## Vehicle Standards Instruction

## ESC testing on in-service light vehicles

September 2021

Electronic Stability Control (ESC) is an important vehicle safety feature. If a light vehicle is fitted with an ESC system it is required to continue to operate as intended after any modifications, including the re-rating of the vehicle's Gross Vehicle Mass (GVM) or ride height.

The purpose of this Vehicle Standards Instruction (VSI) is to clarify the assessment options that may be used to validate the continued operation of an ESC system fitted to a light vehicle that has been subjected to a modification. Light vehicles are those vehicles whose total mass when laden to its maximum specified or permitted mass does not exceed 4,500 kg.

Definitions of the terms used in this VSI are sourced from Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005. For the most current definitions, please refer to the relevant section of the 3rd Edition of the Australian Design Rules (ADRs).

Appropriate evidence that the ESC continues to operate as intended, if required for certification purposes, must be obtained and retained by the certifier (Approved Person).

Evidence of the following types are acceptable;

- 1. Vehicle manufactures approval or certification letter
- 2. Recalibration of the ESC system by the original vehicle/system manufacturer (or authorised representative)
- 3. Combination of computer simulation and diagnostic testing by an approved test facility\*
- 4. Traceable physical testing by an approved test facility to one of the following standards, where applicable:
  - a. ADR 31/... or ADR 35/... as appropriate
  - b. ADR 88/00
  - c. UN ECE R 13H
  - d. Global Technical Standard GTR-08 or
  - e. US FMVSS-126
- 5. Any other form of evidence approved by the Department of Transport and Main Roads.

\*Note, an approved test facility is;

- registered with the National Association of Testing Authorities, Australia, or
- registered with the Road Vehicle Certification System with a current test facility Identification Number and registration to conduct ESC system testing, or
- otherwise approved by the Department of Transport and Main Roads.

## **Further Information**

Details of Approved Persons in your local area, please visit the Transport and Main Roads website at: <u>Find an AIS | Transport and motoring | Queensland Government</u>

For details of current ADRs, please visit the Department of Infrastructure, Transport, Regional Development and Communications website at: <u>Third Edition Australian Design Rules (infrastructure.gov.au)</u>

For further information about this VSI, please email <u>vehiclestandards@tmr.qld.gov.au</u>

