Aircraft (TFA)
Width	3.3m
Height	3.6m
Length	11.75m
GVM	28.5t
1st axle group mass	9.5t
2nd axle group mass	19t
Distance from 1st axle	4.8m
Distance from 2nd axle	1.6m
Ground Contact Width	2.5m

CATEGORY 13 – MATERIAL HANDLING EQUIPMENT

	Grove crane	Tadano crane (ATF 30-2L)	Tadano crane (AR200M)			Manitou 8T Forklift	Manitou 8T Tractor				Scania & Tri-Axle boat trailer
Width	2.6m	2.82m	2.695m		Width	2.66m	2.66m		Width		3.12m
Height	3.9m	3.37m	3.5m		Height	3.241m	3.241m		Height		4.3m
Length	12.53m	9.98m	10.24m		Length	8.035m	6.576m		Length		19.89m
Total mass	48000kg	48000kg	48000kg		Total mass	48000kg	16500kg		Total mass		22000kg
1st axle group mass	12000kg	12000kg	11807kg		1st axle group mass	11305kg	9287kg		1st axle group mass		6000kg
2nd axle group mass	12000kg	12000kg	11860kg		2nd axle group mass	11995kg	6890kg		2nd axle group mass		7000kg
3rd axle group mass	12000kg	N/A	N/A		3rd axle group mass	N/A	N/A		3rd axle group mass		8435kg
4th axle group mass	12000kg	N/A	N/A		4th axle group mass	N/A	N/A		4th axle group mass		N/A
Distance from 1st axle	1.65m	4.8m	3.53m		Distance from 1st axle	3.4m	3.052m		Distance from 1st axle		tbc
Distance from 2nd axle	2.10m	N/A	N/A		Distance from 2nd axle	N/A	N/A		Distance from 2nd axle		tbc
Distance from 3rd axle	1.65m	N/A	N/A		Distance from 3rd axle	N/A	N/A		Distance from 3rd axle		tbc
Distance from 4th axle	N/A	N/A	N/A		Distance from 4th axle	N/A	N/A		Distance from 4th axle		tbc
Distance from 5th axle	N/A	N/A	N/A		Distance from 5th axle	N/A	N/A		Distance from 5th axle		N/A
Distance from 6th axle	N/A	N/A	N/A		Distance from 6th axle	N/A	N/A		Distance from 6th axle		N/A
Distance from 7th axle	N/A	N/A	N/A		Distance from 7th axle	N/A	N/A		Distance from 7th axle		N/A
Distance from 8th axle	N/A	N/A	N/A		Distance from 8th axle	N/A	N/A		Distance from 8th axle		N/A
Tyre Size	525mm	525mm	525mm		Tyre Size	597mm	445mm		Tyre Size		371mm (truck) 220mm (trailer)
Ground Contact Width	2.75m	2.5m	2.5m		Ground Contact Width	2.34m	2.39m (F) 2.369m (R)		Ground Contact Width		2.41m (truck) 2.97m (trailer)

CATEGORY 14 - ASLAV FAMILY OF VEHICLES

	Type 1 (Personnel)	Type 2 (Command;Surveillance ;Ambulance;Personnel)	Type 3 (Recovery)
Width	2.6m	2.6m	2.6m
Height	2.65m	3.23m	2.92m
Length	6.575m	6.665m	7.32m
Total mass	15000kg	15000kg	15000kgs
1st axle group mass	7500kg	7500kg	7500kg
2nd axle group mass	7500kg	7500kg	7500kg
3rd axle group mass	7500kg	7500kg	7500kg
4th axle group mass	7500kg	7500kg	7500kg
Distance from 1st axle	1.095m	1.095m	1.095m
Distance from 2nd axle	1.33m	1.33m	1.33m
Distance from 3rd axle	1.035m	1.035m	1.035m
Distance from 4th axle	N/A	N/A	N/A
Distance from 5th axle	N/A	N/A	N/A
Distance from 6th axle	N/A	N/A	N/A
Distance from 7th axle	N/A	N/A	N/A
Distance from 8th axle	N/A	N/A	N/A
Tyre Size	395mm	395mm	395mm
Ground Contact Width	F - 2.18m R - 2.2m	F-2.18m R - 2.2m	F- 2.18m R - 2.2m



CATEGORY 15 – BOXER

	Boxer
Width	3.38m
Height	3.4m
Length	8.93m
GVM	36.4t
1st axle group mass	18.1t
2nd axle group mass	18.3t
Distance from 1st axle	1.55m
Distance from 2nd axle	2.04m
Distance from 3rd axle	1.55m
Ground Contact Width	3m

CATEGORY 16 – HEAVY ARMoured VEHICLES

	M1A1	M88A2
Width	3.66m	3.66m
Height	2.89m	2.97m
Length	9.83m	8.64m
GVM	65t	65t
1st axle group mass	6t	6t
2nd axle group mass	6t	6t
Distance from 1st axle	1.8m	1.8m
Distance from 2nd axle	1.8m	1.8m
Ground Contact Width	1.6m	1.6m

CATEGORY 17 – LIGHT ARMoured VEHICLES

	M113AS4
Width	2.7m
Height	2.71m
Length	6.4m
GVM	18t
1st axle group mass	N/A
2nd axle group mass	N/A
Distance from 1st axle	N/A
Distance from 2nd axle	N/A
Ground Contact Width	N/A

CATEGORY 18 – LARC-V

	LARC-V
Width	3.05m
Height	3.4m
Length	10.67m
GVM	11.8t
1st axle group mass	5.36t
2nd axle group mass	6.44t
Distance from 1st axle	5.47m
Ground Contact Width	3.05m

CATEGORY 19 - MERCEDES COMBAT SUPPORT VEHICLES PERMIT DATA

	Mercedes Actros Cargo	Mercedes Fuel tanker	Mercedes Actros with 2 axel pig trl
Width	2.6m	2.6m	2.6m
Height	4m	4.3m	4.2m
Length	10m	10.5m	16.1m
GVM	28000kg	28000kg	35000kg
1st axle group mass	6000kg	6000kg	6000kg
2nd axle group mass	6000kg	6000kg	6000kg
3rd axle group mass	8000kg	8000kg </td <td>8000kg</td>	8000kg
4th axle group mass	8000kg	8000kg	8000kg
5th axle group mass (Trl)	N/A	N/A	3500kg
Distance from 1st axle	1.7m	1.7m	1.7m
Distance from 2nd axle	3.93m	3.39m	3.93m
Distance from 3rd axle	1.32m	1.32m	1.32m
Distance from 4th axle	N/A	N/A	5.08m
Distance from 5th axle	N/A	N/A	1.25m
Distance from 6th axle	N/A	N/A	N/A
Distance from 7th axle	N/A	N/A	N/A
Distance from 8th axle	N/A	N/A	N/A
Tyre Size	365mm	315mm	315mm truck 375mm trl
Ground Contact Width			



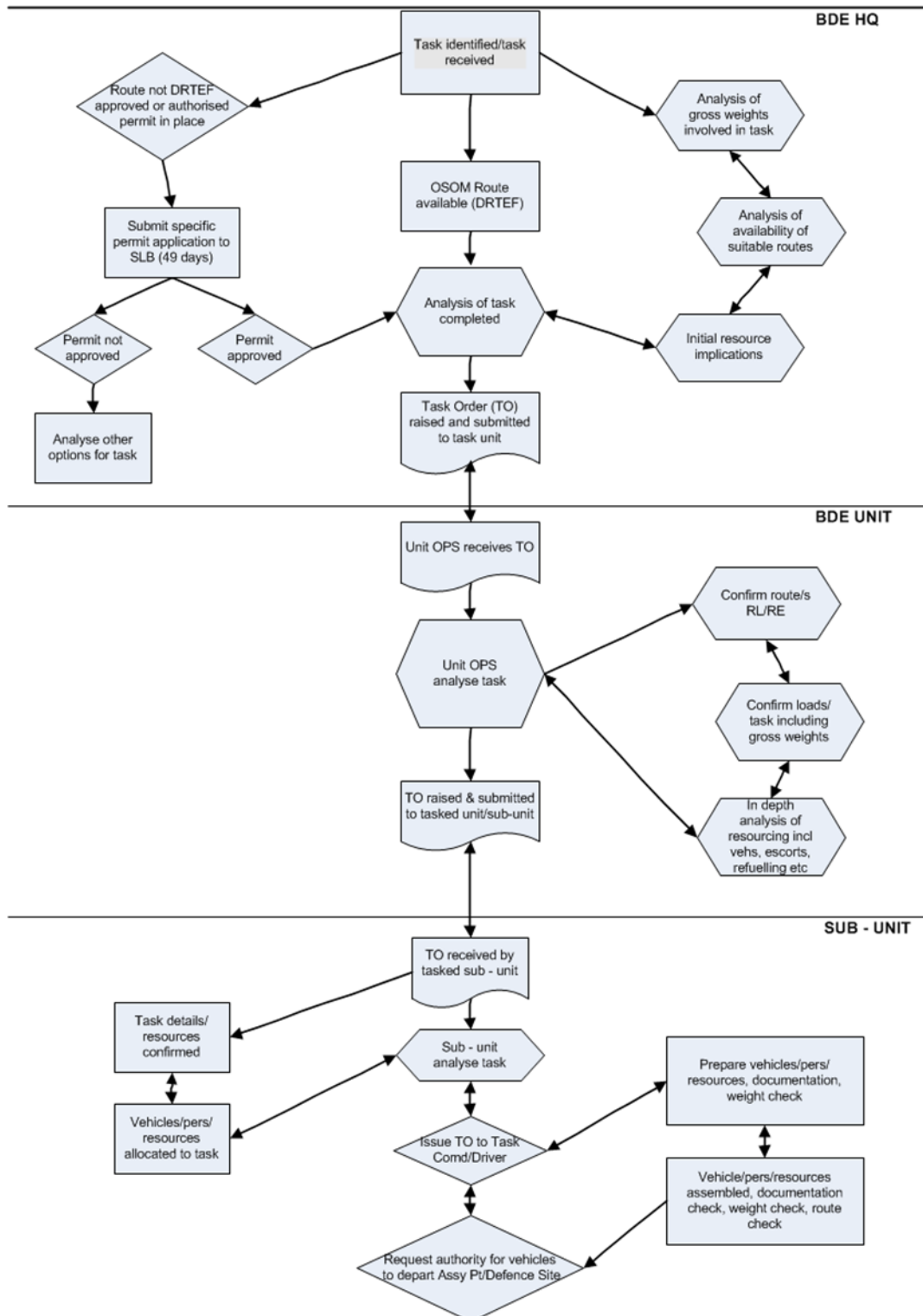
VISITING FORCES OPERATING DEFENCE VEHICLES IN AUSTRALIA

TABLE 7C-1: VISITING FORCES - TIMELINE FOR PERMIT/NOTICE PROCESS

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: <ul style="list-style-type: none"> • Defence Dimension and Mass Standards (DDMS) • National Heavy Vehicle Law Mass and Dimension Regulations • State and Territory Dimension and Mass Regulations 	D – 80
3	Preparation of: <ul style="list-style-type: none"> • 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. 	D – 66

4	Review of permit applications or Notice amendments by State and Territory jurisdictions including local governments.	D – 52
5	Negotiation allowance	
6	<p>Receipt of approved permits/ notice and checking to ensure:</p> <ul style="list-style-type: none"> • that all requested detail has been included • reviewing the conditions included in the permits and identifying any critical requirements 	D – 10
7	Issue permits or Notice update to requesting organisations	D – 3
8	Access to Public Roads/facility road	D – Day

TASK MANAGEMENT OF OSOM VEHICLES



CHAPTER 2

ROAD MOVEMENT

7.2.1. In preparation for road movement on public roads, a driver/ operator must ensure that Defence Vehicles are equipped with the following items IAW approved Complex Equipment Schedule (CES) or provided by sgfleet:

- a. **First aid kits:** must include appropriate PPE such as non-surgical, disposable, nitrile gloves must be carried in all Military Specific Vehicles. It is highly recommended that 4wd, and Medium Rigid and above CL vehicles carry first aid kits to enable personnel to render assistance, particularly in the event of a road accident / incident. It is strongly recommend that consideration be given to equip any other CL vehicles with a First Aid kit, especially those vehicles that are dislocated from its main unit location. If any items of the first aid kit have been used, identified as unsuitable or have expired use by dates, they must be immediately replaced via the supply chain.
- b. **Fire extinguisher:** must be carried in all Military Specific Vehicles unless the Capability Manager has provided an exemption. It is highly recommended that Medium Rigid and above CL vehicles, that have a possible requirement for carriage of Dangerous Goods (DG) are fitted with not only the relevant DG fire extinguishers, but also a vehicle fire extinguisher.
- c. **Complete Equipment Schedule:** All Military Specific Vehicles must carry their CES as defined in the list on the LEA Tech Data webpage. Where there is a known deficiency, this must be recorded and known by the driver/ operator. Where there is a deficiency in wheel changing equipment, the vehicle must not undertake solo public road driving unless the deficiency has been remediated.
- d. **Hi-Vis Vest:** During tasks, drivers and/or passengers may be required to halt their Vehicle close to the roadway, to re-adjust Loads, change tyres or assist with road accidents / incidents. Numerous vehicle related tasks might be conducted at night; it is highly recommended that 'high vis' vests be provided to the vehicle crew 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.

Communications

7.2.2. Commanders / Managers are to ensure communications are available within each Vehicle of a Packet or Convoy when operating on Public Roads and training areas. This could be in the form of UHF or combat net radios, satellites or mobile phone communications. This is to include GS Vehicles and CL Packet or Convoy moves. If communications cannot be assured, then the Officer in Charge must be notified and alternate mitigation measures taken to minimise the likelihood of an accident occurring or consequence of subsequent incident or injury.

7.2.3. 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.

Protected Mobility Vehicles

7.2.4. To ensure spatial awareness for the driver. Land Vehicles, as defined in Part 8 to this manual, must have a person located in the passenger seat when transiting on public roads. This is inclusive of operations within a barracks area where there is access for civilian vehicles.

Armoured Fighting Vehicles

7.2.5. The use and movement of Armoured Fighting Vehicles on public roads is further detailed within Annex 7.2A to this chapter.

Plant and Materiel Handling Equipment

7.2.6. 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 procedures:

- 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.

7.2.7. The requirements detailed in para 7.2.6 do not apply when the equipment is being loaded onto a transporter and part of the loading requires public road operation. This must be kept to a minimum distance and guides must be positioned to reduce risk of accident.

7.2.8. Equipment must be driven at the authorised speed endorsed by the Manufacturer and Capability Manager. Drivers/ operators must consider road/ weather conditions and traffic conditions when driving on public roads.

ARMoured FIGHTING VEHICLE MOVEMENT ON PUBLIC ROADS

1. **Armoured Fighting Vehicle (AFV) commander.** AFV commanders are to position themselves in the commanders' station so that they can see other traffic, give hand signals and communicate with the driver. If under instruction, the trainee AFV commander will be positioned in the commander's station with the AFV instructor being suitably positioned to exert full control over the vehicle and crew.
2. The authority to move an AFV is a lawful command given to an AFV commander by their superior officer. This command will normally be given verbally but may on occasions take the form of a written operation or administrative order.
3. Minimum AFV crew requirements. Regardless of the licence type issued to the driver, the minimum crew requirements before an AFV can be moved with the crew mounted are:
 - a. for the APC FOV, CRV FOV and the Tank Recovery Vehicle - a qualified driver and qualified crew commander
 - b. for the in-service Tank - a qualified driver, qualified crew commander and another member in the Operators position.
4. The minimum crew requirements to move any AFV under command of a ground guide is a qualified driver and a member who is qualified as an AFV ground guide.
5. Where the ground guide is in a position that obstructs their visibility between either the driver or the vehicle to be manoeuvred, an assistant ground guide is appointed to relay hand signals between a driver and the ground guide. At all times, the appointed ground guide remains in control of the vehicle manoeuvre, with the assistant only to relay the hand signals delivered by the ground guide.
6. When an AFV is being ground guided while crewmembers are still in their crew positions, the guide has overall command and responsibility of the vehicle, regardless of rank, until he/she releases it from their control.
7. **The AFV commander.** The Commander AFV is in command of the vehicle and is responsible for the movement, security, control, servicing and fighting efficiency of the AFV. The AFV commander discharges this responsibility by the direction and close supervision of the crew.
8. The AFV Commander is to ensure that when operating the AFV on public roads:
 - a. the intercommunication (IC) system on the vehicle radio harness is functioning correctly. In situations when the IC system is unserviceable the vehicle is to be directed by a ground guide as detailed in Part 3 of this manual
 - b. they position themselves so that they can see other traffic, give signals and communicate with the driver
 - c. all vehicle documentation is complete in accordance with Part 5 of this manual
 - d. before moving off all hatches are securely locked in either the open or closed position, the stowage of the vehicle is secure and all passengers are correctly embussed

- e. AFV turrets are not to be traversed so as to overhang the sides of the vehicles
- f. the AFV is not driven in such a manner so as to endanger the life or limb of any person, or cause damage to property or to the AFV
- g. whilst moving on a public road, the vehicle is not moved in a tactical fashion
- h. radio antennas are to be fitted and stowed IAW Part 3 of this Manual
- i. civilian personnel are not carried on the AFV unless authorised by the unit commander
- j. AFV crew and passengers are to be so positioned within an AFV that no more than the head and shoulders protrude from the vehicle
- k. they give traffic signals when required
- l. AFV travelling on public roads at night and occasions of limited visibility, are to display front, rear, side and width indicator lights and reflectors
- m. subject to operational imperatives, AFV must have headlights on low beam while travelling in daytime, and when operating in convoys on public roads.

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 Commander	An AFV Crew Commander is qualified and appointed to 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 Operator	An AFV Operator is an AFV gunner / AFV Loader/ AFV Operator / AEV operator / SP Gunner Crewman who assist the AFV Crew Commander in the control of the vehicle.
Army Logistic Training Centre (ALTC)	The Army training institution responsible to provide specialised logistic training. These responsibilities include Driver, transport 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 Transport (AST)	AST is a sub-Unit of ALTC which delivers Driver, transport 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 Loader	A Vehicle consisting of a Prime Mover and a 'gooseneck' Low-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 (ADR)	A national standard under the Motor Vehicle Standards Act 1989.
Australian Standard	A standard, approved for publication on behalf of Standards Australia as updated from time to time.
Authorised Defence Representative	A person employed by Defence who is authorised to task a 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: <ul style="list-style-type: none"> • 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 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.
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;

	<ul style="list-style-type: none"> • 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.
Contractor	A Contractor is a person engaged by Defence under a contract that represents a business resource and is subject to direct management by Defence. Contractors would normally undertake Defence roles and are engaged as an alternative to normal Defence Australian Public Service employee resources. This would also apply in circumstances where the engagement of a firm is for labour hire involving specific personnel remunerated at hourly or daily rates. Defence Members and Defence Employees are not included in this definition.
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.
Credit Transfer	The agreed value of the achievement or partial achievement of one qualification when related to another qualification.
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.
Daily 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.
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.
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.
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	<p>A Defence Civilian, as defined in the Defence Force Discipline Act 1982 (DFDA), means a person (other than a Defence Member) who</p> <ul style="list-style-type: none"> • 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 • has consented, in writing, to subject themselves to ADF discipline while so accompanying that part of the ADF
Defence Contractor Vehicle Testing Officer	A Defence Contractor Vehicle Testing Officer (DCVTO) is qualified and current IAW Part 4 of this manual. The DCVTO is appointed by the relevant TA to conduct assessment and issue drivers licences

Defence Contractor Vehicle Assessor	A Defence Contractor Vehicle Assessor (DCVA) is qualified and current IAW Part 4 of this manual. The DCVA is appointed by the relevant TA to conduct assessment and instruction
Defence Contractor Vehicle Instructor	A Defence Contractor Vehicle Instructor (DCVI) is qualified and current IAW Part 4 of this manual. The DCVI is appointed by the relevant TA to conduct instruction.
Defence Driver/ Operator	Defence Drivers/ Operators are categorised into three sub-categories <ul style="list-style-type: none"> • 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 maintainer. • 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: <ul style="list-style-type: none"> • 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 Partner	Is a person or organisation engaged by Defence whether through a contract or agreement to provide resources, knowledge, or skills that enable Defence capabilities, Defence Members and Defence Australian Public Service employees are not included in this definition.
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 Authority (DAA)	Design Acceptance Authority (DAA). As defined in the Land Material Safety Manual (LMSM), the DAA is an appointed competent engineer within Defence, who is responsible for: <ul style="list-style-type: none"> • the design acceptance of land materiel, including maintenance engineering, modifications or changes • safety and environmental compliance of land materiel designs

	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> • 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 Ranks	An explanation on the rank equivalents across Defence is available in the ADF Pay and Conditions Manual (PACMAN), Chapter 1, Part 4.
Escort Vehicle (for Oversize Vehicles)	A Vehicle that is being used to transport a police officer or 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.
Exported Driver Training	Driver training not resourced and scheduled by Forces 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 is conducted within the same licence and mobility category for Defence personnel. This also includes training against a Defence member's or Defence Contractor's civilian licence, IAW Part 4 to this Manual. Familiarisation training is not to be used for training on GS Vehicle (see Recognition training).
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.
General Assessment (GA)	General Assessment is a practical assessment by a qualified DTO, DCVI, or ADI that requires the assessee 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	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)	<p>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:</p> <ul style="list-style-type: none"> • as specified by the motor Vehicle's manufacturer • as specified by the Vehicle registration authority if: <ul style="list-style-type: none"> ○ the manufacturer has not specified the sum of the maximum Loaded masses

	<ul style="list-style-type: none"> ○ the manufacturer cannot be identified; or ○ 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 4.5 t.
Hire Vehicle	A vehicle that is hired by a Defence organisation either through DTC and is used for a purpose for a specified time.
Home Garaging	<p>The secure, overnight, off-street parking of a Defence Vehicle 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:</p> <ul style="list-style-type: none"> ● 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 (IOC)	An IOC is defined as a person who is appointed or reappointed as an instructor in the ADF Cadets under the Cadet Forces Regulations 2013.

Integrated Load Handling System (ILHS)	Integrated Load Handling System (ILHS). Is a mechanical, hydraulically powered, diagonally lifting Load and unload mechanism, fitted to the MAN HX77 used to lift and dismount Flatracks, modules and ISO 20ft containers.
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: <ul style="list-style-type: none"> • 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 Package	The curriculum and all additional documentation needed to conduct a course. Includes validation concept, Recognition policy, 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: <ul style="list-style-type: none"> • tools, equipment or substances necessary for the Vehicle or Combination to function, or for any Load to be 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 Combination that is carrying, or is built to carry, a Load.
Local Training Movement	See Movement Types.
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.
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: <ul style="list-style-type: none"> • is usually coupled between a Prime Mover and a low Loader • 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 Management Plan (MMP)	See Land Materiel Safety Manual (LMSM)
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.
Materials Handling Equipment (MHE)	MHE includes all Vehicles and machinery used for Loading and unloading of material.
Materiel Specific Instructions	Documentation pertaining to the operation and maintenance of 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.

Military Specific Vehicle	A vehicle that is designed as a purpose built military vehicle and is not maintained by sgfleet.
Minor Injury	Any Minor Injury that did not result in a fatality, Serious Injury 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 (MC)	<p>MC is utilised to support the current fleet of Defence Vehicles and is defined as:</p> <ul style="list-style-type: none"> • 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 to enable rapid deployment to good firing positions, weapon sites, surveillance points etc. • 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.
Motor Vehicle, Loss, Destruction or Damage Insurance (also known as Comprehensive Insurance)	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: <ul style="list-style-type: none"> • a two-wheeled motor Vehicle; or • a two-wheeled motor Vehicle to which a sidecar or a Trailer is attached.
Mounted Leader	Includes an AFV Crew Commander, Logistic Combat Support Vehicle or Support Vehicle Commander in command of a single Land Vehicle
Mounted Commander	Includes AFV Troop Leader, AFV Patrol Commander, AFV Section Commander, 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.
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.
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.
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.
Operate Under load	When the Vehicle ancillary attachments are utilised to move or lift materiel (e.g. moving earth or lifting a container).
Outsourced Service Provider	Outsourced Service Provider. Is a person or organisation engaged by Defence under a service contract to deliver a

	specified service or supply, usually against agreed milestones and deliverable requirements.
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.
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	<p>Is a Trailer that:</p> <ul style="list-style-type: none"> • 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.
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	<p>Purpose Designed Passenger Carrying Vehicles include:</p> <ul style="list-style-type: none"> • 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	<p>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</p>
Recognition	<p>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.</p>
Recovery	<p>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.</p>
Regulatory Sign	<p>Regulatory Sign. A sign used by a competent Local, State, Federal Government or military authority to regulate and control traffic.</p>
Relevant Property	<p>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.</p>
Rental Vehicle	<p>See hire vehicle</p>

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: <ul style="list-style-type: none"> • 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.
Royal Australian Air Force School of Administration and Logistics Training	The RAAF training institution responsible for the delivery of initial employment training to RAAF Supply and Movement operators.
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.

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.
Scheduled Driver's Course	A Driver's course which has been approved resourced and scheduled to be conducted at ALTC or another training establishment.
Section Commander Construction	A Section Commander (CPL) Plant is an NCO specifically 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 has: <ul style="list-style-type: none"> • one Axle group or single Axle towards the rear • 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 Service Band 1 and above (or E O-7 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 parent equipment. This term has now been replaced by 'Fully Functional' in accordance with TRAMM-L.
Shipping Document	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.
Short Halt	In principle, Short Halts should be taken after every one-hour and 50 minutes driving. Instructions on where Short Halts must 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.
Special Operations Vehicle (SOV)	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	<p>Class 1 SPMVs are classes of wheeled Vehicles and Trailers that are built or permanently modified for ADF-related purposes and:</p> <ul style="list-style-type: none"> • 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 LSM has now replaced this term.
Technical Inspection	A Technical Inspection in accordance with EMEI or other 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
Engineering Management System Directive (EMSD)	An organisation's EMSD consists of its documented engineering or maintenance management system. An organisation's EMSD is sometimes called an Engineering Management Plan (EMP). For further detail, refer to the LSM.
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 an 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 Tractor Aircraft Towing is managed by Aerospace Materiel Systems Program Office (AMSPO) and has a different servicing regime to that of other Defence Vehicles.
Trailer	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.

Transport Operations Manager	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	<p>An unoccupied Vehicle not carrying a Load in the Load space, however includes:</p> <ul style="list-style-type: none"> • 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) <p>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.</p>
Unscheduled Driver Course	See Exported Driver Training.

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 Cabin of a Vehicle	The inside of a Vehicle, which is connected to both the 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.)
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 (or volume), which can be carried by the Vehicle under given conditions.
Vehicle Categories	<p>Vehicle Categories:</p> <ul style="list-style-type: none"> • ‘A’ Vehicles are all AFV, their variants and derivatives. • ‘B’ Vehicles are all road transport Vehicles designed to transport freight and/or passengers, their variants or derivatives. This includes all variants of Protected Mobility Vehicles not designed as fighting Vehicles. • ‘C’ Vehicles are all engineer plant Vehicles designed to carry out earthmoving and engineer activities such as bulldozer, Front End Loaders and Excavators. 1. • ‘D’ Vehicles are all materials handling equipment designed to lift stores and equipment, such as forklifts 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 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 FORMS 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