The test procedure consists of driving a vehicle through a set track, which simulates a lane change manoeuvre.

The intent of this test procedure is to subjectively determine the road holding ability and handling characteristics of a vehicle. This test procedure is applicable to vehicles with a gross vehicle mass of up to 3500kg.

The testing must be conducted under the guidance of a Light Vehicle Engineering Signatory (Fact Sheet MR426), with proven experience in the automotive area. The lane change track must be negotiated by a skilled driver with automotive road testing experience. Since these are subjective tests, it is not sufficient for the driver to have negotiated the test successfully, the driver must also be confident that the vehicle is safe to drive.

The test procedure consists of driving a vehicle through a set track, which simulates a lane change manoeuvre. The vehicle is driven from the initial lane to another parallel lane and back again to the original lane. The length of the lane is the same for all vehicles, but the width of the lane varies depending on the width of the vehicle under test.

**Lane change track dimensions**
The dimensions of the track are specified in the appropriate ISO standard.

<table>
<thead>
<tr>
<th>Section</th>
<th>Length of Section</th>
<th>Section Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.0 m</td>
<td>1.1 x vehicle width plus 0.25m</td>
</tr>
<tr>
<td>2</td>
<td>30.0 m</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>25.0 m</td>
<td>1.2 x vehicle width plus 0.25m</td>
</tr>
<tr>
<td>4</td>
<td>25.0 m</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>15.0 m</td>
<td>1.3 x vehicle width plus 0.25m</td>
</tr>
</tbody>
</table>

**Lane Offset 3.5 m**

**Note:** Vehicle width means the overall width of the vehicle, but not including rear vision mirrors.

**Marking of the lane change track**
The lane change track shall be marked with cones complying with Figure 1, placed at points specified by Figure 2. The track limits shall be tangential to the base circles of the cones.

**Figure 1 – Cones used for lane change delineation**

Further information
Call 1300 882 248
Visit sa.gov.au
Email dpti.vehiclestandards@sa.gov.au
Measuring distance
The measuring distance starts at the beginning of Section 1 and finishes at the end of Section 5.

Track surface
The track surface shall be sealed, dry and as hard and as planar as possible.

The anti-skid property during the test shall correspond to a skid number of at least 70, according to ASTM.

Longitudinal deviation from horizontal shall not be more than 1 degree.

Transverse deviation from horizontal shall not be more than 2 degrees.

Ambient conditions
Wind speed shall not exceed 3m/s (11 kph).

Vehicle ‘test tare mass’
The test vehicle must be equipped with all optional equipment that is likely to increase the tare mass of the vehicle. The vehicle must also have full complement of:
- lubricants
- coolant (if required)
- washer fluid
- fuel (tank to be filled to at least 90% of the capacity specified by the manufacture).

If offered as standard equipment, the following equipment must also be included in the vehicle;
- spare wheel
- fire extinguisher
- wheel chocks
- standard tool kit.

The mass of a vehicle equipped as described above, is the ‘test tare mass’.

Test mass
The vehicle shall be tested under two loaded conditions, unless the engineer can provide suitable justification for the deletion of one of the tests.

Vehicle test mass 1
The test tare mass as defined above, to which the driver’s mass is to be added. When tested at this mass a driver being of at least 68kg will meet this requirement. Alternatively, additional mass can be added to the vehicle to achieve a combined mass of load mass and driver mass of 68kg.
Vehicle test mass 2
The test tare mass as per 1, plus:

- 68kg x number of seating positions in the passenger compartment and 7kg x number of seating positions, uniformly distributed over the luggage compartment(s).

- Loading of the passenger compartment shall be such that wheel loads obtained correspond to wheel loads that would be obtained with loading each seat with 68kg at its point. Masses used for loading may be placed on the passenger compartment floor.

- In no case must the permissible axle loads be exceeded.

- Masses must be placed in such a way as not to substantially alter the vehicle's moment of inertia around the vertical axis.

Testing
An experienced and skilled driver must conduct the tests.

To ensure the safety of all concerned, the driver must commence testing at a speed not exceeding 80kph. Test speed can then be incrementally increased up to the ‘maximum test speed’, as the driver and engineer deem it safe to do so.

The ‘maximum test speed’ shall be lower of the following:

- The maximum speed the vehicle can obtain, or
- 110 +/- 3kph.

The vehicle must be driven through the lane-change track according to the following conditions:

- The vehicle must be driven into the redesignated test track at the ‘maximum test speed’ for the vehicle and the exit speed must be stated in the test report.

- Over the test course the throttle position must be held as steady as possible and the gear position engaged during the test shall be stated in the test report.

A successful pass through the lane-change track requires that none of the cones be displaced during the test.

Subjective assessment
Further to the above testing, a subjective report assessing the overall handling characteristics of the subject vehicle must be prepared by the test driver. The assessment shall cover the general handling of the vehicle up to legal speed limits.