Correct as at 24th May 2019. It may be superseded at any time.

Extract taken from: NZTA Vehicle Portal > VIRMs > Heavy vehicle specialist certification > Introduction

Introduction

1 Purpose and Scope

The NZ Transport Agency *Waka Kotahi* has prepared this document, *Vehicle inspection requirements manual: Heavy vehicle specialist certification* to enable heavy vehicle specialist and manufacturing inspectors to achieve correct and consistent standards of inspection and certification.

Heavy vehicle specialist and manufacturing certifiers are required to certify specialist aspects of heavy vehicles. They are appointed by the Transport Agency under section 2.2(1)(i) of the **Land Transport Rule: Vehicle Standards Compliance 2002** (the Rule) as vehicle inspectors and/or inspecting organisations.

In order to prepare a vehicle for operational service in New Zealand, the owner may be required to fit additional equipment and to modify the vehicle design to optimise the vehicle for the role in which it is to be employed.

This modification and mounting of additional equipment must result in a vehicle that is deemed by the Transport Agency to be safe to operate.

This means that the modifications (including any repairs or addition of equipment):

- are designed to be technically sound
- are done to a high standard of workmanship
- use parts and materials that are fit for their purpose
- comply with any standards that are applicable
- do not give the vehicle any unacceptable characteristics.

The Transport Agency has delegated the technical assessment of repairs and modifications to heavy vehicle specialist inspectors (HVS or HVM VI) and inspecting organisations (IO). Since the range of knowledge, expertise and experience needed to make these assessments is very wide, HVS certifiers are appointed to certify various aspects of a vehicle. In this manual, these inspectors are generally referred to as HVS certifiers.

These aspects and the Transport Agency requirements for them are covered in this manual. The purpose of this document is to:

- restate the conditions of appointment and continued authorisation
- cover the requirements for the inspection and certification of specialist aspects of heavy vehicles.

This VIRM is published online only and is not supplied in hard copy.

Amendments to this manual will be issued from time to time as inspection requirements change and improvements are made. Details of amendments are available from the **Amendments** tab on the horizontal menu. Suggestions for improvement should be made using the feedback button found on every page.
HVS/M certifiers must ensure they have access to, are familiar with and use, the latest version of the VIRM.

Where appropriate the Transport Agency will consult with HVS/M inspecting organisations prior to the confirmation of amendments to this manual.

An appointed certifier or inspecting organistaion (IO) cannot use the Transport Agency brand, logo or name in connection with their business unless such use is approved in writing by the Transport Agency.

Contacting the Transport Agency

Phone	0800 587 287 then follow the instructions
Technical queries	vehicles@nzta.govt.nz
Administrative queries	vehicleinspections@nzta.govt.nz

Safety Issues – safe work practices

Correct use of this VIRM may involve the use of hazardous materials, work practices or operations and equipment. It is the responsibility of the HVEx/HVxD certifier and IO to establish appropriate safety and health practices required by legislation. Safe work practice shall be employed at all times. An effective compliance process for Health and Safety at work is required by law and is also a requirement of the Transport Agency .

The methods and processes used for the manufacture or repair of a heavy vehicle (HV) shall combine the requirements of the Health and Safety at Work Act 2015 and any relevant manufacturer's recommendations.

This applies to the protection of staff as well as the avoidance of damage to equipment or the work or, in the case of a repair, further damage to the item being repaired. Refer to your HSE manual and work instructions before commencing any work. For repairs most vehicle manufacturers also make recommendations on safe practices.

Page amended **9 April 2018** (see **amendment details**)

2 Overview of the manual

The manual is in two main parts:

1. Introduction

The introduction explains the duties and responsibilities of the HV certifier, the inspection and certification process, complaints procedures, inspection premises and equipment, and appointment of HV certifiers.

Also included are definitions and abbreviations and sample certification documents.

The term he in respect of an HV certifier, is intended to include she.

2. Technical

This part of the manual covers the requirements for the certification of modifications, mounting of components, design and manufacture of vehicles and components and repairs to individual aspects of heavy vehicle components, structures and systems.

To use the manual:

- the HV certifier identifies each system, structure, component, aspect or performance characteristic affected by the modification, manufacture or repair
- the HV certifier selects the corresponding chapter(s) from the technical part and inspects the vehicle to determine whether the requirements have all been met.

Not all chapters in the technical section are devoted to aspects of vehicles that are to be certified. Some of them, such as **1-1 VIN**, **2-1 External projections**. and **3-1 Dimensions**, are to assist in the assessment of other aspects. Other chapters, such as **11-1 Welding** and **11-2 Conversion to right-hand drive** are also concerned with topics that are not aspects in themselves but pool all the requirements to be considered where these items are involved.

Each chapter of the technical part consists of up to six parts:

Required certifier categories	shows the certifiers who are concerned with the chapter material.
Summary of legislation	summarises the legislation that is relevant to that section.
Applicable references	refers to standards, codes and other documents that contain requirements.
Requirements of the legislation	contains a synopsis of the requirements in legislation and other directives of the NZTA
Notes	are for additional guidance, where required.
Reasons for rejection	specifies the conditions that must result in the vehicle being rejected by the specialist certifier

3 Inspection and certification

3-1 Duties and responsibilities

In order to inspect and certify an aspect of a vehicle for a Heavy Vehicle Specialist Certificate (LT400), the HVS/M certifier must:

1. be an authorised certifier appointed by the NZTA under the Rule, section 2.2 for the aspect of the vehicle being certified
2. know the certifiers responsibilities
3. identify the vehicle class according to **section 3.4** of this introduction
4. identify whether the vehicle requires certification. **Section 3.3** of this introduction identifies the threshold for HV certification
5. establish whether the vehicle complies. **Section 3.5** and **section 3.6** of this introduction explain how to determine the vehicles compliance with the requirements
6. complete the inspection documentation, Heavy Vehicle Specialist Certificate, LT400, and any other required labels or plates. **Section 3.7** of this introduction explains the requirements for handling and completing the form
7. when collecting fees take **section 3.8** of this introduction into account
8. to enable the NZTA to efficiently contact the certifier, the certifier must provide and maintain an email address which the NZTA must use to provide any notice required or permit to be sent out by the NZTA to any or all HV certifiers or IO.

3.1.1 General duties and responsibilities

The HV certifiers prime duty is to ensure that a new, modified or repaired vehicle is safe and in compliance with the legal requirements for the aspect of the vehicle that the certifier is approved and required to certify as a Heavy Vehicle Specialist or Manufacturing Inspector or Inspecting Organisation, in **Land Transport Rule: Vehicle Standards Compliance 2002** (the Rule), and in this manual.

The HV certifier shall establish, and use at all times, appropriate and reasonable inspection and certification procedures that are efficient and comply with the Rule, the VIRM and the law.

The HV certifier shall not certify any modification or repair to a vehicle unless and until they have first satisfied themselves that the design, manufacture and installation of the modification or repair take into account the original design, manufacture and installation, and that the vehicle meets the relevant applicable requirements and is safe at the time of certification.

1. HV certifier

HV certifier means an individual appointed by the NZTA under 2.2(1)(i) of the Rule to carry out inspection and certification activities in accordance with requirements and conditions imposed by the NZTA and who is responsible for the inspection and certification outcome.

In this document, a HV certifier is one appointed for the purpose of heavy vehicle specialist or manufacturing inspection and certification. This is defined in section 6.5(1)(d) and 7.5(1)(b) of the Rule as specialist inspection and certification of modifications or repairs to the:

- load anchorages
- chassis and structure
- suspension or steering, including drive train, engine transmission and axles
- brakes
- towing connections
- log bolster attachments
- PSV structural strength, stability and roof racks, as well as
- the static rollover threshold (SRT) of a heavy vehicle
- swept path and heavy vehicle dynamics
- structural composites.

2. Inspection and certification activities (section 2.2(1)(i) of the Rule)

HV certifiers must carry out inspection and certification of modifications or repairs to a heavy vehicle that has been modified since it was manufactured or last certified so as to affect its compliance with an applicable requirement.

3. Primary duty (section 2.1(2) of the Rule)

HV certifiers must carry out inspection and certification activities competently and diligently, and in accordance with the Rule, this document, their Notice of Appointment, the **PRS manual** and other relevant requirements of the NZTA and legislation.

4. Inspection and certification activities that can be carried out (section 2.2(2) of the Rule)

HV certifiers may carry out only those inspection and certification activities for which the NZTA has appointed them.

HV certifiers are appointed as one of the following types:

- engineer
- local manufacturer (NZ)
- SRT certifier.

They may be appointed for one or more certification categories:

Table 1. Certifier Categories

Category	Specialist aspect
HVEC HVCD	Chassis, suspension, steering, PSV, drive train, engine transmission and axles
HVET HVTD	Towing connections
HVEA HVAD	Load anchorages
HVEL HVLD	Log bolster attachments
HVEK HVKD	Brake modification
HVP1 HVP2	Swept path and heavy vehicle dynamics
HVS1 HVS2 HVS3	Static rollover threshold

5. Requirements, conditions and period of appointment (section 2.3(1) of the Rule)

The NZTA may specify the period of appointment for an HV certifier and may impose requirements and conditions as to the performance of the inspection and certification activities, including the performance of those activities at individual sites. The Notice of Appointment states a time of appointment of up to five years from the date it was originally signed by the NZTA. This period of appointment may be extended by the issue of a valid Certificate of Appointment. The new termination date shall be that stated on the certificate. Such appointment may be suspended or terminated by the NZTA if the Parliament of NZ enacts any Law, Act, Regulation, Rule or Bylaw repealing any of the requirements for any or all the certification services offered by the certifier or there is any force majeure event that affects either party to the Notice of Appointment for more than 30 days.

6. Insurance and indemnity

Any previous appointment or approval by the NZTA or any of its predecessor organisations (or by any person or body to whom the NZTA are the successors) to certify heavy motor vehicles, whether made pursuant to the Rule or in accordance with any other statute, regulation or Rule (and any related deed or agreement between parties, or any consent of any kind given to the HVS certifier in whatever capacity) is revoked or terminated on the date of appointment.

This appointment may be terminated by the NZTA if no certifications have been issued by the HV certifier for a period of one year. An HV certifier may apply to the NZTA for a temporary suspension of certification activities for a defined period. The NZTA has the right to impose conditions on reappointment.

The HV certifier may terminate this appointment by giving written notice to the NZTA to that effect. Upon receipt of that notice no vehicle may be certified by the HV certifier, and the HV certifier shall cease to carry out any of the functions to which the HV certifier was appointed.

The HV certifier may cease to carry out any one or more of the categories for which the certifier was appointed by giving written notice to the NZTA to that effect. Upon receipt of that notice no vehicle may be certified by the HV certifier under that or those categories.

Upon termination of this appointment for any reason, the HV certifier agrees to notify the NZTA of the location and means of

access to all the inspection records that are required to be kept.

Nothing in this manual or in the relationship of the parties in relation to this Manual or the Notice of Appointment, shall be construed as creating an NZTA, a partnership or joint venture or a subjecting any party to the creditors of, or claimants against, the other with respect to the rights and obligations pursuant to the Notice of Appointment. Nothing in the Notice or this Manual is intended to create a benefit for, or an obligation enforceable by, any third party against the NZTA or its officers, whether under the provisions of the Contracts (Privity) Act 1982 or otherwise

The HV Certifier will at all times maintain and keep in full force, and do no act which might prejudice or avoid, Professional (PI) insurance and Public Liability (PL) insurance (including any applicable service and repair extension) policies, insuring against any identifiable, recognizable and foreseeable liability which may arise in relation to the provision and performance of the services under this Manual and the Notice of Appointment. Any losses falling under any excess or other deductible either in whole or in part relating to policy or policies, will be the responsibility of the HV certifier. The insurance policies required under this clause may be effected in the name of the HV certifier, his business or his employer.

For the purposes of complying with the requirements to indemnify the NZTA a HV Certifier must have in force and maintain PI and PL insurance during the term of his/her appointment and for a minimum period of six years or such other period as may be professionally advised, from termination of the appointment, or from cessation of certification activities,

For the purposes of complying with the requirements to indemnify the NZTA a HV Certifier must have in force and maintain PI and PL insurance with levels of cover that are appropriate to the level of risk incurred by the HV certifiers work. To establish this the advice of the insurer shall be sought. Such advice must be written and be on file for inspection by the NZTA.

Where such advice indicates that the HV certifier will receive no protection from a type of insurance, the HV certifier is not required to have such insurance.

Where the HV certifiers business risks change, the HV certifier and insurer must assess the effect of such change and implement changes to insurance if required.

Where a HV certifier takes insurance cover from an employer or other organisation, a letter from the insurer, detailing the types, periods and levels of such insurance must be available for inspection by the NZTA.

7. Fit and proper person (section 2.3(3) of the Rule)

All parties agree that the NZTA relied upon information in the HV certifiers application in making this appointment. The HV certifier warrants that the information provided by the HV certifier in applying for appointment is true and complete. The HV certifier will immediately inform the NZTA of any material change to this information. The HV certifier is aware that any material change may be grounds for revocation of the appointment.

The NZTA requires HV certifiers to promote a road safety culture and the commission by the HV certifier of a serious road offence during or outside working hours brings the HV certifiers, and may bring the NZTAs, road safety image into disrepute. Committing a serious road safety offence may be taken into consideration by the NZTA when assessing whether the HVS certifier continues to be a fit and proper person.

The NZTA may terminate or suspend the HV certifiers appointment where it is discovered that the information provided by the HV certifier in their application was not true or complete.

The NZTA may terminate or suspend the HV certifiers appointment on the HV certifier entering into any compromise or scheme of arrangement with any of their creditors, or the HV certifier committing any act of bankruptcy or going or being put into liquidation or being wound up, or where a meeting is called for the purpose of considering the appointment of a liquidator.

It is a condition of an appointment that an HV certifier continues to be a fit and proper person.

8. Document retention, incorrect certification, vehicle defects (section 2.3(4) of the Rule)

It is a condition of an appointment that an HV certifier:

a) keeps a copy of every Heavy Vehicle Specialist Certificate, LT400, and copies of all other relevant records and associated documents relating to inspections and certification for a minimum of five years, or, where the vehicle is certified for a particular operating life, for one year longer than that operating life, whichever is the greater

b) advises Technical Support, Certification and MVR at the NZTA as soon as practicable if there is a reason to believe that the inspection and certification of a vehicle has been carried out incorrectly

c) advises Technical Support, Certification and MVR at the NZTA as soon as practicable after he becomes aware of a defect in a manufacturers production run or quality control process that may affect the safety performance of a vehicle that has been inspected and certified

d) on retiring or ceasing to certify vehicles, advises Technical Support, Certification and MVR at the NZTA of the location or guardian of the documentation for which he has been responsible

e) neither during the term of the appointment or anytime thereafter, use or divulge to any person any documents or copies of documents from official records, or any other confidential information (which includes all customer information and data)

obtained as a result of the HV certifiers relationship with the NZTA, for any purpose other than furtherance of the HV certifiers obligations (which includes the provision of vehicle information to another inspector concerned with the vehicle) under this appointment or as required by law.

9. Delegation (section 2.4(1) of the Rule)

An HV certifier may be permitted by their Notice of Appointment to delegate certain functions or powers to carry out inspection and certification activities for which he was appointed.

An HV certifier may delegate certification work according to their appointment category and Table 2: Delegations:

Table 2. Delegations

Category	Duties (Note 1)	Delegation/transfer	To
Engineer	Initial assessment	Yes, but not for metal fatigue failure	A person reasonably considered to be competent
	Design	Yes, but must personally approve the design to be complete before manufacture	A person reasonably considered to be competent
	Monitoring of manufacture or installation	Yes	A person reasonably considered to be competent or a Local manufacturer certifier with a SoDC
	Final inspection	No	Unless passed to a Local manufacturer certifier with a SoDC
	Sign off (PDS/LT400 etc)	No	Unless passed to a Local manufacturer certifier with a SoDC
Local manufacturer (IO)	Provide facilities to allow Local manufacturer VI to be effective	No	
Local manufacturer (VI)	Initial assessment	Yes	A person reasonably considered to be competent
	Monitoring of manufacture or installation	No	Unless passed to an alternative Local manufacturer certifier or Engineer certifier with a SoDC
	Final inspection	No	Unless passed to an alternative Local manufacturer certifier or Engineer certifier with a SoDC
	Sign off (PDS/LT400 etc)	No	
Static rollover threshold	Calculations for deriving the SRT and issuing a record of determination	Measurements	Another SRT certifier or a person who has passed the TERNZ SRT course

Note 1

Engineers duties may be performed by different certifiers.

Note 2

No other delegations may be made without the express written consent of the NZTA.

A task which has been delegated to a specified employee may not be delegated further by that employee. HV certifiers are responsible for the outcomes or consequences of any delegated task.
HV certifiers must maintain a record of all persons that they have approved in accordance with any specifications in the Performance Review System manual that supports this manual.

A local manufacturer certifier (IO), who derives their authority to certify any aspect of a vehicle from the qualifications and role of a staff member agrees to inform the NZTA of any change to the role or employment of that staff member.

A local manufacturer certifier (VI), who derives, in part, their authority to certify any aspect of a vehicle from their role as a staff member of a Local manufacturer certifier (IO) agrees to inform the NZTA of any change to their role or employment status.

The HV certifier must ensure that, where any employee, agent or contractor to the HV certifier is authorised by the HV certifier in accordance with their appointment to carry out any part of the services on behalf of the HV certifier, that person complies in all respects with the obligations of the HV certifier under their appointment.

3.1.2 Inspection and certification

1. Heavy vehicle specialist inspection and certification (sections 6.5(1), 6.5(4), 6.5(5), 7.5(4) and 7.5(5) of the Rule)

The inspection and certification of a vehicle must be carried out in accordance with the requirements and conditions imposed by the NZTA.

The NZTAs requirements and conditions are contained in this manual (the VIRM), HVS Memos, specified standards and codes, the **PRS manual**, and the Notice of Appointment.

The HV certifier will provide and perform the services in accordance with any published professional or ethical standards of professional bodies to which they belong.

2. Determining compliance of a specific aspect (sections 6.5(5), 7.4 and 11.1 of the Rule)

A specific aspect of a vehicle may be certified as meeting the requirements of the Rule if an HV certifier has identified the vehicle and has determined, on reasonable grounds, that the specific aspect:

a) has not compromised the safe operation of the vehicle

b) has been designed and constructed using components and materials that are fit for their purpose and is within safe tolerance of its state when manufactured or modified

c) complies with the applicable requirements

d) is lawful and no technically competent person (recognised by the NZTA) would dispute that the inspection and certification of the vehicle complies with applicable requirements.

3. Record of determination (sections 6.6 and 7.6 of the Rule)

When an HV certifier has determined whether a specific aspect of a vehicle complies, the HVS certifier must make a record of that determination on the Heavy Vehicle Specialist Certificate, LT400 for each certification (that is, one certification for each aspect certified).

Examples:

1. A semi-trailer that is fitted with a fifth wheel, kin pin, load anchorages, and log bolsters requires **five separate** Heavy Vehicle Specialist Certificates as in the table below:

Component	Certification Category	Code/Standard Certified to
Fifth wheel	HVET or HVTD	NZS 5450
Kin pin	HVET or HVTD	NZS 5451
Load anchorages	HVEA or HVAD	NZS 5444
Log bolsters	HVEL or HVLD	Bolster Attachment Code
Brakes	HVEK or HVKD	Schedule 5/Section 6 HVBR

2. A 4 x 2 truck that has the chassis lengthened, a tag axle fitted, new load anchorages, and a draw beam requires **four separate** Heavy Vehicle Specialist Certificates as in the table below:

Component	Certification Category	Code/Standard Certified to
Chassis, suspension,	HVEC or HVCD	HV Rule
Brakes	HVEK or HVKD	Schedule 5/Section 6 HVBR
Load anchorages	HVEA or HVAD	NZS 5444
Draw beam	HVET or HVTD	NZS 5446

3. A bus or coach **manufactured** in NZ that already has brakes standard compliance, requires **two separate** Heavy Vehicle Specialist Certificates as in the table below: (Additional Certification will be required if the vehicle is fitted with a tow bar, roof rack, a wheelchair hoist, powered ramp or wheelchair/wheelchair occupant restraints or is modified and requires brake certification.)

Component	Certification Category	Code/Standard Certified to
Stability,	HVEC or HVCD	PSV Rule
Rollover Strength	HVEC or HVCD	PSV Rule

The HV certifier must immediately inform the NZTA of any theft of any of the NZTAs documents supplied to the HV certifier by the NZTA or any agent of the NZTA, or prepared by the HV certifier on behalf of the NZTA.

The HV certifier must return to the document supplier or the NZTA or destroy as required by the NZTA any surplus or obsolete NZTA documents.

4. LT400

The LT400 presented must be the original and a faxed copy may only be used by the TSDA to issue a temporary permit. Where the original LT400 has been lost or destroyed the certifier may provide a duplicate (photocopy) provided it is signed and dated by the HV certifier.

5. Standards

Where an HV certifier is required to use a standard during the inspection and certification process, the latest version of the standard must be used except where otherwise specified.

The HV certifier must have available and use any and all standards which are referenced in the Rule or which the HV certifier references in certification.

The HV certifier must comply in all respects with any written instructions, interpretations or guidelines issued by the NZTA to the HV certifier.

3.1.3 Re-inspection and re-certification (section 11.4 of the Rule)

If a Heavy Vehicle Specialist Certificate, LT400, has been issued to a vehicle as a result of an incorrect inspection and certification, the NZTA may require that an HV certifier:

a) repeat the inspection and certification of the vehicle

b) issue, a Heavy Vehicle Specialist Certificate (LT400) as required

c) have the certification in (a) & (b) peer reviewed by another certifier with the appropriate category.

d) meet the re-inspection and re-certification costs of the activities undertaken under (a), (b) and (c)

3.1.4 Performance review (section 3.1(1) of the Rule)

The NZTA, either directly or through an appointed agent, may monitor and review the performance of a HV certifier, including the performance of inspection and certification activities.

The requirements and conditions are contained in this document, the Notice of Appointment and the NZTAs **PRS: Heavy**

vehicle specialist certification manual.

The NZTA may require a HV certifier to provide such information as the NZTA reasonably considers relevant. A HV certifier must comply with these requirements (unless expressly stated in the Notice of Appointment or this VIRM, no functions, duties or powers which may be exercised by the NZTA under any statute, regulation or rule, including under section 188 of the Land Transport Act 1998, are in any way restricted).

Costs of monitoring and review (section 3.1(4) of the Rule)

HV certifiers must bear the costs of the monitoring and reviewing of their performance in accordance with any prescribed fee.

3.1.5 Investigations

1. Investigations (sections 3.2(1) and 3.2(8) of the Rule)

If the NZTA has reason to believe that an HV certifier has failed to comply with any of the conditions of his appointment, the NZTA may require the HV certifier to undergo an investigation and to provide such information as the NZTA reasonably considers appropriate as part of the investigation. The NZTA may observe or inspect the equipment or activities of the certifier and copy relevant books and records. The NZTA may take possession as it sees fit, of any such records for seven days for the purpose of copying.

The HV certifier cannot refuse to undergo any investigation.

2. Notification of action (other than immediate suspension/imposition of conditions) (section 3.2(3) of the Rule)

Following an investigation and before carrying out action, the NZTA will notify the HV certifier in writing of:

a) the action that is being considered

b) the reason for the action that is being considered

c) the date by which submissions may be made to the NZTA in respect of the action that is being considered, which must be at least 21 days after the notice was given

d) where appropriate, the date on which the action that is being considered will take effect, which, unless the NZTA determines otherwise, must be at least 28 days after the notice was given.

3. Responding to a notification of action (section 3.2(5) of the Rule)

If a HV certifier is notified as above, he must ensure that he provides the NZTA with all information within the period specified in the notice.

4. NZ Transport NZTA will consider submissions (section 3.2(6) of the Rule)

The NZTA will consider the submissions and information supplied, and will:

a) decide whether or not to take the action that is being considered

b) as soon as is practicable, provide written notification to the HV certifier of:

i. the NZTAs decision, and

ii. if appropriate, the date on which the action is take effect, and

iii. if appropriate, the right of appeal under section 106 of the Land TransportAct 1998.

5. Remedial action, suspension, revocation (sections 3.2(2) and 3.2(8) of the Rule)

If, following an investigation, the NZTA is satisfied that the HV certifier has failed to comply with any of the conditions of his appointment, the NZTA may do one or more of the following:

a) require that remedial action such as training or mentoring be undertaken by the HV certifier. The HV certifier cannot refuse to comply with the requirement

b) suspend the HV certifier for a specified period or until conditions are met

c) revoke the appointment of the HV certifier.

6. Immediate suspension or imposition of conditions (section 3.3(1) of the Rule)

If the NZTA has reason to believe that a HV certifier has failed to comply with a condition of his appointment and that this presents a significant risk to land transport safety, the NZTA may suspend the appointment with immediate effect, or impose any conditions on the appointment of the HV certifier.

7. Notification of immediate suspension or imposition of conditions (section 3.3(2) of the Rule)

When the NZTA suspends the appointment, or imposes conditions on the appointment, the NZTA will notify the HV certifier in writing of:

a) the grounds for the suspension or imposing of conditions

b) the fact that the certifier or organisation may make submissions to the NZTA

c) the right of appeal under section 106 of the **Land Transport Act 1998**.

8. The NZTA will consider submissions following immediate suspension or imposition of conditions (section 3.3(3) of the Rule)

The NZTA will, as soon as practicable, consider any submission made and notify the certifier or inspecting organisation in writing of the result of any such consideration.

9. Duration of immediate suspension or imposition of conditions (section 3.3(5) of the Rule)

A suspension or condition imposed remains in force until the NZTA has determined the action to be taken and that action has been taken.

10. Withdrawal of immediate suspension or imposition of conditions (section 3.3(4) of the Rule)

The NZTA may at any time withdraw a suspension or condition imposed.

11. Right of appeal against immediate suspension or imposition of conditions (section 3.3(6) of the Rule)

A HV certifier may appeal under section 106 of the **Land Transport Act 1998** against a decision by the NZTA to suspend immediately or to impose conditions.

12. Costs of investigations (sections 3.2(7) and 3.2(8) of the Rule)

The NZTA may require a HV certifier to bear the costs associated with an investigation or remedial action in accordance with any prescribed fee. The HV certifier cannot refuse to pay the fee.

3.1.6 Consequences of termination or suspension

Upon revocation or termination of the appointment for any reason whatsoever, whether in whole or part, the HV certifier will:

a) cease provision of all or such part of the services under their appointment as may be required by the NZTA

b) advise the NZTA of the location of all records or copies of records in the HV certifiers possession relating to the services performed under their appointment and ensure that the NZTA has unlimited access to copy such records

c) return to the NZTA or authorised representative or destroy as required by the NZTA any advertising and/ or display material featuring or referring to the services or the HV certifiers provision of the services under this appointment, as the case may be.

Upon suspension of appointment (whether in whole or part) of the HV certifier for any reason whatsoever, whether by the NZTA or a duly authorised representative, the HV certifier shall immediately cease providing the relevant services during the period of suspension and shall, if so required, surrender all NZTA documents to the NZTA or any authorised representative.

3.1.7 Disputes and appeals

Where there is any dispute arising between parties in relation to any matter arising out of the appointment, the parties shall endeavour to resolve such disputes promptly by consultation and negotiation in good faith.

- Where the HV certifier does not agree with any decisions of the NZTA, including any decision or direction of a Transport Officer, the HV certifier must, notwithstanding any other rights they may have at law, seek from the NZTA a review of that decision.
- Despite the previous two points, both parties recognise that the NZTA has functions in respect of land transport safety and law enforcement and that, not withstanding any dispute or appeal, the NZTA may take whatever lawful action the NZTA considers necessary in the interests of road safety. The specific reasons for the action taken will be provided.
- Where there is any dispute arising between the parties in relation to technical decisions, any available dispute resolution process described in the VIRM or in an issued HVS Memo may be invoked. This will permit the disclosure of otherwise privileged information, such as designs and PRS scores, to the adjudicating body, provided that this information is pertinent to the matter being judged.

3-2 Disqualification from certification

A HV certifier must not engage in any activities that may conflict with his independence of judgement and integrity in relation to the services delivered.

A HV certifier may have a professional interest in a vehicle they certify, such as a vehicle:

a) they have modified or repaired, or

b) that has been modified or repaired by a person working for the same company as the HV certifier, and at the same premises,

However, a HV certifier may not certify a vehicle they or their immediate family have a personal ownership interest in.

A HV certifier may not certify an aspect of a vehicle for which he is not appointed.

An HVS certifier must not inspect a vehicle if:

a) they do not hold a drivers license for that class of vehicle, and

b) they are required to drive it.

3-3 Establishing whether a vehicle must be HV certified

A vehicle must be inspected for heavy vehicle specialist certification if:

a) it requires certification for entry, re-entry or an in-service CoF

b) it is a vehicle of one of the following classes:

MD3, MD4, ME, NB, NC, TC, TD (see **Table 3-4-1. Vehicle equipment standards classifications**)

c) it has undergone modifications or qualifying repairs to:

i. chassis, structural bodywork, brakes, bolster attachments, towing connections, drive train, engine transmission, axles, load anchorages and wheels which affect compliance with applicable requirements (includes flood/water/fire damage)

ii. any item which could affect the vehicles SRT

iii. corrosion in a structural part of the vehicle.

3.3.1 Repairs which do not require certification

The following types of repair do not require inspection and certification:

1. the replacement of bolted on components that do not require certification in themselves (a log bolster attachment or draw beam still requires certification but a bolted on tow-eye does not).

2. repairs to the first failures of chassis cross-members, if that cross-member is not

a) the first or last cross-member of the chassis

b) fitted within 500mm of a suspension support

c) fitted with a driveshaft centre bearing

d) supporting a:

i. ball-race turntable

ii. tow coupling

iii. bolster attachment

iv. device that may place a concentrated load on to the chassis, for example a hoist or a hydraulic cylinder of a tipping body.

3. repairs to coaming rails that do not support certified load anchorage points.

4. tow-eyes fitted to the front of a vehicle for recovery purposes.

5. repairs to non-structural components only of a vehicles monocoque body, for example bolt-on body panels.

6. Ferry tie down points that are attached using existing holes in the chassis and are not welded to components that require certification in themselves.

3.3.2 Repairs that require an LT400, but no statement of design compliance

The following is a list of repairs/replacements that certifying manufacturers can undertake without getting a statement of design compliance from a certifying engineer:

1. Load anchorages that are of a standard design from NZS5444, certified to this standard, and repaird using the method outlines in NZS5444.

2. Worn or damaged fifth wheels can be replaced according to the fifth wheel manufacturers instructions for replacing bolt-on components.

3. Worn or damaged kingpins can be replaced according to the kingpin manufacturers instructions on replacement.

4. Other items as defined in the manufacturing certifier section of this Manual

3.3.3 Repairs that require both an LT400 and a statement of design compliance

All other repairs to heavy vehicle chassis, towing connections, log bolsters and load anchorages require input from a certifying engineer and therefore require a statement of design compliance before an LT400 can be issued by a manufacturing certifier, except where specifically allowed for in the manufacturing certifier section of this manual

3-4 Identifying the vehicle class

Since some decisions are made according to the class of the vehicle, the HV certifier must be able to identify the class of the vehicle to be inspected. The following table describes vehicle classes.

Table 3-4-1. Vehicle equipment standards classifications

Class	Description
AA (Pedal cycle)	A vehicle designed to be propelled through a mechanism solely by human power.
AB (Power-assisted pedal cycle)	A pedal cycle to which is attached one or more auxiliary propulsion motors having a combined maximum power output not exceeding 300 watts.

LA (Moped with two wheels)*	A motor vehicle (other than a power-assisted pedal cycle) that:
	• has two wheels; and
	• either:
	  ◦ has an engine cylinder capacity not exceeding 50ml and a maximum speed not exceeding 50km/h; or
	  ◦ has a power source other than a piston engine and a maximum speed not exceeding 50km/h.

LB (Moped with three wheels)	A motor vehicle (other than a power-assisted pedal cycle) that:
	• has three wheels; and
	• either:
	  ◦ has an engine cylinder capacity not exceeding 50ml and a maximum speed not exceeding 50km/h; or
	  ◦ has a power source other than a piston engine and a maximum speed not exceeding 50km/h.
	
	An LB 1 motor vehicle has one wheel at the front and two wheels at the rear. An LB 2 motor vehicle has two wheels at the front and one wheel at the rear.

LC (Motorcycle)	A motor vehicle that:
	• has two wheels; and
	• either:
	  ◦ has an engine cylinder capacity exceeding 50ml; or
	  ◦ has a maximum speed exceeding 50km/h.

LD (Motorcycle and side-car)	A motor vehicle that:
	• has three wheels asymmetrically arranged in relation to the longitudinal median axis; and
	• either:
	  ◦ has an engine cylinder capacity exceeding 50ml; or
	  ◦ has a maximum speed exceeding 50km/h.

Side-car	A car, box or other receptacle attached to the side of a motorcycle and supported by a wheel.
LE (Motor tri-cycle)	A motor vehicle that: • has three wheels symmetrically arranged in relation to the longitudinal median axis; and • has a gross vehicle mass not exceeding one tonne; and • either: ◦ has an engine cylinder capacity exceeding 50ml; or

Class	Description
	◦ has a maximum speed exceeding 50km/h.
	An LE 1 motor vehicle has one wheel at the front and two wheels at the rear. An LE 2 motor vehicle has two wheels at the front and one wheel at the rear.
Passenger vehicle	A motor vehicle that: • is constructed primarily for the carriage of passengers; and • either: ◦ has at least four wheels; or ◦ has three wheels and a gross vehicle mass exceeding one tonne.
MA (Passenger car)	A passenger vehicle (other than a class MB or class MC vehicle) that has not more than nine seating positions (including the driver's seating position).
MB (Forward control passenger vehicle)	A passenger vehicle (other than a class MC vehicle): • that has not more than nine seating positions (including the driver's seating position); and • in which the centre of the steering wheel is in the forward quarter of the vehicle's total length.
MC (Off-road passenger vehicle)	A passenger vehicle, designed with special features for off-road operation, that has not more than nine seating positions (including the driver's seating position), and that: • has four-wheel drive; and • has at least four of the following characteristics when the vehicle is unladen on a level surface and the front wheels are parallel to the vehicle's longitudinal centre-line and the tyres are inflated to the vehicle manufacturer's recommended pressure: ◦ an approach angle of not less than 28 degrees; ◦ a breakover angle of not less than 14 degrees; ◦ a departure angle of not less than 20 degrees; ◦ a running clearance of not less than 200mm; ◦ a front-axle clearance, rear-axle clearance or suspension clearance of not less than 175mm.
Omnibus	A passenger vehicle that has more than nine seating positions (including the driver's seating position). An omnibus comprising two or more non-separable but articulated units shall be considered as a single vehicle.
MD (Light omnibus)	An omnibus that has a gross vehicle mass not exceeding 5 tonnes.
MD 1	An omnibus that has a gross vehicle mass not exceeding 3.5 tonnes and not more than 12 seats.
MD 2	An omnibus that has a gross vehicle mass not exceeding 3.5 tonnes and more than 12 seats.
MD 3	An omnibus that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 4.5 tonnes.
MD 4	An omnibus that has a gross vehicle mass exceeding 4.5 tonnes but not exceeding 5 tonnes.
ME (Heavy omnibus)	An omnibus that has a gross vehicle mass exceeding 5 tonnes.
Goods vehicle	A motor vehicle that: • is constructed primarily for the carriage of goods; and • either: ◦ has at least four wheels; or ◦ has three wheels and a gross vehicle mass exceeding one tonne.

Class	For the purpose of this description: Description
	• a vehicle that is constructed for both the carriage of goods and passengers shall be considered primarily for the carriage of goods if the number of seating positions multiplied by 68kg is less than 50 percent of the difference between the gross vehicle mass and the unladen mass • the equipment and installations carried on special purpose vehicles not designed for the carriage of passengers shall be considered to be goods • a goods vehicle that has two or more non-separable but articulated units shall be considered to be a single vehicle.
NA (Light goods vehicle)	A goods vehicle that has a gross vehicle mass not exceeding 3.5 tonnes.
NB (Medium goods vehicle)	A goods vehicle that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 12 tonnes.
NC (Heavy goods vehicle)	A goods vehicle that has a gross vehicle mass exceeding 12 tonnes.
Trailer	A vehicle without motive power that is constructed for the purpose of being drawn behind a motor vehicle.
TA (Very light trailer)	A single-axled trailer that has a gross vehicle mass not exceeding 0.75 tonnes.
TB (Light trailer)	A trailer (other than a class TA trailer) that has a gross vehicle mass not exceeding 3.5 tonnes.
TC (Medium trailer)	A trailer that has a gross vehicle mass exceeding 3.5 tonnes but not exceeding 10 tonnes.
TD (Heavy trailer)	A trailer that has a gross vehicle mass exceeding 10 tonnes.

3-5 Work procedure

Any work, to which this manual applies, to be done on a vehicle, must be:

- specified correctly
- designed correctly
- manufactured correctly
- certified as within safe tolerance of the original design or specification.

The design of the work by a HV engineer certifier, where the manufacture and installation is to be the responsibility of others, is to be accompanied by a **Statement of Design Compliance (SoDC)** that is signed by the HV engineer certifier.

The specification of the work is set out in the **Procedure Documentation Sheet (PDS)** that is drawn up by an HV certifier.

- Each certification must have its own unique PDS.

Manufacturing and installation work must also be monitored or verified by an HVS certifier. Where appropriate, the certification of manufacture may be done by a form of ‘type approval’.

Final certification is based on inspection by a qualified certifier with reference to any intermediate documents, including the SoDC, the PDS, supporting documentation from any delegated tasks, any applicable standards, documented histories of used components and worksheets and calculations.

Figure 3-5-1. Certification process: Engineer certifier

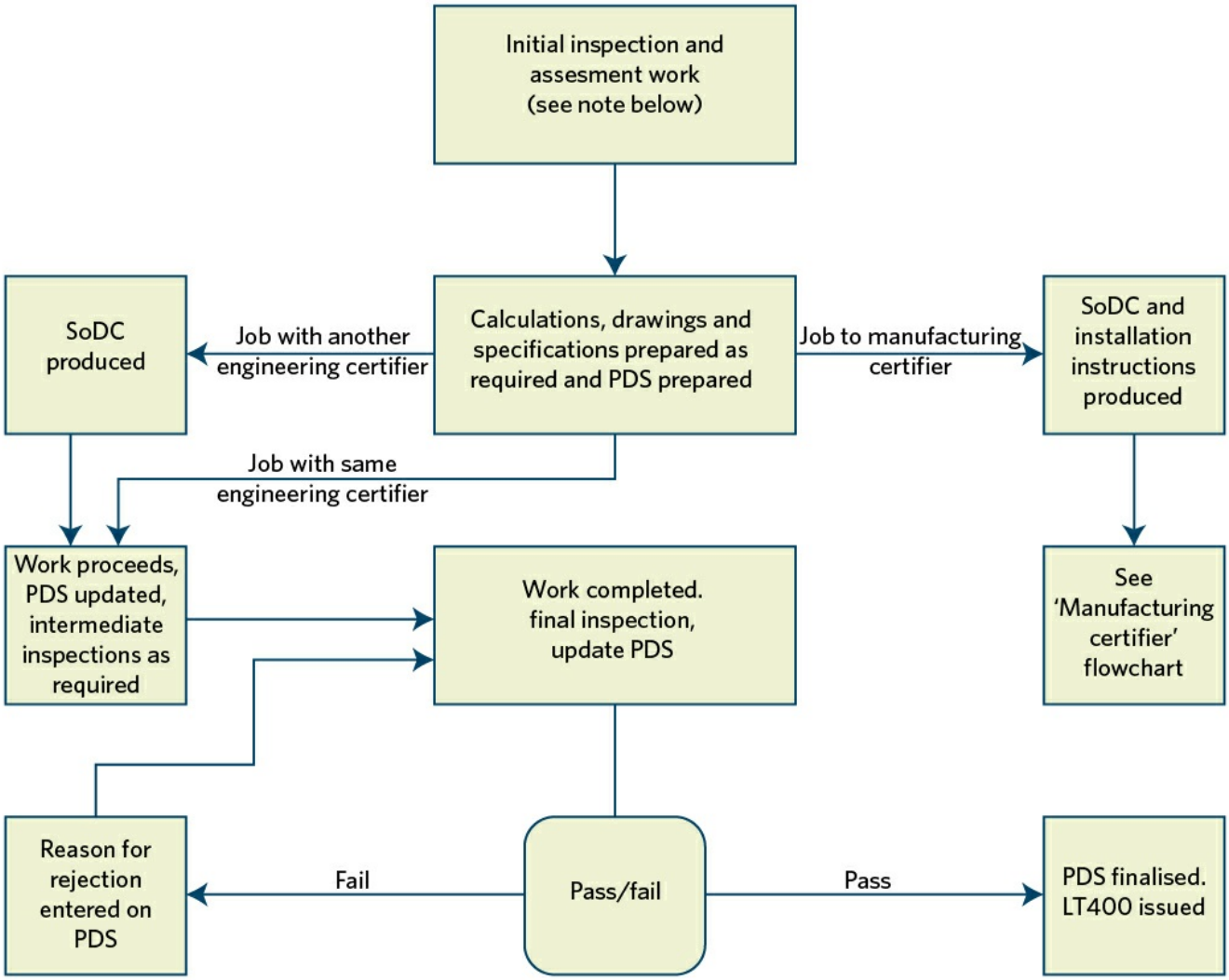
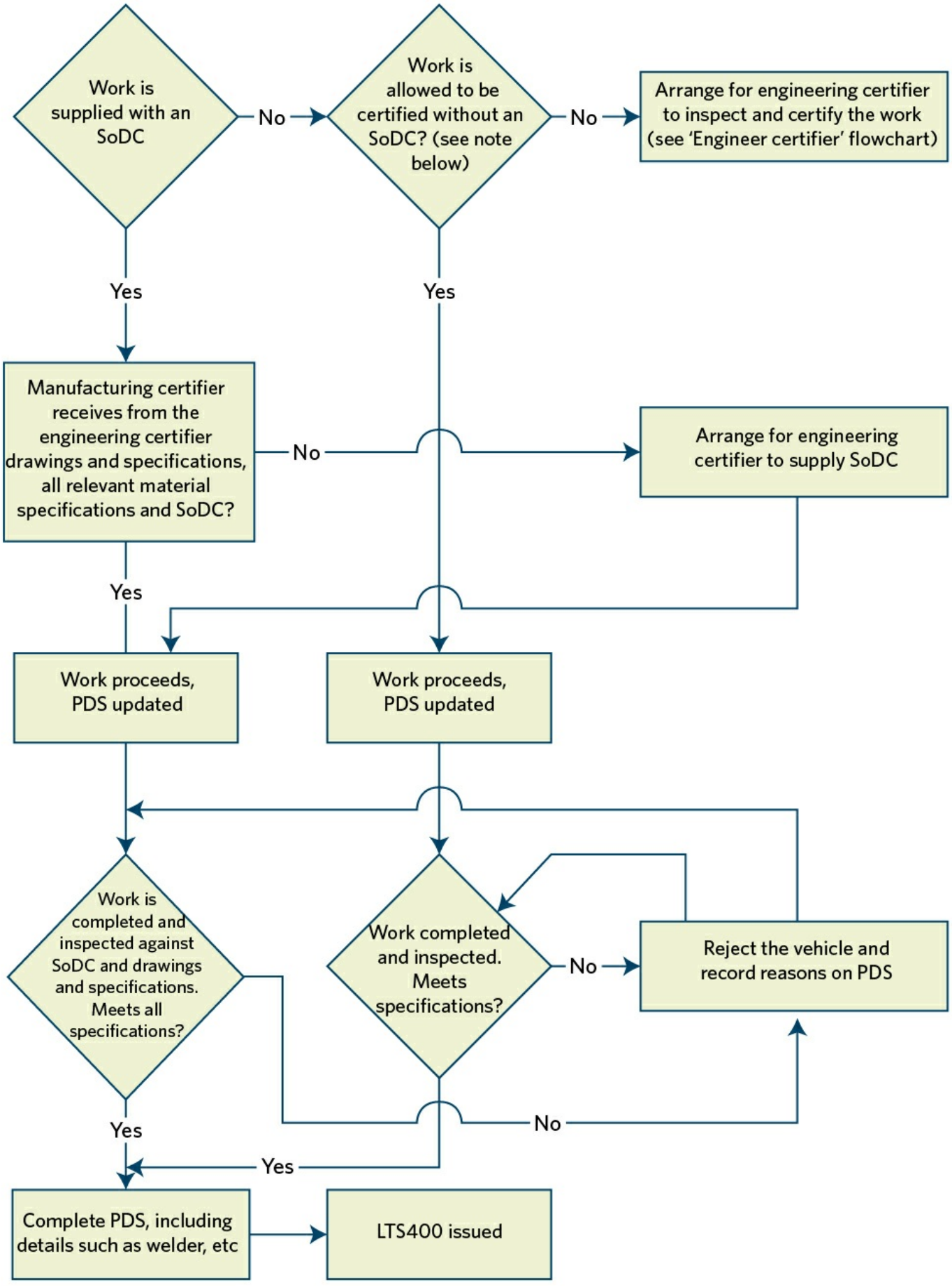


Figure 3-5-2. Certification process: Manufacturing certifier (Note 1)



Note 1

The following work is allowed to be completed by a manufacturing certifier without a SoDC.

- Load anchorages that are of a standard design from NZS5444, certified to this standard and repaired using the method outlined in NZS5444

- Worn or damaged fifth wheels replaced according to the fifth wheel manufacturer's instructions for replacing bolt on components
- Worn or damaged kingpins replaced according to the kingpin manufacturer's instructions on replacement
- Work certified by the HV certifier who has designed it.

Other work that may be certified by a HV manufacturing certifier is defined in the manufacturing certifier section of this manual.

How many certificates?

Each aspect of the vehicle that requires certification is to be certified separately and issued with a separate LT400. This means that any vehicle may need multiple certificates before it can qualify for a CoF (refer to **Technical bulletin 15**).

3.5.1 The statement of design compliance (SoDC)

The SoDC must include the name and signature of the certifier and the date of certification. The SoDC must also have sections with information relevant to:

- the class of motor vehicle
- the vehicle description
- vehicle identifiers
- certification.

The SoDC must include information relevant to the purpose of specialist certification, for example:

- modifications
- repair
- vehicle dimensions
- matters relevant to the structure, systems, components or equipment of a vehicle or instillation or use of a vehicle's structure, systems, components or equipment
- alternative fuel system
- age or historic nature of a vehicle
- class of vehicle
- any other attribute of a vehicle.

The SoDC must confirm that the vehicle, or any aspect of it relevant to the purpose of specialist certification, complies with the requirements as specified in **Land Transport Rule: Vehicle Standards Compliance 2002**, and therefore must include the following statement:

I declare that I am a heavy vehicle specialist certifier – engineer and I hold a current valid appointment. I certify that this vehicle component design and this certification comply in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002; my Notice of Appointment and applicable requirements. To the best of my knowledge the information contained in this certificate is true and correct.

The SoDC must include drawing numbers and may include other relevant details.

HV manufacturing certifiers shall not accept an SoDC that does not contain the information outlined in the *Gazette* notice published during the week of 21 August 2000.

HV manufacturing certifiers shall not accept an SoDC from an HV certifying engineer who has ceased to practice. An SoDC issued by that person can no longer be considered valid as the HV certifying engineer does not hold a current appointment.

Consequently, any item or component manufactured using a SoDC from a non-practicing HV certifying engineer cannot be signed off by an HV manufacturing certifier, but must be re-certified by a current HV certifying engineer of the appropriate category.

SoDCs must be specific to individual vehicles and clearly identify the VIN/chassis number. SoDCs cannot be used for 'type' or 'model' approval of generic designs.

Page amended **9 April 2018** (see **amendment details**)

3-6 Establishing whether the vehicle aspect complies

Certifications by an engineer certifier

1. Start a Procedure Documentation Sheet (PDS) for the vehicle.

2. Inspect the vehicle to be certified at a location that allows adequate access and equipment to allow a full and detailed inspection.

3. Record all relevant details and dimensions for the proposed or existing aspect of the vehicle that requires certification.

4. Collect all relevant information that is required for the certification of that vehicle aspect.

5. Compare what the vehicle owner/workshop wants to do with the relevant sections of the VIRM and ensure that no reasons for rejection will be invoked. If they are, the HV certifier should advise the owner/workshop in writing and detail the options.

6. Complete design drawings, specifications and calculations as required.

7. Complete a Statement of Design Compliance, if required (see **section 3.5**), and supply it as well as all drawings and specifications required to complete the proposed work to the workshop/vehicle owner. Such information should include dimensions, materials and welding specifications.

8. Supply any drawings and specifications required to complete the proposed work to the workshop/vehicle owner. Such information should include dimensions, materials and welding specifications as well as an inspection schedule from the HV certifier.

9. Carry out inspections of the work as required. If the vehicle is presented fully completed, disassembly of certain parts may be required at the discretion of the HV certifier. Compare the work against the requirements of the design drawings and specifications provided. The inspection should include the quality of materials and workmanship.

10. Compare the finished work and documentation against the VIRM for reasons for rejection and if any of the reasons for rejection apply, reject the vehicle for certification.

11. If the HV certifier requires further information in order to determine compliance with the requirements, he must reject the vehicle until the information has been obtained.

12. Complete the PDS and issue an LT400 for the aspect that has been certified if no reasons for rejection exist.

Certifications by manufacturing certifier

1. Start a PDS for the vehicle.

2. Inspect the vehicle to be certified at a premises that allows adequate access and equipment to allow a full and detailed inspection.

3. Inspect the vehicle against the Statement of Design Compliance, if required (see **section 3.5**), issued by a HV engineer certifier or against one of the approved pre engineered solutions. The inspection should include materials and workmanship.

4. Collect any relevant supporting documentation.

5. Compare the inspection results against the VIRM for reasons for rejection and if any exist, reject the vehicle for certification.

6. Complete the PDS and issue an LT400 for the aspect that has been certified if no reasons for rejection exist.

Prerequisite documentation

Certifications by engineer

1. Designs for the work involved in the vehicle aspect.

2. Statement of Design Compliance or LT400 signed by an HV Specialist Certifying Engineer for that aspect.

3. PDS.

Certifications by local manufacturer

1. Designs for the work involved in the vehicle aspect, where this involves the chassis, drawbar, drawbeam, heavy vehicle brakes or log bolsters.

2. Statement of Design Compliance or reference to pre engineered solutions, for the work involved in the vehicle aspect.

3. PDS.

3-7 Record of certification

1. The HV certifier must complete a Heavy Vehicle Specialist Certificate (LT400).

2.The HV certifier must include the Vehicle Identification Number (VIN) on the LT400.

3. The HV certifier must retain one copy of the LT400.

4. The HV certifier must provide one copy of the LT400 to the owner of the vehicle.

5. The HV certifier must hold all documentary evidence involved in the certification process.

One LT400 is required for each aspect of the vehicle that needs to be certified. If a single certifier who is appointed for more than one aspect of a vehicle certifies more than one aspect of the vehicle at the same time, a separate LT400 must be used for

each aspect.

For some aspects of the vehicle an additional record of the determination, such as a component identification, usually in the form of a metal plate, must be issued and fixed to the vehicle. For some items, this identification may be impressed directly on to the item.

While a certifier may include an expiry date on the certification documents or certification records (eg identification plates), they are only valid if they are required by the legislation or the standard they are manufactured to, or are required by the Transport Agency. If they are not specifically required they are not to be recorded in Landata (Where expiry dates are not specifically required by the legislation, the standard or the Transport Agency then any certification carried out will be for the life of the vehicle).

Any vehicles or components certified after 1 December 2016 must contain the following information (on the plate or label) as a minimum:

Table 3-6-1. Data on plates and labels

Aspect	Minimum data on a plate
Drawbars and drawbeams	• Compliance certificate number (LT400) • Certifier's ID • Manufacturer or certifier's ID • VIN or vehicle chassis number (Note 1) • Maximum towed mass • Expiry date • Maximum vertical load (if applicable) Drawbar length (if applicable)
Log bolster	• Compliance certificate number (LT400) • Certifier's ID • VIN or vehicle chassis number (Note 1) • Number of bolsters fitted • Type of bolster attachments • Bolster rating • Expiry date
Load anchorages and headboard	• Compliance certificate number (LT400) • Certifier's ID • VIN or Vehicle chassis number (Note 1) • Anchorage type • Anchorage rating • Number of anchorages fitted • ID of the load anchorage manufacturer
Brake code (only where brake code is approved for re-certification)	• Compliance certificate number (LT400) • Certifier's ID • The words 'NZHVBC Edition No.' • The edition of the Brake Code used to certify the vehicle • Size of the brake chambers • Effective length of slack adjusters • Size of the tyres at certification • Grade of lining material used
PSV roof rack	• Purpose of the roof rack if other than for general baggage • Maximum weight it is allowed to carry • Manufacturer's name • Vehicle ID (VIN/chassis number and LT400 number if the roof rack has been rated and certified for use on a particular vehicle model) (Note 1)

Replacement plates

If a plate becomes illegible, damaged or lost it may be replaced provided that:

- the information that was on the plate can be determined from the original documentation, and
- visual inspection of the plated item shows it remains in a safe condition, and
- it is the original item.

Note 1

VIN is the primary vehicle identifier required and chassis number is acceptable only if the vehicle does not have a VIN.

Page amended **9 April 2018** (see **amendment details**)

3-8 Collecting fees

The **Land Transport (Certification and Other Fees) Regulations 1999**, regulations 5 and 8 stipulate that the fee that may be charged by an HV certifier for the certification of a vehicle is an amount determined by the individual HV certifier having regard to:

a) the time spent in inspecting the vehicle to ascertain whether it complies with the relevant requirements

b) any fees payable to the NZTA

c) any standard or usual rate at which the HVS certifier charges for other work carried out in respect of motor vehicles.

4 Complaints

Customers should be encouraged to direct any complaints to the HV certifier in the first instance.

To ensure that all written complaints are investigated, the HV certifier must maintain an effective complaints management process, which must provide:

1. a clear and concise statement that recognises the positive value of complaints.

2. clear and concise instructions to all customers on how to register a complaint. This can be accomplished in several ways, for example:

a) a conspicuous notice on the workplace wall, or

b) a clear statement on any receipt or invoice issued, or

c) a clear statement on the HVS certifiers checksheet

3. a straightforward explanation of the expected standards for resolution and the customers right to appeal to the Transport Agency if the proposed resolution is unsatisfactory

4. identification of the complainant and should address specific concerns about the service provided.

5. full documentation of each complaint processed, in accordance with the Transport Agencys **PRS manual**, to enable subsequent investigation

6. acknowledgement in writing within three working days of any written complaint

7. a proposed resolution to the complainant within 20 working days of the complaint being made.

8. a record of each complaint, in accordance with the Transport Agencys **PRS manual**

9. a clear direction to the NZTA helpdesk 0800 699 000 if a customer wishes to make a complaint or appeal a decision made by an HV certifier, or the complaint refers to legislation or Transport Agency policy.

Note Complaints must be in writing.

5 Inspection premises and equipment

The HV certifier must ensure that the premises used for the inspection and certification of modifications and repairs comply with the applicable requirements in this section.

HV certifiers who do not have their own premises should make their inspections on premises as described below.

5.1 Premises and equipment specifications

The HV certifier must use an inspection area that:

a) enables a safe and thorough inspection

b) is provided with sufficient lighting to enable good visibility of the vehicle being certified and the equipment used in the inspection process

c) have available suitable, calibrated equipment for the inspection being carried out.

5.2 Compliance with statutory requirements

The HV certifier must not carry out inspections if the premises and equipment do not comply with:

- Occupational Safety and Health requirements
- any other relevant Acts, regulations and local bylaws, as they apply to him or his business.

6 Appointments

There are currently seven different technical certification categories of HV certifier. The NZTA assesses and qualifies four and the other three are assessed by external organisations, with final approval the responsibility of the NZTA.
The categories that the NZTA assess are:

- chassis modification
- towing connections

Dynamic performance analysis

- load anchorages, and
- swept path analysis.

Those assessed by external organisations are:

- log bolster attachments
- brake modifications
- static rollover threshold.

Manufacturer IO & VI

All persons appointed as HV certifiers are required to be and to remain fit and proper persons. The criteria considered for this include:

a) relevant criminal convictions

b) transport-related offences

c) relevant warnings, penalties and disciplinary actions imposed

d) relevant complaints

e) the interest of the public and land transport safety.

Engineer certifier requirements

All HV certifiers must:

a) have a minimum qualification of NZCE (mechanical, civil or aviation) or approved equivalent, except where specialist knowledge and experience is deemed acceptable by the NZTA. Overseas qualifications must be referred to the New Zealand Qualifications Authority (NZQA), who will determine the New Zealand equivalent, if available.

b) have knowledge of the requirements specified in:

i. this manual, VIRM: Heavy vehicle specialist certification

ii. the relevant parts of the **Land Transport Act 1998**

iii. the **Land Transport Rule: Vehicle Standards Compliance 2002**

iv. Other relevant **Land Transport Rules**.

Applicants for appointment as HV certifiers will be assessed on their understanding of design principles for their category and their knowledge of the general and New Zealand requirements for heavy vehicles.

Load anchorage certifiers (HVEA)

Scope

All anchorages for securing loads to vehicles, excluding logging bolsters. Certifiers shall use the latest version of any standard except where permitted otherwise in the Rule.

Experience requirements

Relevant work experience in the design or fabrication of load anchorages. Working knowledge of the following documents:

1. **Land Transport Rule: Heavy Vehicles 2004** and its amendments
2. Welding in the transport industry (see **Technical bulletin 13**)
3. NZS 5444: Load Anchorage Points for Heavy Vehicles
4. NZS 5413: Stock Crates
5. AS/NZS 1554: Structural Steel Welding (parts 1 and 4 as appropriate)

6 AS/NZS 1665: Welding of Aluminium structures

7. AS 3990: Mechanical Equipment Steelwork (supersedes AS 1250)
8. ISO 1161: Series 1 Freight Containers Corner Fittings Specification
9. BS 5400: Part 10, Code of Practice for Fatigue
10. BS 7608: Code of Practice for Fatigue Design and Assessment of Steel Structures
11. AS/NZS 2980: Qualification Tests for Metal Arc Welders
12. AS/NZS 4380:Cargo restraint systems Webbing load restraint systems.

Towing connections certifier (HVET)

Scope

All towing connections between vehicles. This includes fifth wheels, fifth-wheel kingpins, towbars, drawbeams and drawbars.

Experience requirements

Relevant work experience in the design or fabrication of towing connections. Working knowledge of the following documents:

1. **Land Transport Rule: Heavy Vehicles 2004** and its amendments
2. Welding in the transport industry (see **Technical bulletin 13**)
3. NZS 5446:Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers
4. NZS 5450:Specification for Coupling Devices for Articulated Vehicles Fifth Wheel Assemblies
5. NZS 5451:Specification for Coupling Devices for Articulated Vehicles Fifth Wheel Kingpins
6. AS/NZS 4968, Heavy-vehicles Mechanical coupling between articulated vehicle combinations
7. AS 2174, Articulated vehicles Mechanical coupling between prime movers and semitrailers
8. AS 3990: 1993, Mechanical Equipment Steelwork
9. AS/NZS 1554: Structural Steel Welding (parts 1 and 4 as appropriate)

10 AS/NZS 1665: Welding of Aluminium structures

11. AS/NZS 2980: Qualification Tests for Metal Arc Welders
12. NZS 5467: Code of Practice for Light Trailers
13. ISO 1102: Commercial Road Vehicles Mechanical Connections between Towing Vehicles and Trailers50mm Drawbar Couplings
14. AS 1110: ISO Metric Hexagon Precision Bolts and Screws
15. AS/NZS 4291.1: Mechanical properties of fasteners
16. AS 2213: 50mm Pin-Type Couplings and Drawbar Eyes for Trailers
17. BS 5400: Part 10, Code of Practice for Fatigue
18. BS 7608: Code of Practice for Fatigue Design and Assessment of Steel Structures.

Chassis modification and repair certifier (HVEC)

Scope

Chassis modification includes rollover strength for PSVs, steering conversions, chassis modifications and repairs, design of new chassis and ratings, mounting of cranes and other equipment, modifications and repairs to drive trains and axles, and seatbelt anchorage design.

Experience requirements

Relevant work experience in the design, modification and fabrication of vehicles and vehicle components. Working knowledge of the following documents:

1. **Land Transport Rule: Vehicle Standards Compliance 2002** and its amendments
2. **Land Transport Rule: Heavy Vehicles 2004** and its amendments
3. Welding in the transport industry (see **Technical bulletin 13**)
4. AS/NZS 1554: Structural Steel Welding (parts 1 and 4 as appropriate)
5. AS/NZS 1665: Welding of Aluminium structures
6. AS/NZS 2980: Qualification Tests for Metal Arc Welders
7. AS 3990: 1993, Mechanical Equipment Steelwork
8. Ladder frame chassis design guide (joint MoT/IRL document)
9. BS 5400: 1980, Part 10, Code of Practice for Fatigue
10. BS 7608: 1993 Code of Practice for Fatigue, Design and Assessment of Steel Structures
11. AS 1110: ISO Metric Hexagon Precision Bolts and Screws
12. AS/NZS 4291.1: Mechanical properties of fasteners
13. Low Volume Vehicle Code.

Brake certifier (HVEK)

Scope

All heavy vehicle brake system design and modification

Experience requirements

Relevant work experience in the design and modification of braking systems. Passed Heavy Vehicle Brake course and exam as approved by the NZTA. Working knowledge of the following documents:

1. **Land Transport Rule: Heavy Vehicles Brakes 2006** and its amendments, including Schedule 5
2. **Land Transport Rule: Vehicle Standards Compliance 2002** and its amendments
3. Access to the New Zealand brake calculator or an approved proprietary device.

Bolster attachment certifier (HVEL)

Scope

All logging bolster attachments, modifications and repairs.

Experience requirements

The certifier must:

1. be an appointed HVEC certifier with sufficient (three years or more) experience in the transport industry in manufacturing, supervision, quality control or drafting in a similar area:
2. have passed the log bolster attachment course and exam set by the Log Transport Safety Council
3. have a working knowledge of **Land Transport Rule: Heavy Vehicles 2004** and its amendments
4. have a working knowledge of Log Transport Safety Council: Log Bolster Attachment Code.
5. have a working knowledge of Welding in the transport industry (see **Technical bulletin 13**)
6. have a working knowledge of AS/NZS 1554: Structural Steel Welding (parts 1 and 4 as appropriate)
7. have a working knowledge of AS/NZS 1665: Welding of Aluminium structures
8. have a working knowledge of AS/NZS 2980: Qualification Tests for Metal Arc Welders
9. have a working knowledge of AS 3990: 1993, Mechanical Equipment Steelwork

10. have a working knowledge of BS 5400: 1980, Part 10, Code of Practice for Fatigue
11. have a working knowledge of BS 7608: 1993 Code of Practice for Fatigue, Design and Assessment of Steel Structures
12. have a working knowledge of AS 1110: ISO Metric Hexagon Precision Bolts and Screws
13. have a working knowledge of AS/NZS 4291.1: Mechanical properties of fasteners

Static rollover threshold certifier (HVSx)

Scope

Measure and input vehicle data into a computer program to establish a stability angle. There are currently three different certification categories for SRT calculation

- SRT level 1
- SRT level 2
- SRT level 3.

Experience requirements

For those wishing to qualify as NZTA approved and appointed inspectors there are two tests:

- basic for level 1 inspectors and
- advanced for level 2 inspectors.

Level 1 certifiers use the SRT calculator software but are limited to simpler cases. For certification purposes a level 1 certifier may use all the features of the calculator except Load category Other, which requires the calculation of the payload centre of gravity and the user defined suspension options, which requires the obtaining and interpretation of suspension parameters.

Level 2 certifiers also use the SRT calculator software but have all options available.

Level 3 certifiers may be approved by the NZTA to use alternative methods of determining SRT. These could include tilt table testing or computer simulation.

Within the framework of the two levels of certification, there are four parties that may be involved in gathering the data for SRT certification, namely:

1. Operator: may provide tare axle weight data and may nominate load type (Uniform density/ Mixed freight/ Other) on which the certification is to be based except where this is defined by the NZTA.

2. Level 1 SRT inspectors: typically these are individuals who have passed the level 1 SRT training but have not been authorised by the NZTA to be certifiers.

3. HVS1 certifiers: typically these are individuals who have passed the level 1 SRT training and have been appointed by the NZTA to act as certifiers under the NZTAs Notice of Appointment.

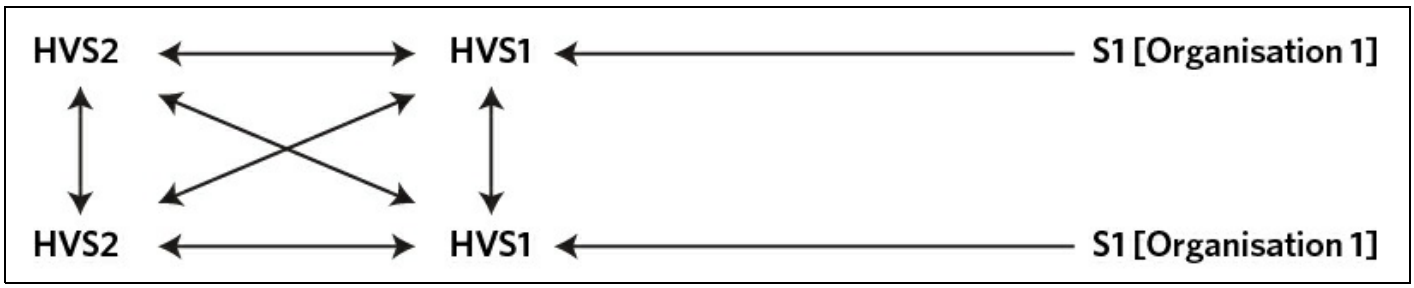
4. HVS2 certifiers: typically individuals who have passed both the level 1 and level 2 SRT training and have been appointed by the NZTA to act as certifiers.

Information and measured vehicle data may be shared between the last three parties as indicated in the diagram below. In this diagram S1 refers to Level 1 SRT inspectors, while HVS1 and HVS2 refers to the certifiers. The arrows indicate allowable paths of information and data transfer. Thus a Level 1 certifier, HVS1, may receive vehicle data that has been obtained by a Level 1 SRT inspector and use these data to undertake a level 1 certification without personally inspecting the vehicle and making the measurements. However, the HVS1 certifier is ultimately responsible for the accuracy of the SRT certificate issued and must ensure that the S1 inspector is appropriately qualified and competent.

Although the allowable data transfers do permit the transfer of information from HVS1 certifiers to HVS2 certifiers, this can only be within the scope of the HVS1s demonstrated level of competence. Thus a level 2 certification which requires an HVS2 certifier will also require that the vehicle is inspected by an HVS2 certifier.

When the certifier issues an SRT certificate he must also issue an LT400 to accompany it.

For some vehicles, the SRT certification process will lead to some vehicle or suspension modifications being undertaken in order to improve the vehicles stability and allow it to maintain its load carrying capacity while achieving the required SRT. These vehicle modifications will generally require certification by an NZTA- approved certifying engineer and will require the issuing of an LT400 detailing the modifications made. Although the certification of the vehicle modifications and the SRT certification may be undertaken by the same engineer certifier, if he is appropriately qualified, two separate LT400s are required, one for the vehicle modifications and one for the SRT.



Dynamic Performance certifier (HVPx)

Scope

To confirm swept path and dynamic vehicle performance by calculation using approved software or by physical testing. There are two different certification categories for Swept Path/Dynamic Performance

- HVP1 Swept Path Certification
- HVP2 Dynamic Vehicle Performance (PBS)

Experience requirements

For those wishing to qualify as NZTA approved and appointed inspectors in either of these categories there are some prerequisites. The certifier must:

1. be an appointed HVEC certifier with sufficient (one year for HVP1 or three years or more for HVP2) experience in the transport industry in manufacturing, supervision, quality control or drafting in a similar area:
2. for HVP1 & 2 have access to and be able to prove competence operating appropriate computer software (such software to be advised to the NZTA who will rule on its suitability) and/or the ability to carry out appropriate physical testing.
3. have attended and passed any course and/or exam set or approved by the NZTA
4. have a working knowledge of **Land Transport Rule: Vehicle Dimensions and Mass 2002** and its amendments
5. have a working knowledge of **Land Transport Rule: Heavy vehicles 2004** and its amendments

HVP1 certifiers use appropriate software or physical testing to provide Swept Path Certificates to either or both of Schedule 8 or Schedule 9 of **Land Transport Rule: Vehicle Dimensions and Mass 2002**.

HVP2 certifiers also use the appropriate software and/or physical testing to provide dynamic vehicle performance analysis for proposed high productivity vehicles, either new pro-forma or bespoke designs within the limits set by the **Land Transport Rule: Vehicle Dimensions and Mass 2002** and its amendments.

Local manufacturer (HVxD)

Scope

As different from the HV Engineering certifier, the local manufacturer certifier responsibility is split between an inspecting organisation (IO) and a vehicle inspector (VI). Each of these roles is vital and interdependent. A local manufacturing certifier IO cannot certify a heavy vehicle while a local manufacturing certifier VI can only certify a heavy vehicle within the requirements of the VIRM and Memos if s/he is in the employ of a manufacturing certifier IO and the NZTA has a record of this employment.

All work certified by the manufacturing certifier VI at the approved Manufacturing certifier IO premises is to be certified with either:

- a Statement of Design Compliance (SoDC), issued by an engineer certifier, or
- for load anchorages, to the designs in NZS 5444, or
- for worn or damaged fifth wheels, replaced to the fifth wheel manufacturers instructions for replacing bolt on components, or
- for worn or damaged kingpins, replaced according to the kingpin manufacturers instructions on replacement, or
- to NZTA approved pre Engineered solutions.

There are currently five different local manufacturing certification categories:

- chassis modification (HMCD)
- towing connections (HMTD)
- load anchorages (HMAD)
- log bolster attachments (HMLD)
- heavy vehicle brakes (HMKD)

Requirements (IO)

The authorised IO is the company or entity responsible for the structural work carried out on a heavy vehicle (not the CEO) and the application must be signed by an appointed office holder of the company who can sign on behalf of the company (Director etc) accompanied by the company seal in the case of a registered company. Each location that is involved with manufacturing certification operations must have an individual appointment. The IO is responsible for ensuring that:

- the IO takes responsibility for the certification activities carried out by any VI in their employ
- the premises are well lit and meet the requirements of the certification categories being carried out
- the IO controls and maintains all necessary equipment for the certification categories carried out
- The IO controls and maintains a library of all processes and procedures required for all the certification categories carried out, including welding procedures, relevant standards and pre-Engineered Solutions.
- One or more qualified welding supervisors are appointed to oversee welding operations
- They have staff with a sound working knowledge of standards, codes of practice and general documents as well as their trade related published material. This includes:
    - welding knowledge
    - materials and product knowledge
    - drawing interpretation
    - scope of work that local manufacturing certifiers can certify
    - repairs, including repairs to industry best practice for temporary endorsement
    - working knowledge of documents, including the following, as they apply to the business:
        - Welding in the Transport Industry (see Technical Bulletin)
        - This HVSC VIRM
        - **Land Transport Rule 35001: Vehicle Standards Compliance 2002** and amendments
        - **Land Transport Rule 34001: Vehicle Repair 1998** and amendments
        - **Land Transport Rule 31002: Heavy Vehicles 2004** and amendments
        - **Land Transport Rule 32015: Heavy-vehicle Brakes 2006** and amendments
        - Other **Land Transport Rules** relevant to the certification categories carried out.
- Ensure a PDS is completed for each certification activity carried out

Requirements (VI)
Each appointed VI may inspect and certify the work of other operators in the employ of the same IO and must:

- Take full responsibility for all certifications which they sign off
- Must only certify work in categories they are authorised for
- Ensure that they only carry out certification activities when there is sufficient properly controlled and maintained equipment for the certification category carried out
- Ensure that they only carry out certification activities when there is a sufficient library of all processes and procedures required for the certification being carried out, including welding procedures, relevant standards and pre-Engineered Solutions or SoDCs.
- Ensure that, where necessary, a properly qualified and appointed welding supervisors has approved the welding on any activity being certified
- Ensure that they and the staff whose work they are certifying have a sound working knowledge of standards, codes of practice and general documents as wells their trade related published material. This includes:
    - welding knowledge
    - materials and product knowledge
    - drawing interpretation
    - scope of work that local manufacturing certifiers can certify
    - repairs, including repairs to industry best practice for temporary endorsement
    - working knowledge of documents, including the following, as they apply to the business:
        - Welding in the Transport Industry (see Technical Bulletin)
        - This HVSC VIRM
        - **Land Transport Rule 35001: Vehicle Standards Compliance 2002** and amendments
        - **Land Transport Rule 34001: Vehicle Repair 1998** and amendments
        - **Land Transport Rule 31002: Heavy Vehicles 2004** and amendments
        - **Land Transport Rule 32015: Heavy-vehicle Brakes 2006** and amendments
        - Other **Land Transport Rules** relevant to the certification categories carried out.
- Maintain a PDS for each certification carried out.

7 Sample certification documents

LT400

NZ TRANSPORT AGENCY WAKA KOTAHI

Heavy vehicle specialist certificate

Must be presented to a CoF (heavy) inspecting organisation

Heavy vehicle specialist inspector and inspecting organisation

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name *(PRINT IN CAPS)*

ID

Vehicle registration *(optional)*

VIN/chassis number

Make

Component being certified:

- Chassis
- Load anchorage
- Log bolsters
- Towing connection
- Brakes
- SRT
- PSV stability
- PSV rollover
- Swept path
- PBS

Model *(optional)*

Certification category

Description of work

Code/standard/rule certified to

Component load rating(s)

General drawing number(s)

Supporting documents

Special conditions *(optional)*

Certification expiry date *(if applicable)*

or

Hubodometer reading *(whichever comes first)*

Declaration

I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my appointment. To the best of my knowledge the information contained in the certificate is true and correct.

Designer's ID *(if different from inspector below)*

Inspector's signature

Inspector's name *(PRINT IN CAPS)*

ID number

Date

Number

CoF vehicle inspector ID

CoF vehicle inspector signature

Date

All fields are mandatory unless otherwise stated.

New Zealand Government

Form ID LT400

Version No. 06/16

8 Definitions

Agricultural trailer	means a trailer constructed to be operated in connection directly with the operation or management of a farm but does not include a logging trailer.
Appointment	means the appointment by the NZTA of the HV Certifier under the Notice of Appointment (NoA) and pursuant to **Land Transport Rule Vehicle Standards Compliance 2002**.
Applicable requirement	means any requirement specified in an Act, Regulation or Rule that applies to a specific vehicle.
Approved vehicle standard	means a vehicle standard with which a vehicle is required to comply by an applicable requirement.
Articulated vehicle	means any motor vehicle with a semi-trailer attached, so that part of the semi-trailer is superimposed on the motor vehicle and a substantial part of the mass of the semi-trailer and of its load is borne by the motor vehicle.
Aspect of a vehicle for heavy vehicle certification	means an aspect of the vehicle which belongs within certifier categories. These include chassis and frame structures, towing connections, load anchorages, bolster attachments, brakes and SRT.
Authority	means the NZ Transport Agency continued by section 184 of the **Land Transport Act 1998**, and includes the successors and any permitted assigns of the NZTA.
Axle	means one or more shafts, spindles or bearings in the same vertical transverse plane by means of which, in conjunction with wheels mounted on those shafts, spindles or bearings, a portion of the weight of the vehicle is transmitted to the roadway, and: a) if two or more wheels of a motor vehicle are substantially in the same line transversely and some or all of them have separate axles, the axles of all those wheels are to be treated as one axle b) if the longitudinal centreline of an axle of a motor vehicle is less than 1m distant from the longitudinal centreline of another axle, the two axles are to be treated as one axle (a dual axle).
Axle mass	means the lesser of: a) the maximum mass that can be carried by the axle, including the mass of the axle, as determined by the axle manufacturer, or b) the maximum mass that can be carried by the suspension system, including the mass of the axle, as determined by the suspension system manufacturer.
Axle set	means a single-axle set, a tandem-axle set, a twin-steer axle set, a tri-axle set, or a quad-axle set.
Axle-stop device	means a device to control the movement of the axle in the event of suspension failure.
Ballrace turntable	means a device incorporating a low friction ball bearing fitted between two substantial structural components of a vehicle to enable rotational motion between those components about a vertical axis.
Body	means the part of the vehicle that is designed for the use and accommodation of the occupants or to hold any goods.
Bolster Attachment Code	means the Bolster Attachment Code of the Log Transport Safety Council, approved by the NZTA.
Brake control	means an assembly containing the brake pedal assembly, the master cylinder or treadle valve, and

assembly	associated components.
Brake pedal assembly	means an assembly containing the brake pedal and pedal pivot, pedal bracket, pedal return spring and associated components.
Cab-guard	means a structure attached to a vehicle that provides protection to the cab occupants from the effects of load impact, and may include a headboard.
Certificate of loading	means a certificate of loading issued under any regulation or rule made under the **Land Transport Act 1998**.
Certify	means in relation to a vehicle, or specific aspect of a vehicle, to make a record of determination under 6.6(1)(a) or 7.6(1)(a) that confirms that the vehicle inspector or inspecting organisation has determined that the vehicle or specific aspect of the vehicle complies with the applicable requirements.
Chassis	means the structural lower part of a vehicle to which the running gear and, as applicable, engine, transmission, steering system and body may be attached.
Chassis assembly	means a chassis with running gear attached and, as applicable, engine, transmission and steering system attached.
Chassis rating	means: a) for a vehicle first registered before 1 February 1989 that has not been modified on or after 1 April 2005, a set of data, containing the gross vehicle mass, gross combination (if applicable) and maximum towed mass (if applicable), approved or determined by the NZTA or a person appointed by the NZTA b) for a vehicle first registered on or after 1 February 1989 or a vehicle that has been modified on or after 1 April 2005, a set of data, containing the permitted maximum axle and/or axle-set masses, gross vehicle mass, gross combination mass (if applicable) and maximum towed mass (if applicable), approved or determined by the NZTA or a person appointed by the NZTA.
Class	in relation to vehicles, means a category of vehicle of one of the groups A, L, M, N and T, as specified in Table A in **Land Transport Rule Heavy Vehicles 2004**.
Combination vehicle	means a towing vehicle in combination with one or more trailers or other motor vehicle that is being towed.
Compliance label	means an attachment to the vehicle in the form of a label that confirms compliance with applicable requirements.
Complaint	means a towing vehicle in combination with one or more trailers or other motor vehicle that is being towed.
Customer	means an attachment to the vehicle in the form of a label that confirms compliance with applicable requirements.
Construction	means the manufacture, assembly, reassembly or modification of a vehicle and includes all acts and activities related or incidental to the construction of a vehicle.
Coupling	means that part of a vehicle that is specifically designed to enable it to be connected to another vehicle; does not include a structural member of the towing or towed vehicle.
De-registered	means that a vehicles New Zealand registration has been cancelled in accordance with section 27 or 28 of the **Transport (Vehicle and Driver Registration and Licensing) Act 1986**.
Drawbar	means an assembly of components that includes: the trailer coupling that connects the trailer to the coupling of the towed vehicle; hinges (where applicable); the structural and other related components

	between the trailer coupling and trailer bogie or chassis.
Drawbeam	means the part of the towing vehicle to which a coupling is fitted to enable a heavy trailer to be connected and includes the attached coupling.
Dual steering	in relation to a vehicle, means the vehicle is able to be steered from both the left-hand and right-hand side of the vehicle.
Enter service	in relation to a vehicle means to begin to be operated in-service for the first time. For Public Service Vehicles the date of entry refers to the most recent entry or re-entry. For other vehicles the date of entry is the date of the first entry into the New Zealand fleet.
Evidence of vehicle inspection	has the same meaning as in the Act and the Rule.
Fifth wheel	means a device fitted to a vehicle to enable a semi-trailer to be connected to it by means of a kingpin so that the semi-trailer may be towed.
Fit and proper	has the meaning ascribed to it in Section 2 of the Rule, and, without limiting Section 2, includes the requirement that the HV Certifier will give the NZTA no reasonable grounds to doubt the certifiers commitment to road safety, his competence as a Vehicle Inspector, or his business integrity.
Force Majeure	means any cause beyond the reasonable control of the party claiming its benefit and which that party is unable to overcome by the exercise of reasonable diligence.
g	means an acceleration of 9.81m/s^2.
Goods	means all kinds of movable property; includes articles sent by post and animals.
Gross combination mass	means, for a vehicle that is permitted to tow another vehicle, the maximum permitted combined mass of the towing vehicle and any combination of attached trailers or vehicles, determined by the vehicle manufacturer and approved by the NZTA, or determined by the NZTA.
Gross mass	in relation to any vehicle or combination vehicle, means the mass of that vehicle and its load, equipment and accessories, which may be determined by adding the mass on the vehicles axles or axle sets.
Gross vehicle mass	means either: a) the maximum permitted mass of a vehicle, which includes the mass of the accessories, the crew, the passengers and load, and is, unless (b) applies, the gross vehicle mass specified (subsequent to the latest modification, if any) by the manufacturer of the vehicle, or b) if a person approved for the purpose by the NZTA determines that the gross vehicle mass should differ from that specified by the manufacturer, taking into account evidence on the capability of the systems and components of the vehicle, or the effects of any modification, that mass determined by that person.
Headboard	means the substantially vertical part of the forward end of a flat deck or curtain-sided body of a vehicle.
Heavy motor vehicle	means a motor vehicle that: a) is of class MD3, MD4, ME, NB, NC, TC or TD, or b) has a gross vehicle mass that exceeds 3500kg and is not of a class specified in **Table 3-4-1. Vehicle equipment standards classifications**.
Heavy vehicle Specialist Vehicle	means the revision that was current at the time of issue of certification of the document published by the NZTA indicating to the HV certifier and inspecting organisation how any vehicle must be inspected under the Rule and their Notice of Appointment.

Inspection Requirements Manual	
Hook truck	means a vehicle recovery service vehicle with a crane hoist that partially lifts the vehicle to be recovered, which is then towed in this position.
HVS certifier	means a heavy vehicle specialist certifier appointed by the NZTA under the Rule to certify certain aspects of vehicles before the vehicle can be given a certificate of fitness.
Inspection and certification	means the performance of two or more of the following, for the purposes of determining compliance with applicable requirements: a) examining vehicles b) determining whether or not a vehicle or specific aspect of a vehicle complies with applicable requirements c) issuing evidence of vehicle inspection d) recording and making available information about vehicles (including their systems, components, devices, fittings and equipment).
Inspection and certification document	means a document required, produced or issued in the inspection and certification process, including a plate, a label, an electronic record and a check sheet.
Inspection and certification outcome	in relation to a vehicle, means: a) production of a record of determination as appropriate to the inspection and certification activity, or b) provision of other records and information about the vehicle to the NZTA or other persons, or c) production of evidence of vehicle inspection.
Inspecting organisation	means an organisation appointed under 2.2 of the Rule to carry out inspection and certification activities. An HVS certifier is an inspector and an inspecting organisation.
Kingpin	means a pin attached to the skid plate of a semi-trailer and used for connecting the semi-trailer to the fifth wheel of a towing vehicle.
Land transport document	has the same meaning as in the **Land Transport Act 1998**.
Lifting gear	in relation to a vehicle recovery service vehicle, means any equipment used to lift another vehicle, and includes towing attachments.
Light trailer	means a trailer that has a gross vehicle mass of 3500kg or less.
Load	includes part of a load and: a) includes covers, ropes, ties, blocks, tackles, barrows or other equipment or objects used in the securing or containing of a load on a vehicle or the loading or unloading of a vehicle, whether or not any other load is on the vehicle, and b) does not include animal wastes discharged from animals being carried on a vehicle at the time.
Load anchorage point	means a device permanently attached to a vehicle to enable a load to be secured or attached to the vehicle.
Load rating	means the maximum force that can be withstood without incurring any loss of structural capacity.

Load securing equipment	means equipment or a device permanently fitted to a vehicle to secure, either by itself or in conjunction with other equipment or devices such as lashings, a load to a vehicle.
Load-sharing axle set	means an axle set suspension system that has effective damping characteristics on all axles of the set and is built to divide the load between the tyres on the set so that no tyre carries a mass more than 10% greater than the mass it would carry if: a) the load were divided in the axle set so that each tyre carries an equal load, or b) the axle set is a tandem axle set comprising a twin-tyred axle and a large single-tyred axle and is built to divide the load between the tyres on the set so that: i. 60% of the load is borne by the twin-tyred axle and 40% of the load is borne by the large single-tyred axle, or ii. 55% of the load is borne by the twin-tyred axle and 45% of the load is borne by the large single-tyred axle.
Logging bolster	means a vertically orientated member attached to a vehicle that is used to secure loads of timber logs.
Manufacturers operating limits	means: a) in relation to a motor vehicle, the allowance provided by the vehicle manufacturer in terms of performance capability and dimensions, relative to deterioration, malfunction or damage beyond which the safe performance of the vehicle, as defined by the vehicle manufacturer, is compromised, and b) in relation to a system, component or item of equipment, incorporated in or attached to a vehicle, the allowance provided by the system, component or equipment manufacturer in terms of performance capability and dimensions, relative to the deterioration, malfunction or damage, beyond which the safe performance of the system, component or item of equipment (and consequently the vehicle) is compromised.
Mass	in relation to a vehicle, means the quantity of material contained in or on the vehicle that, when subjected to acceleration due to gravity, will exert downwards on a level surface a force that can be measured as the weight of the vehicle.
Maximum towed mass	means the maximum permitted mass of all vehicles that may be towed behind a vehicle as determined by the manufacturer of the towing vehicle and approved by the NZTA.
Modify	in relation to a vehicle, means to change the vehicle from its original state by altering, substituting, adding or removing any structure, system, component or equipment but does not include repair.
Monocoque	in relation to a vehicle, means that the chassis of the vehicle is integral to the body.
Motor vehicle	means a vehicle drawn or propelled by mechanical power, including its structure, systems, components and equipment. This includes a trailer, but does not include: a) a vehicle running on rails b) an invalid carriage c) a trailer (other than a trailer designed solely for the carriage of goods) that is designed and used exclusively as part of the armament of the New Zealand Defence Force d) a trailer running on one wheel and designed exclusively as a speed measuring device or for testing the wear of vehicle tyres e) a vehicle designed for amusement purposes and used exclusively within a place of recreation, amusement or entertainment to which the public does not have access with motor vehicles f) a pedestrian-controlled machine.
NZTA	means the NZ Transport Agency that, under Section 2 of the Rule, has the power to set inspection standards and appoint and remove vehicle inspectors as certifiers and inspecting organisations. See also

	Transport Agency.
Operate	in relation to a vehicle, means to drive or use the vehicle on a road, or to cause or permit the vehicle to be on a road or to be driven on a road, whether or not the person is present with the vehicle.
Original equipment	means equipment that is fitted by the vehicle manufacturer when the vehicle is manufactured or equipment that is approved by the vehicle manufacturer for use in a specific vehicle type for a specific purpose.
Outrigger	in relation to a vehicle that is fitted with a crane or hoist, means a device fitted to the vehicle that extends and stabilises the vehicle while the crane or hoist is in use.
Payload capacity	means the gross vehicle mass of a vehicle less its unladen mass.
Pole trailer	means a trailer that is attached to a towing vehicle by a telescoping or sliding pole, and is designed to support a common long load spanning between the trailer and the towing vehicle.
Power pack	means the engine, its radiator/cooling pack, induction and exhaust system, including layout, and any accessories or emissions control equipment, such as 'addblue', specified by the manufacturer.
Procedure documentation sheet	means a document that defines and records the procedures and calculations and design criteria and includes all documents relating to HVS specialist certification.
Quad-axle set	means a set of four axles, where: a) the centres of the first and fourth axles are spaced not less than 3.75m and not more than 4m apart, and b) all axles contain an equal number of tyres, and c) none of the axles is a single standard-tyred axle.
Record of determination	means a record, in paper or electronic form, that a vehicle or specific aspect of a vehicle complies or does not comply with applicable requirements. If the specific aspect of the vehicle complies, this is to be shown on an LT400. The results of inspections before the aspect complies are recorded on the Procedure documentation sheet.
Re-enter service	in relation to a vehicle previously certified for entry means to begin to be operated in-service again.
Registered	in relation to a vehicle, means registered under the Transport (Vehicle and Driver Registration and Licensing) Act 1986.
Registration number	means the combination of numbers or letters on a registration plate, issued under the Transport (Vehicle and Driver Registration and Licensing) Act 1986, for use on a registration plate.
Repair	in relation to a vehicle, means to restore a damaged or worn vehicle, its structure, systems, components or equipment, and includes the replacement of damaged or worn structures, systems, components and equipment with equivalent undamaged or new structures, systems, components and equipment.
Rigid tow-pole	means an inflexible bar with a coupling at each end that can be connected to the coupling fitted to the rear of a vehicle recovery service vehicle and to the coupling fitted to the front of a vehicle to be recovered without lifting that vehicle.
Rule	means the Land Transport Rule Vehicle Standards Compliance 2002 and its amendments.
Safe tolerance	means the tolerance within which the safe performance of the vehicle, its structure, systems, components or equipment is not compromised in the reasonable opinion of the certifier, having regard to any

	manufacturers operating limits.
Semi-trailer	means a trailer, with only one axle set, that is partially superimposed on the towing vehicle so that a substantial part of the trailer and its load is borne by the towing vehicle.
Sideboard	means the substantially vertical part of the side of a flat-deck body of a vehicle.
Single-axle set	means either one axle or two axles having their centres spaced less than 1m apart.
Skid plate	means the plate structure forming part of the semi-trailer that houses the kingpin and that mounts on the coupler plate to form the connection between the towing vehicle and the semi-trailer.
Specialist inspection and certification	means inspection and certification of a specific aspect of a vehicle.
Special purpose vehicle	means a vehicle that is a street sweeper, refuse collector, weed sprayer or road marker.
Statement of compliance	means a statement in a format specified by the NZTA confirming that a vehicle or component complied with one or more approved vehicle standards when manufactured or modified.
Statement of Design Compliance	is a document that is drawn up and signed by an authorised HVS engineer certifier which contains the designs, calculations, materials, processes and methods for completing the design so that the finished vehicle or specific aspect will comply with all applicable requirements.
Steering axle	means the axle of a vehicle where the wheels can turn at an angle to the centreline of the vehicle.
Stinger-lift truck	means a vehicle recovery service vehicle with an arm that partially lifts the vehicle to be recovered, which is then towed in this position.
Stockcrate	means a container designed for transporting livestock, which can be secured to a vehicle.
Stockcrate retention device	means one or more restraining devices or lashings to facilitate the attachment of the stockcrate to the deck or chassis of a vehicle.
Suspension system	means a system that allows controlled and limited movement of an axle relative to the chassis or body of a vehicle; includes a spring and damping system and any associated controls.
Tailboard	means the substantially vertical part of the rear end of a flat-deck or curtain-sided body of a vehicle.
Tandem-axle set	means an axle set comprising two axles having their centres spaced not less than 1m and not more than 2m apart.
Three-point linkage	means, for a tractor or agricultural trailer, a towing connection that has three points of attachment.
Towbar	means the part of the towing vehicle to which a coupling for a light trailer is connected.
Towing connection	means the combination of components that enables one vehicle to tow or be towed by another vehicle; includes a towbar, drawbar, drawbeam and coupling.
Traction engine	has the same meaning as in section 2(1) of the **Land Transport Act 1998**.

Tractor	means a motor vehicle (other than a traction engine) constructed principally for towing an agricultural trailer or powering agricultural implements.
Trailer	means a vehicle without motive power that is capable of being drawn or propelled by a motor vehicle from which it is readily detachable, but does not include: a) a sidecar attached to a motorcycle, or b) a vehicle normally propelled by mechanical power while it is being temporarily towed without the use of its own power.
Transmission	in relation to a motor vehicle, means the gearing system and related components, including a driveshaft, by which power is transmitted from the flywheel or the engine output shaft to the input shafts of the powered axles.
Transport Agency	means the NZ Transport Agency that, under Section 2 of the Rule, has the power to set inspection standards and appoint and remove vehicle inspectors as certifiers and inspecting organisations. See also **NZTA**.
Transporter	in relation to a vehicle recovery service vehicle, means a vehicle equipped with a tray body that: a) can move back and be tilted so that the rear end of the tray rests on the ground, or b) remains fixed and onto which the vehicle to be recovered is moved up ramps or lifted.
Tri-axle set	means a set of three axles, where: a) the centre of the first and third axles are spaced not less than 2m and not more than 3m apart, and b) all axles contain an equal number of tyres, and c) none of the axles is a single standard-tyred axle.
Twin-steer axle set	means a tandem-axle set with single tyres, where both axles are connected to the same mechanism in order to steer similarly.
Two-point linkage	means, for an agricultural trailer, a towing connection that has two points of attachment.
UN/ECE	is an abbreviation for a regulation of the United Nations Economic Commission for Europe.
Unladen mass	in relation to a vehicle, means the mass of the vehicle together with the fuel in its fuel system (if any) and the equipment and accessories on it that are necessary for its operation for the purpose for which it was designed.
Vehicle identification number	means a group of letters and numbers consisting of 17 characters that: a) is affixed to a vehicle in accordance with the relevant standard prescribed under the **Land Transport Rule Vehicle Standards Compliance 2002**, and b) is capable of being decoded to provide identifying information about that vehicle.
Vehicle inspector	means an individual appointed under section 2.2 of the Rule to carry out inspection and certification activities.
Vehicle standard	means a technical specification with which a vehicle component or system must comply, and which is adopted by: a) the New Zealand Standards Council, or b) any international, national or regional organisation with functions similar to the New Zealand Standards Council.

Vehicle recovery service vehicle	means a vehicle used in a vehicle recovery service for towing or transporting on a road any motor vehicle; does not include a vehicle that is not designed or adapted for the purpose of towing or carrying motor vehicles.