

Low Volume Vehicle Technical Association Incorporated

Low Volume Vehicle Certification System Operating Requirements Schedule

The explanations, and administrative and operational requirements contained in this schedule set out how the low volume vehicle certification system operates, and describes how a Low Volume Vehicle Certifier appointed by the New Zealand Transport Agency is required to fulfill his obligations and responsibilities under the Land Transport Compliance Rule 35001 and the Low Volume Vehicle Code.

Issue # 11 - effective from: June 30 2017

Signed in accordance with clause 1.3(5) of the Low Volume Vehicle Code, onby

on behalf of the NZ Transport Agency:

on behalf on the LVVTA:

Amendment record:

| Issue No: | Detail of amendments: | Issue date: | Effective date: |
|-----------|--|-----------------|-----------------|
| 1 | Original Issue | 2001 | 2001 |
| 2 | Establishment of new LVV Certifier Categories. | August 2003 | 1 October 2003 |
| 3 | Introduction of new procedural requirements including plate affixing, road-testing, and remedial work. | March 2005 | 2 April 2005 |
| 4 | Introduction of use of documentation and self-certification. | February 2006 | 2 April 2006 |
| 5 | Introduction of procedures for return of unaffixed plates, and delegation of plate affixing. | May 2007 | 1 July 2007 |
| 6 | Introduction of procedures for plate pre-ordering, and establishment of scratch-built sub-categories. | March 2008 | 2 April 2008 |
| 7 | Major review of ORS, including new sections for service & communication requirements, and conduct and complaints. | January 2010 | 1 February 2010 |
| 8 | Minor review to incorporate detail changes and additions. | March 2011 | 1 April 2011 |
| 9 | Review to incorporate various detail changes and additions relating to Technical Advisory Committee, category extensions, training, and Technical Decision Review Committee. | July 2016 | 1 July 2016 |
| 10 | Introduction of commercial sub-committee of the LVVTA Technical Advisory Committee. | 25 October 2016 | 25 October 2016 |
| 11 | Review to make provision for LVCM-appointed LVV Certifiers. | 30 June 2017 | 30 June 2017 |

The content of this document remains the property of the Low Volume Vehicle Technical Association (Inc.), and no part of it may be reproduced without the prior written consent of the copyright holder.

Contents:

| | | |
|------------------|--|-----------|
| | Preface | 11 |
| | ▪ About the LVV Operating Requirements Schedule | 11 |
| | ▪ Application of the LVV Operating Requirements Schedule | 11 |
| Section 1 | Premises & equipment | 12 |
| 1.1 | Premises requirements | 12 |
| | ▪ Introduction | 12 |
| | ▪ Inspection premises required for all inspections | 12 |
| | ▪ Inspection premises required for main inspections | 13 |
| | ▪ Approval of inspection premises | 13 |
| | ▪ Premises required for plate affixing | 14 |
| 1.2 | Equipment requirements | 14 |
| | ▪ Introduction | 14 |
| | ▪ Equipment required for all LVV Certifier categories | 14 |
| | ▪ Additional equipment required for specified LVV Certifier categories | 15 |
| Section 2 | Documentation | 17 |
| 2.1 | Documentation development | 17 |
| | ▪ Introduction | 17 |
| | ▪ Development process for LVV documents | 17 |
| | ▪ Approval process for LVV documents | 18 |
| 2.2 | Provision of documentation | 18 |
| | ▪ Introduction | 18 |
| | ▪ Documentation to be provided | 18 |
| 2.3 | Required documentation | 19 |
| | ▪ Introduction | 19 |
| | ▪ Document requirements (for other than LVCM LVV Certifiers) | 20 |
| | ▪ Document requirements (for LVCM LVV Certifiers) | 20 |
| | ▪ Document condition, order, and access | 21 |
| 2.4 | Use of documentation | 21 |
| | ▪ Introduction | 21 |
| | ▪ Use of forms and form-sets | 22 |
| | ▪ Retention of forms and form-sets | 23 |

| | | |
|------------------|---|-----------|
| 2.5 | Submission of documentation | 23 |
| | ▪ Introduction | 23 |
| | ▪ Documentation required to be submitted (other than LVCM Certifiers) | 24 |
| | ▪ Documentation required to be submitted (LVCM Certifiers) | 25 |
| | ▪ Documentation required to be applied | 26 |
| 2.6 | Technical documentation analysis | 26 |
| | ▪ Introduction | 26 |
| | ▪ Limitations of LVVTA's technical analysis responsibilities | 26 |
| | ▪ LVV Certifiers' responsibilities | 27 |
| | ▪ Test report validation | 27 |
| | ▪ Standards compliance validation | 27 |
| | ▪ Cost recovery for consultancy services to LVV Certifiers | 27 |
| | ▪ Referral to the Agency | 28 |
| 2.7 | Non-disclosure of information | 28 |
| | ▪ Introduction | 28 |
| | ▪ Notification of non-disclosure requirements | 28 |
| | ▪ LVVTA's non-disclosure policy | 29 |
| | ▪ Conflict of interest | 29 |
| | ▪ Confidentiality of LVVTA communications | 30 |
| Section 3 | LVV Certifier categories & appointment | 30 |
| 3.1 | Limitations of LVV Certifier categories | 30 |
| | ▪ Introduction | 30 |
| | ▪ Appointment of categories | 31 |
| | ▪ Category LV1A Modified Production - Limited | 31 |
| | ▪ Category LV1B Modified Production - Extended | 33 |
| | ▪ Category LV1C Modified Production - Structures | 33 |
| | ▪ Category LV1D Modified Production – Advanced and Scratch-built | 33 |
| | ▪ Category LVRH Modified Production – Right-hand Drive Conversions | 34 |
| | ▪ Category LVEX – Exhaust Noise and Gas Emissions | 34 |
| | ▪ Category LV2A Motorcycles - Modified Production | 34 |
| | ▪ Category LV2B Motorcycles – Advanced and Scratch-built | 35 |
| | ▪ Category LV2C Trikes – Modified Production and Scratch-built | 35 |
| | ▪ Category LV3A Disability Adaptation - Limited | 35 |
| | ▪ Category LV3B Disability Adaptation - Structures | 36 |
| | ▪ Category LV4 - Electric Vehicles | 36 |
| | ▪ Category LVAC – Authority Card | 36 |
| | ▪ Category LVCM – Commercial Modification | 36 |
| | ▪ Category LVPO – LVV Certification Plate Pre-ordering | 36 |

| | | |
|------------------|--|-----------|
| 3.2 | Criteria for application as an LVV Certifier | 37 |
| | ▪ Introduction | 37 |
| | ▪ General background requirements | 38 |
| | ▪ Category LV1A Modified Production - Limited | 39 |
| | ▪ Category LV1B Modified Production - Extended | 39 |
| | ▪ Category LV1C Modified Production - Structures | 39 |
| | ▪ Category LV1D Modified Production – Advanced and Scratch-built | 40 |
| | ▪ Category LVRH Modified Production – Right-hand drive Conversions | 40 |
| | ▪ Category LVEX – Exhaust Noise and Gas Emissions | 41 |
| | ▪ Category LV2A Motorcycles - Modified Production | 41 |
| | ▪ Category LV2B Motorcycles – Advanced and Scratch-built | 41 |
| | ▪ Category LV2C Trikes – Modified Production and Scratch-built | 41 |
| | ▪ Category LV3A Disability Adaptation - Limited | 42 |
| | ▪ Category LV3B Disability Adaptation - Structures | 42 |
| | ▪ Category LV4 - Electric Vehicles | 42 |
| | ▪ Category LVAC – Authority Card | 43 |
| | ▪ Category LVCM – Commercial Modification | 43 |
| | ▪ Category LVPO – LVV Certification Plate Pre-ordering | 43 |
| 3.3 | Conditions for appointment of an LVV Certifier | 43 |
| | ▪ Introduction | 43 |
| | ▪ Initial application | 44 |
| | ▪ Application process | 45 |
| | ▪ Assessment process | 45 |
| | ▪ Mentoring of LVV Certifier applicants | 46 |
| | ▪ Approval and appointment | 46 |
| | ▪ Time-frame for LVV Certifier appointment process | 46 |
| | ▪ Initial and ongoing costs and obligations | 47 |
| | ▪ Independence and conflict of interest | 47 |
| | ▪ Additional appointment requirements for other categories | 48 |
| | ▪ Geographical provision of service | 48 |
| 3.4 | Additional LVV Certifier categories | 48 |
| | ▪ Introduction | 48 |
| | ▪ Application process | 48 |
| | ▪ Assessment process | 49 |
| | ▪ Approval and appointment | 49 |
| Section 4 | LVV certification procedures | 49 |
| 4.1 | Basic inspection principles | 49 |
| | ▪ Introduction | 49 |
| | ▪ Compliance with relevant technical requirements | 50 |

| | | |
|-----|--|----|
| | ▪ Fit for purpose, and safe | 50 |
| | ▪ Tradesman-like manner | 50 |
| | ▪ Vehicle Identification Numbers (VIN) | 51 |
| 4.2 | LVV certification plate requirements | 51 |
| | ▪ Introduction | 51 |
| | ▪ LVV certification plate affixing | 51 |
| | ▪ Return of unaffixed LVV certification plates | 52 |
| | ▪ Delegation of LVV certification plate affixing | 52 |
| | ▪ Removal of LVV certification plates | 53 |
| 4.3 | LVV certification plate pre-ordering | 54 |
| | ▪ Introduction | 54 |
| | ▪ LVV certification plate pre-ordering criteria (other than LVCM Certifiers) | 54 |
| | ▪ LVV certification plate pre-ordering criteria (for LVCM Certifiers) | 56 |
| 4.4 | Self-certification | 57 |
| | ▪ Introduction | 57 |
| | ▪ Self-certification of minor remedial work | 57 |
| | ▪ Disability adaptive control system self-certification | 58 |
| | ▪ Extensively-modified and scratch-built self-certification | 59 |
| | ▪ Self-certification of Type-approved low volume vehicles | 60 |
| 4.5 | Road-testing requirements | 60 |
| | ▪ Introduction | 60 |
| | ▪ Low volume vehicles not required to be road-tested | 60 |
| | ▪ Road-test requirements for all other low volume vehicles | 61 |
| | ▪ Test-driving competence | 61 |
| | ▪ Safe and responsible test-driving | 61 |
| 4.6 | Variation from technical requirements | 62 |
| | ▪ Introduction | 62 |
| | ▪ Application of requirements | 62 |
| | ▪ Variation from requirements | 63 |
| 4.7 | Remedial work inspection | 63 |
| | ▪ Introduction | 63 |
| | ▪ Inspection of remedial work | 64 |
| 4.8 | Retrospective LVV certification | 64 |
| | ▪ Introduction | 64 |
| | ▪ LVV certification requirements | 65 |
| | ▪ Application of retrospective LVV certification | 66 |
| | ▪ Modification date relative to LVV standard introduction | 66 |

| | | |
|------------------|---|-----------|
| 4.9 | Dual-LVV Certifier certification | 67 |
| | ▪ Introduction | 67 |
| | ▪ Responsibilities of each LVV Certifier | 67 |
| 4.10 | LVVTA Technical Advisory Committee | 68 |
| | ▪ Introduction | 68 |
| | ▪ Purpose of the Technical Advisory Committee | 68 |
| | ▪ Role of the Technical Advisory Committee | 68 |
| | ▪ Appointment and composition of members | 69 |
| | ▪ Meetings of the Technical Advisory Committee | 70 |
| | ▪ Documentation of meetings | 70 |
| | ▪ Applications to the Technical Advisory Committee | 71 |
| | ▪ Fees for approval process | 71 |
| | ▪ New Zealand Transport Agency role | 71 |
| | ▪ Right of Appeal | 72 |
| 4.11 | LVVTA Commercial Technical Advisory Committee | 72 |
| | ▪ Introduction | 72 |
| | ▪ Purpose of the Commercial Technical Advisory Committee | 72 |
| | ▪ Role of the Commercial Technical Advisory Committee | 73 |
| | ▪ Appointment and composition of members | 73 |
| | ▪ Meetings of the Commercial Technical Advisory Committee | 74 |
| | ▪ Documentation of meetings | 74 |
| | ▪ Applications to the Commercial Technical Advisory Committee | 74 |
| | ▪ Fees for approval process | 75 |
| | ▪ New Zealand Transport Agency role | 75 |
| | ▪ Right of Appeal | 76 |
| 4.12 | LVV Working Groups | 76 |
| | ▪ Introduction | 76 |
| | ▪ LVV Policy Working Group | 76 |
| | ▪ LVV Technical Working Group | 77 |
| | ▪ Appointment of Working Group members | 77 |
| 4.13 | Category extensions | 77 |
| | ▪ Introduction | 77 |
| | ▪ Category extension application and approval | 78 |
| Section 5 | LVV service and communication requirements | 78 |
| 5.1 | Basics of the LVV certification process | 78 |
| | ▪ Introduction | 78 |
| | ▪ How the process works | 78 |

| | | |
|-----|--|----|
| 5.2 | Plate production service requirements of LVVTA | 80 |
| | ▪ Introduction | 80 |
| | ▪ General plate production service responsibilities | 80 |
| | ▪ General plate production service requirements | 80 |
| | ▪ Administrative document review requirements | 81 |
| | ▪ Technical document review requirements | 82 |
| | ▪ Document review recording | 82 |
| | ▪ Modification declaration certificates | 83 |
| | ▪ Landata record updating | 83 |
| | ▪ Return of certification plate applications | 84 |
| | ▪ Payment for LVV certification plates | 84 |
| | ▪ Agency's review of LVV certification plate production operations | 85 |
| 5.3 | Service requirements of LVV Certifiers | 85 |
| | ▪ Introduction | 85 |
| | ▪ Service requirements | 85 |
| 5.4 | Communication requirements | 86 |
| | ▪ Introduction | 86 |
| | ▪ LVVTA's lines of communication | 86 |
| | ▪ LVV Certifier communications regarding LVV issues (other than LVCM LVV Certifiers) | 87 |
| | ▪ LVV Certifier communications regarding LVV issues (for LVCM LVV Certifiers) | 87 |
| | ▪ Agency communications regarding LVV issues | 88 |
| | ▪ Communication between LVVTA and the Agency | 88 |
| | ▪ Promotion of LVV system | 89 |
| 5.5 | LVV Certifiers' Insurance Club | 89 |
| | ▪ Introduction | 89 |
| | ▪ LVV Certifiers' Insurance Club membership and protection | 89 |
| | ▪ Obligations of an LVV Certifier regarding the Insurance Club | 90 |
| 5.6 | LVV system training programmes | 91 |
| | ▪ Introduction | 91 |
| | ▪ LVCM-appointed LVV Certifiers | 91 |
| | ▪ LVV Certifier training sessions | 91 |
| | ▪ LVV Certifier training attendance requirements | 92 |
| | ▪ Individual training for LVV Certifiers | 92 |
| | ▪ 'Buddy-up' certification training for LVV Certifiers | 93 |
| | ▪ Training for Agency representatives | 93 |
| | ▪ Training for outside organisations | 94 |

| | | |
|------------------|--|-----------|
| 5.7 | Agency Performance Review System | 94 |
| | ▪ Introduction | 94 |
| | ▪ Responsibilities under the Performance Review System | 94 |
| Section 6 | Conduct & complaints | 95 |
| 6.1 | General LVV complaint procedures | 95 |
| | ▪ Introduction | 95 |
| | ▪ Division of complaints-related responsibilities | 95 |
| | ▪ Notification to the Agency | 95 |
| | ▪ Record of determination | 95 |
| | ▪ Agreed notification procedure | 96 |
| | ▪ Notification vs formal complaint process | 96 |
| | ▪ Customer complaints regarding an LVV Certifier | 97 |
| | ▪ LVV Certifier complaints regarding another LVV Certifier | 97 |
| | ▪ Customer or LVV Certifier complaints regarding LVVTA | 97 |
| | ▪ LVCM-appointed LVV Certifiers | 97 |
| 6.2 | LVVTA's Internal complaint resolution process | 98 |
| | ▪ Introduction | 98 |
| | ▪ Referral of complaints to the Agency | 98 |
| | ▪ Targeted audits by the Agency | 98 |
| | ▪ Triggering internal complaints | 98 |
| | ▪ LVVTA's complaint initiation process | 99 |
| | ▪ Risk-assessment process | 99 |
| | ▪ Application of internal complaint resolution process | 100 |
| | ▪ Application of mandatory processes | 102 |
| | ▪ Application of optional processes | 102 |
| | ▪ Internal complaint resolution negotiation | 102 |
| | ▪ Costs incurred during complaint resolution | 103 |
| | ▪ LVV certification documentation problem resolution | 103 |
| | ▪ Disputing the internal complaints resolution process | 103 |
| | ▪ LVCM-appointed LVV Certifiers | 103 |
| 6.3 | Peer review process | 104 |
| | ▪ Introduction | 104 |
| | ▪ LVCM-appointed LVV Certifiers | 104 |
| | ▪ Peer Review Group composition | 104 |
| | ▪ Co-ordination of the Peer Review Group | 105 |
| | ▪ Matters taken into consideration | 105 |
| | ▪ Findings of the Peer Review Group | 106 |
| | ▪ Reporting to the Agency | 106 |
| | ▪ Costs of peer review hearing | 106 |
| | ▪ Disputing the peer review outcome | 106 |

| | | |
|-----|---|-----|
| 6.4 | LVV Certifier monitoring | 107 |
| | ▪ Introduction | 107 |
| | ▪ LVCN-appointed LVV Certifiers | 107 |
| | ▪ Purpose of monitoring process | 107 |
| | ▪ Requirements of LVV Certifier during monitoring process | 108 |
| | ▪ Reporting to the Agency | 108 |
| | ▪ Costs of monitoring process | 109 |
| | ▪ Disputing the monitoring outcome | 109 |
| 6.5 | LVV Certifier mentoring | 109 |
| | ▪ Introduction | 109 |
| | ▪ LVCN-appointed LVV Certifiers | 109 |
| | ▪ Purpose of mentoring process | 110 |
| | ▪ Responsibilities of LVV Certifier undergoing mentoring | 110 |
| | ▪ Responsibilities of LVV Certifier providing mentoring | 110 |
| | ▪ Reporting to the Agency | 111 |
| | ▪ Costs of mentoring process | 111 |
| | ▪ Disputing the mentoring outcome | 111 |
| 6.6 | LVV Certifier competence re-assessment | 111 |
| | ▪ Introduction | 111 |
| | ▪ LVCN-appointed LVV Certifiers | 112 |
| | ▪ Purpose of competence re-assessment | 112 |
| | ▪ Procedure for competence re-assessment | 112 |
| | ▪ Reporting to the Agency | 113 |
| | ▪ Costs of re-assessment process | 113 |
| | ▪ Disputing the re-assessment outcome | 113 |
| 6.7 | Competence record-keeping | 113 |
| | ▪ Introduction | 113 |
| | ▪ LVCN-appointed LVV Certifiers | 114 |
| | ▪ Record-keeping of competence issues | 114 |
| | ▪ Use of competence record-keeping files | 114 |
| | ▪ Referral of competence record-keeping files to the Agency | 115 |
| | ▪ Competence record-keeping of LVVTA staff | 115 |
| 6.8 | Disciplinary action against an LVV Certifier | 115 |
| | ▪ Introduction | 115 |
| | ▪ Responsibilities of the Agency | 115 |
| 6.9 | Technical Decision Review Committee | 116 |
| | ▪ Introduction | 116 |
| | ▪ Responsibilities of the Technical Decision Review Committee | 116 |
| | ▪ Composition of the Technical Decision Review Committee | 116 |
| | ▪ Functioning of the Technical Decision Review Committee | 117 |

| | | |
|------------------|--|------------|
| Section 7 | Low volume vehicle classification and categories | 117 |
| 7.1 | Sub-categories of scratch-built low volume vehicles | 117 |
| | ▪ Introduction | 117 |
| | ▪ Types of scratch-built sub-categories | 118 |
| | ▪ Identification of scratch-built sub-categories | 118 |
| | ▪ Assessment method for scratch-built sub-categories | 119 |
| | ▪ Application of requirements for scratch-built sub-categories | 119 |
| Section 8 | Terms & Definitions | 121 |
| | Appendix A | 130 |

Preface

About the LVV Operating Requirements Schedule

The LVV Operating Requirements Schedule (ORS) is a document that is intended to act as an operational and procedural specification that sets out how the LVV certification system takes place. The ORS provides the operational and procedural requirements by which the key participants in the LVV certification process carry out their respective roles. The key participants are: the Low Volume Vehicle Technical Association (LVVTA), the New Zealand Transport Agency (the Agency), and the Low Volume Vehicle Certifiers (LVV Certifiers).

There are other documents that govern the LVV certification system, such as the Land Transport Rule: Vehicle Standards Compliance 2002 (Rule 35001/1) - referred to from here-on as the Land Transport Compliance Rule 35001, - and the Low Volume Vehicle Code (the LVV Code). However, these documents only provide the top-level legislative frame-work for the system, and do not get into the detail of how the system actually operates on a day to day basis. The ORS, therefore, has become the day-to-day 'rules of the game' document that the key participants follow.

Like the Low Volume Vehicle Code and the Low Volume Vehicle Standards, the LVV Operating Requirements Schedule is a key document that is developed by LVVTA in consultation with the Agency, and is signed off by both parties to form part of the LVV certification system's governing documentation, authorised under the LVV Code. The LVV Code is incorporated into New Zealand's motor vehicle legislation through incorporation by reference into the Land Transport Compliance Rule 35001.

One reason for the development of the ORS is that as the LVV system has evolved since its establishment in 1992, the operational and procedural requirements of the system have become incorporated within a number of other documents, including the LVV Code, the In-service Vehicle Inspection Requirements Manual (VIRM) introduction, and the LVV Certifiers' Deed of Appointment.

From 2003, a lot of effort has been made to incorporate all of the operational and procedural requirements that govern the day-to-day running of the LVV certification system into one document; the ORS. This is proving successful, and the requirements in the Agency's Deed of Appointment or Notice of Appointment now simply refer to the ORS, rather than repeat the same requirements throughout the Deed itself.

Application of the Operating Requirements Schedule

- | | |
|-----|--|
| A-1 | LVVTA and the Agency work to provide each other with any necessary information, interpretation, and opinion, in order to support the other party to carry out its respective responsibilities in relation to the application of the LVV Code. |
| A-2 | LVVTA and the Agency maintain a frank and open exchange of ideas and information, and work together in a spirit of co-operation and willingness in all matters relating to the application of the LVV Code, with the object of continuously improving the quality and range of services available to the public through the LVV Code, and protecting the reputation and integrity of the LVV Code. |

- A-3 In the application of the LVV Code, LVVTA and the Agency recognise the unusually high level of complexity associated with the low volume vehicle certification system, and the consequential need to administer it differently to other certification disciplines, due to:
- (a) the intrinsic need to assess complex motor vehicle design and construction factors within low volume vehicle certification, as distinct from the assessment of condition or reinstatement to vehicle manufacturers' specifications, upon which most other certification disciplines are based; and
 - (b) the heavy reliance on the application of 'best-practice' and 'historical knowledge' gained through hands-on design, modification, and construction experience by those persons involved in the LVV process, which is necessitated by the lack of any available formal trade or profession supporting the LVV Code and the LVV Certifiers.
- A-4 LVVTA and the Agency strive to improve the LVV certification system in New Zealand, focusing on vehicle safety as a principal priority, also giving consideration to environmental issues, and actively pursuing opportunities to reduce compliance costs to the LVV certification consumers.

Section 1 Premises and equipment

1.1 Premises requirements

Introduction

LVV Certifiers may work from within their own inspection premises, or, in order to provide a mobile service for their customers, inspection premises owned by other parties. All premises used for LVV certification inspections however must meet the premises requirements specified within sub-section 1.1. These requirements vary, depending on whether the inspection is a preliminary inspection, a final inspection, or a re-check. Sub-section 1.1 requires that every LVV certification inspection, at some point during the process, is carried out at premises which incorporate a proper under-body inspection facility.

The specific requirements for premises that must be used by an LVV Certifier during the course of his LVV certification inspections are provided here to ensure that the premises used will enable a thorough inspection to take place. In essence, the requirement is that all final inspections are carried out on a hoist or over a pit, and inside a proper building that affords an LVV Certifier all of the comfort, light, and convenience necessary to do his inspections well.

Inspection premises required for all inspections

- 1.1(1) An LVV Certifier must, for all low volume vehicle certification categories, when carrying out a low volume vehicle certification inspection, including a preliminary or rectification inspection, use inspection premises that:

- (a) incorporates an inspection area that enables a safe and thorough inspection to occur; and
- (b) complies with:
 - (i) Occupational, Safety, and Health requirements; and
 - (ii) any other relevant Acts, regulations, and local bylaws.

NOTE: It is the responsibility of an LVV Certifier, as an independent person operating commercially, to identify which acts, regulations, and by-laws must be complied with.

Inspection premises required for main inspections

- 1.1(2) An LVV Certifier must, for all low volume vehicle certification categories, when carrying out a main low volume vehicle certification inspection, in addition to 1.1(1), use inspection premises that incorporates an inspection area that is:
- (a) situated within a building that has a roof, sides, and door made of permanent building materials; and
 - (b) of sufficient dimensions, including doorway and access-way, as to enable the efficient and thorough inspection of any vehicle being certified; and
 - (c) on ground that is constructed of a material that will remain firm in all weather conditions; and
 - (d) on ground that is even and level (the ground will be considered level when it can be demonstrated that a vehicle will remain stationary with all brakes released); and
 - (e) sufficiently clear of structural and equipment intrusions (other than those necessary for the inspection process) as to enable the comfortable, efficient, and thorough inspection of any vehicle being certified; and
 - (f) equipped with sufficient lighting to enable good visibility of the vehicle being certified and the equipment used in the inspection process.

Approval of inspection premises

- 1.1(3) Inspection premises are approved for use by an LVV Certifier for LVV certification inspections, provided that the premises either:
- (a) has been approved by the Agency for the purpose of issuing a Warrant of Fitness or Certificate of Fitness; or

- (b) meets the premises requirements specified in 1.1(2).

NOTE: The requirement for individual site-approval from the Agency to be applied to any inspection premises used for low volume vehicle certification no longer exists.

Premises required for plate affixing

- 1.1(4) An LVV Certifier is not required to use premises that meet any specific requirements when carrying out the affixing of a low volume vehicle compliance plate, provided that a rectification inspection is not required in conjunction with the plate affixing process, for any part of the vehicle underbody.

1.2 Equipment requirements

Introduction

LVV Certifiers are required to have, and use, a number of items of equipment, in order to enable a thorough certification inspection to occur, and correctly verify compliance with LVV Standards. The items of equipment held by an LVV Certifier for LVV certification inspections must meet the equipment requirements specified within sub-section 1.2. Some items of equipment are custom-designed and manufactured by LVVTA specifically for the LVV Certifiers in the application of their certification activities.

The requirements vary, dependent on the LVV certification categories held by the LVV Certifier.

Equipment required for all LVV Certifier categories

- 1.2(1) **Except where specified in 1.2(7),** an LVV Certifier must, for all LVV certification categories, when carrying out a low volume vehicle certification inspection, have, or have access to, all items of equipment specified in 'Table 1.2(1) Equipment Requirements'.

Table 1.2(1) Equipment Requirements

| Required equipment | Categories | |
|---|-----------------------|--------|
| | All except 2A, 2B, AC | 2A, 2B |
| <ul style="list-style-type: none"> ▪ An under-body inspection facility within the inspection area that enables the efficient and thorough close visual inspection of the complete vehicle under-body, from a standing position, that is either: <ul style="list-style-type: none"> ➤ an inspection pit; or ➤ an inspection hoist (hoist must be appropriate for the type of vehicle being certified). | ✓ | × |
| <ul style="list-style-type: none"> ▪ An industrial quality trolley jack (see note 1) | ✓ | ✓ |
| <ul style="list-style-type: none"> ▪ A hand tool selection | ✓ | ✓ |
| <ul style="list-style-type: none"> ▪ Access to a 100 kph road appropriate to enable the safe and efficient conducting of general road-testing and cyclic brake-testing of any vehicle being certified. | ✓ | ✓ |

| | | |
|--|---|---|
| ▪ A stop-watch or other electronic brake-testing device capable of measuring average deceleration. | ✓ | × |
| ▪ A graduated light-board or commercial quality optical beam setter (see note 2) | ✓ | ✓ |
| ▪ An industrial quality hand-held (spot) inspection lamp (not lead light) | ✓ | ✓ |
| ▪ A steel test bar for steering and suspension | ✓ | ✓ |
| ▪ A graduated tyre tread depth gauge (see note 3) | ✓ | ✓ |
| ▪ A vernier caliper | ✓ | ✓ |
| ▪ A steel ruler | ✓ | ✓ |
| ▪ A steel tape measure | ✓ | ✓ |
| ▪ A mirror suitable for detailed inspection work, or electronic snake camera | ✓ | ✓ |
| ▪ A 35% VLT tint sample, or calibrated light transmission measuring device (see note 4) | ✓ | ✓ |
| ▪ A protractor (or Angle Application on a smart-phone) | ✓ | ✓ |
| ▪ A magnet | ✓ | ✓ |
| ▪ A radius gauge or equivalent (able to measure 3 mm radius) | ✓ | ✓ |
| ▪ A magnifying glass (suitable for weld inspection) | ✓ | ✓ |
| <p><i>Notes:</i></p> <ol style="list-style-type: none"> 1. A trolley jack and axle stands are part of the required equipment for LVV certification, but are not acceptable as a means of providing an underbody inspection facility for low volume vehicle certification. (A floor-jack is an acceptable method of lifting a motorcycle) 2. A graduated light-board or commercial quality optical beam setter is only required if an LVV Certifier is taking responsibility for remaining safety item condition requirements on the vehicles he is LVV certifying. 3. A graduated tyre tread depth gauge is only required if an LVV Certifier is taking responsibility for remaining safety item condition requirements on the vehicles he is LVV certifying. 4. A 35% VLT tint sample is only required if an LVV Certifier is taking responsibility for the 'remaining safety items' condition requirement. | | |

Additional equipment required for specified LVV Certifier categories

1.2(2)

Except where specified in 1.2(7), an LVV Certifier must, for specified low volume vehicle certification categories, when carrying out a low volume vehicle certification inspection, have, or have access to, in addition to those items required by 1.2(1), all items of equipment specified in 'Table 1.2(2) Additional Equipment Requirements'.

Table 1.2(2) Additional Equipment Requirements

| <i>Additional required equipment</i> | <i>Categories</i> |
|---|-------------------|
| ▪ An LVVTA H-frame or H-point template | 1B, 1C, 1D |
| ▪ A 165 mm head-sphere | All except 2 |
| ▪ Containers or objects to simulate occupant weight | 1A, 1B, 1C, 1D |
| ▪ A string-line and adhesive tape, or alternative means of achieving vision sight-lines | 1A, 1B, 1C, 1D |

| | |
|--|------------|
| ▪ A stop-watch, or a wristwatch with a second hand | 2A, 2B, 2C |
| ▪ A surveyors' tape or other device capable of accurately measuring 61 metres | 2A, 2B, 2C |
| ▪ An LVVTA-supplied Type-2 sound level meter with wind-sock | EX |
| ▪ An LVVTA-supplied Class-1, Type-0, or Type-1 sound level meter, complete with all accessory equipment, supplied in the case provided. (Equipment includes: wind sock, tripod, field calibrator, noise meter lead, Lutron tachometer with plug-lead clamp, Digitech Infra-red tachometer, reflective tape for infra-red tachometer, 45-degree positioning ruler, vernier caliper, 3 metre tape measure, Sharp calculator, Power Bank double-A battery charger, 4 spare rechargeable double-A batteries, laminated sound level meter instructions, 2 x laminated test examples, ESMP data folder.) | EX |
| ▪ An LVVTA-supplied exhaust gas analyzer, complete with all accessory equipment supplied in the case provided. (Equipment includes: padlock, Innovate LM-1 or LM-2 digital meter, Innovate exhaust clamp, heat-sink extension bung, welding wire, 9-volt battery, 18ft lead, roll of 100 MPH tape, wide-band oxygen sensor, 12-volt battery lead adaptor, cigarette lighter socket power lead, LM-1 or LM-2 meter operating instructions, Innovate CD, Innovate quick start guide.) | EX |
| ▪ An LVVTA-supplied, or LVVTA-approved, suspension bump-steer swing-check bar assembly, or measuring device. | 1A, 1D |

1.2(3) An LVV Certifier must ensure that all items of equipment required by 1.2(1) and 1.2(2) are:

- (a) maintained in good working order; and
- (b) in the case of items supplied by LVVTA or the Agency, are:
 - (i) presented for re-calibration and maintenance as and when required by LVVTA; and
 - (ii) safely stored, transported, and cared for at all times.

1.2(4) LVVTA will develop and manufacture where appropriate, specialised equipment for the use of the LVV Certifiers in the application of the LVV Code.

1.2(5) An LVV Certifier must, upon cessation of the LVV Certifier's appointment, return any equipment that has been provided at no cost by LVVTA.

NOTE 1: Any equipment provided by LVVTA at no cost to an LVV Certifier remains the property of LVVTA. Any other equipment purchased by an LVV Certifier from LVVTA or any other source remains the property of the LVV Certifier. Such equipment may, upon cessation of an LVV Certifier's appointment, by mutual agreement, be purchased from the LVV Certifier by LVVTA.

NOTE 2: Objective Noise Test (ONT) equipment is owned by the Agency, and provided by LVVTA to the LVV Certifiers on the Agency's behalf. As such, ONT equipment must be returned to LVVTA upon cessation of the LVV Certifier's appointment.

- 1.2(6) In the case of a newly-authorised LVV Certifier, or where an existing LVV Certifier gains an additional category that requires the issue of additional equipment by LVVTA, a bond may be applied by LVVTA to cover the value of the equipment provided to the LVV Certifier, refundable upon the cessation of the LVV Certifier's authority and return of such equipment in good condition.

NOTE: The bond specified in 1.2(6) will be held in trust by LVVTA. The same bond paid to cover the equipment referred to in 1.2(6) will also cover the documentation specified in 2.2(2).

- 1.2(7) The requirements specified in 1.2(1) and 1.2(2) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification', however a LVCM-appointed LVV Certifier must have all certification inspection equipment specified by the Agency.

Section 2 Documentation

2.1 Documentation development

Introduction

The technical, operational, and procedural documents that the LVV certification system is comprised of are developed by LVVTA. During the development process, LVVTA liaises with the Agency to ensure that the objectives of the Agency are met, and that the LVV system documentation is correctly integrated within the Agency's legislative frame-work.

As drafts are developed, and the Agency is satisfied in principle, LVVTA consults with the industry, affected parties, and individuals who have particular expertise or interest in the subject matter. Upon completion of the document development process, the Agency reviews and formally approves the documents. This can be a lengthy process, and can take up to two years from start to finish, depending on the complexity of the subject matter.

Similarly, amendments to existing LVV system documents also go through a consultation process and sign-off by the Agency, however this can be achieved within only a few months, particularly when changes need to be made in response to a safety-related situation.

Development process for LVV documents

- 2.1(1) LVVTA will establish, maintain, and continuously improve:
- (a) the Code, and all other operational and procedural documents incorporated within the LVV Certifiers' Manual; and
 - (b) the Standards, and work to expand the range of Standards on an as-required basis, together with all other technical documents incorporated within the LVV Certifiers' Manual, and other outside technical documents referred to within the LVV Certifier's Manual; and

- (c) the Forms and Form-sets incorporated within the LVV Certifiers' Manual by which the LVV Certifiers record the findings of their certification inspections.

- 2.1(2) LVVTA will, during the development process of any new LVV Standards, or amendments to the LVV Code, existing LVV Standards, or Operating Requirements Schedule, consult with the Agency, the LVVTA Council Members, the LVV Certifiers, and affected industry members.

Approval process for LVV documents

- 2.1(3) The Agency will approve and co-sign with LVVTA any new LVV Standards or amendments to the LVV Code, existing Standards, or Operating Requirements Schedule, as required by the LVV Code, following the appropriate consultation process.
- 2.1(4) The approval process of the LVV Code, the Operating Requirements Schedule, and the NZTA-LVVTA Operating Agreement, will be carried out by an authorised Agency Manager, and LVVTA's Chief Executive Officer.
- 2.1(5) The approval process of the Standards will be carried out by an authorised Agency Manager, and LVVTA's Chief Executive Officer.

2.2 Provision of documentation

Introduction

There are three key parties involved in the LVV certification process – the Agency, the LVV Certifiers, and LVVTA - all of whom rely on each other for support and services. Sub-section 2.2 sets out the obligations of the LVVTA and the Agency in relation to provision of documentation and services to the LVV Certifiers.

All documentation provided by LVVTA and the Agency to the LVV Certifiers remains the property of the issuer, and must be returned to the issuer if the LVV Certifier ceases to operate as an LVV Certifier for any reason.

Documentation to be provided

- 2.2(1) LVVTA will provide:
- (a) each LVV Certifier, free of charge, with one copy of the LVV Certifiers' Manual and all applicable updates to this Manual; and
 - (b) the Agency, free of charge, with two copies of the LVV Certifiers' Manual and all applicable updates to these Manuals.

NOTE: Any documentation provided to an LVV Certifier by LVVTA remains the property of LVVTA, and must be returned to LVVTA upon cessation of the LVV Certifier's appointment. Any documentation purchased by an LVV Certifier from LVVTA or any other source (such as triplicate carbonated form-sets, and the NZ Car Construction Manual) remains the property of the LVV Certifier.

- 2.2(2) In the case of a newly-authorised LVV Certifier, a bond may be applied by LVVTA to cover the value of the documentation provided to the LVV Certifier, refundable upon the cessation of the LVV Certifier's authority and return of such documentation in good condition.

NOTE: The bond specified in 2.2(2) will be held in trust by LVVTA. The same bond paid to cover the documentation referred to in 2.2(2) will also cover the equipment specified in 1.2(6).

- 2.2(3) **Except where specified in 2.2(4),** the Agency will provide each LVV Certifier with:
- (a) access to the electronic In-service Vehicle Inspection Requirements Manual; and
 - (b) a Performance Review System Manual, and all applicable updates to this Manual; and
 - (c) access to Motochek.

2.2(4) The requirement specified in 2.2(3) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

- 2.2(5)** The Agency will provide LVVTA, free of charge, with:
- (a) two copies of the Land Transport Rules and all applicable updates to these Rules; and
 - (b) two copies of the Performance Review System Manual, and all applicable updates to these Manuals; and
 - (c) on-going access to and use of required information on the Landata system and Motochek (excluding dial-up charges); and
 - (d) a schedule of LVV Certifiers' names, full contact details including postal address and LVV certifier category authorisation, and update this schedule to LVVTA on occurrence of any changes to those details.

2.3 Required documentation

Introduction

LVV Certifiers are required to have, and use, a number of reference and inspection documents, to ensure the safety and compliance of each vehicle that they LVV certify.

All of the documentation that an LVV Certifier is required to have, as detailed within sub-section 2.3, is provided either by LVVTA or the Agency.

The way in which LVV certification documentation is submitted and reviewed differs for an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Document requirements (for other than LVCM LVV Certifiers)

2.3(1)

An LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', must have, at the main inspection premises, a copy of:

- (a) a driver's license that is current and applicable to the types of vehicles covered by the LVV Certifier categories held; and
- (b) the individual LVV Certifier's Agency *Deed of Appointment* or *Notice of Appointment*; and
- (c) documentation to verify that the LVV Certifier holds current professional indemnity insurance cover as required by sub-section 5.5 and the Agency *Deed of Appointment* or *Notice of Appointment*; and
- (d) the LVVTA *Low Volume Vehicle Certification Manual*; and
- (e) the LVVTA *New Zealand Car Construction Manual*; and
- (f) access to the electronic *In-service Vehicle Inspection Requirements Manual (VIRM)*; and
- (g) the Agency *Performance Review System Manual (PRS)*; and
- (h) a hard copy or electronic copy of an LVV certification plate register.

NOTE: An LVV Certifier who operates a mobile service must carry with him at all times, either an electronic or hard copy of all documentation specified in 2.3(1), other than the items referred to in 2.3(1)(c) and (g).

Document requirements (for LVCM LVV Certifiers)

2.3(2)

An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', must have, at the main inspection premises, a copy of:

- (a) a driver's license that is current and applicable to the types of vehicles being certified; and
- (b) the LVV Certifier's Agency *Deed of Appointment* or *Notice of Appointment*; and

- (c) documentation to verify that the LVV Certifier holds current professional indemnity insurance cover as required by *sub-section 5.5* and the Agency *Deed of Appointment* or *Notice of Appointment*; and
- (d) the LVVTA *Low Volume Vehicle Certification Manual*; and
- (e) a hard copy or electronic copy of an *LVV certification plate register*.

NOTE: An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' will be issued with a copy of the *LVVTA Low Volume Vehicle Certification Manual* referred to in 2.3(2)(d).

Document condition, order, and access

- 2.3(3) An LVV Certifier must, for all LVV certification categories, ensure that all documentation required by 2.3(1) is:
- (a) in complete and current form at all times; and
 - (b) in legible condition; and
 - (c) in the case of a multi-document manual (such as the *LVVTA Low Volume Vehicle Certifiers' Manual*), all documents are in their correct location and order within the manual.

2.4 Use of documentation

Introduction

In addition to having the required documents, LVV Certifiers must also meet the requirements specified in sub-section 2.4 for the correct use of forms and form-sets. These requirements are in place to ensure that every form and form-set used in the course of an LVV Certifier's certification activities is filled out during the LVV certification inspection by the LVV Certifier taking responsibility for the vehicle's LVV certification.

Sub-section 2.4 is one of the most fundamental and important aspects of the LVV certification system, and is critical for ensuring the integrity of the inspection process.

The LVV Code, the Land Transport Compliance Rule 35001, and the NZTA Deed of Appointment are all very clear that an LVV Certifier cannot delegate any of his responsibilities to any other person (other than those specified functions such as affixing the LVV certification plate and assessing 'remaining safety items').

Clearly, the single-most important part of an LVV Certifier's responsibility is the inspection of the vehicle, therefore the idea of an LVV Certifier having someone else carrying out the inspection of the vehicle, or filling out the form-sets on his behalf, is one of the most serious offences within any certification discipline.

Further, LVV certification inspections can be very involved; - in some form-sets (and there can be several form-sets for any given vehicle) there can be approaching 100 individual technical requirements that must be considered and assessed. It would be unrealistic for an LVV Certifier to think that he can inspect a vehicle to the LVV Code thoroughly, without referring to the required forms and form-sets. This is why forms and form-sets have been developed for the LVV Certifiers. Without the forms and form-sets, the LVV Certifiers would have to write a comprehensive series of detailed reports that cover every aspect of every modification to each vehicle.

It is a fundamental principle therefore, that the LVV Certifier uses his forms and form-sets as 'prompts', to ensure that all technical requirements associated with the certification have been fully assessed and approved. The expectation, and requirement, is that the LVV Certifier fills out the forms and form-sets as he inspects the vehicle to ensure that nothing gets missed. Following this logic, it is essential, therefore, that the forms and form-sets are filled out at the time of the LVV certification inspection.

The inspection process, and the way in which LVV certification documentation is used, differs for an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Use of forms and form-sets

2.4(1)

Except as specified in 2.4(2), every LVVTA form and form-set used during the course of carrying out an LVV certification inspection, **other than** for the *F000*, *F002-L* or *F002-MN* LVV Certification Plate Data Sheet, must be filled out:

- (a) by the LVV Certifier who is taking responsibility for the certification of the vehicle; and
- (b) at the time of the LVV certification inspection; and
- (c) fully, with each requirement or statement provided with an appropriate written response; and
- (d) in legible hand-written form.

NOTE 1: An LVV Certifier may not delegate the filling out of any forms or form-sets (other than for the *F000*, *F002-L* and *F002-MN*) involved in the LVV certification process to anyone else.

NOTE 2: An LVV Certifier may not, except for in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', fill out any forms or form-sets involved in the LVV certification process electronically.

NOTE 3: An 'appropriate written response' as referred to in 2.4(1)(c) means a notation consisting of either a tick, cross, N/A (which may include an accompanying strike-through line to denote that a series of check-boxes are not applicable), or an applicable comment where necessary.

NOTE 4: An LVV Certifier may not, except for in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', certify a low volume vehicle using a pre-prepared or copied 'master' form-set. This practice effectively avoids the fundamental inspection requirements specified in 2.4(1) for every aspect of every vehicle to be individually inspected and assessed for safety and compliance.

2.4(2)

The requirement specified in 2.4(1)(d) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Retention of forms and form-sets

2.4(3)

All forms and form-sets produced for each LVV certification by an LVV Certifier must be retained on behalf of the LVV Certifier, by the LVVTA, for the life of the vehicle.

2.4(4)

An electronic or hard copy record of the F001 Statement of Compliance Certificate must be retained on behalf of the LVV Certifier, by the LVVTA, for the life of the vehicle, which must record:

- (a) the name of the LVV Certifier who certified the vehicle; and
- (b) a list of modifications or construction features applicable to the vehicle.

2.4(5)

Each *F001 Form* and *F005 Form* produced for each LVV certification must be retained by an LVV Certifier for a period of not less than seven years.

2.5

Submission of documentation

Introduction

In order to obtain an LVV certification plate for a modified or individually-constructed vehicle, an LVV Certifier must forward to LVVTA all required forms and form-sets relevant to the vehicle being certified. Sufficient information should be forwarded to give LVVTA a level of confidence that the vehicle is both safe and compliant. An additional checking process – which can be likened to a 'desk-top review' of the LVV Certifier's work - is regarded as necessary because of the very high level of complexity and diversity associated with LVV certification.

Because of this unusually high level of complexity and diversity of the LVV certification system, there is much greater scope for error or incorrect judgements in LVV certification, which have the potential to result in an unsafe vehicle. This potential has to be minimised as much as is practical, and the LVVTA desk-top review is seen as a sound and simple additional step toward ensuring safety, compliance, and consistency amongst the decisions of the LVV Certifiers. This desk-top review, and the associated 'coaching role' is detailed in Section 5.

The way in which LVV certification documentation is submitted and reviewed differs for an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Sub-section 2.5 contains the specified requirements for the documentation that is required to be provided in support of each LVV certification plate application.

Documentation required to be submitted (other than LVCM-appointed Certifiers)

2.5(1)

Accompanying each LVV certification application, an LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is required to submit to LVVTA:

- (a) a correctly filled out 'base form-set', comprising a:
 - (i) F000 - Certification Plate Order Form; and
 - (ii) F001 - LVV Statement of Compliance Certificate; and
 - (iii) F002 - LVV Data Form; and
 - (iv) F003 - LVV Safety Item Form; and
 - (v) F004 - LVV Rectification Form;
- and
- (b) a correctly filled out component or system form-set relative to each modification or construction feature present on the vehicle being LVV certified; and
- (c) any supporting technical documentation, certificates, or reports required by the requirements specified within any relevant LVV standards, form-sets, or information sheets.

NOTE 1: It must be clearly understood by the LVV Certifier that the submission of the documentation specified in 2.5(1) in no way reduces the responsibility for the correct assessment of the vehicle by the LVV Certifier, or shifts any responsibility for the vehicle's safety or compliance from the LVV Certifier to LVVTA.

NOTE 2: Documentation as specified in 2.5(1)(c) may not be required in situations where a package of documentation is lodged by the LVV Certifier and held on file by LVVTA that is relative to a series of identical modifications or vehicles.

2.5(2)

In a case where there is no appropriate form-set that is applicable to a modification or scratch-built feature, an LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is required to produce and submit a written report that:

- (a) accurately explains and describes the modifications or scratch-built features; and
- (b) provides assurance that the modifications or scratch-built features are safe and compliant; and

- (c) explains how the decisions that the modifications or scratch-built features are safe and compliant are arrived at.

2.5(3)

In addition to the documentation specified in 2.5(1), an LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is required to submit one or more 1200 x 800 pixel (or equivalent) resolution colour photographs that have been taken by the LVV Certifier, that are fully-framed, well-focused, and clear, of the vehicle's NZTA-recognised vehicle identification number, and of every aspect of every modification that is unique to the individual vehicle being certified, which may be either:

- (a) processed photo prints; or
- (b) printed from a digital image in hard copy form, either one or two per A4 page; or
- (c) on a compact disc, or other non-returnable electronic medium.

- NOTE 1: It must be clearly understood by the LVV Certifier that the submission of photographs specified in 2.5(3) in no way reduces the responsibility for the correct assessment of the vehicle by the Certifier, or shifts any responsibility for the vehicle's safety or compliance from the Certifier to LVVTA.
- NOTE 2: It is the responsibility of the LVV Certifier, if providing photographs on a CD, to ensure that the CD is correctly formatted, and can be opened and navigated through quickly and easily. If the images cannot be viewed, the certification plate application cannot be processed.
- NOTE 3: If providing photographs on a CD, images relating to only one vehicle may be provided on a CD.
- NOTE 4: Whilst in-progress or first inspection photos are encouraged, images of the finished and compliant vehicle must be provided.
- NOTE 5: Whichever option specified in 2.5(3) is chosen, the images must incorporate sufficient light, detail, and clarity so as to enable the LVVTA desk-top review to take place easily and effectively.
- NOTE 6: Where a vehicle predates the requirement for a 17-digit VIN, the manufacturer's assigned identifier (usually a chassis number) will become the NZTA-recognised vehicle identification number, which must be photographed.
- NOTE 7: An LVV Certifier may provide additional supporting photographs which are taken by a third party, in addition to those required by 2.5(3), provided that the photos are clearly identified as such.

Documentation required to be submitted (for LVCM-appointed Certifiers)

2.5(4)

Accompanying each LVV certification application, an LVV Certifier who is appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is required to submit to LVVTA for each Type-approved low volume vehicle being LVV certified:

- (a) a correctly filled out 'base form-set', comprising an:
 - (i) F001-CM LVV Statement of Compliance Certificate; and
 - (ii) F002-CM LVV Data Form;

and

- (b) a reference to the unique LVV Certification Plate Number relating to the originating vehicle certified by an independent LVV Certifier; and
- (c) the LVCM-appointed LVV Certifier's Vehicle Type Approval Number relative to the series of vehicles being certified.

Documentation required to be applied

2.5(5)

An LVV Certifier is required to ensure that for every vehicle and modification he inspects and assesses, the technical requirements that are identified and applied to the vehicle and its modifications or scratch-built features are:

- (a) always the most appropriate technical requirements for the vehicle and modifications being assessed; and
- (b) if there are requirements that are more detailed, specific, or appropriate in another area of the LVV certification system, those requirements are identified and applied to the vehicle and its modifications.

NOTE: By the nature of low volume vehicles, the level of complexity and diversity is such that the technical requirements for any given vehicle may not be entirely appropriate or complete, and it is the responsibility of the certifier to ensure that he applies the most robust inspection possible, and that may involve referring to other technical documents within the LVV certification system that are more relevant to the vehicle or modifications in question.

2.6

Technical documentation analysis

Introduction

It is important that LVV Certifiers understand where LVVTA's responsibilities start and stop in relation to the review and analysis of technical documentation. LVV Certifiers need to be clear as to what is expected of them if they are to embark on carrying out LVV certification on vehicles that feature components and systems that are outside the scope of LVVTA's technical standards, information sheets, and the New Zealand Car Construction Manual.

In this case, a detailed assessment is required to be made by the LVV Certifier in order to prove that the components or systems are fit for their purpose.

Limitations of LVVTA's technical analysis responsibilities

LVVTA's role in relation to document review prior to plate production is to review technical documents, provide guidance, and clarify and provide interpretation on LVVTA's technical requirements. Included within LVVTA's responsibilities are the tasks of reviewing calculation work, confirming the validity of overseas standards, and reviewing test reports. When submitting technical documentation with certification plate applications that are outside of the straight-forward scope of the LVV standards or New Zealand Car Construction Manual, an LVV Certifier is expected to propose his own solution and seek confirmation from LVVTA, rather than relying on LVVTA to provide the technical solutions.

LVV Certifier's responsibilities

It is not appropriate that LVV Certifiers rely on LVVTA to provide their customers with a free consultancy service. It is not the role of the LVVTA to solve the LVV Certifier's technical problems by coming up with a solution, or to spend time researching the validity of a solution by checking overseas standards, contacting vehicle or component manufacturers for information, or carrying out calculation work.

It is expected that where a component or system does not meet a technical requirement contained within the LVV certification system, and LVVTA requires an analysis to be made, the LVV Certifier is to provide LVVTA with a detailed file of all the required information for the component or system, including any manufacturer's data, calculation work, test reports, and approvals that have been issued. It is up to the LVV Certifier to provide sufficient evidence to substantiate the component or system's suitability.

The LVV Certifier is expected to provide information that is complete, well presented, and written in English, so that it becomes a simple matter for LVVTA to review the documents, and, where necessary, provide a summary to enable the LVVTA Technical Advisory Committee to approve the design.

Test report validation

It is the responsibility of the LVV Certifier, if providing a test report to LVVTA for a component or system that does not meet a technical requirement contained within the LVV certification system, to understand the report, be satisfied with the content of the report, and provide written confirmation of the suitability of the component or system to LVVTA. The LVV Certifier must analyse the component or system with reference to the relevant LVVTA technical requirement, and a report should be provided by the LVV Certifier to LVVTA confirming that he is satisfied that the system is fit for its purpose.

Standards compliance validation

If an LVV Certifier is assessing a component or system against a recognised standard, it is the responsibility of the LVV Certifier to ensure that the standard that he is assessing the component or system against is a valid and appropriate standard. If the standard does not provide for the component or system in question, then compliance with that standard cannot be claimed, and another more appropriate standard must be used for the assessment.

If LVVTA is required to become involved in the validation of test reports or standards compliance information beyond LVVTA's normal responsibilities, this time may be charged to the LVV Certifier.

The technical documentation analysis process is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Cost recovery for consultancy services to LVV Certifiers

2.6(1)

LVVTA will charge a fee to an LVV Certifier, on the basis of between \$90 pr hour and \$180 pr hour, depending on the service provided, for technical consultancy work if:

- (a) it is agreed that LVVTA conducts work that exceeds the usual expectations; or
- (b) excessive time is required by LVVTA to analyse and approve a component or system because of incomplete or insufficient information provided by the LVV Certifier.

NOTE: LVVTA will not be charging, as a matter of course, for its normal technical reviewing and support. The cost recovery referred to in 2.6(1) will only be applied to LVV Certifiers who repeatedly fail to meet normal expectations in providing correct information, and cause LVVTA a disproportionate amount of work over and above LVVTA's normal responsibilities.

Referral to the Agency

- 2.6(2) LVVTA may refer technical matters to the Agency, or another independent organisation approved by the Agency, for inspection and assessment, in the case where LVVTA is of the opinion, based on the form-sets and documentary evidence provided, that there is reason to believe a low volume vehicle may be either non-compliant or unsafe.

2.7 Non-disclosure of information

Introduction

As part of the LVV certification process, LVV Certifiers are required in certain circumstances, in order to prove compliance of certain components and systems, to provide LVVTA with certain technical information about a company's intellectual property, including compliance information and test results, to which the company holds rights.

LVVTA recognises that in some cases, such information can be commercially sensitive, and that the information, therefore, should not be disclosed or distributed to any third party. LVVTA undertakes to keep all such information received by this means, if so notified by the provider of the information, strictly confidential, and to refrain from discussing the information with any third-party other than LVVTA staff members and Technical Advisory Committee members, the Agency (or persons or organisations appointed to act on their behalf), the Ministry of Transport, or the New Zealand Police, unless authority to do so has been received from the provider of the information.

Notification of non-disclosure requirement

- 2.7(1) In the event that the provider of the information considers his information to be commercially sensitive and does not want LVVTA to disclose the information to any third party, the LVV Certifier who is acting on behalf of the provider of the information must notify LVVTA of the information provider's requirement for non-disclosure, as part of the LVV certification plate application.

NOTE: The LVV Certifier acting on behalf of the provider of the information is to record clearly, on the *F000 Certification Plate Order Form*, that the application contains information which is commercially sensitive and must not be disclosed.

LVVTA's non-disclosure policy

- 2.7(2) Upon receipt of a non-disclosure request as specified in 2.7(1), LVVTA will not disclose or distribute any information associated with the corresponding certification plate application, received by this means, to any third-party other than those persons or organisations specified in 2.7(3).

NOTE: It should be noted that LVVTA's obligations in regard to disclosure of information only requires LVVTA to maintain information in confidence that has been directly supplied by the disclosing party. Maintenance of confidentiality of that information does not apply if LVVTA has prior knowledge of the information, or has, or can obtain the information through another means or source, or if the information is, or can be, generally known to the public.

- 2.7(3) Persons and organisations that are not considered to be 'third parties' in regard to non-disclosure of information, and are therefore privy to such information if deemed to be necessary by LVVTA in order to fulfill its obligations and responsibilities, are limited to:

- (a) staff-members of, and contractors to, LVVTA; and
- (b) members of the LVVTA Technical Advisory Committee; and
- (c) members of any sub-committee established by LVVTA for the purposes of a technical assessment or an approval process; and
- (d) recognised industry experts relied upon by LVVTA for expert advice in specialised areas, on a case-by-case basis; and
- (e) staff-members of the Agency and the Ministry of Transport who are involved in LVV operations; and
- (f) any outside person or organisation authorized to act on behalf of the Agency in relation to LVV certification complaints or investigations; and
- (g) members of the New Zealand Police.

Conflict of interest

- 2.7(4) Information provided to LVVTA that is accompanied by a non-disclosure request from the LVV Certifier acting for the provider of the information will be made available to the Technical Advisory Committee, only if:
- (a) technical support in regard to the information is required from the Technical Advisory Committee by the LVVTA staff-members; and
 - (b) in a case where LVVTA considers that there may be potential for a conflict of interest to exist between one or more Technical Advisory Committee members and the provider of the information, either:

- (i) the conflicted Technical Advisory Committee members will voluntarily absent themselves from the part of the meeting in which the information is discussed; or
- (ii) permission will be sought from the provider of the information for the information to be discussed with potentially conflicted Technical Advisory Committee members present.

2.7(5) Information provided to LVVTA that is accompanied by a non-disclosure request from the LVV Certifier acting for the provider of the information will be made available to recognised industry experts relied upon by LVVTA for expert advice in specialised areas, only if:

- (a) technical support in regard to the information is required from the recognised industry experts by the LVVTA staff-members; and
- (b) LVVTA is satisfied that there is no conflict of interest between the recognised industry experts and the provider of the information.

NOTE: It is recognised that the LVVTA Technical Advisory Committee comprises experts from the vehicle modification industry, therefore potential for a conflict of interest may arise from time to time. All efforts will be made to respect the commercially-sensitive nature of any technical information provided by members of the vehicle modification industry, where required.

Confidentiality of LVVTA communications

2.7(6) An LVV Certifier must not disclose any information or forward any correspondence provided to him by LVVTA, if the requirement for confidentiality is stated on the correspondence.

Section 3 LVV Certifier categories & appointment

3.1 Limitations of LVV Certifier categories

Introduction

The vehicle modification and construction industry is both diverse and complex, so much so that very few, if any, people have the background, knowledge, and skills, to be able to competently LVV certify every type of modification and construction feature that exists.

LVVTA has, therefore, established a range of LVV Certifier categories, that enable an individual LVV Certifier's particular areas of background, knowledge, and skills to be matched to certain LVV certification activities, in order to ensure that each LVV Certifier is involved only in those particular areas in which he has the necessary level of competence.

Sub-section 3.1 provides the available LVV certification categories for which an LVV Certifier may be authorised, together with the operational boundaries of each of those categories.

Appointment of categories

- 3.1(1) An LVV Certifier may be appointed for one or more certifier categories by the Agency, each of which authorise an LVV Certifier to certify those modifications specified for each category in 3.1(2) to 3.1(16).

Category LV1A Modified Production – Limited

- 3.1(2) An LVV Certifier appointed to certify under LVV Certifier category 'LV1A Modified Production - Limited' is authorised to certify Classes M-group and NA modified production low volume vehicles that feature:

- (a) all engine and drive-train conversions and modifications covered by *LVV Standard 85-40 (Engine & Drive-train Conversions)*; but no structural modifications to the chassis, sub-frame or suspension cross-members, and the engine must be in the original location; and
- (b) all braking modifications covered by *LVV Standard 35-00 (Braking Systems)*, including rotor and drum changes, disc and drum adaptations; but no changes, substitutions, or modifications to OE stub axles, with the exception of:
 - (i) common 'bolt-on' OEM-type 4-stud to 5 stud stub axle conversions; and
 - (ii) 'bolt-on' aftermarket (dropped spindle-type) stub axle conversions;

and

- (c) 'bolt-on' OEM steering components or OEM steering system substitution, including bolt-on OEM manual or power steering conversions, but no changes, substitutions, or repositioning of any geometry-critical steering components, and no modifications to any individual steering components or mounting systems, with the exception of:
 - (i) 'bolt-on' roll-centre adjusters; and
 - (ii) 'bolt-on' aftermarket (dropped spindle-type) stub axle conversions;
 - (iii) 'bolt-on' HICAS lock-bars (specifically limited to Nissan HICAS system only);
 - (iv) modifications directly associated with a body-lift, limited to the adjustment of the positioning of the splined section of the OEM steering intermediate shaft, or a 'bolt-on' aftermarket component (which does not incorporate welding and that is catalogued for the make and model of vehicle) which lengthens the OEM steering intermediate shaft; and

- (v) right-hand drive conversions of pre-1980 vehicles, where the conversion is of a direct mirror-image nature, and where the vehicle manufacturer made provision during the manufacturing process for the vehicle to be assembled in either left-hand or right-hand drive form;

and

- (d) all suspension modifications covered by *LVV Standard 195-00 (Suspension Systems)*, but no structural modifications to the chassis, sub-frame or suspension cross-members, no complete suspension assembly change, no change to suspension configuration or geometry, and no airbag or hydraulic suspension system conversions, with the exception of:

- (i) 'bolt-on' roll-centre adjusters; and
- (ii) 'bolt-on' aftermarket loaded suspension arms;
- (iii) repositioning of a non-load bearing shock absorber; and
- (iv) 'bolt-on' aftermarket (dropped spindle-type) stub axle conversions;

and

- (e) all wheel and tyre changes and modifications; and
- (f) seat changes covered by 2.5 in *LVV Standard 185-00 (Seats & Seat Anchorages)*, but no seatbelt anchorage retro-fitments, and no stressed seat changes or installations; and
- (g) all interior modifications covered by *LVV Standard 155-40 (Interior Impact)*; and
- (h) all external projection and field of vision; and
- (i) all lighting modifications and substitutions; and
- (j) all glazing, and windscreen wipe and wash system modifications and substitutions; and
- (k) all fuel system modifications and custom-built fuel systems, and substitution of non-OE fuel tanks and systems; and
- (l) a body-lift of up to 50 mm on a four-wheel drive vehicle (including associated steering modifications limited to those specified in 3.1(2)(c)(iv)); and

- (m) all non-structural body modifications including substituted or modified door opening systems, fuel filling systems, and intercooler installations.

Category LV1B Modified Production – Extended

3.1(3) An LVV Certifier appointed to certify under LVV Certifier category 'LV1B Modified Production - Extended' is authorised to certify Classes M-group and NA modified production low volume vehicles that feature:

- (a) all seatbelt anchorage installations covered by *LVV Standard 175-00 (Seatbelt Anchorages)*; and
- (b) all seat design, construction, and installations, including stressed seats, covered by *LVV Standard 185-00 (Seats & Seat Anchorages)*; and
- (c) all adaptive control systems to assist disabled drivers covered by *LVV Standard 45-30 (Disability Adaptive Control Systems)*; and
- (d) all frontal impact protection system modifications covered by *LVV Standard 155-30 (Frontal Impact)*.

Category LV1C Modified Production – Structures

3.1(4) An LVV Certifier appointed to certify under LVV Certifier category 'LV1C Modified Production - Structures' is authorised to certify Classes M-group and NA modified production low volume vehicles that feature:

- (a) all structural body modification, including restructuring and configuration changes, that retain the vehicle manufacturer's occupant protection systems and structure forward of the A-pillars, and complete (bolt off-on OE-body type) body substitution; and
- (b) all chassis and sub-frame modifications, but not complete chassis substitution or complete chassis or rear half-chassis design and construction, or complete sub-frame changes.

Category LV1D Modified Production – Advanced & Scratch-built

3.1(5) An LVV Certifier appointed to certify under LVV Certifier category 'LV1D Modified Production - Structures' is authorised to certify Classes M-group and NA scratch-built, and modified production M-group and NA low volume vehicles that feature:

- (a) design and construction of custom-built suspension systems, and substitution of major non-OE suspension components and complete non-OE suspension assemblies; and
- (b) design and construction of custom-built steering systems, and relocation or substitution of major non-OE steering components and complete non-OE steering assemblies; and

- (c) design and construction of custom-built braking systems, and substitution of major non-OE braking components and complete non-OE braking assemblies; and
- (d) repositioning of an engine, gearbox, or differential to a different location within a vehicle; and
- (e) all body restructuring, configuration changes, body type or style substitution, and complete body design and construction; and
- (f) major modifications and complete substitution of chassis or sub-frames, and complete chassis or rear half-chassis design and construction.

Category LVRH Modified Production – Right-hand Drive Conversions

- 3.1(6) An LVV Certifier appointed to certify under LVV Certifier category 'LVRH Modified Production – Right-hand Drive Conversions' is authorised to certify Classes M-group and NA modified production low volume vehicles that are modified production vehicles which have been converted from left-hand drive to right-hand drive, covered by *LVV Standard 190-70 (Right-hand Drive Steering Conversions)*.

Category LVEX – Exhaust Noise and Gas Emissions

- 3.1(7) An LVV Certifier appointed to certify under LVV Certifier category 'LVEX – Exhaust Noise and Gas Emissions' is authorised to certify Classes M-group, NA, and L-group vehicles for exhaust noise emissions and gas emissions covered by *LVV Standard 90-20 (Exhaust Noise Emissions)*, and *LVV Standard 90-10 (Exhaust Gas Emissions)*.

Category LV2A Motorcycles - Modified Production

- 3.1(8) An LVV Certifier appointed to certify under LVV Certifier category 'LV2A Motorcycles - Modified Production' is authorised to certify Class L-group modified production low volume vehicles that feature:
- (a) all hand and foot control system modifications and adaptations; and
 - (b) all suspension modifications including substitution of OE and aftermarket suspension components and assemblies, but not custom fabricated front-ends or swing-arm assemblies; and
 - (c) all steering modifications including substitution of OE and aftermarket steering components and assemblies, but not custom-fabricated components or complete steering head adaptation; and
 - (d) all braking modifications including substitution of OE and aftermarket brake components and assemblies, but not custom-fabricated components; and
 - (e) all engine and drive-train conversions and modifications; and

- (f) frame and body modifications, but not complete design and construction of new frames.

Category LV2B Motorcycles – Advanced and Scratch-built

3.1(9) An LVV Certifier appointed to certify under LVV Certifier category 'LV2B Motorcycles - Scratch-built' is authorised to certify Class L-group scratch-built, and modified production low volume vehicles that feature:

- (a) design and construction of custom-built suspension systems, including complete custom-fabricated front-ends and swing-arm assemblies; and
- (b) design and construction of custom-built steering systems, including custom-fabricated steering components and steering head adaptations; and
- (c) design and construction of custom-built braking systems, including custom-fabricated braking components; and
- (d) all major frame and body modifications, complete substitution of frames and bodies, and complete frame and body design and construction.

Category LV2C Trikes - Modified Production & Scratch-built

3.1(10) An LVV Certifier appointed to certify under LVV Certifier category 'LV2C Trikes – Modified Production & Scratch-built' is authorised to certify low volume vehicles that:

- (a) are modified production LE or MA-class trikes, and are covered by *LVV Standard 198-00 (Trikes with Motorcycle Controls)*; or
- (b) are scratch-built LE or MA-class trikes, and are covered by *LVV Standard 198-00 (Trikes with Motorcycle Controls)*.

Category LV3A Disability Adaptation – Limited

3.1(11) An LVV Certifier appointed to certify under LVV Certifier category 'LV3A Disability Adaptation' is authorised to certify Classes M-group and NA low volume vehicles that feature:

- (a) modifications carried out for the purpose of enabling a person with a disability to operate a braking system, accelerator system, steering system, or any other vehicle controls, provided that the integrity and rigidity of the permanent vehicle structure is not affected by the modifications; and
- (b) modifications carried out for the purpose of enabling a person with a disability, and a care-giver or attendant, to enter or exit a vehicle, or to be seated or restrained within a vehicle, provided that the integrity and rigidity of the permanent vehicle structure is not affected by the modifications.

Category LV3B Disability Adaptation – Structures

3.1(12) An LVV Certifier appointed to certify under LVV Certifier category 'LV3B Disability Adaptation - Structural' is authorised to certify Classes M-group and NA low volume vehicles that feature:

- (a) all modifications carried out for the purpose of enabling a person with a disability to operate a braking system, accelerator system, steering system, or any other vehicle controls, including those modifications that affect the integrity and rigidity of the permanent vehicle structure; and
- (b) all modifications carried out for the purpose of enabling a person with a disability, and a care-giver or attendant, to enter or exit a vehicle, or to be seated or restrained within a vehicle, including those modifications that affect the integrity and rigidity of the permanent vehicle structure.

Category LV4 - Electric Vehicles

3.1(13) An LVV Certifier appointed to certify under LVV Certifier category 'LV4 - Electric Vehicles' is authorised to certify modified production and scratch-built Classes M-group and NA low volume vehicles that are converted to, or constructed using, electric or hybrid motive power.

Category LVAC - Authority Card

3.1(14) An LVV Certifier appointed to certify under LVV Certifier category 'LVAC - Authority Card' is authorised to certify low volume vehicles in accordance with 2.12 of the LVV Code.

Category LVCM – Commercial Modification

3.1(15) An LVV Certifier appointed to certify under LVV Certifier category 'LVCM - Commercial Modification' is authorised to certify modified production Type-approved low volume vehicles in accordance with the limitations and conditions specified within their *Notice of Appointment* from the Agency.

Category LVPO - LVV Certification Plate Pre-ordering

3.1(16) An LVV Certifier appointed to certify under LVV Certifier category 'LVPO - LVV Certification Plate Pre-ordering' is authorised to pre-order LVV Certification Plates from LVVTA prior to the completion of the final inspection of the vehicle provided that the procedural requirements for LVV Certification Plate Pre-ordering specified in *Section 4* are met.

NOTE 1: An applicant applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is not required to also hold Category LVPO – LVV Certification Plate Pre-ordering' specified in 3.1(16), because Plate Pre-ordering is an integral function of the Type-approval certification process carried out by LVCM-appointed LVV Certifiers.

NOTE 2: In the case of any previously LVV certified low volume vehicle that has been subsequently modified, the LVV Certifier undertaking the LVV certification of the subsequent modifications must be authorised for the LVV certification category that would have been required for the original certification of the vehicle.

For example, a scratch-built sports car (originally requiring Category 1D) with a subsequent suspension modification must be LVV certified by an LVV Certifier authorised for 1D category. This is because a comprehensive knowledge of the vehicle in question is required in order to be able to establish the flow-on influences of any subsequent modifications on inter-related aspects of the original vehicle's design.

NOTE 3: On a case-by-case basis, an LVV Certifier appointed to certify under a LVV Certifier category may certify a vehicle that is outside of the specified criteria and would normally require a different or higher level of category, provided that the LVV Certifier can demonstrate extensive practical experience directly relevant to the modification in question, and an application is pre-approved by LVVTA. In such a situation, LVVTA will seek permission for approval from the Agency-LVVTA LVV Technical Working Group (as detailed in 4.13), and issue approval to the LVV Certifier if approval from the Working Group is granted. In such cases, the LVV Certifier is to make an application in writing to LVVTA, using the LVV Form F007 Category Extension Request Form.

3.2

Criteria for application as an LVV Certifier

Introduction

As with any certification process, the single-most important ingredient in achieving the highest possible level of safety outcome is to ensure that the LVV Certifiers have the appropriate background, experience, and skills relevant to the type of certification in which they are engaged. LVV certification is unique amongst all other certification types, in that there is no formal trade or profession to support it. Being a motor mechanic or engineer alone is nowhere near enough to equip a person with the necessary level of competence required in order to make sound safety-related judgments within the complex and diverse world of modified and individually-constructed motor vehicles.

Two and a half decades of LVV certification operations have proven that the only people who consistently perform well as an LVV Certifier are those people who have built up a substantial amount of knowledge and a high level of skill in relation to modified and individually-constructed vehicles, through the practical experience that only comes from working in an automotive mechanical environment together with extensive direct practical involvement in the motor vehicle modification and construction sector. The same logic applies in specialised areas outside of the 'enthusiast realm', such as those vehicles modified for people with disabilities.

The lessons learnt and historical knowledge accumulated during modifying and building cars, and having involvement in motoring clubs creates a solid understanding of best practice in this difficult certification discipline. Active involvement in the motor racing scene can also be an important contributor to the knowledge and skill-base required to become a good LVV Certifier.

Without this background, experience, and knowledge, it is highly unlikely that the right safety-related decisions will be made when assessing a modified vehicle. There are potentially catastrophic consequences as a result of an LVV Certifier not being able to recognise the bare basics of whether the vehicle is fitted with it's original suspension uprights (and therefore whether or not the steering arms are in the correct position relative to the steering rack); whether the steering arms are the correct shape (and therefore whether or not they have been heated and bent); or whether the disc brakes are original or adapted (and therefore whether the spindles might have been incorrectly machined).

In short, if an LVV Certifier cannot identify that modifications have occurred in the first place, then there is little chance of ensuring that the modifications are carried out safely.

Another lesson that LVV certification history has taught us is that there is a clear correlation between consistently good-performing LVV Certifiers and people with a genuine passion for motor vehicle modification and construction. Without the passion, there isn't the total commitment to the modified and individually-constructed motor vehicle hobby that, over a life-time, creates the necessary experience, knowledge, and skills required to competently assess such complex motor vehicles.

Consequently, there is a very small pool of people with the right attributes for LVV certification, and a much greater degree of difficulty exists in identifying and training such people when the need arises. The criteria for application as an LVV Certifier has been developed and tuned over time, to minimise as much as possible, the likelihood of people without the necessary experience, knowledge, and skills becoming LVV Certifiers.

Wherever possible, any person wishing to become an LVV Certifier should have the experience, knowledge, and skills to ultimately be able to become authorised for the top-level LVV Certifier category 1D. With the 1A and 1B 'bread and butter' work spread amongst too many LVV Certifiers, there is insufficient work available to attract and keep 1D Certifiers. This balance is essential for reasons of both safety and geographical coverage, for both the vehicle modification industry and the enthusiast motor vehicle sector.

The criteria for application to become an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' differs to the criteria for other certification categories.

Sub-section 3.2 specifies the criteria which a person must meet in order to become appointed as an LVV Certifier, for each of the different categories of authorisation.

General background requirements

3.2(1)

In order to apply to become an LVV Certifier, an applicant, other than one applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', must first:

- (a) in general terms, have:
 - (i) a career background with direct and recent practical involvement in the light motor vehicle industry spanning for a continuous period of not less than ten years; and
 - (ii) had considerable and recent involvement in motor vehicle enthusiast clubs spanning for a continuous period of not less than ten years; and
 - (iii) developed a high level of knowledge, practical skills, and hands-on experience during recent years in relation to light motor vehicle modification and construction;

and

- (b) in addition to 3.2(1)(a), more specifically, meet the minimum criteria specified for each relevant category in 3.2.

NOTE: An applicant applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is not required to meet the general requirement specified in 3.2(1), however must meet the minimum criteria specified for LVV Certifier category 'LVCM - Commercial Modification' in 3.2(15).

Category LV1A Modified Production – Limited

3.2(2) A person applying to become appointed to certify under LVV Certifier category 'LV1A Modified Production - Limited' must, as a minimum, either:

- (a) hold a New Zealand National Certificate in Automotive Engineering, or equivalent, and have had two years' recent full-time practical experience in the modification of motor vehicles involving elements of design change that affect safety systems; or
- (b) have had four years' recent full-time practical experience in the modification of light motor vehicles, involving elements of design that affect safety systems.

Category LV1B Modified Production – Extended

3.2(3) A person applying to become appointed to certify under LVV Certifier category 'LV1B Modified Production - Extended' must, as a minimum, meet the same criteria specified for category 'LV1A Modified Production - Limited' in 3.2(2).

Category LV1C Modified Production – Structures

3.2(4) A person applying to become appointed to certify under LVV Certifier category 'LV1C Modified Production - Structures' must, as a minimum:

- (a) have an appropriate level of knowledge, expertise, and practical experience in the modification and adaptation of vehicle structures; and
- (b) either:
 - (i) have had two years' experience operating as a category 'LV1B Modified Production - Extended LVV Certifier; or
 - (ii) have consistently achieved an excellent standard of LVV certification performance since his appointment as an LVV Certifier, and has the endorsement of the LVVTA Training Officer, and LVVTA technical and administrative staff.

NOTE 1: The key indicators of an excellent standard of LVV certification performance, as referred to in 3.2(4), are that the LVV Certifier:

- has not had any disciplinary action taken against him by the Agency; and
- has not been the subject of the LVV Certifier Monitoring process as specified in 6.4, or the LVV Certifier Mentoring process as specified in 6.5: and
- has consistently achieved an NZTA Performance Review System score of not less than 2.8; and
- is within, and remains within, the 'green zone' of LVVTA's LVV Certifier Error Report Summary.

NOTE 2: The 'green zone' as referred to above is the part of the LVV Certifier Error Report Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall above a specified minimum acceptable level.

NOTE 3: The LVV Certifier Error Report Summary referred to above is detailed in sub-section 6.7(3).

Category LV1D Modified Production – Advanced & Scratch-built

3.2(5) A person applying to become appointed to certify under LVV Certifier category 'LV1D Modified Production – Advanced & Scratch-built' must, as a minimum:

- (a) have been the principal involved in the physical construction of at least two vehicles over the past ten years, or have practical experience that is entirely equivalent; and
- (b) either:
 - (i) have had two years' experience operating as a category 'LV1C Modified Production - Structures' LVV Certifier; or
 - (ii) have consistently achieved an excellent standard of LVV certification performance since his appointment as an LVV Certifier, and has the endorsement of the LVVTA Training Officer, and LVVTA technical and administrative staff.

NOTE 1: The key indicators of an excellent standard of LVV certification performance, as referred to in 3.2(5), are that the LVV Certifier:

- has not had any disciplinary action taken against him by the Agency; and
- has not been the subject of the LVV Certifier Monitoring process as specified in 6.4, or the LVV Certifier Mentoring process as specified in 6.5: and
- has consistently achieved an NZTA Performance Review System score of not less than 2.8; and
- is within, and remains within, the 'green zone' of LVVTA's LVV Certifier Error Report Summary.

NOTE 2: The 'green zone' as referred to above is the part of the LVV Certifier Error Report Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall above a specified minimum acceptable level.

NOTE 3: The LVV Certifier Error Report Summary referred to above is detailed in sub-section 6.7(3).

Category LVRH Modified Production – Right-hand Drive Conversions

3.2(6) A person applying to become appointed to certify under category 'LVRH Modified Production – Right-hand Drive Conversions' must, as a minimum, either:

- (a) hold certifier LVV Category 'LV1A Modified Production - Limited'; and
- (b) either:
 - (i) have had two years' experience operating as a category 'LV1A Modified Production - Limited' LVV Certifier; or
 - (ii) have had two years full-time practical experience in carrying out right-hand drive steering conversions.

Category LVEX – Exhaust Noise and Gas Emissions

- 3.2(7) A person applying to become appointed to certify under LVV Certifier category 'LVEX - Exhaust Noise and Gas Emissions' must hold LVV Certifier category 'LV1A Modified Production - Limited'.

Category LV2A Motorcycles - Modified Production

- 3.2(8) A person applying to become appointed to certify under LVV Certifier category 'LV2A Motorcycles - Modified Production' must, as a minimum:
- (a) hold a New Zealand National Certificate in Motorcycle Engineering, or equivalent, and have had two years' recent full-time practical experience in the modification of motorcycles involving elements of design change that affect safety systems; or
 - (b) have had four years' recent full-time practical experience in the modification of motorcycles, involving elements of design that affect safety systems.

Category LV2B Motorcycles – Advanced and Scratch-built

- 3.2(9) A person applying to become appointed to certify under LVV Certifier category 'LV2B Motorcycles – Scratch-built' must, as a minimum:
- (a) have had two years' experience operating as a category 'LV2A Motorcycles - Modified Production' LVV Certifier; and
 - (b) have been the principal involved in the physical construction of at least two motorcycles over the past ten years, or have practical experience that is entirely equivalent.

Category LV2C Trikes - Modified Production & Scratch-built

- 3.2(10) A person applying to become appointed to certify under LVV Certifier category 'LV2C Trikes - Modified Production & Scratch-built' must, as a minimum:

- (a) hold either certifier category 'LV1A Modified Production – Limited' or 'LV2A Motorcycles - Modified Production'; and
- (b) either:
 - (i) have had two years' experience operating as a category 'LV1A Modified Production - Limited' or 'LV2A Motorcycles - Modified Production' LVV Certifier; or
 - (ii) have been the principal involved in the physical construction of at least two trikes over the past ten years, or have practical experience that is entirely equivalent.

Category LV3A Disability Adaptation – Limited

- 3.2(11) A person applying to become appointed to certify under LVV Certifier category 'LV3A Disability Adaptation' must have had, as a minimum, four years full-time practical industry involvement in adaptation for the disabled, including responsibility for the design or installation of electro-mechanical systems for this purpose.

Category LV3B Disability Adaptation – Structures

- 3.2(12) A person applying to become appointed to certify under LVV Certifier category 'LV3B Disability Adaptation - Structural' must, as a minimum:
- (a) have had two years' experience operating as a category 'LV3A Disability Adaptation' LVV Certifier; and
 - (b) have completed relevant and appropriate formal motor body structure training; and
 - (c) have an appropriate level of knowledge, expertise, and practical experience in the modification and adaptation of vehicle structures.

Category LV4 - Electric Vehicles

- 3.2(13) A person applying to become appointed to certify under LVV Certifier category 'LV4 - Electric Vehicles' must, as a minimum:
- (a) have had two years' experience operating as a category 'LV1D Modified Production – Advanced & Scratch-built' LVV Certifier; and
 - (b) have an appropriate level of knowledge, expertise, and practical experience in the servicing or re-powering of vehicles with electric power.

Category LVAC - Authority Card

- 3.2(14) A person applying to become appointed to certify under LVV Certifier category 'LVAC - Authority Card' must be the approved representative of the organisation authorised by *Annex 3* of the *LVV Code* to issue authority cards for specific purposes.

Category LVCM – Commercial Modification

- 3.2(15) A company applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' must:

- (a) be directly and recently involved in the repetitive modification of light motor vehicles on a commercial basis; and
- (b) meet the criteria and conditions for appointment as an LVCM-appointed LVV Certifier specified by the Agency for the purpose of certifying Type-approved low volume vehicles.

Category LVPO - LVV Certification Plate Pre-ordering

- 3.2(16) A person applying to become appointed to certify under LVV Certifier category 'LVPO – LVV Certification Plate Pre-ordering' must meet the criteria specified for LVV certification plate pre-ordering in 4.3(1)(b) and 4.3(2).

NOTE: An applicant applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is not required to also hold Category LVPO – LVV Certification Plate Pre-ordering' as specified in 3.2(16) because Plate Pre-ordering is an integral function of the Type-approval certification process carried out by LVCM-appointed LVV Certifiers.

3.3**Conditions for appointment of an LVV Certifier*****Introduction***

Sub-section 3.3 provides information on how a person interested in becoming an LVV Certifier goes through the LVV Certifier application process, including the conditions for appointment as an LVV Certifier, and the assessment process that is designed to ensure that any person wishing to become appointed as an LVV Certifier does in fact have the necessary experience, knowledge, and skills.

The Agency carries out the appointment of qualifying persons to be LVV Certifiers, prior to which, the Agency consults with LVVTA as to the geographical need and suitability of a candidate to carry out the grade of certification for which they are applying to become appointed.

A person wishing to become appointed as an LVV Certifier is, in the first instance, prior to commencing the formal application process specified in 3.3(1) to 3.3(5), encouraged to participate in an informal meeting with either an Agency LVV Reviewer, or an appointed representative of the LVVTA. The purpose of such a meeting is to ensure that the applicant has an appropriate understanding of the low volume vehicle system, the type of background and knowledge that an applicant must possess, and the responsibilities of an LVV Certifier, before an applicant commits the necessary effort and costs in going through the formal application process.

The Agency, and LVVTA by consultation, will take into consideration 'geographical coverage' with any application. While LVV Certifier categories 1A and 1B are the 'entry-level' categories, this work is effectively the 'bread and butter' work relied upon by the top-level 1D Certifiers. The introduction of more entry-level LVV Certifiers than are necessary reduces the LVV certification work available to each LVV Certifier. Because the LVV certification system is so diverse and complex, a reduction in work in turn creates safety risks by lessening the opportunity for the LVV Certifiers to 'stay sharp' through carrying out LVV certification on a regular and repetitive basis.

An additional side-effect of 'over-population' is the potential loss of LVV Certifiers with approaching 20 years of experience, being replaced by incoming LVV Certifiers with no experience as an LVV Certifier. The system is then vulnerable because regions will have no top-level LVV Certifiers to provide the LVV certification service for higher level modifications and scratch-built vehicles, for both the vehicle modification industry and the enthusiast motor vehicle sector.

Because of the commercial nature of the LVV certification activities undertaken by LVV Certifiers appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', much of the background information detailed above does not apply to that LVV certification category.

Sub-section 3.3 sets out the conditions and processes associated with becoming appointed as an LVV Certifier.

Initial application

3.3(1)

In order to become appointed as an LVV Certifier, an applicant must:

- (a) in the case of a company applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', apply for an LVV Certifier application pack from the Agency (Vehicle Certifier Register, Private Bag 1117, Palmerston North 4440); or
- (b) in the case of a person applying to become appointed to certify under any category other than LVV Certifier category 'LVCM - Commercial Modification':
 - (i) apply for an LVV Certifier application pack from the Agency (Vehicle Certifier Register, Private Bag 1117, Palmerston North 4440); and
 - (ii) meet the requirements specified in 3.3(2) to 3.3(14).

NOTE: An applicant applying to become appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' is not required to meet the requirements specified in 3.3(2) to 3.3(14).

3.3(2)

The Agency and LVVTA will consider the geographical coverage provided by the existing LVV Certifier(s) in the applicant's area, and upon satisfaction that there is a need for an additional LVV Certifier in the region, and that there will be no risk to safety nor a reduction in service by the addition of an LVV Certifier, will allow the application process to commence.

Application process

- 3.3(3) In order to become appointed as an LVV Certifier, an applicant must first present to the Agency:
- (a) a filled-in Agency LVV Certifier application pack; and
 - (b) a detailed resume that satisfies the Agency and LVVTA that the applicant has the appropriate background, expertise, and skills, and holds any relevant qualifications necessary to become an LVV Certifier as specified in 3.2; and
 - (c) a list of referees and contact details for the listed referees; and
 - (d) any relevant fee prescribed by the Agency relative to LVV Certifier appointments.

Assessment process

- 3.3(4) A person who has satisfied the requirements specified in 3.3(3), must undergo an assessment and examination process at a time and place specified by the Agency and LVVTA, that will comprise, for each LVV Certifier category the applicant is being assessed for, and overseen by a selection panel comprising not less than one representative from the Agency and not less than one representative from LVVTA, the following components:
- (a) a series of 20 multi-choice written questions that relate to vehicle modification and construction; and
 - (b) an in-depth interview on detailed technical matters in relation to vehicle modification and construction; and
 - (c) an in-depth evaluation of the applicant's practical knowledge and skills during an inspection in a workshop environment, relating to a low volume vehicle with modifications applicable to the LVV Certifier category being applied for; and
 - (d) an in-depth vehicle modification and construction assessment examination.

NOTE: The content of the assessment examination process referred to in 3.3(4) is continuously developed, and is developed jointly by the Agency and LVVTA.

- 3.3(5) An applicant that satisfies the Agency and LVVTA during the assessment process specified in 3.3(4) that there are no shortfalls in experience, knowledge, or skills, will be approved for LVV Certifier induction training by LVVTA.
- 3.3(6) An applicant that is approved for LVV Certifier induction training by LVVTA will:

- (a) attend the 3-day LVV Certifier induction training at a time and place specified by LVVTA; and
- (b) meet the costs incurred for the LVV Certifier induction training, which will be based on a fair and reasonable hourly rate.

NOTE 1: The LVV Certifier induction training referred to in 3.3(6)(a) will usually follow on directly from the day of the assessment process.

NOTE 2: The fees associated with the provision of induction training referred to in 3.3(6) may, upon special circumstances and at the discretion of LVVTA, be reduced or waived.

Mentoring of LVV Certifier applicants

3.3(7) A person approved for appointment as an LVV Certifier will:

- (a) be required to undergo LVV Certifier Mentoring for either a specified or indefinite period of time, which will take place as specified in sub-section 6.5; and
- (b) meet the costs incurred for the LVV Certifier Mentoring, which will be based on a fair and reasonable hourly rate.

NOTE: The LVV Certifier mentoring course referred to in 3.3(7)(a) will comprise a minimum of five days, and may be longer at the discretion of LVVTA, based on the LVV Certifier's performance during the mentoring course.

Approval and appointment

3.3(8) A person who has successfully completed the LVV Certifier induction training and mentoring programmes will be provided with, by the Agency:

- (a) notification in writing of his appointment; and
- (b) a Certificate of Appointment; and
- (c) a Deed of Appointment as an LVV Certifier; and
- (d) the documentation specified in 2.2(3).

Time-frame for LVV Certifier appointment process

3.3(9) An applicant must allow several months for the application, assessment, approval, appointment, and training process to take place, due to the many steps involved in the process, and the number of Agency and LVVTA staff-members that are required to be involved in the process.

NOTE: Many steps, all of which require multiple people, planning, and time, are involved in the application and appointment process. It can take up to 3 months to work through the many steps involved. It is up to the applicant to ensure that he starts the process early enough to allow sufficient time for the process.

Initial and ongoing costs and obligations

- 3.3(10) As part of the initial and ongoing obligations and requirements associated with being appointed as an LVV Certifier, an LVV Certifier must also:
- (a) undergo ongoing LVVTA training held at various intervals throughout each year as specified in 5.6; and
 - (b) undergo, and pay the relevant fees to, the Agency for the application of a periodic auditing regime called the Performance Review System (PRS) as specified in 5.7; and
 - (c) review, become conversant with, and understand the content of the 8-volume LVV Certification Manual, along with periodic updates and amendments distributed by LVVTA at various intervals throughout each year; and
 - (d) hold a comprehensive professional indemnity insurance package for the LVV certification activities, as specified in 5.5.

NOTE: It is important to realise that 'professional indemnity' insurance referred to in 3.3(10)(d) is a totally different policy to the easily-obtained 'public liability' insurance held by most businesses. Professional indemnity insurance is very expensive, and anyone considering becoming an LVV Certifier should establish this cost (together with the other costs associated with becoming an LVV Certifier) before applying to become an LVV Certifier.

Independence and conflict of interest

- 3.3(11) An LVV Certifier, must:
- (a) maintain total and complete independence in all of his LVV certification decisions; and
 - (b) in no way be in a position where potential exists for the LVV Certifier to be influenced in relation to his LVV certification activities, by any person, company, or organisation by whom he is employed, or in the care, custody, or control of.
- 3.3(12) Except as provided for in 4.4, an LVV Certifier may not certify any modification or construction feature on a low volume vehicle that is carried out, or in any way influenced, by any person, company, or organisation, under whose employment or any other care, custody, or control, the LVV Certifier is in.

NOTE 1: 3.3(10) and 3.3(11) is intended to clarify the intention of the relevant section of the Land Transport Compliance Rule 35001, which specifies that a certifier may not certify a vehicle in which he or she has a professional or financial interest.

NOTE 2: The requirements specified in 3.3(10) and 3.3(11) do not apply to a mentoring situation as specified in 6.5.

Additional appointment requirements for other categories

- 3.3(13) A person applying to become appointed to certify under LVV Certifier category 'AC - Authority Cards' must, in addition to the requirements specified in 3.3(3) to 3.3(9), provide written confirmation from the president or chief executive of the association responsible for the administration of the authority card, of that organisation's endorsement of the application.

NOTE: Because an LVV Certifier appointed for LVV Certifier category AC is effectively just performing an administrative function, not all of the processes, requirements, and costs specified in 3.3(3) to 3.3(9) will apply.

Geographical provision of service

- 3.3(14) An LVV Certifier may not relocate to a geographical region outside that for which he has been appointed, and continue to operate as an LVV Certifier, without prior written approval from the Agency.

NOTE: The requirement in 3.3(14) is in place so as to avoid a situation where an LVV Certifier with significant experience and the ability to provide all levels of certification services to the surrounding geographical area is lost as a result of the introduction of a new LVV Certifier who has no experience and can provide only a limited range of services. This situation potentially introduces considerable safety risk, as well as a reduction of LVV certification services available to the vehicle modification industry and the motoring public.

3.4 Additional LVV Certifier categories

Introduction

Once appointed, an LVV Certifier may, in time, wish to increase his LVV Certifier categories. The LVV certification process allows for this, provided that there is a geographical need for an LVV Certifier (or additional LVV Certifier as the case may be) with the additional category, and provided that the LVV Certifier can clearly demonstrate the necessary level of competence in the particular area.

Sub-section 3.4 provides the details of how an LVV Certifier goes about obtaining additional LVV Certifier categories.

Application process

- 3.4(1) An LVV Certifier, other than one who is appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', who wishes to apply for an additional LVV Certifier category must in the first instance apply to the Agency (from the NZTA Vehicle Certifier Register, Private Bag 1117, Palmerston North 4440).

NOTE: An LVV Certifier who is appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' may not apply for any additional LVV Certifier categories.

3.4(2) The Agency, in consultation with LVVTA, will consider the geographical coverage provided by the existing LVV Certifier(s) in the applicant's area, and upon satisfaction that there is a need for an additional LVV Certifier with the category being applied for in the region:

- (a) the Agency will allow the assessment process to commence; and
- (b) any relevant fee prescribed by the Agency relative to an LVV Certifier additional category authorisation will be made.

Assessment process

3.4(3) An LVV Certifier who has satisfied the requirements specified in 3.4(2), must undergo an assessment process at a time and place specified by the Agency and LVVTA, that will include:

- (a) an in-depth interview on detailed technical matters applicable to the LVV Certifier category being applied for, by a selection panel comprising not less than one representative from the Agency and not less than one representative from LVVTA; and
- (b) an in-depth evaluation of the applicant's practical knowledge and skills during an inspection in a workshop environment, relating to a low volume vehicle of a type applicable to the LVV Certifier category being applied for, by a selection panel comprising not less than one representative from the Agency and not less than one representative from LVVTA.

Approval and appointment

3.4(4) An LVV Certifier that satisfies the Agency and LVVTA during the assessment process specified in 3.4(3) that there are no shortfalls in experience, knowledge, or skills applicable to the LVV Certifier category being applied for, will be provided with, by the Agency:

- (a) notification in writing of his additional LVV Certifier category authorisation; and
- (b) a new Certificate of Appointment which includes the additional LVV Certifier category.

Section 4 LVV certification procedures

4.1 Basic inspection principles

Introduction

This sub-section sets out the basic principles associated with carrying out an LVV certification inspection, which must be followed and applied during every LVV certification inspection undertaken by an LVV Certifier.

Compliance with relevant technical requirements

- 4.1(1) A low volume vehicle must comply with all relevant technical requirements, as appropriate, specified in:
- (a) the Low Volume Vehicle Standards; and
 - (b) the New Zealand Car Construction Manual; and
 - (c) the relevant Vehicle Inspection Requirements Manual (VIRM).

NOTE: The latest version of a low volume vehicle standard must always be applied, unless the modification or construction feature predates the scope and application section of the standard.

Fit for purpose, and safe

- 4.1(2) A low volume vehicle must:
- (a) be designed and constructed using materials and components that are fit for their purpose; and
 - (b) be safe to be operated on the road.

NOTE: The requirements in 4.1(2) are copied from the LVV Code, and are over-riding requirements which make it clear that, regardless of what technical requirements are or are not in place, every vehicle certified to the LVV Code must be fit for its purpose, and must be safe.

Tradesman-like manner

- 4.1(3) Any mechanical, engineering, or fabrication work associated with a modification or construction feature in a low volume vehicle must:
- (a) be carried out in a thorough, tidy, and tradesman-like manner; and
 - (b) follow sound automotive engineering principles.

NOTE 1: 4.1(3)(a) specifies that it is an expectation of the LVV certification system that modification work is not only compliant and safe, but is carried out to a reasonable standard, both structurally and visually. Engineering work that - whilst compliant and safe - has been executed in a manner that makes the job rough or crude in appearance, can bring the LVV certification system into disrepute through observers' perception (rightly or wrongly) of any such work. This in turn can lead to complaint investigations being raised, which can consume time and impose costs unnecessarily.

NOTE 2: 'Automotive engineering principles' referred to in 4.1(3)(b) is intended to mean those top-end quality engineering principles employed throughout the light passenger vehicle manufacturing industry, rather than those found in industrial equipment such as fork-lifts.

Vehicle Identification Numbers (VIN)

- 4.1(4) A vehicle manufacturer-assigned identifier, or the vehicle's NZTA-recognised vehicle identification number, must be permanently attached onto, or stamped into, the vehicle structure, and must be verified as such by an LVV Certifier at the time of the LVV certification inspection.

NOTE: Recording the chassis number or VIN from any other document or source is not acceptable as an alternative to the LVV Certifier sighting the correctly-affixed chassis number or VIN to the vehicle.

- 4.1(5) In the case of an LVV Certifier inspecting a vehicle manufacturer-assigned identifier, or a VIN, to a low volume vehicle, and he has reason to believe that the identifier has been tampered with, he must refer the vehicle to an NZTA- authorised Transport Service Delivery Agent for validation of the identifier or VIN.

4.2 LVV certification plate requirements

Introduction

It is important that when a modified or individually-constructed vehicle has been certified to the LVV Code, any interested party such as a Warrant of Fitness issuer, a member of the NZ Police, or even someone interested in purchasing the vehicle, can readily find the LVV certification plate, and be able to read the information recorded on the plate. For this reason, requirements are in place to ensure that the plate can be readily found and read, and the likelihood of the plate becoming removed or lost is minimised.

This sub-section also sets how who else can affix the LVV certification plate on behalf of the LVV Certifier.

LVV certification plate affixing

- 4.2(1) An LVV certification plate fitted to a low volume vehicle must be positioned on the vehicle so that it is:
- (a) both accessible and easily read; and
 - (b) fixed by both rivets and adhesive.
- 4.2(2) An LVV certification plate fitted to a low volume vehicle must be positioned on a non-removable structural part of the vehicle where it is clearly visible, that is either:
- (a) within the engine compartment; or
 - (b) where there is insufficient available space within the engine compartment to enable the LVV certification plate to be fitted and remain clearly visible, in one of the following locations:
 - (i) within the passenger compartment on the vehicle's A-pillar or B-pillar; or

- (ii) in the case of a sedan; on the rear bulkhead or other prominent position within the boot area; or
- (iii) in the case of a van with an engine cover in the passenger compartment; on a non-removable panel steel part of the engine cover or seat frame; or
- (iv) in the case of a vehicle with a raised floor, on the vertical area of the step behind a door; or
- (v) in the case of a hatchback or station wagon; in the spare wheel-well which is accessible without the use of tools.

NOTE: The LVV certification plate may be bent over or around a curved section, provided that the details engraved on the plate remain clearly visible to anyone inspecting the plate.

Return of un-affixed LVV certification plates

- 4.2(3) Upon receipt of the LVV certification plate, an LVV Certifier must make all reasonable efforts to notify the vehicle owner that the LVV certification plate has been manufactured, and is ready for affixing.

NOTE: 'All reasonable efforts' within the context of 4.2(3) is deemed to be at least one telephone communication (direct contact or message left), followed by at least one written communication (email or post).

- 4.2(4) An LVV certification plate that cannot be affixed to the vehicle for which it was manufactured within two months of its date of issue, must be returned to the LVVTA at the end of that two-month period, together with notification of why the certification process could not be completed.

NOTE: Upon receipt of an unaffixed LVV certification plate, LVVTA will notify the Agency Transport Registry Centre, who may elect to ban-flag the vehicle in order to prevent it from being issued with further warrants of fitness, until such time as a new LVV certification process has been recommenced and completed.

Delegation of LVV certification plate affixing

- 4.2(5) An LVV Certifier may delegate his responsibility for the affixing of an LVV certification plate to another nominated person, provided that:

- (a) the nominated person who is delegated to affix the plate:
 - (i) either holds a position of responsibility within the motor vehicle industry, or is personally known to, and trusted by, the LVV Certifier; and

- (ii) has the necessary motor vehicle modification expertise to identify if the vehicle differs from the description provided on the LVV certification plate; and
- (iii) has the necessary ability to affix the plate in the manner and location specified in 4.1(1) and 4.1(2), without risk of damage to any other part of the vehicle to which it is being affixed;

and

- (b) the LVV Certifier who certified the vehicle provides to the nominated person the original *F001 Statement of Compliance Form* validated by the LVVTA, and a copy of the *F005 LVV Plate Attachment Delegation Form* for the nominated person to confirm the affixing of the plate; and
- (c) the Low Volume Vehicle Certifier who certified the vehicle ensures that the completed *F005 LVV Plate Attachment Delegation Form* has:
 - (i) been correctly filled out and signed by the nominated person and returned to the originating LVV Certifier; and
 - (ii) been safely stored, together with the applicable *F001 Statement of Compliance Form* validated by the LVVTA, within his low volume vehicle certification filing system such that the documents can be produced if such a need should arise.

NOTE: A person who holds a position of responsibility as specified within 4.2(5)(a)(i) would generally be considered to be an Agency-appointed Authorised Vehicle Inspector, or another LVV Certifier.

- 4.2(6) An LVV Certifier may not delegate his responsibility for the affixing of an LVV certification plate to the owner of the vehicle being LVV certified, even if the vehicle owner meets the criteria specified in 4.2(5).

Removal of LVV certification plates

- 4.2(7) An LVV certification plate must be removed from a low volume vehicle if the vehicle is either written-off or returned to as-manufactured condition, and returned to LVVTA, accompanied by an explanation as to why the LVV certification plate has been returned.

- 4.2(8) Where an LVV certification plate is required to be removed from a low volume vehicle and returned to LVVTA, such removal may only be carried out by either:

- (a) an authorised LVV Certifier; or
- (b) a member of the LVVTA technical staff; or

- (c) an LVV-specialist Transport Officer of the Agency.

NOTE: An authorised LVV Certifier as specified within 4.2(8)(a) can be an LVV Certifier that is authorised for any LVV Certifier category.

4.2(9) In the case of a low volume vehicle being returned to standard as-manufactured condition, and the associated removal of the LVV certification plate:

- (a) the LVV certification plate must be returned to LVVTA for destruction; and
- (b) LVVTA must notify the Agency of the change in vehicle details.

4.3 LVV certification plate pre-ordering

Introduction

'LVV certification plate pre-ordering' is a process that enables a more streamlined service to be provided for companies who are commercially engaged in the vehicle modification industry, and who, due to the needs of their clients, require the LVV certification plate to be fitted as quickly as possible after completion of the LVV certification inspection.

The Plate pre-ordering process allows an LVV Certifier (who meets a specified criteria) to provide those commercial customers (who meet a specified criteria) with the fitted LVV certification plate immediately after completion of the final inspection, rather than imposing the customary delay of 3-5 working days for the full cycle of sending the request to LVVTA, having the plate manufactured, and sent to the LVV Certifier, who in turn fits the plate. This process also reduces costs to the industry, as the LVV Certifier does not have to make a special trip to the company just to fit the LVV certification plate.

LVV certification plate pre-order criteria (for other than LVCM LVV Certifiers)

4.3(1) An approved LVV Certifier, other than an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', may pre-order a low volume vehicle certification plate from LVVTA prior to the final inspection of a vehicle that has been modified commercially by a company specified in Appendix A, provided that:

- (a) the company modifying the vehicle:
- (i) is commercially engaged in such modification work on a regular basis; and
 - (ii) performs a significant volume of similar modifications to the work being carried out; and
 - (iii) carries out the same modification on a regular and repetitive basis; and

- (iv) has and maintains documented operating procedures for the modifications, and a checking system in place for ensuring that the procedures are being followed; and
- (v) has, and continues to maintain after the approval is granted, the trust and confidence of the Agency and LVVTA, established by agreement of the LVV Policy Working Group, both for standards of workmanship and quality control; and
- (vi) is listed in *Appendix A – 'LVVTA-recognised companies'*;

and

(b) the LVV Certifier:

- (i) is authorised by the Agency for LVV Certifier category 'PO – LVV Certification Plate Pre-ordering'; and
- (ii) has, and continues to maintain after the approval is granted, the trust and confidence of the Agency and LVVTA, established by agreement of the LVV Policy Working Group, based on a good working relationship over several years, and
- (iii) has carried out a preliminary inspection, and is satisfied that the engineering work has been completed satisfactorily; and
- (iv) has only to carry out a final inspection when the vehicle is completed and ready for delivery; and
- (v) is satisfied that the low volume vehicle certification process will be completed within one month from the date of the preliminary inspection; and
- (vi) has applied, after the preliminary inspection specified in *4.3(1)(b)(iii)*, for the pre-order of the LVV certification plate through the use of the *LVVTA F006 Certification Plate Pre-order Form*.

NOTE 1: The requirement that LVVTA and the Agency must continue to have trust and confidence in the modifier as specified in *4.3(1)(a)(v)*, and the LVV Certifier as specified in *4.3(1)(b)(ii)*, means that at any time after the issue of plate pre-ordering approval, such approval can be immediately withdrawn as a result of any circumstances that may cause LVVTA and the Agency to lose trust and confidence in either the modifier or the LVV Certifier.

NOTE 2: The composition of the LVV Policy Working Group referred to in *4.3(1)(a)(iv)* and *4.3(1)(b)(ii)* is detailed in sub-section 4.11.

- 4.3(2) In order to have gained the trust and confidence of the LVV Policy Working Group as required by 4.3(1)(b)(ii), an LVV Certifier must have consistently achieved an excellent standard of LVV certification performance, the key indicators of which are that the LVV Certifier:
- (a) has not had any disciplinary action taken against him by the Agency; and
 - (b) has not been the subject of the LVV Certifier Monitoring process as specified in 6.4, or the LVV Certifier Mentoring process as specified in 6.5: and
 - (c) has consistently achieved an NZTA Performance Review System score of not less than 2.8; and
 - (d) is within, and remains within, the 'green zone' of LVVTA's LVV Certifier Error Report Summary.

NOTE 1: The 'green zone' as referred to in 4.3(2)(d), is the part of the LVV Certifier Error Report Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall above a specified minimum acceptable level.

NOTE 2: The composition of the LVV Policy Working Group referred to above is detailed in sub-section 4.11.

NOTE 3: The LVV Certifier Error Report Summary referred to in 4.3(2)(d) is detailed in sub-section 6.7(3).

LVV certification plate pre-order criteria (for LVCM LVV Certifiers)

- 4.3(3) An LVV Certifier who is appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', may pre-order a low volume vehicle certification plate from LVVTA prior to the modification and final inspection of a Type-approved low volume vehicle, provided that:
- (a) the low volume vehicle certification process is completed within one month from the date of issue of the LVV certification plate; and
 - (b) the LVV certification process will be completed correctly, and that the vehicle will be safe and compliant in its entirety, prior to the affixing of the LVV certification plate; and
 - (c) all required forms and associated information applicable to the vehicle in question are provided to LVVTA within five working days of affixing the LVV certification plate.

NOTE: The ability to pre-order LVV certification plates with minimal conditions being imposed is an integral part of the process upon which the Type-approval process is based for the commercial modification sector. This is intended to enable companies appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' to streamline their modification and LVV certification processes as much as possible without compromising the safety or compliance of the vehicles in question.

4.4

Self-certification

Introduction

Under normal circumstances, an LVV Certifier cannot certify any vehicle in which he has a professional or financial interest. This requirement is in the Land Transport Compliance Rule 35001, and is intended to highlight the need for any specialist certifier to maintain a high degree of independence during every certification inspection that he is involved in.

'Professional interest' refers to a vehicle that an LVV Certifier has worked on himself. In other words, an LVV Certifier cannot certify a vehicle that he has built himself, or in which he has been heavily involved in the build or modification process. This includes a situation where someone else has carried out the modification or construction work, but that person is under the care, custody, or control of the LVV Certifier. Similarly, 'financial interest' refers to a vehicle that the LVV Certifier, or a family member of the LVV Certifier, owns. It would be unethical for any specialist certifier to certify his own vehicle, as there is a clear conflict of interest in this situation.

An inherent problem within the LVV certification system is that, due to the complexity and uniqueness of the vehicle modification and construction arena, there are a very limited number of people with the necessary skills to correctly carry out the modifications or build, and an equally limited number of people with the necessary skills to accurately assess the safety of the modifications or build. Therefore, the ideal people for the modification or build, and the LVV certification inspection process, are sometimes one and the same. Often, the only person in a given area who has the skills to do a certain job is the same person who is authorised to do the certification - this is usually why the person became the region's LVV Certifier in the first place.

This situation presents a conflict of interest because of the professional and financial interest requirement in the Land Transport Compliance Rule 35001, however it also causes problems for the industry and the hobby, because the LVV Certifier is often the only, or the best-suited, person to carry out the modifications or remedial work.

Sub-section 4.4 provides variations, under certain circumstances, to resolve this situation of conflict. The intention of these variations is to accept that LVV certification is very complex and unique, and the risks associated with self-certification within a controlled environment is outweighed by the benefits of improved service to the vehicle owners concerned, and increased safety to the vehicles involved.

Self-certification of minor remedial work

4.4(1)

An LVV Certifier may carry out remedial work to rectifications required as a result of a low volume vehicle certification inspection that he has undertaken, provided that:

- (a) the work undertaken by the LVV Certifier is limited to remedial work of existing modifications as distinct from new modifications; and
- (b) all of the remedial work is completed in not more than eight hours; and

- (c) a declaration of the remedial work that specifies the type of work and number of hours spent accompanies the LVV certification form-set, and is in the form of either:
 - (i) a written report of the rectification work; or
 - (ii) a copy of the invoice provided to the owner of the vehicle.

Disability adaptive control system self-certification

4.4(2) An LVV Certifier who is appointed to certify under LVV Certifier category '3A Disability Adaption' or '3B Disability Adaption – Structural' may certify a low volume vehicle in which he has a professional interest, without the restrictions specified in 4.4(1), provided that:

- (a) the LVV Certifier is a specialist who is professionally engaged in modifying motor vehicles to suit the specialised and individual needs of people with disabilities, and has extensive practical experience in this field; and
- (b) the LVV Certifier has gained the trust and confidence of the LVV Technical Working Group by having consistently achieved an excellent standard of LVV certification performance, the key indicators of which are that the LVV Certifier:
 - (i) has not had any disciplinary action taken against him by the Agency; and
 - (ii) has not been the subject of the LVV Certifier Monitoring process as specified in 6.4, or the LVV Certifier Mentoring process as specified in 6.5: and
 - (iii) has consistently achieved an NZTA Performance Review System score of not less than 2.8; and
 - (iv) is within, and remains within, the 'green zone' of LVVTA's LVV Certifier Error Report Summary;

and

- (c) the LVV Certifier has been issued with individual approval in writing to carry out disability adaptive control system self-certification by the Agency; and
- (d) a declaration of the professional interest associated with each applicable low volume vehicle certification is made in writing and accompanies each LVV certification form-set.

NOTE 1: The 'green zone' as referred to in 4.4(2)(b)(iv), is the part of the LVV Certifier Error Report Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall above a specified minimum acceptable level.

NOTE 2: The composition of the LVV Technical Working Group referred to above is detailed in sub-section 4.11.

NOTE 3: The LVV Certifier Error Report Summary referred to in 4.4(2)(b)(iv) is detailed in sub-section 6.7.

NOTE 4: An application for self-certification should be forwarded by email to LVVTA in the first instance. LVVTA will, where appropriate, endorse the application, and forward it to the appropriate person within the Agency.

Extensively-modified and scratch-built self-certification

4.4(3) An LVV Certifier who is appointed to certify under LVV Certifier category '1D' Modified Production – Advanced & Scratch-built' may certify a low volume vehicle in which he has a professional interest, without the restrictions specified in 4.4(1), provided that:

- (a) the LVV Certifier is a specialist who is professionally engaged in extensive modification and construction of motor vehicles, and has extensive practical experience in this field; and
- (b) the LVV Certifier has gained the trust and confidence of the LVV Technical Working Group by having consistently achieved an excellent standard of LVV certification performance, the key indicators of which are that the LVV Certifier:
 - (i) has not had any disciplinary action taken against him by the Agency; and
 - (ii) has not been the subject of the LVV Certifier Monitoring process as specified in 6.4, or the LVV Certifier Mentoring process as specified in 6.5: and
 - (iii) has consistently achieved an NZTA Performance Review System score of not less than 2.8; and
 - (iv) is within, and remains within, the 'green zone' of LVVTA's LVV Certifier Error Report Summary;

and

- (c) the LVV Certifier has been issued with individual approval in writing to carry out extensive modification or scratch-built self-certification by the Agency; and
- (d) a declaration of the professional interest associated with each applicable low volume vehicle certification is made in writing and accompanies each LVV certification form-set.

NOTE 1: The 'green zone' as referred to in 4.4(3)(b)(iv), is the part of the LVV Certifier Error Report Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall above a specified minimum acceptable level.

NOTE 2: The composition of the LVV Technical Working Group referred to above is detailed in sub-section 4.11.

NOTE 3: The LVV Certifier Error Report Summary referred to in 4.4(3)(b)(iv) is detailed in sub-section 6.7(3).

NOTE 4: An application for self-certification should be forwarded by email to LVVTA in the first instance. LVVTA will, where appropriate, endorse the application, and forward it to the appropriate person within the Agency.

Self-certification of Type-approved low volume vehicles

4.4(4)

A company which is appointed as an LVV Certifier to certify Type-approved vehicles under LVV Certifier category 'LVCM – Commercial Modification' may certify a low volume vehicle in which that company has a professional interest, without restrictions, provided that:

- (a) the limitations and conditions specified in the Certifier's *Notice of Appointment* are consistently met; and
- (b) the auditing requirements and outcomes specified by the Agency are consistently met.

4.5

Road-testing requirements

Introduction

Road-testing is an essential part of any LVV certification process, and the specific test requirements are covered within the relevant LVV Standards and LVV forms and form-sets. Sub-section 4.5 however, clarifies that there are a small number of circumstances where the LVV Certifier is not required to carry out a road test, and provides clearly-defined criteria for when this applies.

Because LVV certification activities undertaken by LVV Certifiers appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' will not involve road-testing, sub-section 4.5 does not apply to that LVV certification category.

Low volume vehicles not required to be road-tested

4.5(1)

An LVV Certifier is not required to carry out a road test on a vehicle which undergoes low volume vehicle certification, that is:

- (a) brand new; and
- (b) one of a series production run; and
- (c) subject to a pre-delivery check by the vehicle manufacturer's appointed representative prior to the vehicle's entry certification process being carried out; and

- (d) not modified in any way that may influence either:
 - (i) the driver's vision of the road; or
 - (ii) the driver's control of the vehicle; or
 - (iii) the vehicle's safe driving performance.

4.5(2)

An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' is not required to carry out a road test on any vehicle which undergoes low volume vehicle certification.

NOTE: A road-test is not required in the case of a Type-approved vehicle undergoing certification by an LVCM-appointed LVV Certifier, because such vehicles are identical in every respect to the 'originating vehicle' certified by an independent LVV Certifier.

Road-test requirements for all other low volume vehicles**4.5(3)**

On every vehicle that undergoes low volume vehicle certification, other than one specified in 4.5(1) or 4.5(2), an LVV Certifier must carry out a road test that:

- (a) is sufficient to ensure the vehicle is functioning normally and safely; and
- (b) meets any specific road-testing requirements of any relevant low volume vehicle certification standards, forms, or form-sets.

NOTE: 4.5(3) includes those vehicles that have had a modification that has nothing to do with the driveability of the vehicles (eg. seatbelt anchorages, raised roof conversion), but which are not new or series production-run vehicles (and therefore not covered by 4.5(1)).

Test-driving competence**4.5(4)**

In order to carry out road-testing thoroughly and competently, an LVV Certifier must ensure that he possesses the necessary level of skills and competence to accurately assess and comment on the handling characteristics of each vehicle he drives or rides.

NOTE: This is an area where an LVV Certifier needs to apply continuous professional development in regard to driving skills. Many aspects of a motor vehicle's handling characteristics can only be assessed through driving, and a high level of driving skill is required to accurately assess the way in which a vehicle behaves and responds over varying road conditions and surfaces, without putting the vehicle at risk. All LVV Certifiers who do not have motor racing experience should undergo advanced driver training programmes wherever possible. An LVV Certifier should ensure that he has a high level of driving competence relative to the type of vehicles which he is certifying.

Safe and responsible test-driving**4.5(5)**

During the process of any road-testing of a low volume vehicle, other than one specified in 4.5(3), an LVV Certifier must:

- (a) observe all speed limits and other road rules; and
- (b) drive in a manner that is responsible and considerate toward other road users; and
- (c) drive in any manner that does not put himself, other road users, pedestrians, or the low volume vehicle under assessment, at risk in any way; and
- (d) carry out the test on a road that:
 - (i) is quiet and has a minimal amount of traffic; and
 - (ii) has a speed limit of 100 kph.

4.5(6)

During the process of brake performance testing a low volume vehicle, an LVV Certifier must ensure that, throughout the applicable process, as specified in LVV Standard 35-00 (Braking Systems), the road ahead and behind, in both lanes, is empty, and that there are no nearby pedestrians.

4.6**Variation from technical requirements****Introduction**

Because of the uniqueness and diversity of motor vehicle modification and construction, the combination of modifications and vehicle components, systems, and types are literally infinite. Remember, the very nature of LVVTA is to allow somebody to achieve something unique, creative, innovative and ingenious, provided that vehicle safety is not compromised. Therefore, no matter how well-considered and comprehensive the technical requirements within the LVV certification system are, there will always be unusual situations where the rules, or the vehicle, don't fit or apply.

Sub-section 4.6 provides the correct process in the case where an LVV Certifier encounters a situation, which, to apply the specified technical requirements would be inappropriate or provide the wrong outcome.

Sub-section 4.6 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Application of requirements**4.6(1)**

An LVV Certifier is required to apply all applicable technical requirements specified in the LVV standards and other technical requirements provided by LVVTA, on each vehicle which undergoes LVV certification.

Variation from requirements

- 4.6(2) Except where specified in 4.6(4), an LVV Certifier who considers it necessary to vary from a technical requirement specified in an LVV standard or other technical requirement provided by LVVTA, may make application to LVVTA for approval to vary from the requirement.
- 4.6(3) Except where specified in 4.6(4), LVVTA may approve that an LVV Certifier varies from a technical requirement specified in an LVV standard or other technical requirement, provided that LVVTA is satisfied that:
- (a) either:
 - (i) the technical requirement is not necessary, reasonable, or appropriate for the modification or vehicle in question; or
 - (ii) an unusual or particular situation exists which makes the technical requirement unnecessary, unreasonable, or inappropriate;
 - and
 - (b) any compromise to the safety of the vehicle, as a result of the variation to the technical requirement, has been minimised as much as practicable.
- 4.6(4) The requirements specified in 4.6(2) and 4.6(3) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.
- 4.6(5) In the event of an unusually complex or unique situation being presented to LVVTA by an LVV Certifier, the LVVTA technical staff will, where considered necessary, have the proposed design assessed to ensure it meets any technical specifications and is safe and fit for purpose by the LVVTA Technical Advisory Committee.

NOTE: In some situations where a matter referred to in 4.6(5) requires full discussion at an LVVTA Technical Advisory Committee meeting, it is unavoidable that a delay in receiving a response will be experienced. It is up to the vehicle owner and LVV Certifier to plan ahead so as to ensure that such delays do not compromise the work-flow of the project.

4.7 **Remedial work inspection**

Introduction

One of the key principles of the LVV certification process is that an LVV Certifier inspects the vehicle, has any required remedial work carried out, then re-inspects the vehicle, and then when the LVV Certifier is satisfied that the vehicle is safe and compliant in its entirety, he may then submit his forms and form-sets to LVVTA and order the LVV certification plate, and finally, fit the plate to the vehicle.

In practice, following this process rigidly can create unreasonable additional inconvenience and cost to the motoring public, through the cost of additional inspections, delays in finalising the process, and additional travel for the vehicle owner, particularly if the owner lives some distance from the LVV Certifier.

Sub-section 4.7 provides criteria by which an LVV Certifier can streamline the process for the owner by combining the re-check of the remedial work with the fitting of the LVV certification plate.

Inspection of remedial work

4.7(1)

Except where specified in 4.7(2), minor remedial work as a result of required rectifications from an LVV certification inspection may be inspected and approved by the LVV Certifier at the time of fitting the LVV certification plate, provided that:

- (a) any preliminary inspections, and the main inspection, have been completed prior to submitting the forms and form-sets to LVVTA and ordering the LVV certification plate; and
- (b) the areas requiring remedial work are of a minor nature, and either:
 - (i) relate only to the unmodified aspects of the vehicle; or
 - (ii) relate to the modified aspects of the vehicle but does not present any risk to safety;

and

- (c) any areas requiring remedial work are listed on the *LVV Rectification Form F004*, and a notation is made for the applicable areas to be re-inspected prior to the affixing of the LVV certification plate to the vehicle.

4.7(2)

An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' is not restricted to the limitations specified in 4.7(1).

4.8

Retrospective LVV certification

Introduction

Vehicles that were built or modified before modern vehicle safety standards were introduced into New Zealand do not need to be certified to the LVV Code, as the LVV certification system – like common law – is based on the basic premise that a vehicle must comply with those requirements that are in force at the time of the manufacture or modification date.

However, for varying reasons, some vehicles that were built a long time ago are subjected to the LVV Certification process. Common reasons are that cars were built or modified here in New Zealand 20 or more years ago and have been subsequently modified, or vehicles that were built more than 20 years ago overseas are imported into New Zealand and have to undergo LVV certification as part of their entry certification process.

To impose complex modern safety standards such as frontal impact and door retention system standards onto a home-built sports car that someone built in the United Kingdom in the 1970s and who is now immigrating to New Zealand in their retirement and bringing their beloved sports car with them, would present significant engineering challenges and would be an unreasonable imposition.

In such situations, LVVTA's 'retrospective' certification process takes into account the date of the vehicle's build or modifications, and applies safety-based requirements that are appropriate and reasonable. The 'retrospective' certification process ensures that maximum focus is applied to safety principles that could affect other road users such as suspension, steering, and braking, but less on standards that could affect the occupants during a crash, such as door retention systems and steering column impact systems.

The 'retrospective' certification process is applied by way of concessions provided within the various LVV standards and the New Zealand Car Construction Manual. The LVV standards enable a variation from the rigid application of the specified requirements, and give the LVV Certifier the scope to apply the relevant requirements within the LVV standards as a guide upon which to ensure that he is satisfied that the vehicle is – despite its build date - still safe.

LVV certification requirements

- 4.8(1) A low volume vehicle that was modified or constructed prior to the introduction date of the *Transport (Vehicle Standards) Regulations 1990* is not required to undergo LVV certification, provided that:
- (a) the vehicle has been continuously registered in New Zealand since 1 January 1992; and
 - (b) documented evidence can be provided to substantiate that the modifications or construction pre-dated the relevant introduction date; and
 - (c) no further modifications have been carried out since the relevant introduction date.

NOTE 1: The *Transport (Vehicle Standards) Regulations 1990* referred to in 4.8(1) (now all absorbed into the Land Transport 'Rules' programme) were introduced progressively, but the arbitrary general implementation date for LVV certification is 1 January 1992. This implementation date covers all scratch-built low volume vehicles, and all typical drive-train modifications including suspension, brakes, and engine conversions. Implementation dates of standards that were introduced after 1 January 1992 (such as frontal impact and seats) can be established by referring to the scope and application section of the relevant LVV standard.

NOTE 2: 'Documented evidence' referred to in 4.8(1)(b) can take the form of a legitimate 'modification declaration certificate', or other bonafide evidence such as receipts or insurance policy cover notes that specifically refer to the modification. The original legitimate 'modification declaration certificates' that were issued between 1991 and 1996 are held by LVVTA, and copies can be obtained from LVVTA.

Application of retrospective LVV certification

- 4.8(2) A low volume vehicle that was originally constructed before 1 January 1992, and for some reason undergoes the LVV certification process, may have the 'retrospective' LVV certification process applied.

NOTE: An LVV certifier may apply the 'retrospective' certification process if he has first-hand knowledge of the vehicle's history.

- 4.8(3) A low volume vehicle that was originally constructed before 1 January 1992, and has since undergone further modifications may:

- (a) have the 'retrospective' certification process applied to the aspects of the vehicle's construction that were carried out prior to 1 January 1992; and
- (b) have any applicable LVV standards relevant to the modifications carried out since 1 January 1992 applied.

NOTE: For example, a 1937 Chevrolet hot rod built in the 1980s, featuring a 283-cubic inch Chevrolet V8 engine and complete HT Holden independent front suspension assembly, this year fitted with a 350 cubic inch Chevrolet V8 engine replacing the 283, and HZ Holden vented disc brakes replacing the solid HT Holden disc brakes, would have the 'retrospective' certification requirements applied to the whole vehicle except for the 350 Chev engine and the HZ Holden discs. The fitment of the 350 Chev engine and HZ Holden discs would have the LVV standards for Engine and Drive-train Conversions, and Braking Systems, applied to cover those more recent items.

Modification date relative to LVV standard introduction

- 4.8(4) A low volume vehicle that has been constructed or extensively modified over a long period of time is not required to comply with the requirements of an LVV standard if:

- (a) the LVV Certifier has established that the part of the vehicle's design and construction relative to that LVV standard was completed prior to the implementation date specified in the scope and application section of the LVV standard; and
- (b) it is not considered reasonable or practicable by the LVV Certifier for the vehicle to be re-modified or re-engineered to enable the vehicle to be bought into compliance with the requirements of the standard.

NOTE: As an example of the situation referred to in 4.8(4), if a constructor has completed the engineering aspects of the body (framing and panel-work etc) on his vehicle by June 2009, and the vehicle has been deemed to be in compliance with the requirements in force at the time and signed off as such during an LVV Certifier's preliminary inspection, and then a Land Transport Rule and associated LVV standard for side impact protection is introduced after that inspection date, the owner of that vehicle would not be required to retrospectively re-engineer that part of the vehicle. Because of the typically long build-period of many individually-constructed vehicles, this philosophy applies regardless of the vehicle's completion date.

4.9 Dual-LVV Certifier certification

Introduction

There are occasions when more than one LVV Certifier is required to be involved in the assessment and LVV certification of a low volume vehicle. An example of this is where a disabled driver owns a vehicle which is modified with an adaptive hand control system, and is also modified in other ways, such as changed engine, brakes, or suspension.

In some circumstances, there will not be an LVV Certifier within the vehicle owner's geographical region who has the necessary categories to certify every aspect of the vehicle's modifications. Another example is an electrically-powered scratch-built motorcycle; - there will be few LVV Certifiers with both category 2B and 4A.

In order to minimise inconvenience and costs to the vehicle owner, an LVV Certifier with 1A (Modified Production – Limited) who can certify the changed engine, brakes, or suspension, can work with an LVV Certifier with 3A (Disability Adaption) who can certify the adaptive hand control system.

In this case, one LVV Certifier becomes the 'primary certifier' – usually the one who holds the highest level of LVV certifier authority – and he takes responsibility for the overall LVV certification process. The 'secondary' LVV Certifier carries out the inspection of the part of the vehicle he is taking responsibility for, fills out the applicable form-sets, and provides those form-sets (and any other supporting information) to the 'primary' LVV Certifier. The 'primary' LVV Certifier forwards all of the documentation associated with the complete certification of the vehicle to LVVTA, and takes responsibility for the affixing of the LVV certification plate.

Sub-section 4.9 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Responsibilities of each LVV Certifier

4.9(1)

Except where specified in 4.9(2), in the case of a low volume vehicle being certified by more than one LVV Certifier:

- (a) one LVV Certifier must take the role of the 'primary' LVV Certifier, and take responsibility for the correct certification of the vehicle; and
- (b) the full names of both the primary LVV Certifier and the secondary LVV Certifier must be provided; and
- (c) both the primary LVV Certifier and the secondary LVV Certifier must sign the F001 LVV Statement of Compliance Certificate; and
- (d) it must be made clear exactly which aspects of the certification each LVV Certifier is taking responsibility for.

4.9(2)

The requirement specified in 4.9(1) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

4.10 **LVVTA Technical Advisory Committee**

Introduction

The LVVTA Technical Advisory Committee is a sub-committee of LVVTA appointed by the LVVTA Council. The TAC provides advice to the LVVTA on technical matters related to the LVV certification system and makes determinations on applications under the LVV Code.

An LVV Certifier may access the LVVTA Technical Advisory Committee for technical support and assistance on any technical matter relating to vehicle modification and construction, via the LVVTA technical staff. The LVVTA Technical Advisory Committee meet with the LVVTA technical staff either on a monthly, or as-needed basis.

The majority of the Technical Advisory Committee's work relates to the enthusiast sector, and deals with highly complex modifications and scratch-built low volume vehicles.

Purpose of the Technical Advisory Committee

4.10(1) The LVVTA Technical Advisory Committee supports and enables innovation in vehicle modification approaches, while ensuring vehicle safety is maintained, and its purpose includes:

- (a) making determinations on applications for vehicle modifications and construction features that do not meet the methods and designs specified by the Low Volume Vehicle Code; and
- (b) providing expert advice to the LVVTA technical staff on technical matters related to vehicle modifications and the LVV system; and
- (c) assessing the various types of build and component approval applications that are submitted by vehicle modifiers and constructors.

Role of the Technical Advisory Committee

4.10(2) The role of the Technical Advisory Committee is focused on technical matters relating to vehicle modification and construction, and its primary roles are to:

- (a) assess and make determinations on applications for vehicle modifications and construction features that do not meet the methods and designs specified by the LVV Code; and
- (b) assess, provide guidance and make determinations on Design Approval applications and Concept Approval applications; and
- (c) assess, provide guidance and make determinations on Component Approval applications, Type Approval applications, and Component Endorsement applications; and
- (d) provide assessments and determinations on technical matters presented by LVV Certifiers and LVVTA technical staff.

- 4.10(3) In addition to 4.10(2), the Technical Advisory Committee will also, as required:
- (a) review and assist in the ongoing development of LVV standards and the New Zealand Car Construction Manual;
 - (b) provide expert assistance in preparation for, and during LVV Certifier training;
 - (c) provide expert assistance in the assessment of modified vehicles involved in complaints, investigations, or accidents; and
 - (d) provide any other expert technical functions needed by the LVVTA.

Appointment and composition of members

- 4.10(4) Members of the Technical Advisory Committee are nominated by the LVVTA Chief Executive Officer, with the prior agreement of the Agency, and are appointed by the LVVTA Council.

- 4.10(5) The composition of the Technical Advisory Committee ensures that membership knowledge and experience covers all of the commonly-required areas of expertise, and individual members are selected for possessing:

- (a) recognised technical skills and practical experience in vehicle design, modification, or construction; and
- (b) strong and diverse knowledge of vehicle modification and construction, and of the LVV certification system; and
- (c) sufficient credibility so as to influence peers in relation to the member's area of expertise; and
- (d) an understanding of customer demand for vehicle modification and construction; and
- (e) an understanding of the regulatory requirements for vehicle safety and the LVV certification system.

NOTE: One of LVVTA's objectives is to have as wide a range of experience, knowledge and skills as possible covered by the TAC at all times, including welding, materials, fabrication, formal and practical engineering, along with knowledge in a diverse range of vehicle types and construction methods. Some members are professional car builders, and all members have been involved in the vehicle modification and construction sector for a significant period of time.

- 4.10(6) Membership of the Technical Advisory Committee will be reviewed on a rolling basis, with between one and three member roles being reviewed each year. Rolling review of membership allows for continuity, as it retains a core membership level at any given time.

Meetings of the Technical Advisory Committee

- 4.10(7) The Technical Advisory Committee will meet monthly in order to make timely decisions on applications before it, however:
- (a) meetings may be cancelled if no applications are currently under consideration; and
 - (b) additional meetings may be arranged when the workload of applications necessitates it.
- 4.10(8) Meetings of the Technical Advisory Committee will be held in a venue that allows the committee to work efficiently and effectively, whilst maintaining its duties of good regulatory decision-making, confidentiality, impartiality and professionalism.
- 4.10(9) The Technical Advisory Committee will aim to reach consensus in its decision-making processes, however, if consensus cannot be reached, a two-thirds majority of voting members is needed for an application to be approved.
- 4.10(10) The Technical Advisory Committee Chairperson may, as appropriate, invite visitors to attend meetings or specific agenda items where particular input is required, however visitors will not have any rights of voting.

Documentation of meetings

- 4.10(11) At each meeting of the Technical Advisory Committee, the Chairperson will:
- (a) remind members of the need to consider any potential conflicts of interest relating to agenda items, and confidentiality requirements; and
 - (b) record the proceedings and all decisions on technical matters by the committee within the meeting minutes; and
 - (c) for all applications for vehicle modifications or construction features that do not meet the methods and designs specified by the Low Volume Vehicle Code ('Variations from Technical Requirements'), record the decision and associated information within a 'VTR Decision-making Document' which will be signed by the Chairperson; and
 - (d) provide a summary from each meeting of final decisions on any 'Variations from Technical Requirements' and make the decisions publically available; and
 - (e) provide to each person who makes an application for an approval, written notification of the committee's decision, including an explanation for any decision to decline, with reference to the relevant LVV standards or *New Zealand Car Construction Manual* chapter.

- (f) ensure that, where necessary for particular approval applications that require specialised knowledge not available within the committee membership, input is requested and received from appropriate external technical experts in order to assist the committee with their decision-making processes; and
- (g) refer decisions made by the committee to be incorporated into regular LVV Certifier training, or otherwise communicated to LVV Certifiers to ensure that they are kept up to date with committee decisions and emerging trends.

NOTE 1: The background and processes associated with 'Variations from Technical Requirements' are detailed within 4.6.

NOTE 2: Any details that are commercially sensitive within an application for a 'Variation from Technical Requirements' will be redacted prior to publication.

Applications to the Technical Advisory Committee

- 4.10(12) Applications to the LVVTA Technical Advisory Committee must be made in accordance with the processes specified in *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide*.

NOTE: *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide* is available, free of charge, from the LVVTA's website www.lvvtta.org.nz.

Fees for approval processes

- 4.10(13) Fees for the approval processes provided by the LVVTA Technical Advisory Committee are set out in *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide*.

NOTE: *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide* is available, free of charge, from the LVVTA's website www.lvvtta.org.nz.

New Zealand Transport Agency role

- 4.10(14) A representative of the New Zealand Transport Agency attends the meetings of the Technical Advisory Committee, and the role of the Agency representative is to provide advice on or clarify:
- (a) the regulatory boundaries that the Technical Advisory Committee operates within, and its compliance with its legal powers; and
 - (b) the various Land Transport Rules that vehicles must meet, to assist in addressing any matters before the Technical Advisory Committee; and
 - (c) the impact of any decisions or recommendations made by the Technical Advisory Committee on the broader land transport regulatory framework.

NOTE 1: The Transport Agency representative(s) is an observer and not a member of the TAC. As such, Agency advice and comments may be recorded in meeting minutes, but they do not have a decision-making or voting role on the TAC.

NOTE 2: The Transport Agency representative(s) is a permanent role, but the specific person(s) may be replaced or revoked at the discretion of the Agency. The Agency will consult with the LVVTA CEO before appointing or changing its TAC representative(s).

Right of appeal

4.10(15) An applicant who wishes to seek a reconsideration of a decision made by the Technical Advisory Committee has an opportunity to do so under the 'Technical Decision Review Committee' process, the details of which:

- (a) will be communicated to applicants along with their notification of the Technical Advisory Committee's decision; and
- (b) are documented on the LVVTA website www.lvvtta.org.nz.

NOTE: The 'Technical Decision Review Committee' process, for re-considering a decision of the Technical Advisory Committee, as referred to in 4.10(15) is detailed within 4.6.

4.11 LVVTA Commercial Technical Advisory Committee

Introduction

The Commercial Technical Advisory Committee is a sub-committee of the Technical Advisory Committee of LVVTA. The work of the Commercial Technical Advisory Committee relates specifically to the commercial modification sector, and makes determinations on approval applications under the LVV Code from the commercial modification sector. This Committee is intended to help facilitate the processing of applications, taking into account the commercial time-constraints that the industry is subjected to.

An LVV Certifier may access the Commercial Technical Advisory Committee for technical support and assistance on technical matters relating to vehicle modification and construction within the commercial modification sector, via the LVVTA technical staff.

The Commercial Technical Advisory Committee operates under the guidance of the LVVTA Technical Advisory Committee and its Chairperson, and meets on an as-and-when-needed basis.

Purpose of the Commercial Technical Advisory Committee

4.11(1) The Commercial Technical Advisory Committee supports and enables innovation in vehicle modification approaches while ensuring vehicle safety is maintained, and its purpose is to deal with all of the matters specified in 4.10(1), however, specifically for the commercial vehicle modification sector.

Role of the Commercial Technical Advisory Committee

- 4.11(2) The Commercial Technical Advisory Committee is focused on technical matters relating to vehicle modification and construction, and its primary role is to deal with all of the matters specified in 4.10(2) and 4.10(3), however, specifically for the commercial vehicle modification sector.

Appointment and composition of members

- 4.11(3) Appointments to the Commercial Technical Advisory Committee are made:
- (a) on a case-by-case basis each time a meeting of the Commercial Technical Advisory Committee is convened; and
 - (b) by the Chairperson of the LVVTA Technical Advisory Committee.

NOTE: Appointments to the Commercial Technical Advisory Committee are made on a case-by-case basis for each meeting of the Committee for two reasons; - firstly, because there is a high potential for a conflict of interest within the commercial vehicle modification sector (as opposed to the enthusiast sector) and special consideration must be made as to the suitability of each member; and secondly, because the skill-sets of the committee members must be appropriately matched to the type of modification under consideration.

- 4.11(4) The Commercial Technical Advisory Committee is comprised of members who are highly-skilled independent technical experts from the automotive engineering industry, which includes:
- (a) not less than three and not more than five persons who possess the attributes specified in 4.10(5), together with the relevant knowledge and experience appropriate to the type of modification for which any application or determination is made, and which shall include:
 - (i) not less than one member of the LVVTA Technical Advisory Committee; and
 - (ii) not less than one person who works within the commercial vehicle modification sector, who has a high level of specific technical expertise and experience relating to commercial vehicle modification;
- and
- (b) the Chairperson of the LVVTA Technical Advisory Committee who will chair the meeting and record the decisions, and who is a voting member of the committee; and
 - (c) one representative from the New Zealand Transport Agency, who is not a voting member of the committee.

Meetings of the Commercial Technical Advisory Committee

- 4.11(5) Meetings of the Commercial Technical Advisory Committee will:
- (a) be established and co-ordinated by the Chairperson of the LVVTA Technical Advisory Committee, or an appropriate member of LVVTA's technical staff that the Chairperson may nominate in his absence where necessary; and
 - (b) occur on an as-and-when-required basis; and
 - (c) be undertaken, wherever possible, via an electronic or teleconference medium in order to reduce the process timeframe.

NOTE 1: Meetings of the Commercial Technical Advisory Committee are not held on a regular basis because of the infrequent nature of applications from the commercial vehicle modification sector.

NOTE 2: It is recognised by LVVTA that time is critical in the commercial environment (more so than in the enthusiast environment) and so the way in which applications are considered and discussed by the committee (by an electronic or teleconference medium where possible) are undertaken in such a way as to reduce, as much as is possible, any delays in response time for the applicant.

- 4.11(6) The Commercial Technical Advisory Committee will aim to reach consensus in its decision-making processes, however, if consensus cannot be reached, a two-thirds majority of voting members is needed for an application to be approved.
- 4.11(7) An applicant, together with a technical representative of the applicant where necessary, may attend the part of a meeting of the Commercial Technical Advisory Committee that deals with the application in question, however neither the applicant nor the applicant's technical representative will have any rights of voting.
- 4.11(8) The Commercial Technical Advisory Committee Chairperson may, as appropriate, invite visitors, other than an applicant or the applicant's technical representative, to attend meetings or specific agenda items where particular input is required, however visitors will not have any rights of voting.

Documentation of meetings

- 4.11(9) Documentation associated with meetings of the Commercial Technical Advisory Committee will be made in accordance with that specified in 4.10(11).

Applications to the Commercial Technical Advisory Committee

- 4.11(10) Applications to the Commercial Technical Advisory Committee must be made in accordance with the processes specified in *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide*.

NOTE: *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide* is available, free of charge, from the LVVTA's website www.lvvtan.org.nz.

- 4.11(11) Any application for an approval process, application for a variation from requirements, or request for technical support made to the Commercial Technical Advisory Committee, will be referred by the Chairperson to the full LVVTA Technical Advisory Committee, either prior to holding a meeting of the Commercial Technical Advisory Committee, or as a consequence of a meeting of the LVVTA Commercial Technical Advisory Committee, if either:
- (a) the vehicle is a scratch-built low volume vehicle; or
 - (b) the level of modification may involve a sufficiently high level of risk as a result of either its complexity or the number of vehicles to which the modifications will apply that it is not appropriate to deal with the application via the Commercial Technical Advisory Committee; or
 - (c) it is considered that the matter may require the LVVTA Technical Advisory Committee to seek assistance from a Technical Support Team established for the purpose of assessing the application.

NOTE: The 'Technical Support Team' referred to in 4.11(11)(c) is detailed within *LVVTA Information Sheet # 02-2015 Technical Support Team for Unusually Complex Modifications*, which is available, free of charge, from the LVVTA's website www.lvvtan.org.nz.

Fees for approval processes

- 4.11(12) Fees for the approval processes provided by the Commercial Technical Advisory Committee are set out in *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide*.

NOTE: *LVVTA Information Sheet # 11-2012 LVVTA Approval Application Guide* is available, free of charge, from the LVVTA's website www.lvvtan.org.nz.

New Zealand Transport Agency role

- 4.11(13) The role of the New Zealand Transport Agency representative at the meetings of the Commercial Technical Advisory Committee is to:
- (a) oversee the consideration and determination process and ensure that the committee acts in a fair, reasonable, and transparent manner; and
 - (b) to provide advice or clarification on:
 - (i) the regulatory boundaries that the Commercial Technical Advisory Committee operates within, and its compliance with its legal powers; and
 - (ii) the various Land Transport Rules that vehicles must meet, to assist in addressing any matters before the Commercial Technical Advisory Committee; and

- (iii) the impact of any decisions or recommendations made by the Commercial Technical Advisory Committee on the broader land transport regulatory framework.

NOTE 1: The Transport Agency representative(s) is an observer and not a member of the Committee. As such, Agency advice and comments may be recorded in meeting minutes, but they do not have a decision-making or voting role on the Committee.

NOTE 2: The Transport Agency representative(s) is a permanent role, but the specific person(s) may be replaced or revoked at the discretion of the Agency. The Agency will consult with the Chairperson of the Commercial Technical Advisory Committee before appointing or changing its Committee representative(s).

Right of appeal

4.11(14) An applicant who wishes to seek a reconsideration of a decision made by the Commercial Technical Advisory Committee has an opportunity to do so under the 'Technical Decision Review Committee' process, the details of which:

- (a) will be communicated to applicants along with their notification of the Commercial Technical Advisory Committee's decision; and
- (b) are documented on the LVVTA website www.lvvtta.org.nz.

NOTE: The 'Technical Decision Review Committee' process, for re-considering a decision of the Commercial Technical Approval Committee, as referred to in 4.11(14) is detailed within 4.6.

4.12 LVV Working Groups

Introduction

The establishment of dedicated working groups for LVV matters took place in 2009. The intention was to create two separate working groups, but with membership cross-over between the two groups. One working group focuses on technical issues, and the other working group deals with policy issues. The key to the success of the working groups is that they are small groups, and those representatives appointed to the working groups from LVVTA and the Agency are conversant in LVV matters, and are committed to the continuous improvement of the LVV certification system.

LVV Policy Working Group

4.12(1) The ongoing development of this Operating Requirements Schedule, the LVV Code, and the LVV Standards, will be carried out by a joint working group, comprising representatives from LVVTA and the Agency, known as the LVV Policy Working Group.

4.12(2) The LVV Policy Working Group will meet monthly, and will comprise:

- (a) one or two representatives of the Agency, who have responsibility in NZTA's policy, technical, and operational areas; and

- (b) one or two representatives from LVVTA, who have responsibility in LVVTA's policy, technical, and operational areas.

LVV Technical Working Group

4.12(3) Communication between the Agency and LVVTA on technical matters relating to the LVV certification system will be carried out by a joint working group, comprising representatives from LVVTA and the Agency, known as the LVV Technical Working Group.

4.12(4) The LVV Technical Working Group will meet weekly, and will comprise:

- (a) one or two representatives of the Agency, who have responsibility in NZTA's Technical area; and
- (b) one or two representatives from LVVTA, who have responsibility in LVVTA's Technical area.

Appointment of Working Group members

4.12(5) The appointment of working group members will be made jointly by an authorised Agency Manager and LVVTA's Chief Executive Officer.

4.13 Category extensions

Introduction

Category extensions are sometimes required because an LVV Certifier may not have the required background to be authorised for a certain category, however may have intimate knowledge and competence around a certain sub-section of that category.

An example is where an LVV Certifier may not have the background of building scratch-built vehicles and therefore may not ever be authorised for LV1D, however he may have extensive knowledge around converting Mk1 and Mk2 Ford Escorts from their original leaf spring configuration to a four-link and watts linkage system. Such a modification requires an LV1D LVV Certifier, and so an LVV Certifier only authorised for LV1A could not certify this modification.

An example is where an LVV Certifier may not have the background of building scratch-built vehicles and therefore may not ever be authorised for LV1D, however he may have extensive knowledge around converting Mk1 and Mk2 Ford Escorts from their original leaf spring configuration to a four-link and watts linkage system. Such a modification requires an LV1D LVV Certifier, and so an LVV Certifier only authorised for LV1A could not certify this modification.

Through the category extension process, an LV1A-authorised LVV Certifier may be able to certify that Escort four-link conversion.

Sub-section 4.13 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Category extension application and approval

- 4.13(1) **Except where specified in 4.13(2),** an LVV Certifier may, on a case-by-case basis, be authorised to certify a vehicle that is outside of the scope of his authorised categories and would normally require a different or higher level of category, provided that:
- (a) the LVV Certifier can demonstrate extensive practical experience directly relevant to the modification in question; and
 - (b) a category extension application is made in writing to LVVTA, using the LVV *F007 Category Extension Request Form*, prior to proceeding with the certification of the vehicle for which the application is made; and
 - (c) after discussion and agreement with the Agency at the next NZTA-LVVTA Technical Working Group meeting, the application is approved.

NOTE 1: Information about the NZTA-LVVTA Technical Working Group referred to in 4.13(1)(c) is as detailed in 4.12.

NOTE 2: It is a condition of the category extension authorisation that the application is made to LVVTA prior to commencement of the LVV certification of the vehicle for which the application is made.

- 4.13(2) **The requirement specified in 4.13(1) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.**

Section 5 LVV service and communication requirements

5.1 Basics of the LVV certification process

Introduction

The LVV certification system is a specialist inspection regime, authorised by the Agency, and implemented and administered by LVVTA.

The LVV certification system is intended to ensure that any modifications carried out on light vehicles are safe, and that the vehicles remain fit for their purpose. The process also applies to individually-constructed (scratch-built) light vehicles.

How the process works

The LVV certification process, broken down into its most basic principles, operates in the following manner:

- *Authorised vehicle inspectors (AVIs – more commonly referred to as warrant of fitness issuers) are expected to identify modifications to light vehicles during their warrant of fitness inspection.*

- Upon identifying modifications, AVIs are expected to determine whether or not the modification is one that is required to be certified to the LVV Code. They find this information from within the LVVTA Modification Threshold Schedule, which is incorporated within the Vehicle Inspection Requirements Manual (VIRM) modification tables. (The VIRM is the Agency-supplied electronic document that provides AVIs with their inspection requirements and processes).
- If a modification is required to be LVV certified, the AVI is expected to inspect the vehicle to determine whether or not an LVV certification plate is fitted to the vehicle (in the areas specified in sub-section 4.2), and if so, whether or not the LVV certification plate lists all of the modifications present on the vehicle.
- If the vehicle has no LVV certification plate, or it has a plate but one or more of the modifications present on the vehicle are not listed on the plate, the AVI is expected to refer the vehicle to an LVV Certifier for LVV certification before the vehicle can be issued with a warrant of fitness.
- The vehicle owner contacts an LVV Certifier (detailed on the LVVTA website) who will inspect the vehicle against the LVV standards, LVV Information Sheets, the New Zealand Car Construction Manual, and other LVVTA technical information.
- The LVV Certifier will inspect, road-test, and fill out a series of LVVTA forms and form-sets that are supported by the LVV standards and other LVVTA technical information, that directly relate to the modifications present on the vehicle.
- If the vehicle is in any way unsafe or non-compliant, the LVV Certifier will require remedial work to be carried out, and may provide advice on how best to achieve the desired outcome.
- Upon satisfaction that the vehicle is fully compliant and safe, the LVV Certifier will forward all of the forms, form-sets, and other supporting documentation to LVVTA, requesting an LVV certification plate for the vehicle.
- LVVTA will apply a document review (as specified in sub-section 5.2) and if satisfied that the LVV Certifier has met any relevant obligations, and there is no reason to believe that the vehicle is unsafe, LVVTA will manufacture an LVV certification plate, and despatch the plate to the LVV Certifier.
- Upon receipt of the LVV certification plate, the LVV Certifier will fit the plate to the vehicle.
- The vehicle will then be re-presented to the AVI, who will, after becoming satisfied that a LVV certification plate is fitted, and that the plate correctly reflects the modifications present on the vehicle, issue the warrant of fitness.
- Some requirements specified in 5.2 do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

5.2 **Plate production service requirements of LVVTA**

Introduction

LVVTA provides the service of manufacturing and issuing LVV certification plates, with its associated administrative and technical form and form-set review processes, under contract to the Agency. There are a number of other functions associated with producing the LVV certification plates, including providing all certification data to the Agency on a weekly basis, providing the LVV Certifiers with technical support and help, and providing a coaching-based continuous improvement role to the LVV Certifiers in relation to their certification activities.

Sub-section 5.2 outlines the plate production service requirements that LVVTA is required to meet.

General plate production service responsibilities

5.2(1) LVVTA is responsible for all plate production operations under the LVV Code, and will:

- (a) make all reasonable efforts to ensure that the engraved information recorded on each plate accurately records the vehicle's identity including make, model, and year of manufacture, and the modifications and construction features applicable to each certified vehicle; and
- (b) ensure that any change to the plate or its specification, including logo placement, shall be with the prior agreement of the Agency; and
- (c) provide any information and certification form-set copies as and when required by Agency reviewers for the purpose of the Agency performance review system, Agency investigation staff for the purpose of complaint investigation, or the NZ Police for the purpose of accident investigation, at no charge, provided that the certification date of the required form-set is not more than two months from the date of the request, after which a retrieval fee may be charged; and
- (d) maintain a valid license for any software systems being used in relation to the LVV certification plate production operations.

5.2(2) Where the LVV Code is amended to include items that require changes to the LVV certification system, then LVVTA at that time will, if necessary, establish the royalty fee applicable to those items.

5.2(3) Additional services requested from LVVTA by the Agency, which are additional to those provided by LVVTA under the Code, may be subject to fees negotiated between the parties prior to the service provision.

General plate production service requirements

5.2(4) LVVTA is required to:

- (a) operate the LVV Certification Plate production service in a thorough and professional manner; and
- (b) provide, conditional upon normal business circumstances existing, a LVV Certification Plate production service turn-around, unless where additional information is required or there is a technical reason to withhold the plate, of not more than three working days; and
- (c) provide the LVV certification plate production service on every working day with the exception of statutory public holidays and the days between the Christmas and New Year statutory holidays, and any organisational-development days which shall not exceed one day in any one calendar week; and
- (d) collect and archive documents and form-sets that form part of the certification process; and
- (e) ensure the security of the LVV certification plate production system, through secure storage and archiving of all certification records, storage of all LVV certification plates in a locked steel cabinet or safe, and off-site back-up of computer software and records; and
- (f) develop and maintain an LVV certification plate production Operations Manual; and
- (g) advise the Agency of any significant changes to the plate production operation service; and
- (h) provide any updated data on the LVV database to the Agency on a weekly basis; and
- (i) report to the Agency any plates that have been returned, having not been affixed to the vehicle within the allotted time.

5.2(5) LVVTA may not sub-contract the LVV certification plate production service operations to any outside person or organisation.

Administrative document review requirements

5.2(6) LVVTA is required to carry out an administrative documentation review of each set of forms and form-sets provided by LVV Certifiers, which will focus on ensuring that:

- (a) the LVV Certifier is only certifying modifications which are legally required to be LVV Certified, or that the vehicle owner has requested LVV certification despite there being no legal requirement for the vehicle to be LVV certified; and

- (b) the LVV Certifier is authorised to certify the type of modification or construction carried out; and
- (c) the LVV Certifier is the person who has filled out the form-sets; and
- (d) all of the required form-sets relevant to the modification or construction have been provided; and
- (e) the 'base' form-sets provided have been filled out correctly.

Technical document review requirements

5.2(7)

Except where specified in 5.2(8), LVVTA is required to carry out a technical documentation review of either each set, or targeted sampling, of forms and form-sets, which will focus on ensuring that:

- (a) the LVV Certifier is operating within his area of expertise; and
- (b) the LVV Certifier is correctly applying the LVV standards; and
- (c) any supporting documentation, evidence, or photographs required by the type of modification has been provided; and
- (d) the LVV Certifier's technical judgments and decisions appear to be sound.

NOTE: It must be clearly understood by the LVV Certifier, that the submission of documentation specified in 5.2(7) in no way reduces the responsibility for the correct assessment of the vehicle by the LVV Certifier, or shifts any responsibility for the vehicle's safety or compliance to LVVTA.

5.2(8)

The requirement specified in 5.2(7) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

Document review recording

5.2(9)

LVVTA is required to:

- (a) record the details into a standardised report, of each:
 - (i) administrative document review as specified in 5.2(6) that has been carried out; and
 - (ii) technical document review specified in 5.2(7) that has been carried out;

and

- (b) provide to the Agency a copy of the administrative document review report, and a copy of the technical document review report, on a monthly basis.

5.2(10)

As a result of the administrative and technical assessment processes specified in 5.2(6) and 5.2(7), LVVTA is expected to provide coaching and up-skilling opportunities for the LVV certifiers in the administrative and technical aspects of the LVV certification system, which will include:

- (a) e-mail and telephone one-on-one coaching where improvements in knowledge and application can be improved; and
- (b) targeted one-on-one training to LVV Certifiers who require assistance, or to any at-risk LVV Certifiers; and
- (c) general communications via LVVTA newsletters and LVV Certifier training sessions.

5.2(11)

Where necessary, as a result of the processes specified in 5.2(6) to 5.2(9), LVVTA is expected to implement the internal complaint resolution process specified in 6.2, and where required, provide notification to the Agency of any LVV Certifiers who present on-going risks to vehicle safety and to the reputation of the LVV certification system.

Modification declaration certificates**5.2(12)**

LVVTA will maintain the national database of Modification Declaration Certificates, and issue copies as requested, to members of the public as and when required, at a fee that is fair and reasonable.

NOTE 1: Modification Declaration Certificates are documents that were issued to modified and scratch-built vehicles between 1991 and 1996, as a record of confirmation that the vehicle was built or modified prior to the introduction of the Transport (Vehicle Standards) Regulations 1990, and is therefore not required to be certified to the LVV Code, provided that the vehicle has been continuously registered and has not been modified further.

NOTE 2: Replacement Modification Declaration Certificates are issued by LVVTA in A5 format, 'approval' colour-stamped in red, and laminated for protection.

Landata record updating**5.2(13)**

When a vehicle has been LVV certified, LVVTA is required, on behalf of the Agency, to update all relevant vehicle records into the Agency's Landata system, within three working days from the date upon which the LVV certification plate is despatched to the LVV Certifier:

- (a) update the 'IVCERT screen' with:
 - (i) the unique LVV certification plate number; and

- (ii) the LVV certification category used for the certification of the vehicle; and
- (iii) the unique certifier identification number of the LVV Certifier who carried out the LVV certification;

and

- (b) update the 'VCATS screen' if a change has occurred to either:
 - (i) the number of seating positions within the vehicle; or
 - (ii) the cc rating of the vehicle; or
 - (iii) the engine type of the vehicle; or
 - (iv) the fuel type of the vehicle; or
 - (v) the vehicle type; or
 - (vi) the body type of the vehicle; or
 - (vii) the Table-A class of the vehicle.

Return of certification plate applications

5.2(14)

In the case where an LVV Certifier does not meet the administrative or technical requirements specified in 5.2(6) and 5.2(7), LVVTA will return the certification plate application to the LVV Certifier.

NOTE: LVVTA will endeavor to provide coaching and general assistance rather than return a certification plate application, however if an LVV Certifier repeatedly fails to accept the coaching and up-skilling in a spirit of co-operation and willingness, LVVTA will return any incomplete or incorrect applications.

Payment for LVV certification plates

5.2(15)

An LVV Certifier is required to pay for each LVV certification plate at the time of making application for the LVV certification plate.

5.2(16)

LVVTA may provide, on request, an account-based payment system, provided that:

- (a) the LVV Certifier carries out a very high volume of LVV certification activities; and
- (b) payment is made no later than the 20th day of the following month; and

- (c) all payments are the responsibility of the Agency-authorised LVV Certifier.

NOTE 1: The LVV Certifier is the person who holds the Deed of Appointment with the Agency, and as such is the person with whom the Agency and LVVTA have the relationship, in all aspects of the LVV certification process, including the responsibility for payment of services.

NOTE 2: An LVV certifier who fails to comply with the terms of the payment conditions specified in 5.2(16) will not be issued with further LVV certification plates while any certification plate payment is overdue, and the account-based payment privilege will be revoked, with an immediate return to the application-based payment system as specified in 5.2(15). In this case, reinstatement of the account system will not be made. Note that suspension of an LVV Certifier's authority may be imposed by the Agency under the LVV Certifier's Deed of Appointment for non-payment of plate production services provided by LVVTA.

Agency's review of certification plate production operations

5.2(17)

The Agency will carry out a review of the LVV certification plate production operations on a regular basis, to ensure that the Agency's objectives in relation to LVV certification plate production operations, and the associated administrative and technical review processes, are being met.

5.3

Service requirements of LVV Certifiers

Introduction

LVV Certifiers are appointed agents of the Agency, and as such, a reasonable level of service is required to be provided to members of the motoring public and vehicle modification industry who require LVV certification. Sub-section 5.3 sets out the minimum level of service required to be provided by an LVV Certifier.

Sub-section 5.3 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

Service requirements

5.3(1)

Except where specified in 5.3(3), an LVV Certifier is required to:

- (a) provide a reliable and efficient service to members of the motoring public and the vehicle modification industry; and
- (b) charge a fair and reasonable hourly rate for his professional services, taking into consideration all fixed and operating over-heads, and down-time associated with training and maintaining expertise in relation to the LVV certification system; and
- (c) have and use telephone answer-phone services or email, and return calls or emails in a timely manner; and
- (d) in the case of being unavailable for an extended period such as holidays, make contact details for an alternative LVV Certifier available to any persons enquiring about LVV certification services; and

- (e) in the case of a dispute arising between the LVV Certifier and a member of the motoring public, apply either:
 - (i) the complaints processes specified in sub-section 6.1.; or
 - (ii) the LVVTA complaints form available on the LVVTA website.

5.3(2) **Except where specified in 5.3(3),** an LVV Certifier may not refuse to certify a low volume vehicle, unless:

- (a) he does not have the appropriate LVV certification category relevant to the type of vehicle or level of modification involved; or
- (b) he believes that in order to certify the vehicle he would be operating outside of his area of expertise, in which case he is required to refer the vehicle owner to an appropriately experienced and authorised LVV Certifier.

5.3(3) **The requirements specified in 5.3(1) and 5.3(2) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.**

5.4 Communication requirements

Introduction

Following correct methods and lines of communication are very important for consistency of information flow, and to avoid incorrect or conflicting advice being given and unnecessary wasted time. There are established lines of communication that enable information to be provided correctly and consistently, and to enable relevant information or problems to be identified and communicated by LVVTA to all LVV Certifiers. Sub-section 5.4 sets out the appropriate lines of communication to be followed by an LVV Certifier.

The lines of communication for an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' differs to the the lines of communication for other LVV certification categories.

LVVTA's lines of communication

5.4(1) LVVTA will provide technical and operational support and advice on all matters relating to the application of the LVV Code to LVV Certifiers, the vehicle modification industry, participating organisations, and the motoring public via newsletter, telephone, and other electronic means.

NOTE: LVVTA also provides a forum on its website, to enable members of the motoring public to ask questions and receive answers, and to enable LVV Certifiers to communicate directly with each other.

5.4(2) LVVTA will relay any information that the Agency wishes to communicate to the LVV Certifiers on the Agency's behalf, via a regular LVVTA newsletter.

LVV Certifier communications regarding LVV issues (for other than LVCM LVV Certifiers)

- 5.4(3) In order to obtain advice, guidance, information, or a determination in relation to a low volume vehicle or any LVV matter including LVV certification plate-related issues, technical issues, and complaints, an LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification', is required to direct his communication in all cases to LVVTA.
- 5.4(4) An LVV Certifier, when communicating with LVVTA, is required to communicate:
- (a) directly, rather than via the LVV Certifier's staff members; and
 - (b) in a courteous and non-confrontational manner.
- 5.4(5) An LVV Certifier must work with LVVTA in a spirit of co-operation and willingness at all times, sharing the same end goal as LVVTA in the correct application of the LVV certification system, so as to provide consistently safe and compliant certification outcomes.
- 5.4(6) An LVV Certifier is required to have, or have access to, and use e-mail to assist in communication between LVVTA and the LVV Certifiers.
- 5.4(7) An LVV Certifier may not directly contact:
- (a) a member of the LVVTA Technical Advisory Committee, unless authorised to do so by the LVVTA technical staff; or
 - (b) a staff-member of the Agency on any technical matters relating to LVV certification.

NOTE 1: The reason for the requirement specified in 5.4(7)(b) is to prevent any potential for conflict in advice being provided by LVVTA staff and Agency staff. It is agreed between the Agency and LVVTA that LVVTA, as the developer of the LVV Standards, is responsible for the provision of technical support to LVV Certifiers.

NOTE 2: Where it is necessary for any technical matter to be communicated to, or discussed with, the Agency, LVVTA must be the 'conduit' by which the communication or discussion takes place.

LVV Certifier communications regarding LVV issues (for LVCM LVV Certifiers)

- 5.4(8) An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' should contact:
- (a) for information relating to issue of LVV certification plates, or advice, guidance, or information relating to general LVV certification system matters, the LVVTA; or

(b) for advice, guidance, or information relating to specific matters relating to the Type-approval certification process, the Agency.

5.4(9)

An LVV Certifier appointed to certify under LVV Certifier category 'LVCM - Commercial Modification' must:

(a) communicate with LVVTA staff via the LVCM-appointed LVV Certifier's authorised representative; and

(b) have, or have access to, e-mail in order to assist in communication with LVVTA staff; and

(c) communicate with LVVTA in a courteous and non-confrontational manner; and

(d) work with LVVTA in a spirit of co-operation and willingness at all times, sharing the same end goal as LVVTA in the correct application of the LVV certification system, so as to provide consistently safe and compliant certification outcomes.

5.4(10)

An LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification' may not directly contact a member of the LVVTA Technical Advisory Committee, unless authorised to do so by the LVVTA technical staff.

Agency communications regarding LVV issues

5.4(11)

The Agency will refer any queries and problems relating to the application of the LVV Code that require technical advice or support, from LVV Certifiers, the vehicle modification industry, participating organisations, and the public, to LVVTA.

5.4(12)

The Agency will consult with LVVTA before publishing any information that refers to, or affects, any matters relating to the application of the LVV Code.

Communication between LVVTA and the Agency

5.4(13)

LVVTA and the Agency will communicate in a frank and open manner, with the object of protecting the reputation and integrity of the LVV Code and correctly applying the requirements of the Operating Requirements Schedule, and in particular, communications shall include:

(a) any complaint or investigation about an LVV Certifier where the nature of the complaint or investigation relates to a low volume vehicle; and

(b) the identification of any technical or operational problems or issues that may affect the safety of a low volume vehicle; and

(c) any future developments that may affect the application of the Code; and

- (d) any future developments that may affect any plate production operation or other services that LVVTA may provide; and
- (e) any future developments that may affect the Member Associations of LVVTA.

5.4(14)

LVVTA and the Agency will ensure that any representatives appointed to become involved in LVV matters use their respective LVV Policy Working Group members, or LVV Technical Working Group members, as appropriate, as a conduit for any communications or queries in relation to LVV matters.

Promotion of LVV system**5.4(15)**

LVVTA will make available, and encourage uptake, of its LVV Certifiers' Manual to members of the vehicle modification industry.

NOTE: The service of providing the LVV Certifiers' Manual to the vehicle modification industry service will be subscription-based, and will be provided by LVVTA on a cost-recovery basis.

5.4(16)

LVVTA will promote, as reasonably able, awareness and understanding of the low volume vehicle certification system to interested parties through motoring publications, trade shows, and other appropriate mediums.

5.5**LVV Certifiers' Insurance Club*****Introduction***

The LVV Certifier's Deed of Appointment requires all LVV Certifiers to hold a professional indemnity insurance policy. Because the cost of purchasing such a policy on an individual basis would preclude many highly-valued LVV Certifiers from remaining in the system, LVVTA has traditionally negotiated and operated a professional indemnity insurance group scheme since the beginning of LVV operations, known as the LVV Certifiers' Insurance Club.

The scheme is based upon LVVTA negotiating a group policy, and dividing the cost of the premium amongst the Insurance Club members. This achieves a substantial cost-saving, and makes the difference for many LVV Certifiers between remaining in the LVV certification system and not.

The existence of the LVV Certifier's Insurance Club is, therefore, a very important part of the LVV certification system. Sub-section 5.5 outlines the details of the LVVTA Insurance Club.

Sub-section 5.5 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCN - Commercial Modification'.

LVV Certifier Insurance Club membership and protection**5.5(1)**

Except where specified in 5.5(2), the LVVTA Council may, at its discretion, endorse an LVV Certifier for membership to the LVVTA Insurance Club, provided that LVVTA has established a high level of confidence in the background, skills, and ethics of the LVV Certifier.

5.5(2) The requirement specified in 5.5(1) does not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

5.5(3) The LVVTA Council may, at its discretion, withdraw LVVTA's endorsement of an LVV Certifier for membership to the LVVTA Insurance Club if it has reason to believe, based on evidence of the Certifier's poor performance or unethical behaviour, that the actions, decisions, judgments, or ethics of the LVV Certifier may expose the Insurance Club to an unsustainable level of risk.

5.5(4) In relation to 5.5(3), factors which the LVVTA Council will consider to constitute poor performance or unethical behaviour will include circumstances where:

- (a) an LVV Certifier has been placed consistently in the orange or red zone of the Error Report Summary; or
- (b) an LVV Certifier has had substantive disciplinary action taken against him by the Agency; or
- (c) significant damage, injury, or loss of life has occurred as a direct result of an LVV Certifier's poor certification decisions; or
- (d) any dispute has arisen directly as a result of an LVV Certifier's poor certification decisions.

NOTE 1: Substantive disciplinary action, as referred to in 5.5(4)(b) includes a suspension, or more than one written warning.

NOTE 2: The 'orange zone' and 'red zone' as referred to in 5.5(4)(a), is the part of the LVV Certifier Error Record Summary within which those LVV Certifiers are positioned, whose administrative and technical errors fall below a specified minimum acceptable level.

NOTE 3: The LVV Certifier Error Report Summary referred to in 5.5(4)(a) is detailed in sub-section 6.7(3).

Obligations of an LVV Certifier regarding the Insurance Club

5.5(5) An LVV Certifier who is a member of the LVVTA Insurance Club must, in the event of any problem or situation, or sign of any problem or situation that may result in a claim against the LVVTA Insurance Club, immediately notify LVVTA of the problem or situation, providing all relevant details.

NOTE: It is essential that LVVTA ensures that membership to the Insurance club is a privilege and not a right in order to protect the future of the club, by minimising the claims made against the policy. The most effective way of minimising claims against the LVVTA Insurance Club policy is to maintain some control over who attains membership to the club. The LVVTA Council therefore reserves the right to endorse only those LVV Certifiers for membership to the Insurance Club in whom LVVTA has utmost confidence.

5.6

LVV system training programmes

Introduction

The LVV Certifier's Deed of Appointment requires all LVV Certifiers to attend LVV Certifier training provided by LVVTA. LVVTA provides LVV Certifier training on a regional basis throughout New Zealand for all LVV Certifiers.

The reason for providing the training session on a regional basis is two-fold; one – it reduces, or in most cases avoids, the traveling and accommodation costs that LVV Certifiers would be subjected to if they all had to attend the training sessions at one major centre; and two – regional sessions create smaller groups where input and participation from the LVV Certifiers occurs more easily in a small group of 8 to 15 people, than it would in a group of 60 or more people.

In addition to the regional training sessions involving all LVV Certifiers, LVVTA also provides category-based workshop training programs that are applicable to those LVV Certifiers who hold a particular LVV Certifier category. The workshops may be held on a regional basis, or because of the smaller number of LVV Certifier numbers involved in category-specific training, they may be held on a national level, where all LVV Certifiers holding that category get together at one location.

LVVTA technical staff-members provide telephone and email-based opportunities for coaching and mentoring on an as-and-when-needed basis, in order to continuously improve overall certification quality, and consistency in inspections from certifier to certifier.

LVVTA has a dedicated Training Officer, who makes himself available to assist LVV Certifiers when they ask for help in areas where they lack specific knowledge, or where there is a need for an LVV Certifier to be upskilled.

Because of the unique and diverse range of knowledge required from an LVV Certifier, it can be easy for an LVV Certifier to feel isolated in their technical decision-making. The intention of the 'Buddy-up' system is to reduce those feelings of isolation, improve consistency in the application of the LVV standards, and encourage communication between LVV Certifiers by bringing two LVV Certifiers together to share their opinions, experiences and questions while carrying out an LVV certification inspection together.

Sub-section 5.6 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

LVCM-appointed LVV Certifiers

5.6(1)

The requirements specified in 5.6(2) to 5.6(11) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

LVV Certifier training sessions

5.6(2)

LVVTA will provide to all LVV Certifiers, in order to communicate the operational and technical requirements of the LVV certification system:

- (a) up to three general LVV Certifier training sessions per year, conducted on a regional basis; and

- (b) up to three specific category-based LVV Certifier training sessions per year, conducted on a national basis.

5.6(3)

LVVTA will provide to all LVV Certifiers, on a one-off basis, a half-day familiarisation training session on LVVTA office systems and certification plate production operations, at the Wellington LVVTA office.

LVV Certifier training attendance requirements

5.6(4)

Unless prevented by exceptional circumstances such as ill health, an LVV Certifier must attend all LVV Certifier training sessions conducted by LVVTA for LVV Certifiers.

5.6(5)

If an LVV Certifier is unable to attend the scheduled LVV Certifier training session in his region, he may either:

- (a) attend a scheduled LVV Certifier training session in any of the other regions; or
- (b) in the event that he is unable to attend a scheduled training session in any of the other regions, arrange with LVVTA for an additional unscheduled training session to be put on at a time that is mutually convenient for LVVTA and the LVV Certifier.

5.6(6)

In the event that an additional unscheduled training session as specified in 5.6(5)(b) is required to be provided by one or more LVV Certifiers:

- (a) LVVTA will arrange for all LVV Certifiers who require an additional unscheduled training session to attend the same session; and
- (b) LVVTA will divide the costs incurred in presenting the additional unscheduled training session between all attending LVV Certifiers.

NOTE: The costs involved in providing an additional unscheduled training session referred to in 5.6(5) and 5.6(6) will be based on a fair and reasonable prescribed hourly rate.

5.6(7)

An LVVTA Certifier must attend, on a one-off basis, the half-day familiarisation training session on LVVTA office systems and certification plate production operations, at the Wellington LVVTA office, at a time suitable to the LVV Certifier and LVVTA.

Individual training for LVV Certifiers

5.6(8)

LVVTA Technical Team staff members and the LVVTA Training Officer will provide, as and when required, targeted individual training opportunities for LVV Certifiers through telephone and email-based coaching, in order to assist in achieving the best possible level of LVV certification performance from all LVV Certifiers.

5.6(9)

LVVTA's Training Officer will provide, where appropriate and necessary, targeted individual training opportunities for LVV Certifiers through one-on-one mentoring, in order to assist in achieving the best possible level of LVV certification performance from all LVV Certifiers.

'Buddy-up' certification training for LVV Certifiers**5.6(10)**

For each calendar year, every LVV Certifier must, on not less than one occasion, 'buddy-up' with another LVV Certifier, and carry out a complete LVV certification inspection together with the other LVV Certifier.

5.6(11)

During the certification of a low volume vehicle under 'buddy-up' certification:

- (a) one LVV Certifier must take the role of the 'primary' LVV Certifier, and take responsibility for the correct certification of the vehicle; and
 - (b) the other LVV Certifier must take the role of the 'secondary' LVV Certifier, and provide support, advice, and guidance to the 'primary' LVV Certifier; and
 - (c) the full names of both the 'primary' LVV Certifier and the 'secondary' LVV Certifier must be recorded on:
 - (i) the *LVV F000 Certification Plate Order Form*; and
 - (ii) the *LVV F001 Statement of Compliance Certificate*;
- and
- (d) the inspection must take place at either the 'primary' LVV Certifier's or the 'secondary' LVV Certifier's usual place of work; and
 - (e) a record of each 'buddy-up' certification must be kept by both the 'primary' and 'secondary' LVV Certifiers, with the certification details of each 'buddy-up' certification recorded in the training section of the LVV Certifier's Agency Performance Review System Manual.

NOTE 1: The 'buddy-up' certification process is for training and consistency purposes only and should not be considered a test, but rather an opportunity to develop and improve each LVV Certifier's inspection procedures. Therefore, both the 'primary' and 'secondary' LVV Certifiers are encouraged to ask questions and give suggestions during the inspection process, to make the most of the opportunity.

NOTE 2: In order to maximise learning opportunities to share knowledge and improve consistency, an LVV Certifier should, wherever practical, 'buddy-up' with a different LVV Certifier each year.

Training for Agency representatives**5.6(12)**

Agency representatives who become involved in activities related to the LVV certification system will undertake LVV induction training on the application of the LVV Code by LVVTA, so as to establish within each Agency staff-member involved a basic understanding of the LVV Code and its related activities, which will comprise:

- (a) in the case of primary points of contact, a three-day LVV introduction training course; and
- (b) in the case of other points of contact, a one-day LVV introduction training course.

5.6(13)

LVVTA will provide, as reasonably able, any training on the application of the Code to Agency staff-members, in addition to that specified in 5.6(12), at NZTA's request.

Training for outside organisations

5.6(14)

LVVTA will provide training as required, and as reasonably able, to motor industry groups and bodies, and other Government agencies and crown entities.

NOTE: The training referred to in 5.6(14) may be an introduction to the LVV certification system, or based on specific subjects of technical or operational interest.

5.7

Agency Performance Review System

Introduction

The LVV Certifier's Deed of Appointment requires all LVV Certifiers to undergo the Agency's 'Performance Review System' (PRS). The PRS is the Agency's method of establishing the competence of the LVV Certifier on the day of the review. The performance review is carried out periodically, with intervals determined by the outcome of the previous review.

Sub-section 5.7 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCN - Commercial Modification'.

Responsibilities under the Performance Review System

5.7(1)

An LVV Certifier, other than one appointed to certify Type-approved vehicles under LVV Certifier category 'LVCN - Commercial Modification', is required to undergo the Performance Review System, as specified by the Agency Deed of Appointment, and detailed within the Performance Review System Manual.

5.7(2)

The Agency will:

- (a) involve LVVTA in the application and improvements of its performance review system, with the aim of ensuring that the system is consistent with the objectives of the LVV Code, and that it meets the needs of the LVV certification system; and
- (b) provide LVVTA with the results of each LVV Certifier PRS outcome.

Section 6 Conduct and complaints

6.1 General LVV complaint procedures

Introduction

Problems in relation to LVV Certifier performance are rare, but the potential implications to vehicle safety and to the reputation of the low volume vehicle system as the result of poor decisions by an LVV Certifier can be severe. Whenever a problem arises that brings into question the safety of a low volume vehicle that has been LVV certified, the problem must be investigated and resolved, with safety as a principal focus. The process that is applied however, must be sound and transparent, in order to ensure fairness and consistency in the application of all internal and external complaint resolutions. The details of these processes are provided within this section.

Division of complaints-related responsibilities

Resolving complaints is the responsibility of the Agency, however one of the roles of LVVTA is to deal with the many and varied problems and complaints-related issues that crop up on a daily basis, in order to prevent the Agency's resources being disproportionately consumed by LVV matters. Within the division of roles and responsibilities between LVVTA and the Agency in relation to LVV certification, LVVTA is expected to determine whether or not complaints that are presented in fact have foundation, and if so, to then deal with those lower-level issues that do not present a serious risk to vehicle safety.

Notification to the Agency

This division of responsibilities between LVVTA and the Agency must however be balanced against an important requirement within the Land Transport Compliance Rule 35001 - 2.3(4)(b) - which requires an LVV Certifier to notify the Agency if there is reason to believe that the inspection and certification of a vehicle may have been carried out incorrectly. There are fundamental problems with this requirement, in that (a) it is unclear whether the Rule requires the LVV Certifier to notify the Agency about an incorrectly certified vehicle that he has certified himself, or one that has been certified by someone else; and (b) a Certifier will, in many cases, be reluctant to notify the Agency about an incorrectly certified vehicle for a number of different reasons.

Another, and even more pertinent problem with the requirement, is that the term 'incorrectly' has a very wide scope, and goes much further than matters relating just to serious safety issues, which of course is the Agency's primary concern.

Record of determination

The Land Transport Compliance Rule 35001 refers to a 'record of determination', which, in the case of LVV Certification, is the F001 Statement of Compliance Certificate. As soon as the F001 Statement of Compliance Certificate is signed off by an LVV Certifier, the LVV Certifier has declared that the vehicle complies with all applicable requirements.

This means that every administrative or minor technical mistake that an LVV Certifier makes in relation to his completed and submitted forms and form-sets could be regarded as having to be notified to the Agency. (Note that the vehicle is not legal for road use until the LVV certification plate has been affixed to it.)

Obviously, the Agency does not need or want to be notified every time an LVV Certifier makes a simple administrative error such as recording 'overhead valve' instead of 'overhead camshaft'. Therefore, in this regard, the following points in relation to the correct interpretation and application of 'notification' within 2.3(4)(b) of the Land Transport Compliance Rule 35001 have been agreed between LVVTA and the Agency:

- 'notification' to the Agency only applies to those vehicles for which an F001 Statement of Compliance Certificate has been filled out and signed by an LVV Certifier (if no F001 has been filled out, then no notification is required to be made); and
- 'notification' is not necessarily a complaint; and
- 'notification' can be provided by LVVTA to the Agency rather than by an LVV Certifier direct.

Agreed notification procedure

The key issue in establishing and agreeing the lines of responsibility in this regard is that the Agency knows that, in the case of a matter that does not require notification, the problem is being correctly resolved.

It has been agreed between LVVTA and the Agency, that, because of the 'LVV Certifier competence record-keeping process' specified in 6.7, combined with the joint LVVTA-Agency 'LVV Technical Working Group' system specified in 4.11, the established process of recording administrative and technical breaches fulfils the requirement of 2.3(4)(b) of the Land Transport Compliance Rule 35001. These processes enable LVVTA to work directly with the LVV Certifier to resolve problems and complaints that do not present a serious safety risk as they arise, the recorded outcome of which provides the Agency with the opportunity to be notified if they deem it necessary to do so, via the Agency's regime of regularly reviewing LVVTA's LVV certification plate production operations.

The requirement for notification (for those problems and complaints that do not present a serious safety risk) within the Land Transport Compliance Rule 35001, therefore, is agreed to have been met through the various processes specified within the LVV Operating Requirements Schedule. Any information that comes to LVVTA's attention, by any means, regarding a serious safety issue relating to a low volume vehicle that has been LVV certified, will be provided directly to the Agency.

Notification vs formal complaint process

It is important that during LVVTA's involvement in this area, that LVVTA maintains a clear distinction in all LVV certification complaints and problems between:

- standard notification (via the competence record-keeping and LVV Working Group processes); and
- the formal complaint process that is required to be made in any case where a serious safety risk is presented.

The distinction between the standard notification process, and the process of making a formal complaint in the event of serious safety issues, will be drawn as a matter of course, during the process of dealing with each complaint or problem assessment, through LVVTA's Risk Assessment process specified in 6.2.

Customer complaints regarding an LVV Certifier

A customer complaint regarding an LVV Certifier should in the first instance be directed to the LVV Certifier in question. All complaints made against an LVV Certifier by a customer must be logged by the LVV Certifier in the Agency Performance Review System (PRS) manual, and made available for the Agency Reviewers to review the history and resolutions.

If it is not practical for the customer to deal directly with the LVV Certifier in question, or the result is unsatisfactory, the complaint must then be forwarded, in writing, to LVVTA, using the on-line LVVTA Complaint Form, available from www.lvvtta.org.nz. LVVTA will maintain a log of all complaints received, available for the Agency's review. If the complainant finds the outcome to be unsatisfactory, the complaint should then be forwarded to the Agency. A customer who wishes to make a complaint to the Agency about an LVV Certifier should contact the Agency Helpdesk on 0800 699 000.

LVV Certifier complaints regarding another LVV Certifier

If an LVV Certifier has a complaint about the safety or compliance of a vehicle that has been LVV certified by another LVV Certifier, he may in the first instance, if the matter warrants it, direct his concern to the LVV Certifier in question. This should have the effect of establishing whether a problem actually exists.

If the LVV Certifier with the complaint does not wish to deal directly with the LVV Certifier in question, or he has attempted to do so and he is dissatisfied with the result, the complaint must then be forwarded to LVVTA. LVVTA will maintain a log of all complaints received, available for the Agency's review. If this also does not prove to be satisfactory, the LVV Certifier with the complaint should contact the Agency. The correct Agency point of contact in the case of an LVV Certifier who wishes to make a complaint about another LVV Certifier is their Agency LVV Reviewer.

Customer or LVV Certifier complaints regarding LVVTA

A customer or LVV Certifier who wishes to make a complaint regarding an LVVTA employee or representative should do so, in writing, to the Chief Executive Officer of LVVTA, via the contact details provided on the LVVTA website.

If it is not practical for a complaint to be dealt with in this way, or the complainant is dissatisfied with the result, the written complaint should then be forwarded to the President of the LVVTA, via the contact details provided on the LVVTA website.

If this also does not prove to be satisfactory, the complaint may be then forwarded to the Agency. A person who wishes to make a complaint to the Agency regarding LVVTA should contact the Manager Vehicles, Technical Services, New Zealand Transport Agency, Private Bag 6995, Wellington 6141.

LVCM-appointed LVV Certifiers

Sub-section 6.1 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

6.2

LVVTA's internal complaint resolution process

Introduction

During the process of dealing with a complaint against an LVV Certifier or by identifying a problem with an LVV Certifier, an opportunity may be presented for LVVTA to improve the LVV certification system. LVVTA's philosophy is that, particularly given the diversity and complexity of the LVV certification system, any LVV Certifier can have a bad day and make a mistake. In most cases, the LVV Certifier should be given the opportunity to resolve the issue and learn from it. LVVTA will therefore, wherever possible, endeavor to deal with any problems relating to an LVV Certifier's performance in a positive way.

Referral of complaints to the Agency

LVVTA will make all reasonable efforts to coach and help an LVV Certifier who is making poor technical decisions or is not following the operational requirements of the LVV certification system. If, despite providing coaching and help, an LVV Certifier continues to make unsound decisions, or fails to comply with the technical or operational requirements of the LVV certification system, LVVTA will forward a complaint to the Agency. It should be noted that LVVTA is legally obliged to notify the Agency about an LVV Certifier where the Certifier is exposing the LVV certification system or the Agency to safety risk, or bringing the LVV certification system into disrepute.

LVVTA may forward a complaint about an LVV Certifier to the Agency as a result of first-hand knowledge such as an inspection of a potentially unsafe vehicle, information provided by an outside person or organisation, or through information established during the LVV plate production form-set review process.

Targeted audits by the Agency

LVVTA may request that an Agency LVV Reviewer inspects a low volume vehicle for which an LVV certification plate application has been received, if LVVTA believes that any aspect of the vehicle's compliance or safety needs to be confirmed. In this case, the Agency Reviewer will be provided with the necessary information from LVVTA, and will arrange with the LVV Certifier, or the vehicle owner directly, to inspect the vehicle. The Agency Reviewer will request the assistance of LVVTA or one or more LVV Working Group members for specialist advice.

Triggering internal complaints

There are a number of situations that may lead LVVTA to investigate a vehicle through its internal complaint resolution process. LVVTA may be made aware of an alleged safety issue by a member of the public, a vehicle owner, an authorised vehicle inspector, another LVV Certifier, or through LVVTA's internal pre-plate production form-set review process.

The problem may come to LVVTA's attention in the form of a complaint, or the problem may be just an expressed concern that needs to be investigated. For the purposes of the explanation of this process, all concerns, issues, and problems that need to be investigated by LVVTA will be referred to as 'complaints'.

During the course of the internal complaint resolution process, depending on the outcome, the internal complaint may become an external complaint which is then referred to the Agency.

LVVTA's complaint initiation process

When a complaint has been received by LVVTA from an external person or organisation, the complaint process will be initiated. All written complaints will be acknowledged in writing within three working days after receipt, and the investigation will be completed and a resolution provided to the complainant within a reasonable time period. Where this is not possible, the complainant will be kept informed of the situation.

The steps involved in the initiation of a complaint are as follows. Note that not all steps will be necessary in every case, and it may be appropriate to change the order in which these steps are carried out in some cases.

- *After a complaint has been received, LVVTA will create a file folder (electronic or paper) and record details of the issue raised, including:*
 - *complainant name, contact details, company or business name, together with any interest the complainant has in the vehicle or LVV Certifier (e.g. vehicle owner, business competitor etc); and*
 - *details of the issue described by the complainant; and*
 - *the LVV Certifier name, and date the issue is alleged to have occurred; and*
 - *the vehicle make, identity, and description of modifications.*
- *LVVTA will check the LVVTA records and gather any related information for the folder, and confirm the details of the vehicle that have been provided, as far as is possible.*
- *LVVTA will determine whether the complaint is valid, and warrants an investigation.*
- *If LVVTA has reason to believe that the complaint may be valid and that there is a vehicle that has been LVV Certified which may present a safety risk or be non-compliant, LVVTA will initiate its internal complaint resolution process, as detailed in 6.2.*
- *LVVTA will inform the LVV Certifier in question at the earliest opportunity that there has been a complaint, and that an investigation is to occur.*

Risk-assessment process

A risk assessment matrix is used by LVVTA to determine the degree of seriousness that should be associated with the process of resolving an internal complaint. 'Table 6.2(1) LVVTA Risk-assessment Matrix' uses a vertical occurrence factor to determine the likelihood of a potential problem with a vehicle in fact occurring, and a horizontal consequence factor to determine the level of consequence that a potential problem within a vehicle may cause. The matrix follows time-proven risk-management principles incorporated within the Risk Management Standard AS/NZS 4360:2004.

The combination of the two factors provides a 4-level risk rating; - low, moderate, high, and extreme. The level of risk determines which of the internal complaints resolution processes specified in 'Table 6.2(2) LVVTA Internal Complaint Resolution Process' will be applied.

Sometimes, the level of risk will not be fully known until the processes specified in 'Table 6.2(2) LVVTA Internal Complaint Resolution Process' are applied, therefore the risk-assessment and complaints resolution process may be applied in tandem.

Table 6.2(1) LVVTA Risk-assessment Matrix

| | Risk of minor occupant injury | Risk of serious occupant injury | Risk of serious multi-occupant injury | Risk to other road users through potential loss of vehicle control |
|---|-------------------------------|---------------------------------|---------------------------------------|--|
| Likely to occur | High | High | Extreme | Extreme |
| Unlikely to occur | Moderate | High | High | Extreme |
| Very unlikely to occur | Low | Moderate | High | High |
| Notes: 1. Where risk rating falls into more than one column, the highest risk rating is selected. 2. Where the problem affects a series of vehicles that are modified or built in the same way, risk rating increases by one. 3. Where likelihood of occurrence is present only when the vehicle is subjected to extreme use, risk rating reduces by one. | | | | |

Some examples of the four risk assessment areas are:

- 'Risk of minor occupant injury': potential for knee injury due to unprotected lower dashboard shelf; or arm laceration due to insufficient radius on interior door handles or window winders.
- 'Risk of serious occupant injury': potential for head injury due to sharp or hard objects intruding into A-zone; or upper torso injury due to poorly-designed steering column impact design.
- 'Risk of serious multi-occupant injury': potential for head and upper torso injury due to inadequate seatbelt anchorages, or inadequate seat design or attachment system in more than one seating position.
- 'Risk to other road users through potential loss of vehicle control': potential for collision with other road users or pedestrians through loss of directional or braking control as a result of steering component failure, braking component failure, or driver's seat failure.

Application of internal complaint resolution process

Once the level of risk associated with the complaint has been established, the appropriate actions will be taken according to the 'risk rating', as set out in 'Table 6.2(2) LVVTA Internal Complaint Resolution Process Table'. Some processes shown in the actions column of the table are mandatory, and will therefore be applied as a matter of standard process, whereas other options are optional, and may be applied by LVVTA at its discretion, depending on various circumstances and criteria.

Table 6.2(2) LVVTA Internal Complaint Resolution Process Table

| Actions | Options | Risk Rating | | | |
|--|---|------------------------|-----|------|-----|
| | | ○ Optional ● Mandatory | | | |
| | | Low | Mod | High | Ext |
| The complaint will be dealt with internally or externally on the following basis: | LVVTA will deal with the matter internally without seeking involvement from the Agency | ● | ● | ● | |
| | LVVTA may refer the matter externally to the Agency if the LVV Certifier does not demonstrate a willingness to co-operate with LVVTA in a spirit of goodwill, or does not make a safe vehicle outcome and the integrity of the LVV certification system his highest priorities | ○ | ○ | ○ | |
| | High risks that involve certifiers with a recent history of issues may be notified externally to the Agency, as required by defined circumstances, for example: <ul style="list-style-type: none"> a serious breach of safety; or dangerous non-compliance of LVV Certifier appointment conditions; or a situation to the extent that there is a serious lack of confidence in the decision-making ability of the LVV Certifier. | | ○ | ○ | |
| | LVVTA will refer the complaint externally, and notify the Agency | | | ○ | ● |
| | | | | | |
| Assessment of the vehicle will be undertaken by the following personnel, appointed by LVVTA technical staff or CEO: | The LVV Certifier will be given opportunity to observe (with certain conditions imposed) | ● | ● | ● | ● |
| | LVVTA technical team members(s) or appointed representative(s) | ● | ● | ● | ● |
| | LVVTA Technical Advisory Committee member(s) | | ○ | ○ | ○ |
| | An LVV Certifier with relevant experience and knowledge, with no interest in the vehicle, and outside of the geographical area | | | ○ | ○ |
| | An independent person with expert knowledge of the components or systems in question | | | ○ | ○ |
| | An Agency representative | | | ○ | ● |
| LVVTA tech team member will write a report based on assessment & any other supplementary info available: | LVVTA technical team member to compile notes & record the recommendations of team | ● | ● | ● | ● |
| | Identify compliance and safety faults, and detail any rectification requirements | ● | ● | ● | ● |
| | Specify requirement for vehicle to be re-certified by independent LVV Certifier appointed by LVVTA, at cost of originating LVV Certifier | | ○ | ● | ● |
| | Specify cost of assessment process (applicable if serious safety faults are identified and rectifications are required) payable by LVV Certifier to LVVTA | ○ | ○ | ● | ● |
| | Distribute report for concurrence by assessment team | | ○ | ● | ● |
| | Receive feedback and revise report as necessary | | ○ | ● | ● |
| LVVTA will take the following actions: | Forward report to LVVTA CEO to sign off report and agree rectification (and re-certification where necessary) actions, with LVVTA TAC input as appropriate | | ○ | ● | ● |
| | Inform LVV Certifier of the assessment findings and actions to be taken | ● | ● | ● | ● |
| | Recall certification plate | | | ○ | ○ |
| | Issue report to vehicle owner to aid rectification process | ○ | ○ | ○ | ○ |
| | Inform the complainant of the outcome | ● | ● | ● | ● |
| | Consider the impact on any other vehicles and take actions to mitigate risk | ● | ● | ● | ● |
| | Prepare newsletter article/other communication to inform all LVV Certifiers | ○ | ○ | ○ | ○ |
| | Schedule revision of LVVTA documentation including LVV Standards and Form-sets | ○ | ○ | ○ | ○ |
| | Propose changes to NZTA Rules or processes | | | ○ | ○ |
| | Liase with LVV Certifier to ensure issues are understood so as to prevent re-occurrences | ● | ● | ● | ● |
| | Arrange for specific training for LVV Certifier | | ○ | ○ | ○ |
| | Initiate hearing by LVVTA Peer Review Group (as per 6.3 of ORS) | | | ○ | ○ |
| | Impose LVV Certifier Monitoring (as per 6.4 of ORS) | | | ○ | ○ |
| | Impose LVV Certifier Mentoring (as per 6.5 of ORS) | | | ○ | ○ |
| | Inform NZTA of the issue and resolution | | | ● | ● |
| | Impose re-assessment of one or more related LVV Certifier categories (as per 6.6 of ORS) | | ○ | ○ | ○ |
| | Provide recommendation to the Agency on initiation of disciplinary process | | ○ | ○ | ○ |
| | Update the file folder with all documentation for future reference | ● | ● | ● | ● |
| The LVV Certifier will take the following actions: | Ensure problem is resolved to the satisfaction of LVVTA | ● | ● | ● | ● |
| | Meet any costs that are imposed by LVVTA for assessment process and/or re-certification | ● | ● | ● | ● |
| | Comply with any requirements and actions specified by LVVTA | ● | ● | ● | ● |
| | Confirm to LVVTA in writing upon completion of compliance with any specified actions | ● | ● | ● | ● |
| | Detail problem and resolution as specified within NZTA Performance Review System | ● | ● | ● | ● |

Application of mandatory processes

Any mandatory processes specified by the actions column of the LVVTA Internal Complaint Resolution Process Table will be followed strictly in accordance with Table 6.2(2).

Where LVVTA is required by the processes specified by the actions column of the LVVTA Internal Complaint Resolution Process Table to notify the Agency, a report will be provided to the Agency with the findings of LVVTA's internal complaint resolution process. The Agency will then take over the complaint, and deal with the complaint in accordance with the processes specified within the Land Transport Compliance Rule.

Application of optional processes

Whether any of the optional processes shown in the actions column of the LVVTA Internal Complaint Resolution Process Table are applied, and which of those optional actions are applied, will take into consideration:

- *the outcome of the internal complaint assessment; and*
- *the level of negligence on the part of the LVV Certifier involved; and*
- *whether or not the problem was readily identifiable, and the expected ease with which the LVV Certifier should have identified the problem; and*
- *whether or not the LVV certification technical requirements provide adequate guidance with which to enable the LVV Certifier to correctly deal with the issue; and*
- *the LVV certification history of the LVV Certifier in question; and*
- *the level of co-operation and willingness shown by the LVV Certifier during the course of working with LVVTA in order to resolve the complaint.*

Internal complaint resolution negotiation

In the event of the resolution of an internal complaint which the LVVTA risk-assessment matrix identifies as a high risk, and where referral of the matter to the Agency is 'optional', LVVTA may consider 'negotiation' with the LVV Certifier. Negotiated resolutions available to the LVV Certifier may include options for the LVV Certifier to:

- *voluntarily relinquish one or more LVV certification categories where the LVV Certifier is operating at a higher level of risk; and*
- *voluntarily undergo LVV Certifier Monitoring, under the conditions specified in 6.4; and*
- *voluntarily undergo LVV Certifier Mentoring, under the conditions specified in 6.5.*

Achieving a negotiated resolution between LVVTA and the LVV Certifier in order to enable the complaint to remain internal is subject entirely upon:

- achieving a reduction of safety-risk to the motoring public; and
- the LVV Certifier maintaining a high level of cooperation and willingness during the course of working with LVVTA in order to resolve the complaint.

Costs incurred during complaint resolution

The application of the processes shown in the LVVTA Internal Complaint Resolution Process Table will incur costs to LVVTA, and LVVTA will, where an LVV Certifier is found to be negligent or in breach of a technical or operational requirement, exercise its right to recuperate those costs from the LVV Certifier if it so chooses to. Paragraph 3.2(7) of the Land Transport Compliance Rule 35001/1 provides for a person under investigation to bear the costs associated with the investigation process, or remedial action required as a result of the investigation process. LVVTA's decision as to whether or not it chooses to recuperate its costs, or what portion of its costs it chooses to recuperate, from the LVV Certifier during any internal complaints resolution process, will take into consideration:

- the outcome of the internal complaint assessment; and
- the amount of time and cost LVVTA is subjected to in order to carry out the internal complaint assessment; and
- the LVV certification history of the LVV Certifier in question; and
- the level of co-operation and willingness shown by the LVV Certifier during the course of working with LVVTA in order to resolve the complaint.

LVV certification documentation problem resolution

An LVV Certifier is required to provide the necessary and relevant forms and form-sets for each LVV certification carried out, which must be submitted and filled out correctly, accurately, and legibly. In each case that LVVTA finds it necessary to request further information from an LVV Certifier, or provide coaching to an LVV Certifier on the correct provision of the relevant forms and form-sets, such action will be recorded internally for future reference, as detailed in 6.7.

Disputing the internal complaints resolution process

An LVV Certifier may, at any time, dispute the action being taken by LVVTA in relation to the internal complaint resolution process detailed within 6.2. If an LVV Certifier wishes to do so, the details of the dispute must be forwarded to the Manager, National Service Delivery Co-ordination, New Zealand Transport Agency, Private Bag 1117, Palmerston North 4440.

LVCM-appointed LVV Certifiers

Sub-section 6.2 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

6.3 Peer review process

Introduction

A complaint that is being dealt with, either internally or externally, against an LVV Certifier in relation to the LVV Certifier's technical judgments or expertise, or application of the LVVTA low volume vehicle standards or other relevant technical information, may, prior to a determination being made, be subject to a hearing by an LVVTA Peer Review Group.

The LVVTA Peer Review Group will operate as outlined in Sub-section 6.3. The purpose of such a hearing is to determine without bias whether the LVV Certifier in question is negligent in his actions, and if so, the extent of the negligence. The findings of the peer review may be provided to the Agency as a tool with which to assist with their disciplinary action process if the Agency so chooses.

Sub-section 6.3 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

LVCM-appointed LVV Certifiers

6.3(1)

The requirements specified in 6.3(2) to 6.3(9) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

Peer Review Group composition

6.3(2)

The LVV Peer Review Group will comprise:

- (a) a chairperson, who may be an LVVTA technical staff member or an independent person appointed to the role; and
- (b) members who have considerable experience and expertise in low volume vehicle modification, construction, and certification; and
- (c) one or more LVV Certifiers who have categories equivalent to the LVV Certifier under review, and who shall, where practicable, be from outside of the geographical coverage area of the LVV Certifier under review; and
- (d) where considered necessary, co-opted members who have specific experience and expertise on specific technical subjects relevant to the particular hearing; and
- (e) a representative from the Agency.

NOTE: The requirement specified in 6.3(2)(c) for an LVV Certifier to be from outside of the geographical coverage area (where practicable) of the LVV Certifier under review is considered ideal in terms of ensuring against bias or a conflict of interest occurring, however this requirement may be relaxed in the interests of efficiency and cost-saving if so requested by LVVTA and agreed to by the LVV Certifier under review.

Co-ordination of the Peer Review Group**6.3(3)**

The LVV Peer Review Group will be coordinated by LVVTA, who will:

- (a) appoint a chairperson with a strong technical and LVV certification knowledge who is experienced in conducting hearings without prejudice, and who will ensure that fair practices are followed; and
- (b) appoint and co-opt the members of the LVVTA Peer Review Group for each hearing; and
- (c) arrange and co-ordinate the hearings; and
- (d) ensure that the hearings occur without pre-disposition or prejudice, and are focused on the safety-related technical performance of the LVV Certifier in question, in relation to the complaint under investigation; and
- (e) provide a written report which reflects the consensus of the LVVTA Peer Review Group, in order to assist LVVTA in making their decisions relating to the remedial work on the vehicle in question, and where necessary to assist the Agency in the application of their disciplinary action against the LVV Certifier under investigation.

Matters taken into consideration**6.3(4)**

The LVV Certifier under review will be given the opportunity to present his point of view via the presentation of a written statement, or if he so chooses, may make a presentation directly to the Peer Review Group at the commencement of the hearing, however will be asked to leave the hearing upon completion of his presentation.

6.3(5)

The peer review group will, during its hearing of the facts relating to the complaint, take into consideration matters which include:

- (a) the point of view provided by the LVV Certifier under review; and
- (b) the presence, accessibility, clarity, and scope for misinterpretation of the relevant LVVTA technical requirements that should have been applied to the situation; and
- (c) what would be reasonably expected of a competent automotive expert in relation to the situation; and
- (d) what conclusions and decisions the LVV Certifiers appointed to the Peer Review Group would have taken had they been presented with the same vehicle for LVV certification assessment.

Findings of the Peer Review Group

6.3(6)

The findings of the LVV Peer Review Group will be used to:

- (a) assist LVVTA in determining the seriousness of the situation, and whether the complaint should be forwarded to the Agency recommending their consideration of disciplinary action against the LVV Certifier in question; and
- (b) in the case of the matter being referred to the Agency, assist the Agency in determining whether to take disciplinary action against the LVV Certifier in question, and if so, what level of disciplinary action.

Reporting to the Agency

6.3(7)

In each case of a Peer Review Group hearing being applied by LVVTA, LVVTA will inform the Agency of the details relating to the peer review requirement, together with the outcome of the peer review process when completed.

Costs of peer review hearing

6.3(8)

An LVV Certifier who is required to undergo a peer review will, if found by the Peer Review process to be negligent, meet all actual and reasonable costs incurred by LVVTA for the hearing by the Peer Review Group, which will be based on:

- (a) recuperation of direct costs incurred by LVVTA in order to co-ordinate the hearing; and
- (b) LVVTA's time to co-ordinate the hearing and provide the Peer Review Group's report, based on a fair and reasonable prescribed hourly rate; and
- (c) the Peer Review Group participants' time to travel to and from, and attend the hearing, based on a fair and reasonable prescribed hourly rate.

NOTE: The costs associated with the provision of the peer review process referred to in 6.3(8) may, at the discretion of LVVTA, be reduced or waived upon special circumstances.

Disputing the peer review outcome

6.3(9)

An LVV Certifier may, at any time, dispute the findings, or the action being taken by LVVTA, in relation to the Peer Review process detailed within 6.3. If an LVV Certifier wishes to do so, the details of the dispute must be forwarded to the Manager Vehicles, Technical Services, New Zealand Transport Agency, Private Bag 6995, Wellington 6141.

6.4 LVV Certifier monitoring

Introduction

LVVTA operates a monitoring process which is applied from time to time, as and when determined to be necessary.

The monitoring process is an internal documentation-based review process, usually imposed in cases where an LVV Certifier is found to need a disproportionate level of coaching through the LVVTA pre-plate production review process, or where the normal coaching process is not achieving positive results.

The monitoring process may be invoked when determined to be necessary as a result of a complaint, or disciplinary action taken by the Agency. It may also be invoked where a new LVV Certifier appointment is made.

This process is intended to identify any areas of safety-risk or procedural weakness within LVV Certifiers, and enable coaching and assistance to be provided by LVVTA in an effort to up-skill the LVV Certifiers. The monitoring process is a means of attempting to bring about an alignment of all LVV Certifier's inspection and certification standards, without any investigations or disciplinary action being applied by the Agency. If the monitoring process fails to bring about the necessary improvements to an LVV Certifier's performance, decisions, and competence, then LVVTA will refer the matter, and its findings in relation to the matter, as a formal complaint to the Agency.

Sub-section 6.4 provides the details of the monitoring process.

Sub-section 6.4 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

LVCM-appointed LVV Certifiers

6.4(1)

The requirements specified in 6.4(2) to 6.4(6) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

Purpose of monitoring process

6.4(2)

As a means of providing training or up-skilling to an LVV Certifier, an LVV Certifier may, by agreement between LVVTA and the Agency, be required to undergo monitoring by the LVVTA for either a specified or indefinite period of time, to ensure that the LVV Certifier is:

- (a) operating within his area of expertise; and
- (b) operating within his authorised LVV certification categories; and
- (c) correctly applying the LVV standards and other relevant LVV technical requirements; and

- (d) making judgments and decisions that are technically and legally sound.

Requirements of LVV Certifier during monitoring process

6.4(3)

An LVV Certifier who is required to undergo monitoring must, for every LVV certification application submitted:

- (a) supply one or more 1200 x 800 pixel (or equivalent) resolution colour photographs taken by the LVV Certifier, that are well-focused and clear, of the vehicle's VIN, and of every aspect of every modification that is unique to the individual vehicle being certified, together with written details of what is shown in each photograph, which may be either;
 - (i) ideally, on a compact disc, or other non-returnable electronic medium; or
 - (ii) processed photo prints; or
 - (iii) printed from a digital image in hard copy form, either one or two per A4 page;
- and
- (b) provide, on request, for the purpose of clarification, any further information or detail requested by LVVTA; and
- (c) comply with any directives that LVVTA requests in relation to remedial work deemed necessary to bring any vehicle into a safe and compliant condition, in a spirit of willingness and cooperation.

NOTE 1: It must be clearly understood by the LVV Certifier that the submission of photographs specified in 6.4(3) in no way reduces the responsibility for the correct assessment of the vehicle by the LVV Certifier, or shifts any responsibility for the vehicle's safety or compliance to LVVTA.

NOTE 2: It is the responsibility of the LVV Certifier, if providing photographs on a CD, to ensure that the CD is correctly formatted, and can be opened and navigated through quickly and easily. If the images cannot be viewed, the certification plate application cannot be processed.

NOTE 3: Whichever option specified in 6.4(3) is chosen, the images must incorporate sufficient light, detail, and clarity so as to enable the LVVTA desk-top review to take place easily and effectively.

Reporting to the Agency

6.4(4)

In each case of a form-set monitoring process being applied by LVVTA, LVVTA will inform the Agency of the details relating to the monitoring requirement, together with the outcome of the monitoring process when completed.

Costs of monitoring process

6.4(5)

An LVV Certifier who is required to undergo monitoring will meet all actual and reasonable costs incurred by LVVTA for the monitoring process, which will be based on:

- (a) recuperation of direct costs incurred by LVVTA in order to co-ordinate the monitoring process; and
- (b) LVVTA's time to co-ordinate the monitoring process, based on a fair and reasonable prescribed hourly rate.

NOTE: The costs associated with the provision of monitoring referred to in 6.4(5) may, at the discretion of LVVTA, be reduced or waived upon special circumstances.

Disputing the monitoring outcome

6.4(6)

An LVV Certifier may, at any time, dispute the findings, or the action being taken by LVVTA, in relation to the monitoring process detailed within 6.4. If an LVV Certifier wishes to do so, the details of the dispute must be forwarded to the Manager Vehicles, Technical Services, New Zealand Transport Agency, Private Bag 6995, Wellington 6141.

6.5

LVV Certifier mentoring

Introduction

Sometimes, an LVV Certifier can be of value to the LVV certification system, but may have a shortfall in knowledge in a certain area. The LVV Certifier mentoring process provides the opportunity for an LVV Certifier to be paired up with, and learn from, another LVV Certifier who has superior knowledge and experience in that area. This process is usually initiated by LVVTA when circumstances have arisen to highlight a need for an LVV Certifier to receive on-the-job up-skilling and coaching.

Sub-section 6.5 provides the details of the mentoring process.

Sub-section 6.5 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCN - Commercial Modification'.

LVCN-appointed LVV Certifiers

6.5(1)

The requirements specified in 6.5(2) to 6.5(7) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCN Commercial Modification'.

Purpose of mentoring process**6.5(2)**

As a means of providing training or up-skilling to an LVV Certifier, or to a person who is to become appointed as an LVV Certifier, an LVV Certifier may, by agreement between LVVTA and the Agency, be required to undergo one-on-one mentoring with another LVV Certifier by the LVVTA for a specified period of time, to assist the LVV Certifier in:

- (a) correctly applying the LVV standards and other relevant technical requirements; and
- (b) making judgments and decisions that are technically and legally sound.

Responsibilities of LVV Certifier undergoing mentoring**6.5(3)**

The LVV Certifier undergoing the mentoring process will, during the period of being mentored:

- (a) carry out a specified number of his inspections accompanied by a suitably experienced LVV Certifier appointed by LVVTA, and
- (b) undergo the mentoring process, and comply with any directives that LVVTA requests during the process, in a spirit of willingness and cooperation; and
- (c) fit in with the schedules and availability of the LVV Certifier providing the mentoring, in a spirit of willingness and cooperation.

NOTE: LVVTA will make all reasonable efforts to use an LVV Certifier for the mentoring provision service who has no commercial conflict of interest with the LVV Certifier undergoing mentoring. A compromise will sometimes need to be made in order to maintain a balance between commercial conflict and cost of the service provision.

Responsibilities of LVV Certifier providing mentoring**6.5(4)**

The LVV Certifier providing the mentoring process will, during the period of the mentoring:

- (a) oversee each LVV certification carried out by the LVV Certifier under-going mentoring, to determine whether or not the LVV Certifier is correctly applying the low volume vehicle standards and other relevant technical requirements, and is making judgments and decisions that are technically and legally sound; and
- (b) counter-sign each LVV certification carried out by the LVV Certifier under-going mentoring, to confirm that he is satisfied that the low volume vehicle is safe and compliant; and

- (c) maintain an open line of communication with LVVTA, providing opinions and information relating to the inspections and decisions of the LVV Certifier undergoing mentoring; and
- (d) provide to LVVTA, at the end of the specified mentoring process, a written recommendation that outlines whether or not the LVV Certifier undergoing mentoring has the necessary competence and knowledge to carry out LVV certification unsupervised without presenting any safety risks to the motoring public.

Reporting to the Agency

6.5(5)

In each case of the mentoring process being applied by LVVTA, LVVTA will inform the Agency of the details relating to the mentoring requirement, together with the outcome of the mentoring process when completed.

Costs of mentoring process

6.5(6)

An LVV Certifier who is required to undergo mentoring will meet all actual and reasonable costs incurred by LVVTA for the mentoring process, which will be based on:

- (a) recuperation of direct costs incurred by LVVTA in order to co-ordinate the mentoring process; and
- (b) LVVTA's time to co-ordinate the mentoring process, based on a fair and reasonable prescribed hourly rate.

NOTE: Part of the fee for the mentoring service referred to in **6.5(6)** will be paid to the LVV Certifier providing the mentoring service.

Disputing the mentoring outcome

6.5(7)

An LVV Certifier may, at any time, dispute the findings, or the action being taken by LVVTA in relation to the mentoring process detailed within 6.5. If an LVV Certifier wishes to do so, the details of the dispute must be forwarded to the Manager Vehicles, Technical Services, New Zealand Transport Agency, Private Bag 6995, Wellington 6141.

6.6

LVV Certifier competence re-assessment

Introduction

It is possible for an LVV Certifier to hold one or more LVV Certifier categories for which he does not have the appropriate level of knowledge, skills, or experience. This may be because the LVV Certifier was appointed for the category without due attention to determining whether he was appropriately skilled for the category at the time of his appointment, or because he has had very little involvement in that category and vehicle technology advancements have passed him by.

When a shortfall of knowledge, skills or experience has been identified as a result of a complaint, it is appropriate to carry out a re-assessment of the LVV Certifier's competence in relation to one or more LVV certification categories.

Sub-section 6.6 provides the details of the competence re-assessment process.

Sub-section 6.6 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

LVCM-appointed LVV Certifiers

6.6(1)

The requirements specified in 6.6(2) to 6.6(6) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

Purpose of competence re-assessment

6.6(2)

As a means by which to establish an LVV Certifier's level of competence in relation to one or more LVV Certifier categories, as a result of a complaint that has found that an LVV Certifier has performed poorly or made unsound technical decisions, an LVV Certifier may, by agreement between LVVTA and the Agency, be required to undergo re-assessment in relation to one or more LVV Certifier categories.

Procedure for competence re-assessment

6.6(3)

An LVV Certifier undergoing the competence re-assessment process must undergo an assessment process at a time and place specified by LVVTA, that will include, for each LVV Certifier category the applicant is being re-assessed for:

- (a) a series of 20 multi-choice written questions that relate to vehicle modification and construction; and
- (b) an in-depth interview on detailed technical matters in relation to vehicle modification and construction by a selection panel comprising representatives from LVVTA, which may include LVVTA staff-members and Technical Advisory Committee members, Agency representatives, or outside experts co-opted for the purpose of the re-assessment process; and
- (c) an in-depth evaluation of the LVV Certifier's practical knowledge and skills during an inspection in a workshop environment, relating to a low volume vehicle of a type applicable to the LVV Certifier category under re-assessment, by a selection panel comprising representatives from LVVTA, which may include LVVTA staff-members and Technical Advisory Committee members, Agency representatives, or outside experts co-opted for the purpose of the re-assessment process.

Reporting to the Agency

6.6(4)

In each case of the re-assessment process being applied by LVVTA, LVVTA will inform the Agency of the details relating to the re-assessment requirement, together with the outcome of the re-assessment process when completed.

Costs of re-assessment process

6.6(5)

An LVV Certifier who is required to be re-assessed for one or more LVV Certifier categories will meet all actual and reasonable costs incurred by LVVTA for the re-assessment process, which will be based on:

- (a) recuperation of direct costs incurred by LVVTA in order to co-ordinate the re-assessment process; and
- (b) LVVTA's time to co-ordinate the re-assessment process, based on a fair and reasonable prescribed hourly rate.

Disputing the re-assessment outcome

6.6(6)

An LVV Certifier may, at any time, dispute the findings, or the action being taken by LVVTA, in relation to the re-assessment process detailed within 6.6. If an LVV Certifier wishes to do so, the details of the dispute must be forwarded to the Manager Vehicles, Technical Services, New Zealand Transport Agency, Private Bag 6995, Wellington 6141.

6.7

Competence record-keeping

Introduction

It has been agreed between the Agency and LVVTA that LVVTA is to keep a record of any instances where an LVV Certifier has failed to meet a technical or procedural requirement. An internal process has been established within LVVTA that records these technical or administrative issues. A technical error is likely to have an effect on safety and is regarded as the most serious type of error. Procedural breaches relate to errors made in filling out paperwork or following administrative processes, which are not usually safety related and on their own, would not require anything more than some coaching or help. However, over time, if the problems continue, or the problems are shown to be disproportionate to the number of certifications carried out by the LVV Certifier, this information may contribute toward more serious action being taken in the long-term.

An internal file is kept for each LVV Certifier, within which to collate and store any errors found. Sub-section 6.7 provides the details of the competence record-keeping process.

Sub-section 6.7 is not relevant to an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM - Commercial Modification'.

LVCM-appointed LVV Certifiers**6.7(1)**

The requirements specified in 6.7(2) to 6.7(10) do not apply in the case of an LVV Certifier appointed to certify Type-approved vehicles under LVV Certifier category 'LVCM Commercial Modification'.

Record-keeping of competence issues**6.7(2)**

In the event that an LVV Certifier is found by LVVTA, during the administrative or technical document review processes specified in 5.2, or by other sources of information such as Agency Certification Officers or customers, to have failed to meet a specified technical or procedural requirement or to have made a poor technical decision, an Error Report Form will be completed by an LVVTA technical staff-member, about which the LVV Certifier will be contacted to provide any relevant details in mitigation before the report is finalised.

Use of competence record-keeping files**6.7(3)**

Each finalised Error Report is notified to the Agency at the next meeting of the NZTA-LVVTA Technical Working Group, and the number of technical and procedural errors is jointly agreed by LVVTA and NZTA and noted on the Error Report, along with the date and Agency staff-member in attendance.

6.7(4)

The information recorded within each LVV Certifier's Error Report files, as specified in 6.7(2) and 6.7(3), will be summarised within an LVVTA LVV Certifier Error Report Summary, which will be updated every six months and kept on file at the LVVTA office, and will rank each LVV Certifier by technical and procedural errors, with regard to:

- (a) the number of certifications carried out by each LVV Certifier; and
- (b) the complexity of the certifications carried out.

6.7(5)

The information contained in the Error Report Summary will be used to:

- (a) notify the Agency of each LVV Certifier's performance, and of his performance relative to the LVV Certifier's peers; and
- (b) provide background information on an LVV Certifier's performance history and level of competence in the event that a complaint of a more serious nature is made about the LVV Certifier to the Agency; and
- (c) provide information to Agency Certification Officers to assist in their Performance Review System assessments.

6.7(6)

LVVTA will inform each LVV Certifier periodically, and upon request by an LVV Certifier, of the errors that are on file for that LVV Certifier.

6.7(7)

In the event that LVVTA finds it necessary to request further information from an LVV Certifier, or provide coaching to an LVV Certifier on the correct provision of the relevant forms and form-sets, to a degree that is disproportionate to that required from the majority of LVV Certifiers, LVVTA may:

- (a) require the LVV Certifier to come to LVVTA for one-on-one training in the correct application and use of forms and form-sets; or
- (b) introduce LVV Certifier Monitoring as specified in 6.4; or
- (c) refer the problem as an external complaint to the Agency.

Referral of competence record-keeping files to the Agency

6.7(8)

LVVTA will provide the Error Report Summary to the Agency every six months after it has been updated.

6.7(9)

In the event that an LVV Certifier shows inability or unwillingness to provide further information when requested, or to accept coaching on the correct provision of the relevant forms and form-sets in a spirit of willingness and co-operation, LVVTA may refer the problem as an external complaint to the Agency.

Competence record-keeping of LVVTA staff

6.7(10)

In the event that any staff-member of LVVTA is found to have made an error or a poor technical or operational decision, a record of this will be kept on the LVVTA Error Report file for the purposes of internal training and to assist in the continuous improvement of LVVTA operations.

6.8

Disciplinary action against an LVV Certifier

Introduction

LVV Certifiers are the responsibility of the Agency, including appointment, applying disciplinary action, suspension, or revocation of the LVV Certifier's appointment. Disciplinary action, including suspension and revocation, will be applied by the Agency where an LVV Certifier performs poorly or makes poor technical decisions, thereby introducing safety risk to members of the public and NZTA, or by bringing the LVV system into disrepute.

Responsibilities of the Agency

6.8(1)

Where an LVV Certifier has, despite LVVTA's efforts to improve and up-skill that LVV Certifier to an acceptable level, repeatedly failed to maintain an acceptable level of safety-related output quality, the Agency will carry out meaningful disciplinary action in accordance with the LVV Certifier's Deed of Appointment.

6.9 Technical Decision Review Committee

Introduction

From time to time, LVVTA technical staff-members, and the NZTA-LVVTA Technical Working Group, make technical determinations that disallow vehicle modifiers from carrying out their desired modifications and vehicle construction. These technical decisions are made on the grounds of compliance, or safety to the motoring public. If a member of the public is dissatisfied with the decision of the LVVTA technical staff members, they can request that the matter is given re-consideration by the LVVTA Technical Advisory Committee, in which case the LVVTA technical staff will, where practical and reasonable, facilitate.

Similarly, from time to time, the LVVTA Technical Advisory Committee have to decline approval applications from members of the public who wish to carry out modifications or construction on a motor vehicle that is considered by the committee to either be unsafe, or to be of an unknown design and unproven in terms of its safety or durability, again on the grounds of safety to the motoring public.

The Technical Decision Review Committee has been established to provide a mechanism by which a person who has had a technical request or an approval application denied by the LVVTA Technical Advisory Committee, to ask that the request or application be re-considered if the applicant is dissatisfied with the decision made by the LVVTA Technical Advisory Committee.

The Technical Decision Review Committee is a committee that is independent of the LVVTA technical staff and the Technical Advisory Committee, and is tasked, where required, to review a decision by the TAC, and determine whether or not the TAC was fully aware of the facts associated with their consideration, and whether the determination of the TAC was fair and appropriate.

Responsibilities of the Technical Decision Review Committee

6.9(1) The Technical Decision Review Committee is responsible for independently reviewing a decision made by the LVVTA Technical Advisory Committee in a situation where a dispute or a complaint has been raised in relation to a decision made by the Technical Advisory Committee, as a consequence of either:

- (a) a decision having been challenged by a member of the public; or
- (b) where a member of the public wishes to have a decision made by the Technical Advisory Committee reviewed or re-considered.

Composition of the Technical Decision Review Committee

6.9(2) The Technical Decision Review Committee is a Wellington-based review panel that is:

- (a) established and co-ordinated by LVVTA; and

- (b) functions independently from LVVTA; and
- (c) is comprised of:
 - (i) not less than three and not more than four persons who are highly-skilled independent technical experts from the automotive engineering and modification industry; and
 - (ii) one member of the LVVTA Technical Advisory Committee, whose role is to provide background information and the reasons for the Technical Advisory Committee's decision, however has no voting right; and
 - (iii) one representative from NZTA, whose role is to oversee the consideration and determination process and ensure that the committee acts in a fair, reasonable, and transparent manner, however has no voting right; and
 - (iv) a chairperson who will chair the meeting and record the decisions, and who is a voting member of the committee.

Functioning of the Technical Decision Review Committee

- 6.9(3) The Technical Decision Review Committee will:
- (a) meet on an as-and-when-required basis; and
 - (b) be called and co-ordinated by a senior technical staff member of LVVTA; and
 - (c) report back to the senior technical staff member of LVVTA, and to the Agency, with its findings on the matter under consideration.

Section 7 Low volume vehicle classification and categories

7.1 Sub-categories of scratch-built low volume vehicles

Introduction

If a vehicle enthusiast builds a scratch-built replica vehicle, then despite the fact that it may appear to be, say, a 1930 vehicle, it is in fact a brand-new vehicle and as such must meet all of LVVTA's technical requirements specified within the LVV standards. There are however different levels of 'replica', and to treat all replica vehicles in the same manner is not always appropriate.

For example, if a vintage or veteran car enthusiast chose to build a very accurate and authentic replica of an early 1900s-era Bentley tourer (because such a vehicle is not practically able to be purchased any more), and incorporated the original construction methods of timber-framing and canvass cladding, then compliance with all modern vehicle safety standards (such as a burst-proof door retention system that is required to withstand over a ton of load) is in some cases both unachievable and unreasonable. Therefore, it is appropriate to apply certain concessions to such a scratch-built vehicle.

Builders of other scratch-built vehicle types however, such as a futuristic sports car, where the builder is starting with a blank canvass and has no design limitations, have no legitimate justification not to fully comply with all modern vehicle safety systems.

Sub-section 7.1 details the different types of 'scratch-built low volume vehicle sub-categories, and what the compliance requirements are for each sub-category.

Types of scratch-built sub-categories

7.1(1) A scratch-built low volume vehicle will fall into one of the three following categories:

- (a) a 'Scratch-built Historic Replica' low volume vehicle; or
- (b) a 'Scratch-built Reproduction' low volume vehicle; or
- (c) a 'Scratch-built Unique' low volume vehicle.

Identification of scratch-built sub-categories

7.1(2) A 'Scratch-built Historic Replica' low volume vehicle is a replica of a vehicle which was, or could have been, manufactured before 1960, that uses components, systems, materials, and engineering processes throughout its construction that are appropriate to the period in which the vehicle is styled, and either:

- (a) is an accurate historical representation of a vehicle built from a particular period of motoring history; or
- (b) is not readily distinguishable from an original example of the specific make and model of production vehicle being replicated.

NOTE 1: As examples, a typical 'Scratch-built Historic Replica' LVV as described in 7.1(2) might be a constructed 1925 Bentley 3-litre replica, a constructed alloy-bodied AC Cobra replica, or a constructed Type-35 Bugatti replica. It may also be a Austin Seven sedan re-bodied with a period-correct open sports body.

NOTE 2: A vehicle, for the purpose of the description in 7.1(2) that was manufactured before 1960, includes those vehicles whose production commenced prior to 1960 but continued past 1960.

- 7.1(3) A 'Scratch-built 'Reproduction' low volume vehicle is a vehicle which is clearly recognisable as a reproduction of a specific make and model of production motor vehicle, and maintains an actual or approximate silhouette of the vehicle being reproduced, and uses an amalgamation of period and modern components, systems, materials, and engineering processes throughout its construction.

NOTE: An example of a typical 'Scratch-built Reproduction' LVV as described in 7.1(3) might be a fibre-glass reproduction 1934 Ford Coupe hot rod, a fibre-glass reproduction AC Cobra, or a fibre-glass reproduction MGTF.

- 7.1(4) A 'Scratch-built Unique' low volume vehicle is a vehicle that is not recognisable as a reproduction of any specific make and model of production motor vehicle, but is the result of the builder's individual and unique ideas.

NOTE: An example of a typical 'Scratch-built Unique' LVV as described in 7.1(4) might be a uniquely-styled sports car such as a 'Saker' or a 'Radical', or a futuristic concept car.

Assessment method for scratch-built sub-categories

- 7.1(5) A 'Scratch-built Historic Replica' low volume vehicle must, in order to be categorised as a 'Scratch-built Historic Replica' low volume vehicle, be issued with a valid *Identity Card of The Vintage Car Club of New Zealand*, which specifies the vehicle's classification as either 'B5', 'C4', or 'C5'.

NOTE: In assessing whether or not a scratch-built low volume vehicle fits within part (a) of the 'Scratch-built Historic Replica' definition – that is, 'is the vehicle an accurate historical representation of a vehicle built from a particular period of motoring history?' - The Vintage Car Club of NZ will consider whether or not the vehicle presented could have been built during the period in which it is styled. This involves determining whether or not all of the key components of the vehicle were in fact available at that time.

- 7.1(6) A scratch-built low volume vehicle must, in order to be categorised as a 'Scratch-built Reproduction' low volume vehicle, be assessed via visual inspection and identification by a Category 1D-authorized LVV Certifier.

- 7.1(7) A scratch-built low volume vehicle must, in order to be categorised as a 'Scratch-built Unique' low volume vehicle, be assessed via visual inspection and identification by a Category 1D-authorized LVV Certifier.

Application of requirements for scratch-built sub-categories

- 7.1(8) A 'Scratch-built Historic Replica' low volume vehicle must comply with specified technical requirements contained in all LVVTA LVV standards, and must, in every case, as a minimum:

- (a) incorporate some form of steering system collapsibility specified in *Chapter 7 (Steering Systems)* of the *New Zealand Car Construction Manual*; and

- (b) meet all applicable LVV braking requirements specified in *Chapter 8 (Braking Systems)* of the *New Zealand Car Construction Manual*; and
- (c) incorporate as a minimum, a lap seatbelt for each seating position, which meets the applicable requirements specified in *Chapter 14 (Seats, Seatbelts, and Anchorages)* of the *New Zealand Car Construction Manual*; and
- (d) meet all applicable LVV glazing requirements specified in Chapter 15 (Glazing and Vision) of the *New Zealand Car Construction Manual*, for the windscreen and side and rear windows (if fitted); and
- (e) meet all applicable LVV lighting performance requirements specified in *Chapter 17 (Lighting Equipment)* of the *New Zealand Car Construction Manual*, with the exception of the requirements for the lighting equipment to meet approved standards.

7.1(9) A 'Scratch-built Reproduction' low volume vehicle must comply with all applicable technical requirements specified in all LVVTA LVV standards.

NOTE: A 'Scratch-built Reproduction' low volume vehicle will be required to comply with significantly more technical requirements within the LVVTA low volume vehicle standards than a 'Scratch-built Historic Replica' vehicle.

7.1(10) A 'Scratch-built Unique' low volume vehicle must comply with all technical requirements specified in all LVVTA LVV standards.

Section 8 Terms and definitions

| | |
|---|--|
| Adaptive control systems | means controls for people who are prevented by a physical disability from driving a motor vehicle using conventional controls, in particular those primary controls that operate the brake and accelerator systems. |
| Administrative breach | means a situation where an LVV Certifier fails to meet an administrative requirement when applying for an LVV certification plate. |
| Aftermarket | means a manufacturer or supplier who produces components on a production-run basis for the mass-market. |
| Agency | means the New Zealand Transport Agency. |
| Airbag | means a supplementary occupant protection device together with its associated equipment, fitted forward of the front seating positions, that deploys upon impact during a collision and provides an inflatable cushion to protect the occupants from injury as a result of contacting the vehicle structure, fittings, controls, and surfaces. These are generally referred to as supplementary restraint systems. |
| Authority Card | means a LVV certification document, issued under the delegated authority of the Agency, specifying alternative safety-related equipment required by a vehicle for special purposes. |
| AVI | is an abbreviation for authorised vehicle inspector. |
| A-zone | means the safety-critical area immediately around the occupants in relation to interior impact protection, as defined within <i>LVV Standard 155-40 (Interior Impact)</i> . |
| Base-form-set | means the forms and form-sets that are common to all LVV certifications, which is comprised of the <i>F000 Certification Plate Order Form</i> , <i>F001 Statement of Compliance Certificate</i> , <i>F002 LVV Plate Data Form</i> , <i>F003 Safety Item Form</i> , and <i>F004 Rectification Form</i> . |
| Calibrated light transmission measuring device | means a device for measuring light transmittance through a material in which a detector and a light source are mounted in a single housing, and light emitted from the light source is transmitted through the material and then retro-reflected by a retro-reflector into the light detector. |
| CCM | is an abbreviation for the New Zealand Car Construction Manual. |
| Certification | means the process specified by the Code, by which the design of a low volume vehicle is determined to comply with applicable safety requirements, and, in recognition of which, a plate is affixed. |

| | |
|--------------------------------|--|
| Certification plate fee | means the total fee paid by the Certifier to LVVTA for a certification plate, which comprises the NZTA crown regulatory fee, and the LVVTA royalty. |
| Certifier mentoring | means a process of providing training or up-skilling to an LVV Certifier, or to a person who is to become appointed as an LVV Certifier, where an LVV Certifier may be required to undergo one-on-one mentoring with another LVV Certifier for a specified period of time. |
| Certifier monitoring | means an internal documentation-based review process, usually imposed in cases where an LVV Certifier is found to need a disproportionate level of coaching through the LVVTA pre-plate production review process, or where the normal coaching process is not achieving positive results. |
| Chassis | means the supporting frame or platform of a motor vehicle to which the major mechanical components and body attach. |
| Code | means the Low Volume Vehicle Code of LVVTA, incorporated by reference into the <i>Land Transport Rule 35001: Vehicle Standards Compliance 2002</i> , and all applicable individual Land Transport equipment rules. |
| Component Approval | means the process used for approval of a component design, for confirmation that it will meet any applicable requirements. |
| Concept Approval | means the process used for approval of a conceptual project plan, for confirmation that a proposed idea can in fact be legally carried out. |
| Cyclic brake testing | means the process of checking a vehicle's braking system by completing a series of identical brake performance tests 'back to back', thereby determining the braking system's ability to handle severe and continuous braking. The test consists of three or five consecutive hard stops from a speed of 100 km/h. This test is generally completed by an LVV Certifier as part of the inspection process when a modification has been done which may affect the vehicle's braking performance, such as an engine change, an increase in power output of the factory-fitted engine, or changed braking or suspension components. |
| Deceleration | means the opposite to acceleration. |
| Deed of Appointment | means the contract that exists between an LVV Certifier and the Agency, which provides an LVV Certifier with the authorisation to carry out LVV certification on behalf of the Agency. |
| Design Approval | means the process used for the approval of a proposed plan that is well developed and detailed, of various modified components and systems of a low volume vehicle. |

| | |
|----------------------------------|---|
| Drive-train | means the part of the vehicle that provides the motive force to propel the vehicle. This includes the engine, gearbox, driveshaft, and differential, however numerous other components which are mounted to or work together with these items can also be included; for example, the clutch, flywheel, pulleys, and universal joints. |
| Drum | means a part of the braking system, which is a cast steel part that encloses the vehicle's braking system components at each wheel. Enclosed within the brake drum are brake shoes and hydraulic wheel cylinders, which when activated by the brake pedal, press against the brake drum to slow the vehicle through friction. |
| Electric motive power | means an electrical power system used to move a motor vehicle. |
| Exhaust gas analyser | means an item of equipment that analyses the content of an engine's exhaust gases. This usually refers to a multi-gas analyser, however for the purpose of this standard, the gas analysing equipment measures the oxygen content. |
| External projections | means parts of a vehicle that protrude from the body or parts of the body that form sharp features and could present a hazard to pedestrians. Types of external projection can include functional items such as bull bars, or non-functional items such as hood ornaments. |
| Fabricated front-ends | means a front suspension system or set of components which have been custom-fabricated from raw materials, instead of using volume manufactured parts available from other OE vehicles. Fabricated front ends are often lighter, stronger, and more visually appealing than OE components. |
| Field of vision | means the area of visibility from the driving position in a forward direction, usually through a windscreen. |
| Final inspection | means the primary inspection, which covers all aspects of the vehicle, including its modifications and scratch-built features, and general condition. The condition aspect of the inspection is similar to a Warrant of Fitness inspection in that it covers all safety aspects required for a WOF inspection. A rectification sheet will be completed by the LVV Certifier if required, and given to the vehicle's owner, which sets out the items that require rectification. |
| Form-set monitoring | means a part of LVV Certifier monitoring, whereby any form-sets supplied in application for an LVV certification plate will be thoroughly checked. |
| Frontal impact protection | means the systems built into a vehicle that are designed to prevent injury to the occupants in the event of a frontal crash. These systems include supplementary restraint system airbags and seatbelts. |

| | |
|--|---|
| Glazing | means any of the components of a vehicle that provide visibility to the exterior, which includes windscreens, side and rear windows, sunroofs, clear roof panels and convertible roof rear screens (soft and hard types). |
| Graduated light board | means a simple tool used by AVIs, panel beaters, and various other automotive trades for the purpose of adjusting vehicle head lamps. Once commonly used, these tools are less accurate for adjusting modern halogen head lights, and have all but been replaced by the more accurate optical beam setter. |
| Hybrid | means a vehicle that derives its motive power from more than one source, such as one which uses a petrol engine and an electric motor, which can work individually or together. |
| Hydraulic suspension | means a suspension system operated by a hydraulics means, rather than conventional springing. Although it has been around for many years, hydraulic suspension has never really caught on with mainstream car makers except for French car maker Citroen, who have used their system successfully for some decades. In more recent times, and with the increasing numbers of older cars being modified, the 'low-rider' style of modified car has been the main user of the system. The low-rider type of hydraulic system is very different to that of Citroen's, which is designed for superior ride and handling. The hydraulic systems used in low-riders provide little absorption of road bumps, and therefore can give a less comfortable ride than conventional suspension systems. If incorrectly installed and set up, these hydraulic suspension systems can also be dangerous, as they have the capability to enable the driver to raise or lower each ram (one mounted per corner) individually. |
| Internal complaint resolution process | means LVVTA's internal method of dealing with a complaint, where a specified process is followed in order to ensure that fairness, consistency, and transparency is always applied. |
| L-class | means the vehicle class which covers motorcycles. This comprises LA (moped with 2 wheels), LB (moped with 3 wheels), LC (motor-cycle with 2 wheels), LD (motor-cycle with sidecar) and LE (motor-cycle with 3 wheels). An LB1 and LE1 has one wheel at the front and two at the rear. An LB2 and LE2 has two wheels at the front and one at the rear. |
| Low volume vehicle certifier | means an inspector authorised by NZTA under a Deed of Appointment, to carry out low volume certification under the Code, in accordance with the technical and operational requirements specified within the LVV Certifier's Manual. |
| Low volume vehicle standard | means a standard written specifically for low volume vehicles under the LVV Code and listed in <i>Annex1</i> , as an alternative to either those standards listed in the <i>Transport (Vehicle Standards) Regulations 1990</i> , or other standards listed as approved standards in the Land Transport equipment rules. |

| | |
|--|---|
| LVCM | is an abbreviation for LVV Certifier category 'Low Volume Commercial Modification'. |
| LVCM-appointed LVV Certifier | means a commercial modifying inspecting organisation (CMIO) appointed under the provisions of <i>Land Transport Rule: Vehicle Standards Compliance 2002</i> to carry out certification of Type-approved low volume vehicles as specified by <i>Part 2</i> of the <i>Code</i> , and which has been assessed by the Agency as having sufficient controls and processes in place to ensure ongoing conformity of production. |
| LVV certification | is an abbreviation for low volume vehicle certification. |
| LVV Certifier | is an abbreviation for low volume vehicle certifier. |
| LVV Certifiers' manual | means LVVTA's LVV certification manual incorporated by reference under the <i>Code</i> , which contains the legal, technical, and operational requirements, inspection forms and form-sets, information sheets, newsletters, and supplementary information, upon which the LVV certification system operates. |
| LVV Code | means the same as <i>Code</i> . |
| LVV standard | is an abbreviation for low volume vehicle standards. |
| LVVTA | is an abbreviation for the 'Low Volume Vehicle Technical Association Incorporated'. |
| Modification | in relation to a motor 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. 'Modified' and 'modification' have corresponding meanings. |
| M-group | means the vehicle class that covers passenger vehicles, which comprises MA (car), MB (forward control vehicle), MC (off-road), MD (light omnibus) and ME (heavy omnibus). M-group classes which can be certified under the LVV Code are MA, MB, MC, and MD1 and MD2. |
| NA-class | means the vehicle class which covers light goods vehicles. NA-class is the only class amongst the N-group which can be certified under the LVV Code. |
| New Zealand Car Construction Manual | means a publication of the LVVTA that specifies best practice and legislative requirements for the safe modification and construction of low volume vehicles in New Zealand. |
| Occupant protection system | means the systems built into a vehicle that are designed to prevent injury to the occupants in the event of a crash, frontal or otherwise, which can include front and side curtain airbags. |

| | |
|--|---|
| OE | is an abbreviation for 'original equipment', which in the context of this document means original equipment as provided by a mass-production motor vehicle manufacturer. |
| OEM | is an abbreviation for 'original equipment manufacturer', which in the context of this document means original equipment as provided by a mass-production motor vehicle manufacturer. |
| ONT | is an abbreviation for an objective noise test. |
| Optical beam setter | means a device for adjusting a vehicle's headlights, driving lights, and fog lights. The device allows a quick, accurate and consistent measure of filament alignment, beam pattern, aim, and bulb output, and can also quantify lens degradation. |
| Peer review process | means a process whereby a group of LVV Certifiers (through the Peer Review Group) are used to determine independently and without bias whether an LVV Certifier is negligent in his actions, and if so, the extent of the negligence. |
| Pillar | means the part of a vehicle structure which extends vertically from the floor to support the upper body or roof structure. 'Pillar', 'side-pillar', and B-pillar have corresponding meanings. |
| Pixel | means a single dot of colour within a picture or on a computer screen. The more pixels a picture has, the better the resolution, and thus quality that exists. |
| Plate | means the low volume vehicle certification plate affixed to a low volume vehicle upon completion of the LVV certification process, as required by the Code. |
| Preliminary | means, in the case of a low volume vehicle, a preliminary inspection an inspection that occurs at an early stage in the vehicle's modification process. This inspection allows the LVV Certifier to determine the correct category which will be required to complete the certification, and also allows the LVV Certifier to 'coach' the vehicle's builder or owner by giving advice on the proposed, or already completed, modifications. |
| Pre-plate production review process | means the process of checking the LVV certification plate application paperwork for technical and administrative errors or omissions. |
| Rack & pinion | means a type of steering gear that uses a pinion gear to drive a toothed horizontal bar, the ends of which operate the tie rods within a vehicle's steering system. |

| | |
|---------------------------------|--|
| Re-calibration | means the process of checking that equipment is still working effectively and providing accurate results. The sound level meters, field calibrators, microphones, and tachometers in the ONT kit are subject to periodic re-calibration. |
| Rectification inspection | means a re-inspection carried out by an LVV Certifier after rectification work required from a previous LVV certification inspection has been completed. |
| Remedial | means an action that improves or repairs a component or system in a low volume vehicle, as part of the LVV certification inspection process. |
| Repower | means the action of exchanging the engine of a vehicle for another engine of a different type, size, or motive power. |
| Retro-fitment | in relation to a seat or seat anchorage in a motor vehicle, means to fit a seat or seat anchorage in a location where a seat or seat anchorage has not been fitted before. |
| Reviewer | means a Transport Officer of the Agency. |
| Retrospective | means the certification of a vehicle where the modifications pre-date the requirements in force at the time of the certification. In certain circumstances, the modifications can be certified 'retrospectively' to the requirements that were in force at the time that the modifications or construction took place. |
| Risk assessment matrix | means a process used to judge the likely impact of an action, by a risk rating that can be calculated, based on likelihood of occurrence and severity of the result. A low risk rating may be from an event that is very unlikely to occur or will have little impact if it does occur, whereas a high-risk rating may be from an event that is likely to occur or will cause severe consequences. |
| Road testing | means the part of the LVV certification process where the LVV Certifier assesses the on-road behaviour of the vehicle. The vehicle is driven on a variety of roads at various speeds, in order to ensure that it drives safely and predictably. The road test will also include a brake test. |
| Rotor | means a commonly used name for a brake disc, which is a machined disc (usually of steel) which is attached to the vehicle's hub and road wheel. A brake caliper is mounted over the rotor, and holds two brake pads, which become clamped against the disc when the brake pedal is depressed, to slow the vehicle through friction. |
| SLM | is an abbreviation for a sound level meter, also known as noise meter. |

| | |
|-------------------------------------|--|
| Sound level meter | means a device for measuring the level of sound output, in decibels, which forms part of the objective noise test kit used to measure exhaust noise output. |
| Steering box | means a device that translates the rotary motion of the steering wheel and shaft into the linear motion of a steering arm connected to a parallelogram-like steering linkage. |
| Steering column | means the device intended primarily for connecting the steering wheel to the steering box, or rack and pinion, by transferring the driver's input torque from the steering wheel. A steering column may also perform the secondary functions of energy dissipation management in the event of a frontal collision, a mounting point for the multi-function switch, column lock, column wiring, column shroud(s), transmission gear selector, gauges or other instruments as well as the electro motor and gear units found in EPAS and SbW systems, and offer (height and/or length) adjustment to suit driver preference. |
| Stressed Seat | means a seat that has one or more seatbelt anchorages attached to the seat frame in such a way that any loading applied to the seatbelt anchorages would be transmitted through the seat structure to the seat anchorage. |
| Stub axle spindles | means the part of a vehicle's front suspension that links the suspension arms to the wheel hub. The spindle is the part of the stub axle that the wheel bearings fit onto. The hub is usually retained to the stub axle by a nut screwed on to the end of the spindle. |
| Sub-frame | means a structural component of a unit construction vehicle to which the major mechanical components attach, such as the engine, drive-train, and suspension components. The sub-frame is usually bolted to the main vehicle chassis/body structure and is sometimes equipped with rubber bushings or springs to dampen vibration. |
| Suspension cross-member | means a section of material positioned between or connecting the main chassis rails or sub-frame sections to provide support to the chassis or body, or for the attachment of related components and systems. |
| Standards | means the low volume vehicle standards. |
| Technical Advisory Committee | means a technical sub-committee of LVVTA, established to provide LVVTA with expert technical direction on all technical matters relevant to the LVV certification system. |
| Technical breach | means a situation where an LVV Certifier fails to meet a technical requirement when applying for an LVV certification plate. |
| The Agency | means the New Zealand Transport Agency. |

Trike means, usually, three wheeled vehicles of class LE (motor-cycle with 3 wheels), but can also include vehicles of class LB (moped with 3 wheels).

Type-approved low volume vehicle means a low volume vehicle to which a specific set of identical modifications have been, or will be, made to a series of vehicles of the same make, model and specification, by a commercial modifier who is appointed by the Agency to certify under LVV Certifier category 'LVCM Commercial Modification', and where the design details of the specific set of modifications have been initially confirmed as meeting the LVV Code by an LVV Certifier with the appropriate categories.

Note: The initial inspection by an LVV Certifier of a low volume vehicle to which Type-approval certification will be subsequently applied by an LVCM-appointed LVV Certifier is a 'due-diligence' check only, and the LVCM-appointed LVV Certifier remains responsible for the certification of each of the vehicles within any series of identically-modified vehicles.

Up-skilling means a process by which additional training is provided in order to improve the skills of an LVV Certifier.

Vernier caliper means a hand tool, which is commonly used for accurately measuring a wide range of items. The vernier caliper is ideal for quickly and accurately measuring the inside or outside diameter of a pipe, bolt, nut, or the thickness of a disc rotor, along with an infinite number of other items. This type of caliper is also usually equipped with a depth gauge, making it a very versatile measuring device.

Visible light transmittance means the method of measuring the quantity of light able to be transmitted through a non-opaque item, for example a piece of automotive glass. 35% Visible Light Transmittance (VLT) is the maximum legal window glass tint allowable on an MA or MB class vehicle in New Zealand.

VLT is an abbreviation for 'visible light transmittance'.

Warrant of Fitness (WOF) means a warrant of fitness, issued by a New Zealand Transport Agency-appointed authorised vehicle inspector.

Wheel-chair hoist means a mechanical device installed into a vehicle that lifts a wheelchair (sometimes together with occupant) into and out of a vehicle.

Wheel-chair occupant restraint system means the seatbelt used to restrain a wheelchair occupant within a vehicle.

Wheel-chair restraint system means the components used to secure a wheelchair to the structure of a vehicle.

Appendix A

to Low Volume Vehicle Certification Systems Operating Requirements Schedule:

LVVTA-recognised companies

The following companies are those which have been approved by the Agency and LVVTA, as referred to in 4.2(1), for the purpose of LVV certification plate pre-ordering by an LVV Certifier specified in 3.1(16), as at 1 July 2016.

| <i>LVPO-recognised company</i> | <i>Modification type</i> | <i>LVPO-recognised LVV Certifier</i> |
|--------------------------------|------------------------------|--------------------------------------|
| Jackson Enterprises | Seating, disability adaption | Thomas Breinhorst Mark Stokes |
| Braiden International | Disability adaption | Julian Cheer |
| Cowper Trucks | Utility conversions | Ken McAdam |
| Action Motor Bodies | Seating, disability adaption | Neal Miller |
| Auto Transform | Seating, disability adaption | Thomas Breinhorst |