

Guidelines for modifying vehicles for people with disability

Purpose

This *Guidelines for modifying vehicles for people with disability* (the Guidelines) is intended to provide advice about modifying a light vehicle to suit a person with a *disability*, either as a driver or a passenger. It outlines modifications that require *certification* in accordance with the *Road Transport (Vehicle Registration) Regulation 2017* and the *Vehicle Safety Compliance Certification Scheme*, and how to obtain the *certification*.

The Guidelines were developed by the Vehicle Safety Working Group. Members of the Working Group are:

- Australian Automotive Aftermarket Association
- Australian Confederation of Motor Clubs
- Confederation of Australian Motor Sports Ltd
- Institute of Automotive Mechanical Engineers
- Motor Traders Association NSW
- Motorcycle Council of NSW
- NRMA Motoring and Services
- NSW Police
- Transport for NSW (Chair)
- VSCCS certifiers

A dedicated Focus Group drafted the Guidelines. The members of the Focus Group are:

- Ageing, Disability & Home Care, Department of Family and Community Services
- Department of Education, Assisted School Travel Program
- EnableNSW
- Mobility Engineering
- NSW Taxi Council
- OT Solutions
- Problem Management Engineering
- Roads and Maritime Services
- Transport for NSW

The Guidelines is a live document and subject to change in response to feedback or updated standards and practices.

1. General

1.1. Scope

This Guidelines for modifying vehicles for people with disability (the Guidelines) applies to light vehicles. It is intended to guide and assist persons in modifying a vehicle for use by a person with *disability*. Modifications may be required to facilitate a person with *disability* to travel as vehicle passenger (e.g. seat modifications) and/or to be able to drive the vehicle (e.g. pedal extensions).

The Guidelines provides details about various modifications, including outlining modifications that require certification in accordance with the Road Transport (Vehicle Registration) Regulation 2017 (the Regulation) and the *Vehicle Safety Compliance Certification Scheme* (VSCCS) and how to obtain the certification. The Guidelines have no legal status and only provides guidance on means to comply with the Regulation and associated standards.

The Guidelines apply to passenger vehicles for use by people with *disability* that are not public passenger vehicles. They may also assist in modifying taxis and hire vehicles designed to be *wheelchair* accessible, but these vehicles must also meet the design and performance requirements specified in the Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017.

The Guidelines are not exhaustive, and will not cover every vehicle modification. A list of contacts that may provide further guidance and advice are included in Appendix A.

Note: The term 'vehicle' used in the Guidelines refers to light vehicles, being vehicles with a *gross vehicle mass* of 4.5 tonnes or less.

1.2. Definition of Terms

Terms that are italicised in the Guidelines are defined in Appendix B. In addition, the terms *may*, *must*, *should*, and *shall* have distinct meaning within the context of the Guidelines and are also defined in Appendix B.

1.3. Explanatory Note

The Guidelines provide guidance to persons who modify a vehicle for use by a person with *disability*, and to *licensed certifiers* who assess and certify vehicles modified for this purpose. The Guidelines provide advice on vehicle standards and the legal obligations on *registered operators*, and every attempt has been made to ensure the advice is accurate and current.

It must be emphasised that compliance with vehicle standards may not be sufficient to ensure a modified vehicle is safe to use on the road network.

The modified vehicle must be either assessed by the modifier to not require certification (see Section 2) or certified by a *licensed certifier* as appropriate to ensure it does not pose an unacceptable risk to its occupants or other road users.

The assessments detailed in the Guidelines apply to vehicles intended to be registered for use on the road, in normal driving operations and within posted speed limits. If it is intended to also use a vehicle for specialised activities, such as extreme off-road activities, more rigorous assessment and tests may be required to ensure the vehicle modifications are suitable for this use and do not pose an unacceptable risk to its occupants and other road users.

1.4. DISCLAIMER

The information contained in this Guideline is for information purposes only and is not intended to replace any requirements or obligations under any legislation.

Transport for NSW makes no representations or warranties in relation to this Guideline, including without limitation, as to the accuracy or completeness of the information in this Guideline.

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The information in this Guideline is subject to change without notice.

1.5. Documents Referenced in the Guidelines

The following documents are referenced in the Guidelines:

Commonwealth Legislation

Disability Discrimination Act 1992

Radio communications Act 1992

NSW Legislation

Road Transport Act 2013

Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017

Road Transport (Vehicle Registration) Regulation 2017

Australian Design Rules (ADRs)

ADR 14 Rear vision mirrors

Vehicle Standards Bulletin (VSB)

VSB 14 National Code of Practice for Light Vehicle Construction and Modification

Vehicle Standards Information (VSI)

VSI 6 Light Vehicle Modifications

VSI 49 Seat belt buckle covers

VIS 60 Carrying motorised mobility devices and motor cycles on vehicles

Australian and New Zealand Standards

AS/NZS 1754 Child *restraint* systems for use in motor vehicles

AS/NZS 1841.5 Portable fire extinguishers – specific requirements for powder type extinguishers

AS 2444 Portable fire extinguishers and fire blankets – selection and location

AS/NZS 3504 Fire blankets

AS/NZS 3696.19 *Wheelchairs* – wheeled mobility devices for use as seats in motor vehicles

AS/NZS 3856.1 *Hoists* and ramps for people with disabilities – vehicle mounted product requirements

AS/NZS 3856.2	<i>Hoists</i> and ramps for people with disabilities – vehicle mounted installation requirements
AS 3954.1	Vehicle controls – Adaptive systems for people with disabilities part 1: General requirements
AS 3954.2	Vehicle controls – Adaptive systems for people with disabilities part 2: <i>Hand controls</i> - Product requirements
AS 4535	<i>Ancillary equipment</i> storage
AS/NZS 10542.1	Technical systems and aids for people with <i>disability</i> – <i>wheelchair</i> tiedown and occupant- <i>restraint</i> systems – Requirements and test methods for all systems
AS/NZS ISO 16840.4	<i>Wheelchair</i> seating – seating systems for use in motor vehicles

2. Planning the modification

2.1. Consultation with Occupational Therapist

Vehicle modifications are carried out to facilitate people with disability use the vehicle as a passenger, and/or to drive the vehicle themselves.

To determine what equipment and/or modifications are necessary to enable a driver with *disability* to safely operate a vehicle, an individual driver assessment and training should be undertaken with an *Occupational Therapist (OT)*. The *OT* should be competent in the field of rehabilitation and driver assessment in order to provide an assurance that the person has been suitably trained and can safely operate the vehicle once it has been modified.

For modifications required for a passenger with *disability*, the *OT* should assess the specific needs of that person to determine the level of equipment or vehicle modification required to ensure that the person can safely access and be transported in the modified vehicle with consideration to the requirements of applicable legislation and the relevant Australian standards.

Suitably qualified *OTs* can be found by contacting Occupational Therapy Australia or using the search function on their website (see Appendix A).

2.2. Licensing Requirements

A person with a physical *disability* that requires special aids, appliances or vehicle modifications in order to safely drive, must contact Transport for NSW (TfNSW) for a vehicle-specific *disability* driving test. Additional conditions may be applied to the licence. For more information, see: <http://www.rms.nsw.gov.au/roads/licence/health/driving-with-disability.html>

2.3. Seeking an Exemption

People with certain disabilities may require a vehicle to be extensively modified to meet their needs. These modifications may be so extreme the vehicle can no longer comply with certain vehicle standards. In these situations, a person may apply to TfNSW for an exemption from the vehicle standards requirements made under Schedule 2 Light Vehicle Standards Rules to the Regulation, for a vehicle modified for a person with *disability*.

Further information, including details of how to apply for an exemption, is included in Appendix C.

2.4. Internal Vehicle Dimensions

The modified vehicle should have sufficient space to allow all occupants to be seated and properly restrained at all times. This may involve modifying the vehicle structure to increase the space (e.g. raising the vehicle roof to increase head clearance).

Although there are no minimum *clear zone* requirements for privately registered vehicles under the ADRs or the Regulation, vehicles modified for a person with *disability* should meet the minimum *clear zone* requirements included in AS/NZS 10542.1. The allocated floor space should be level.

Doorways shall have an unobstructed clear vertical height and width sufficient for a *wheelchair* seat occupant to enter and exit the vehicle in their normal seated position.

Any storage facilities for *ancillary equipment* such as ventilators, crutches and trays that may be needed shall be secured in accordance with AS 4535.

3. Types of modifications

3.1. General

The Regulation requires that:

- all registrable vehicles comply with the applicable vehicle standards for that vehicle
- modified vehicles continue to comply with those standards
- the vehicle and its parts and equipment are suitable for safe use, and are in a thoroughly serviceable condition.

To assist *registered operators* meet these obligations, the VSCCS has been created under the Regulation and is administered by Transport for NSW. This is a modification scheme that authorises persons with appropriate competence, known as '*licensed certifiers*', to inspect and test a modified vehicle, and issue a compliance certificate if they are satisfied that it complies with the applicable vehicle standards. Except for purposes relating to compliance certification, a vehicle that has undergone a *significant modification* (i.e. one that requires a compliance certificate), must not be used on a road or *road related area* unless a compliance certificate has been issued for the vehicle. (For more information, refer to clauses 60, 64, 84, 85 and 87 of the Regulation and VSI 6.)

Modifications to vehicles for people with *disability* can range from the simple addition of an extension mirror, to structural modifications such as floor replacement.

Only a *licensed certifier* may be engaged in assessing and certifying vehicle modifications. The particular competencies required may vary depending on the specific modifications completed.

TfNSW has assessed the competencies of *licensed certifiers*. Contact details and areas of competence for each *licensed certifier* are published under VSCCS Bulletin 01 *Licensed Certifiers* on the RMS's website at: <http://www.rms.nsw.gov.au/business-industry/examiners/vscs/index.html>.

If the vehicle is found to comply with the applicable vehicle standards, then a VSCCS compliance certificate is issued for the vehicle. The *licensed certifier* will then submit the compliance certificate electronically to TfNSW. The *registered operator* or their representative must present the compliance certificate and the certificate of registration to a Service NSW Centre for amendment. Vehicle registration records will be updated and the amended certificate of registration provided.

The modification design process shall include provision for an able bodied person to drive or use the vehicle, except if the required modifications makes this impracticable.

If there is any doubt as to whether a modification requires certification or not, it is advised to contact TfNSW for clarification.

3.2. Defining the Significance of the Modification

Depending on the significance of the vehicle change, it may not require assessment or certification. Changes not classed as a modification and minor modifications will not require assessment, while changes classed as a *significant modification* will.

This section provides an overview on the differences in these classifications. For specific advice, it is recommended you contact TfNSW Vehicle Standards and Investigations (see Appendix A).

3.2.1. Changes that do not require assessing or certification

Not classed as modifications:

The following are not considered to be modifications and do NOT require assessing or certification:

- a. Replacement of parts or components by identical or equivalent parts or components.
- b. Replacement of parts or components with parts or components of equivalent functional performance.
- c. Optional parts or components as prescribed by the vehicle's manufacturer. These include:
 - i. Installing a reverse activated rear view safety camera and dash mounted monitor, where it is optioned for that make and model and fitted in accordance with the vehicle manufacturer's instructions.
 - ii. Installation of *Original Equipment Manufacturer (OEM)* hand rail in location originally optioned by vehicle manufacturer.

Minor modifications:

In addition to the above, the following are not considered to be *significant modifications* and do NOT require assessing or certification:

- a. Fitting an interior or exterior panoramic rear vision mirror to assist side vision profile that complies with ADR 14.
- b. Fitting a seat belt buckle cover to ensure that people with behavioural issues cannot release their seat belt buckle while travelling in a vehicle (see VSI 49).
- c. Installation of a steering wheel spinner knob that does not affect the operation of an SRS airbag system or compliance with an ADR.
- d. Fitting a one-handed steering device to enable driver to access controls such as horn, wipers, and indicators.
- e. Fitting a gear change extended linkage to motorcycles that retains the original shift pattern.

3.2.2. Significant modifications

Unless exempted by TfNSW (see Appendix C), any modification that affects an applicable ADR is considered a *significant modification* and will require certification. VSI 6 provides a list of potential *significant modifications* that require certification. This list is not exhaustive, and it is recommended that before undertaking any modification/s to your vehicle, you seek advice regarding the impact they may have on your vehicle's continuing compliance with ADRs and the Regulation. If you have any doubt about whether or not your intended vehicle modification/s may require certification, you should contact TfNSW Technical Enquiries for more information (see Appendix A).

3.3. Common Modifications

The following sub-sections discuss common modifications required of vehicles for use by people with disability. Depending on the extent of these modifications, they may be classed as *significant modifications*.

3.3.1. Structural

Modifications that affect the vehicle's structure (e.g. roof extensions or lowering of the floor) are classed as a *significant modification* and will require certification.

3.3.2. Access

3.3.2.1. Ramps and hoists

Ramps and *hoists* may be used to assist a person with disability ingress to and egress from a vehicle. Ramps are designed to remain in the inclined position during use, and can be deployed and stored manually by hand, or operated by a combination of power or hydraulic controls. *Hoists* are attached to the vehicle and are designed to raise or lower people into or out of the vehicle.

Ramps and *hoists* should comply with AS/NZS 3856.1 and be installed in accordance with manufacturer's instructions. Where these instructions are insufficient or unavailable, then installation should be carried out in accordance with AS/NZS 3856.2.

3.3.2.2. Fitting hand or guard rails

Hand or guard rails may be fitted to a vehicle ramp or *hoist* to provide additional stability and safety for the appliance operator, and should comply with AS/NZS 3856.1.

Hand or guard rails fitted to a vehicle ramp or *hoist* must be fitted in accordance with manufacturer's instructions and once fitted, not adversely affect the safe loading and unloading of a *wheelchair* occupant, or affect the operation of the appliance.

Hand rails should have no obstructions preventing free hand movement over the surface of the rail.

When hand or guard rails are detached and stored, the following minimum requirements should apply:

- a. When stowed, a folding rail shall be securely attached to the vehicle capable of withstanding a force in any direction of 20 times the weight of the rail.
- b. Stored rails shall not protrude into the *clear zone* or *allocated space* of a *wheelchair* occupant.
- c. Rails must not be stored where they could pose a hazard to a vehicle occupant in the event of a crash or sudden stop.
- d. Stored anchored rails in a vehicle must not interfere with the function of any impact occupant protection or *restraint* system.

3.3.3. Controls

Some complex modifications to the driver's controls will impact a number of ADRs and are deemed to be significant. However, most of these will be covered by the allowances for manufacturer's certified aftermarket components, allowing for an easier certification process (see Section 4.3).

If *driving controls* have been modified, a warning label shall be prominently displayed in the vehicle (see Section 5.1).

3.3.4. Deactivation of an SRS airbag

If an SRS airbag needs to be deactivated when a modification is in use, an exemption from TfNSW must be obtained (see Appendix C).

3.3.5. Occupant restraints

A *wheelchair* occupant should be secured by the OEM's seatbelt system, with the frame of the *wheelchair* restrained separately.

People with disability or restricted mobility may be unable to use the original vehicle seat and/or occupant seatbelts, and would need to remain within a *wheelchair* in the vehicle. A *wheelchair* used for a seating position in a vehicle should be designed and manufactured to comply with the performance standards of AS/NZS 3696.19.

Drivers transporting occupants travelling in *wheelchairs* must ensure that the occupants are appropriately restrained in the *wheelchair*, and that the *wheelchair* is securely docked. Drivers should ensure familiarity with the requirements before transporting occupants in *wheelchairs*.

A *Wheelchair Tie-down and Occupant Restraint System (WTORS)* should comply with AS/NZS 10542.1 and be fitted in accordance with the manufacturer's specifications.

Other *WTORS* requirements are:

- a. OEM seatbelts incorporating pre-tensioners should be retained as part of a vehicle's supplementary *restraint* system if the modification allows.
- b. A lap-only seatbelt should not be fitted where the *WTORS* is replacing an occupant seat that was previously fitted with a lap-sash seatbelt.
- c. Adequate space should be available for forward head excursion, that being:
 - i. 650 mm when used with a lap-sash seatbelt
 - ii. 950 mm when used with a lap-only seatbelt.
- d. The *wheelchair's* own postural support (see Figure 1) shall not be used unless certified as a *wheelchair* anchored belt *restraint* certified to AS/NZS 3696.19.
- e. Seatbelts and *restraints* shall be kept clean and coiled within the retractor when not in use.
- f. Seat belt and *WTORS* webbing shall be protected from sharp edges or protrusions.
- g. *WTORS* sets shall be kept together as a complete kit.
- h. A *WTORS* release mechanism should be within reach of the *wheelchair* occupant and marked or labelled to assist the user.
- i. Seatbelts and *WTORS* should be able to be released using one hand.



FIGURE 1 Example of postural support not suitable as a *restraint*.

3.3.6. Wheelchair docking

Wheelchair docking systems are specifically manufactured to suit various *wheelchair* models, and to allow the OEM seatbelt systems be used by the seat's occupant.

Wheelchair docking systems shall comply with AS/NZS 10542.1, be compatible with the *wheelchair* and installed according to manufacturer's instructions.

An exemption from TfNSW must be obtained if a seat incorporating an SRS airbag system has been removed to accommodate a *wheelchair* docking system (see Appendix C).

3.3.7. Dual purpose driver seating provision

A driver's seating position may be modified to allow driving by a person with disability or an able bodied person. A vehicle with dual purpose driver seating must be constructed to be safely driven and controlled by both an able bodied person and a person with disability. The OEM seat should retain its adjustment functions in a vehicle with dual purpose driver seating.

An instruction label shall be affixed in a prominent position, readily visible to vehicle users, advising of the various seat operations available. This advice shall include information on how to engage and disengage the seat locking system. The label must also advise the driver of the type of modifications done to the vehicle.

3.3.8. Seating support

If it is intended to transport a person in a wheelchair in the front seating positions, there shall be a headrest and *backrest* with sufficient strength to reduce the risk of injury in the event of a crash. Where possible a headrest and *backrest* with sufficient strength should be provided for other seating positions in which it is intended to transport a person in a wheelchair.

Note: A headrest/backrest combination device can be mounted to the interior frame of a vehicle for use by *wheelchair* seated occupants of differing stature (see Figure 2). This device supports the occupant's torso regardless of the model of *wheelchair* they use and can pivot to the side of the vehicle when not in use.



FIGURE 2 Headrest/backrest combination device.

4. Methods for certifying the modified vehicle

4.1. General

This section presents different methods to certify a significantly modified vehicle. Regardless of the means used to demonstrate compliance, evidence of the assessment process used and the results must be developed and maintained for each vehicle.

4.2. Method 1 – Compliance with the ADRs and Other Standards

Each vehicle can be individually assessed by a *licensed certifier* for compliance with the *ADRs* and the other standards outlined in Section 2 above.

Prior to doing the verification tests, the *licensed certifier* must inspect the vehicle to ensure the components have been installed correctly in accordance with the manufacturer's instructions.

Note: A checklist, like the one at Appendix D, can help the modifier ensure that the components have been installed to the manufacturers' specifications and instructions. This should be provided to the *licensed certifier* to assist in the inspection.

Most *ADRs* specify tests or other methods for determining vehicle compliance. If a modification affects an *ADR*, the tests must be done unless TfNSW has allowed alternative means to demonstrate compliance; refer to VSCCS Bulletin 2 to see what alternatives are permitted for certain *ADRs*. VSCCS Bulletin 2 may be accessed at <http://www.rms.nsw.gov.au/documents/business-industry/examiners/vscs-bulletin-02-modified-individually-constructed-vehicles.pdf>.

Following the examination and verification tests, the *licensed certifier* may require other tests to ensure the overall safety of the vehicle prior to its registration. Finally, the performance of the vehicle should be checked by taking it for a test run, with the length of the run and the type of road depending on the nature and extent of the modification.

4.3. Method 2 – Certified Aftermarket Components

A vehicle may be modified to incorporate manufacturer certified aftermarket components, without the need for detailed testing providing the conditions specified in TfNSW Aftermarket Parts Guide are met.

5. Other items to be considered

5.1. Driving Controls Modification Warning Label

If *driving controls* are modified for use by a person with disability, a warning label shall be securely attached to the dash in a prominent position, clearly visible to the driver. The label shall include bold black lettering at least 5 mm high on a yellow background, stating the following:

<p>CAUTION</p> <p>DRIVING CONTROLS HAVE BEEN MODIFIED. DO NOT OPERATE UNLESS FAMILIAR WITH CORRECT USE OF THIS VEHICLE.</p>

5.2. Emergency Seat Belt Cutting Devices

Some vehicle modifications may make it difficult for an emergency responder to unclasp a seatbelt. In these situations, a seat belt cutting device should be stored within easy access for emergency use. If there is a risk of inappropriate use, then an alternative storage area should be used. An instruction advice label shall be fitted near the device, or be readily visible in the cabin area of the vehicle.

5.3. Fire Safety Equipment

Some vehicle users with disability may not be able to exit a vehicle quickly in the case of emergency and are at increased risk of serious injury or death if the vehicle catches fire. A vehicle modified for such a person should be fitted with a fire extinguisher with an extension hose.

Note: This type of extinguisher is preferred as it enables access to a fire source in a confined space.

A fire blanket complying with AS/NZS 3504 should be carried in a vehicle transporting a person at increased risk in a fire. Blanket should be at least 1.2x1.8 m.

5.4. Carrying Mobility Devices

VSI 60: Carrying motorised mobility devices and motorcycles on vehicles provides advice on the safety and legal requirements that apply when carrying a *wheelchair* or motorised mobility devices on a rack fitted to the rear of a vehicle.

VSI 60 may be accessed at <http://www.rms.nsw.gov.au/documents/roads/safety-rules/standards/vsi-60.pdf>.

5.5. Electromagnetic Compatibility of Equipment Fitted in A Vehicle

Mobility devices may use electronic wireless transmission to assist a person with disability to drive and control a vehicle. A typical example is a wireless *hand control* pad mounted to a steering wheel spinner knob to reduce driver reach when operating controls such as washers, wipers and indicators. These types of wireless control devices generally emit and receive electrical energy that communicates with existing OEM vehicle electronic systems.

Testing of vehicles and vehicle components for *electromagnetic compatibility* (EMC) shall be done to prevent unpredictable equipment behaviour and electrical disturbances to vehicle safety systems.

To prevent inadvertent electrical disturbance from a non-OEM vehicle device, all electrical and electronic equipment fitted to a vehicle modified for a person with disability, including any systems outside the vehicle, shall be designed, manufactured, labelled, or electronically labelled to demonstrate compliance with at least one of the EMC performance standards defined under Section 162 of the Radiocommunications Act 1992.

Appendix A: List of contacts

The following contacts may be useful for people involved in modifying a vehicle for a person with *disability* to identify the required modifications and have the modified vehicle registered under *the Regulation*.

New South Wales Department of Education

GPO Box 33 | Sydney | NSW | 2001 | T | 02 9561 8999

E | DECinfo@det.nsw.edu.au

Further information can be accessed via the [NSW Department of Education](#).

Assisted School Travel Program, Department of Education

Locked Bag 9 | Wollongong | NSW | 2500 | T | 1300 338 278

E | generalenquiries.astp@det.nsw.edu.au

Further information can be accessed via <https://education.nsw.gov.au/astp/home>

Department of Infrastructure, Regional Development and Cities (DIRDC)

GPO Box 594 | Canberra | ACT | 2601 | T | 1800 075 001

Further information can be accessed via [DIRDC](#).

NSW Health

Locked Bag 961 | North Sydney | NSW | 2059 | T | 02 9391 9000

For people with hearing or speech loss: | TTY | 133 677, then ask for 02 9391 9000

Speak and listen: | T | 1300 555 727 then ask for 02 9391 9000

Department of Family and Community Services / Ageing Disability and Home Care

Locked Bag 10 | Strawberry Hills | NSW | 2012 | T | 02 9377 6000

E | facsinfo@facs.nsw.gov.au

Further information can be accessed via [Family and Community Services](#).

Enable New South Wales

Locked Bag 5270 | Parramatta | NSW | 2124 | T | 1800 362 253

E | enable@health.nsw.gov.au

Further information can be accessed via [Enable NSW](#).

Legislation: All relevant NSW transport legislation is provided on TfNSW website at:
www.legislation.nsw.gov.au

National Disability Insurance Scheme (NDIS)

GPO Box 700 | Canberra | ACT | 2601 | T | 1800.800.110 | E | [Contact form](#)

For people with hearing or speech loss: | TTY | 1800 555 677

Speak and listen: | T | 1800 555 727

For people who need help with English: | T | 131 450

Further information can be accessed via: [NDIS](#).

Occupational Therapy Australia

PO Box 6921 | Silverwater | NSW | 2128 | T | 02-9648-3225

E | info.nsw@otaus.com.au

Further information can be accessed via: [Occupational Therapists](#)

TfNSW Vehicle Standards and Investigations:

PO Box 1120 | Parramatta | NSW | 2124 | T | 1300 302 402

E | VS&C@rms.nsw.gov.au

TfNSW VSCCS Administrator

PO Box 1120 | Parramatta | NSW | 2124 | T | 1300 791 186

E | vscs@rms.nsw.gov.au

TfNSW Technical Enquiries

PO Box 1120 | Parramatta | NSW | 2124 | T | 1300 137 302

TFNSW Technical Enquiries | T | 1300.137.302

E | tech-enq@rms.nsw.gov.au

TfNSW License and General Enquiries

PO Box 1120 | Parramatta | NSW | 2124 | T | 13 22 13

E | Email TfNSW via this link: [RMS Enquiries](#)

Spinal Cord Injuries Australia

PO Box 397 | Matraville | NSW | 2036 | T | 1800 819 775

E | info@scia.org.au

Appendix B: Glossary

The following defined terms are italicised in the text:

Allocated space – a three dimensional clear floor or ground space that can accommodate a *wheelchair* or a mobility device.

Ancillary equipment – medical equipment required by an individual (e.g. ventilator, portable oxygen).

Australian Design Rules (ADRs) – National design and construction standards for vehicles.

Backrest – back support portion of seat or chair that restricts rearward excursion or movement of a vehicle occupant's torso in a vehicle crash.

Clear zone – an area in a vehicle free of fixed components and encroachments.

Disability – an impairment to a person as defined in the *Disability Discrimination Act 1992*.

Driving control – a device in a vehicle that enables it to be driven by a person with *disability*.

Gross Vehicle Mass – the maximum laden mass of a motor vehicle as specified by the vehicle manufacturer.

Hand control – a control enabling the *driving control* equipment on a vehicle normally operated by a foot to be operated by hand.

Hoist – a device used to raise and lower a *wheelchair*.

Licensed certifier – a person issued a license under Clause 89 of *the Regulation* authorising that person to certify vehicles for registration purposes.

Occupational Therapist (OT) – a trained and qualified health professional specialising in enabling people who need assistance to participate in everyday activities.

Original Equipment Manufacturer (OEM) – the name of the person or company who accepts responsibility for compliance with the *ADRs*.

Registered operator – person legally responsible for a registered vehicle.

Restraint – a device such as a seatbelt used to restrain a vehicle occupant in the event of a vehicle impact to minimise the risk of bodily injury.

Road related area:

- (a) an area that divides a road, or
- (b) a footpath or nature strip adjacent to a road, or
- (c) an area that is open to the public and is designated for use by cyclists or animals, or
- (d) an area that is not a road and that is open to or used by the public for driving, riding or parking vehicles, or
- (e) a shoulder of a road, or
- (f) any other area that is open to or used by the public and that has been declared under section 18 [of the *Road Transport Act 2013*] to be an area to which specified provisions of this [*Road Transport Act 2013*] or the statutory rules apply.

Significant modification – a modification that requires assessing and *certification* by a *licensed certifier* registered on the *VSCCS*.

The Regulation – the Road Transport (Vehicle Registration) Regulation 2017.

VSCCS – the Vehicle Safety Compliance Certification Scheme.

Wheelchair – a chair mounted on 2 or more wheels in parallel that is built to transport a person who is unable to walk or has difficulty in walking (not including a pram, stroller or trolley).

Wheelchair docking systems – vehicle floor mounted electro-mechanical devices that allow a driver or passenger *wheelchair* to be locked into position in a vehicle by the occupant without the assistance of others.

Wheelchair Tie-down and Occupant Restraint System (WTORS) – a system used to provide safe and effective securement of a *wheelchair* and occupant in a vehicle during transit and in the event of a collision.

Throughout the Guidelines, the terms *may*, *must*, *should*, and *shall* are used. These terms are not italicised in the text. These all have distinct meanings within the context of the Guidelines as follows:

May indicates an option that is permissible and which does not affect compliance.

Must indicates something that is mandatory under legislation.

Shall indicates something that is mandatory for compliance with the Guidelines.

Should indicates something that is recommended, but is not necessary to ensure compliance.

Appendix C: Requesting an exemption from the Regulation for a vehicle modified for a person with *disability*

C.1 Recognition of the special requirements for vehicles used by a person with *disability* and *the Regulation*

The Regulation allows registration of a vehicle that is specially constructed, equipped or adapted in a manner not provided by the normal vehicle standards requirements of *the Regulation*.

Clause 11E of Schedule 2 Light Vehicle Standards Rules to *the Regulation* states:

- (1) *The Authority may exempt any particular vehicle or class of vehicle from any requirement of these rules.*
- (2) *An exemption may be granted subject to conditions.*
- (3) *The Authority may amend or revoke an exemption or a condition made or imposed in accordance with this rule.*

Note: The Authority is TfNSW.

C.2 Applying for a TfNSW exemption for a non-complying modified vehicle under *the Regulation*.

Exemptions are provided when a particular need arises. Each request for an exemption should be carefully prepared to ensure all relevant details are included. This will enable TfNSW to consider each request on its merits.

As requirements should be considered on a case-by-case basis there is no one particular template for what will be required in an application. To assist TfNSW the following information should be provided where applicable:

- a) A copy of the vehicle's certificate of registration.
- b) A copy of the applicant's driver's licence, if they are the vehicle's *registered operator*, or authorisation to act on behalf of the *registered operator*.
- c) Reason for the modification.
- d) Supporting evidence from an *OT* or medical practitioner.
- e) A supporting statement from a *licensed certifier* detailing the modification and the applicable vehicle standards that the vehicle requires an exemption from; for example, the applicable *ADR* or the relevant clause of *the Regulation*, why it can't comply, and any alternative controls used instead.

Once the application form is completed, the vehicle operator (or their representative) may email it together with the required information, to TfNSW Vehicle Standards & Investigations Unit at VS&C@rms.nsw.gov.au.

TfNSW may request additional information or other supporting documents to assist in the application process.

TfNSW may issue the exemption and apply certain conditions as appropriate (see C.3).

Further information on applying for an exemption for a vehicle modified for a person with *disability*, (together with the relevant application form) is provided on the RMS website at:

<http://www.rms.nsw.gov.au/roads/registration/get-nsw-registration/standards/vsi/light-vehicle-exemptions.html>.

C.3 Vehicle exemption conditions

Depending on the modification type, TfNSW exemptions may include certain conditions. For example, in the case of allowing an SRS airbag system to be deactivated by a driver-operated dash-mounted switch, the following conditions are likely to apply:

- i. an indicator light must be readily visible to the driver denoting that the SRS airbag has been disabled
- ii. the airbag deactivation switch must carry a warning instruction that the SRS driver's airbag system is deactivated when the light is on
- iii. the SRS airbag system must default back to activation status whenever the vehicle is first switched on
- iv. the instruction "push to deactivate" must be clearly inscribed on the airbag switch.

C.4 Exemptions for a vehicle without a registered driver

Anyone with a justifiable need for a vehicle modified for a person with *disability* may apply for an exemption. In most situations, the person applying would be the person with *disability* or a family member or carer.

In some situations, a modified vehicle may need to be registered to a corporation, such as for modified vehicles intended for training or test-driving purposes. This has road safety benefits as it allows an inexperienced driver with *disability* to become familiar with the operation of a vehicle modified to suit his or her needs under controlled driving conditions.

TfNSW may issue exemptions for vehicles registered to a corporation when the need has been demonstrated. In such situations, TfNSW may impose conditions as considered necessary and appropriate. These will be considered on a case-by-case basis, but may include:

- a) the installation of duplicate *driving controls*
- b) the driver to always be accompanied by a driving instructor
- c) the driver to have a referral from an OT.

These conditions will help ensure the safe operation of the vehicle when the driver is inexperienced with the specialist equipment.

C.5 Using a vehicle with an exemption

A vehicle that has been modified and issued with a TfNSW exemption must comply with the conditions associated with the exemption and all other mandatory safety and equipment requirements of *the Regulation*, be safe to drive, and remain in a serviceable condition.

A person driving a vehicle with an exemption should carry a copy of the exemption in the vehicle.

Appendix D: Vehicle modification checklists

This exemplar checklist summarises the various equipment and modification processes outlined in the Guidelines. This or a similar checklist should be used by the vehicle modifier to ensure they have considered all aspects relevant to the modification.

Where the answer of 'no' is given for any of these options, commentary should be given about why this is not considered to be a problem, or the issue should be rectified.

	Yes	No	N/A	Comments
D.1. Vehicle concept and design checklist				
D.1.1 Has the vehicle user or driver undergone mobility assessment by an <i>OT</i> prior to a vehicle being purchased, specially equipped or modified?				
D.1.2 Does the modified or specially equipped vehicle require <i>certification</i> from a <i>licensed certifier</i> ?				
D.1.3 Is the vehicle undergoing changes that are not classed as modifications, such as replacing parts or components that are equivalent to the original vehicle manufacturer's specifications?				
D.1.4 Has TfNSW been contacted to confirm whether intended modifications will require certification by a <i>licensed certifier</i> ?				
D.1.5 Do the modifications require the vehicle to be exempted from any <i>ADRs</i> ?				
D.2 Hoist and ramp installation modification examples				
D.2.1 Does the <i>hoist</i> or ramp comply with the product requirements of AS/NZS 3856.1?				
D.2.2 Does the <i>hoist</i> or ramp installation comply with the requirements of AS/NZS 3856.2?				
D.2.3 Can a rack be affixed to the rear of the vehicle in accordance with the requirements of VSI60?				
D.3 Adaptive <i>driving controls</i> installation modification examples				
D.3.1 Has a TfNSW <i>disability</i> driving test been conducted with the applicant in a vehicle with the relevant driving aids fitted?				

	Yes	No	N/A	Comments
D.4 Labelling				
D.4.1 Where <i>driving controls</i> are modified, is a readily visible label been affixed in a prominent position as specified in Section 5.1?				
D.4.2 If an SRS airbag system deactivation switch has been fitted, is a visible indicator triggered whenever the system is deactivated?				
D.4.3 If an SRS airbag system deactivation switch has been fitted, is it set to default to 'activated' whenever the engine is started?				
D.4.4 Where a vehicle has been modified for dual purpose driver seating has an instruction label been affixed in a prominent position that is readily visible to vehicle users, advising of the various dual purpose seating positions?				
D.5 Minimum design and performance standards of a <i>wheelchair</i> and restraints				
D.5.1 Is the <i>wheelchair</i> used for a seating position in a vehicle a type or model that is specifically designed and manufactured to comply with the performance standards of AS/NZS 3696?				
D.5.2 Does the <i>WTORS</i> comply with AS/NZS 10542.1?				
D.6 Vehicle <i>wheelchair docking systems</i>				
D.6.1 Does the installation of a <i>wheelchair docking system</i> meet the minimum design and performance requirements of AS/NZS 10542.1?				
D.6.2 Is the <i>wheelchair docking system</i> purpose designed and manufactured for the particular make and model of <i>wheelchair</i> to be restrained?				
D.6.3 Has an application for an exemption from TfNSW been sought where a seat has been removed which has an SRS airbag system fitted?				
D.7 Spatial provisions for <i>wheelchair</i> occupants in a vehicle				
D.7.1 Do the interior spatial dimensions of the vehicle meet the recommended minimum <i>clear zone</i> requirements as defined in AS/NZS 10542.1?				

	Yes	No	N/A	Comments
D.7.2 Has provision been made for the safe storage of <i>ancillary equipment</i> to be secured in accordance with AS 4535?				
D.7.3 Does the vehicle comply with the recommended ground or clear floor space requirements for an occupied <i>wheelchair</i> as defined in Section 4.4 of the Guidelines?				
D.8 Wheelchair seated occupant headrest and backrest provisions				
D.8.1 Is there sufficient headrest and <i>backrest</i> provision for a <i>wheelchair</i> seated occupant?				
D.9 Emergency equipment for a vehicle modified for a person with disability				
D.9.1 Is a portable fire extinguisher with an extension hose that is manufactured to AS/NZS 1841.5 readily accessible in the vehicle?				
D.9.2 Is a fire blanket available in the vehicle which is manufactured to the requirements of AS/NZS 3504?				
D.9.3 Is an emergency seat belt cutting device stored adjacent to the vehicle occupant readily available for emergency use?				
D.10 Fitting of hand or guard rails to aid vehicle access and egress operations				
D.10.1 Do hand and guard rails comply with AS/NZS 3856.1 and 3856.2?				
D.10.2 Are the hand rails or guard rails likely to adversely affect the safe loading/unloading of a <i>wheelchair</i> seated occupant, or affect the operation of a ramp or a <i>hoist</i> ?				
D.11 Electromagnetic compatibility of equipment fitted in a vehicle				
D.11.1 Is the electronic equipment fitted to a vehicle, designed, manufactured and labelled to comply with at least one of the EMC performance standards defined under Section 162 of the <i>Radiocommunications Act 1992</i> ?				

	Yes	No	N/A	Comments
D.12 Adjustment of TfNSW records for a vehicle modified for a person with disability				
D.12.1 Has the <i>licensed certifier</i> submitted the Compliance Certificate to enable the vehicle registration details to be amended?				

