

CIRCULAR NO 65/00-2-1

PROCEDURES FOR DEMONSTRATION OF COMPLIANCE

INTRODUCTION

1. ADR 65/00 – Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy omnibuses - requires vehicles of category NC and ME to comply with the requirements of this Rule. The ADR permits compliance to be established by any of three specified methods.

These are:

- (a) by gearing to Clause 65.3; or
 - (b) by use of road speed governing to Clause 65.4 and road speed testing to Clause 65.6; or
 - (c) by road speed testing to Clause 65.6.
2. This circular addresses the demonstration of compliance by each of these methods.
 3. Where the method adopted includes testing to Clause 65.6, the level of testing needed to establish compliance of every possible vehicle variant could be most extensive. Therefore, the Administrator has decided to accept road speed tests based on selecting worst case of vehicles and speed limiters for the purpose of demonstrating compliance with ADR 65/00 and the issue of Compliance Plate Approvals.
 4. The implementation procedures given in this circular detail acceptable guidelines for selection of test vehicles for the purpose of demonstrating compliance of a range of vehicles.
 5. It will be the responsibility of vehicle manufacturers to ensure that every vehicle to which a Compliance Plate is affixed complies with the Design Rule.

Geared Vehicle

6. For vehicles satisfying the criteria for road speed limitation by gearing in accordance with Clause 65.3, no testing is required. The vehicle manufacturer will be required to assure compliance by confirming on the SEV 65/00 summary of the evidence form that the rated engine speed is permanently shown on a plate affixed to the engine of each such vehicle in accordance with Clause 65.3.1.

Vehicles with Road Speed Governors

7. The Administrator will accept a test on one vehicle as representative of another for the purposes of demonstrating compliance, provided the following guidelines are met.

8. The tested vehicle should have, when compared with the untested vehicle:
 - (a) A road speed governor of the same make or model and type or where the road speed governing function is part of an integrated engine management system, an engine of the same make and an engine management system of the same type;
 - (b) the same or greater ratio of engine power (at 110% 'set speed' or if this speed cannot be achieved due to gearing, then at a road speed not less than 105% 'set speed') to unladen mass;
 - (c) the same or lower vehicle speed for the same engine speed in the first gear which allows the set speed to be exceeded by more than 5%;
 - (d) Where the limiter actuator is a separate component in the engine power control, the minimum travel of the actuator between maximum and minimum engine power control positions; and
 - (e) Where any other designed adjustment of the governor system effects acceleration from 90% of 'set speed' to 'set speed', the adjusted position providing the greatest such acceleration.
9. Where compliance with Clause 65.6 is claimed on the basis of the road speed governor or engine management system incorporating a road speed governing function complying with the alternative standard BS AU 217: Part 1 1987 identified in Clause 65.7, either details of an approval issued by the UK Department of Transport or other approving authority acceptable to the Administrator, or where such an approval has not been issued, the results of tests to the British Standard, are acceptable and should be reported on a SET 65/00 summary of evidence form.

The provisions of paras 7 and 8 above are also available for these vehicles.

Road Speed Testing Vehicles without Road Speed Governors

10. A vehicle neither satisfying the criteria for road speed limitation by gearing in accordance with Clause 65.3 nor fitted with a road speed governor in accordance with Clause 65.4 are required to comply with Clause 65.5 when tested in accordance with Clause 65.6. This requirement will be deemed to be met if the terminal speed reached on travelling 1.6 km after the commencement of the test in each gear tested does not exceed the specified set speed. Every endeavor shall be made to reach the commencing speed for the test (i.e. 90% 'set speed') including maximum acceleration through the gears.
11. A test on one vehicle in accordance with para 10 above is acceptable as demonstrating compliance of other such vehicles provided that the tested vehicle should have, when compared with the untested vehicle:
 - (a) an engine with the same or higher maximum power;
 - (b) the same or lower road speed in the gear which provides the highest road speed;
 - (c) The same or higher governed engine speed;
 - (d) A test mass the same or lower than the unladen mass of either vehicle; and

- (e) The same or lower aerodynamic drag.

Number of Test Vehicles

- 12. Where the selection of one vehicle is insufficient to cover all the worst case parameters, a sufficient number of vehicles should be selected until all the vehicles in the range are covered.

Documentation

- 13. The vehicle manufacturer shall retain documentation to verify that:
 - (a) calculations support any claims of compliance with the gearing requirements of Clause 65.3; and
 - (b) Vehicles tested as the worst case meet the guidelines of this circular.

These requirements are additional to the records retained under condition 4 of Compliance Plate Approval.