Tástáil Ródacmhainneachta um Fheithiclí Tráchtála
Commercial Vehicle Roadworthiness Testing

PREMISES AND EQUIPMENT GUIDELINES FOR CVR TEST OPERATORS

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INTRODUCTION

These guidelines are issued in accordance with section 38 of the Road Safety Authority (Commercial Vehicle Roadworthiness) Act, 2012. The guidelines set out the minimum requirements in relation to the premises and equipment required for the carrying out of CVR tests at CVR testing centres.

CVR test operators are authorised to carry out, CVR tests of one or more categories of CVR vehicles accordance with Regulations made under the Comercial Vehicle Roadworthinss Act, 2012. These may include:

(a) vehicles used for the carriage of passengers, with more than eight seats, excluding the driver's seat (categories M2 and M3),

(b) goods vehicles (categories N1, N2 and N3) including living vans,

(c) goods trailers (categories O3 and O4),

(d) ambulances (special purpose vehicles in category M), and

(e) motor caravans first registered on or after 1 January 1980 (special purpose vehicles in category M).

The Authority will not authorise persons to be CVR test operators unless and until it is satisfied that all applicable requirements in these guidelines have been met.

In the case of persons or bodies who:

- were authorised as authorised testers under the European Communities (Vehicle Testing) Regulations 2004 (S.I. No. 771 of 2004) and
- are subsequenly authorised as CVR test operators under section 10 of the Road Safety Authority (Commercial Vehicle Roadworthiness) Act 2012 for a transitional period of 2 years, and
- subsequently apply for an renewal of that authorisation under section 15 of the Act,

the following points shall be noted in relation to the application of these guidelines:

- All CVR testing centres must have a clearly defined physical partition between test activities and other activities on the premises. Paragraph 1 of both Sections A & B states that the Authority will accept a 2 metre high partition dividing test lanes from workshops as meeting its requirements in this regard. Where the Authority is satisfied that a 2 metre high partition is not physically possible, the CVR test operator must put forward proposals to otherwise meet the requirement to have a clearly defined physical partition between test activities and other activities on the premises for approval by the Authority.
- Paragraph 1 of Section A1 provides that all HCV CVR testing centres must have a minimum entrance height of 5.3 metres. Where the Authority is satisfied that a minimum entrance height of 5.3 metres is not physically possible, the Authority may approve an entrance height of not less than 4.8 metres.
- Paragraph 1 of both Sections A & B provides that it must be possible to drive with ease each of the vehicles or combination of vehicles in the category to be tested from the site entrance through the test lane and to the site exit in one movement. The Authority will accept a drive through as meeting this requirement. Where the Authority is satisfied that a drive through is not physically possible, the CVR test operator must put forward proposals for the safe entrance and exit of vehicles, for approval by the Authority. An independent risk assessment of the proposals will be required in the case of HCVs,
- Paragraph 6 of Section A provides that all HCV CVR testing centres must have a pit with a clear unobstructed working length of at least 20 metres. Where the Authority is satisfied that it is not physically possible to provide a pit which meets this requirement, the Authority may approve a pit with a clear unobstructed working length of less than 20 metres, provided that:
    - the clear unobstructed working length of the pit exceeds 18 metres,

    - the pit otherwise complies with the requirements of section 6 in all other respects, and
    - the testing of CVR vehicles shall be limited to those vehicles not exceeding the maximum working length of the pit.
- Paragraph 13 of Section A and Paragraph 14 of Section B provides that all CVR testing centre premises must be in a location which does not cause traffic congestion or danger. Where the Authority believes that the location of the CVR testing centre gives rise to concerns in this regard, the CVR test operator must put forward proposals for managing traffic congestion and avoiding danger to other road users, including an independent risk assessment of the proposals, for approval by the Authority.

The term “not physically possible” means that the CVR testing centre premises is bounded by buildings or land not owned or leased by or otherwise within the control of the CVR test operator which means that it is not possible for the CVR test operator to extend his or her CVR testing centre premises to meet one or more of the requirements referred to above.

Section A deals with the requirements for the testing of vehicles above with the exception of goods vehicle category N1.

Section B deals with the requirements for the testing of light commercial vehicles (including motor caravans up to 3.5 tonne DGVW) [“LCV’s”]

Tástáil Ródacmhainneachta um Fheithiclí Tráchtála
Commercial Vehicle Roadworthiness Testing

GUIDELINES FOR PREMISES AND EQUIPMENT FOR THE TESTING OF ALL VEHICLES COVERED BY THE HEAVY COMMERCIAL VEHICLE TESTERS MANUAL

SECTION A

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CVR TESTING

GUIDELINES FOR PREMISES AND EQUIPMENT

1. Premises

The testing area shall be contained within premises that are permanent, fully weather proof, with concrete floors and adequate lighting. The test lane shall be dedicated to vehicle testing and be separate from other workshop activities.

CVR testing centres who were authorised under the 2004 Vehicle Testing Regulations must have, at the least, a solid 2m high partition wall dividing test lanes from workshops (this does not preclude an access doorway to the lane). Where the Authority is satisfied that a 2 metre high partition is not physically possible, the CVR test operator must put forward proposals to otherwise meet the requirement to have a **clearly defined physical partition** between test activities and other activities on the premises for approval by the Authority.

All testing centres authorised after 21st February, 2013 must have test lanes which are fully separated from all other activities conducted on the premises. A lane separate from the HCV lane is required for testing LCVs.

For all CVR testing centres, the headroom of the testing area and the entrance height shall be a minimum of 5.3m with a minimum entrance width of 4.25m. The overall length of the premises shall be at least 25m with an internal width of 6m. The design shall be such that all combinations of HCV vehicles can drive in one end of the test lane and out the opposite end. Where, in the case of a testing centre authorised under the 2004 Vehicle Testing Regulations, the Authority is satisfied that a minimum entrance height of 5.3 metres is not physically possible, the Authority may approve an entrance height of not less than 4.8 metres.

Sufficient concreted or similar surfaced parking space must be available to accommodate any vehicles awaiting tests. The parking and the general area needed for movement of vehicles for tests shall be arranged so that there is no undue obstruction. CVR testing centres must provide at least 1 dedicated HCV space per HCV lane which is adjacent to the CVR testing centre.

There shall be an unobstructed access via a concrete or similar surfaced driveway from the site entrance to the test bay building entrance and from the test bay exit to the site exit. It must be possible to drive with ease each of the vehicles in the category to be tested from the site entrance through the test lane and to the site exit in one movement. The design shall be such that all combinations of HCV vehicles can drive in one end of the test lane and out the opposite end. Where, in the case of a testing centre authorised under the 2004 Vehicle Testing Regulations, the Authority is satisfied that a drive through is not physically possible, the CVR test operator must put forward proposals for the safe entrance and exit of vehicles, including an independent risk assessment of the proposals, for approval by the Authority.

The testing area shall not be unreasonably subjected to oil contamination, smoke, noise or other pollution from adjacent facilities.

Testing centres must have in place a diagram of the test area showing each test lane with each clearly marked and identified with a unique number and reference to the test categories to which each lane is designated. This will be important for clearly identifying each test lane for the purposes of the new testing centre IT system ("COVIS"). For example a testing centre with 1 HCV lane and 2 LCV lanes shall have each lane named and clearly marked with references 'HCV1, LCV1 and LCV2' These shall also be clearly illustrated on the testing centre diagram, a copy of which shall be provided to the Authority.

Where CVR Testing Centres use automated telephone services and / or answering services, commercial vehicle tests and/or testing must be referred to as 'CVR Tests and/or CVR Testing, any and all references to 'DOE Tests and/or DOE Testing' must be removed or replaced.

2. Test Facilities – General

The CVR test operator will be responsible for ensuring that the premises and equipment comply with the relevant Acts, Regulations, Bye-laws, Health, Safety and Welfare requirements, Health and Safety at Work Requirements. CVR testing centres shall be maintained to a standard which is conducive to conducting roadworthiness tests in a proficient manner.

The floor area of the test lane shall be painted or otherwise to facilitate easy cleaning.

An appropriate exhaust emissions extraction system must be installed and shall, as far as practicable, be attached to all vehicles when the engine is running.

The level of illumination and the evenness of distribution shall be adequate for inspection work to be carried out with ease.

An office shall be provided on the premises. There shall be a lockable desk, a chair, a telephone nearby and a security lockable steel safe for the safe custody of test documentation. The scale of these facilities may be less at sites with small throughputs.

A customer waiting room separated from the office and test lane but with a view of the test lane, shall be provided. This view may be provided using CCTV if the layout of the premises prevents open viewing, however all testing centres first authorised after 21 February 2013 must have a waiting room with direct view of the test area. Space shall be provided for a television screen, two A2 sized posters and display stands which can be used to display information materials and Road Safety messages, as stipulated by the RSA.

Toilets, adjacent to the waiting room dedicated to customers must be provided. The toilets shall comply with the Health and Safety requirements. Unauthorised personnel shall be discouraged from entering the test area.

Appendix 2 lists the documentation required for testing purposes.

3. Testing Facilities

The testing operations subdivide into the following stages:

- External inspection of vehicle Stage
- Internal inspection of vehicle Stage
- Underside of vehicle inspection Stage
- Lighting and headlamp aim Stage
- Brake testing Stage

As a general requirement, the testing equipment shall be easily accessible to the entrance of the test lane so that the inspection can be carried out in sequence. This means that the equipment shall be positioned in the building so that access to it is unlikely to be obstructed by other vehicles on the premises.

4. External Inspection of Vehicle Stage

The provision for external inspection shall be fully under cover and of a minimum length to accommodate a maximum length truck / trailer combination and allow ample space at the front and back. Width shall be a minimum of 6.0 m and shall be clear of obstruction. The level of illumination falling on the sides of the vehicle must be adequate for inspection purposes at all levels.

The following equipment is required to complete this stage of the test. The equipment must be in accordance with the specification contained in Appendix 1.

Air Pressure Gauges
Air pressure gauges must be available to establish the pressure in the suzie brake connections to the trailer/semi-trailer.

Steering Side Slip Plate
A steering side slip plate shall be fitted in the test lane prior to the under body inspection and a level length of 12m available before and after the centre point of the side slip plate.

Fifth Wheel Pin
Unworn fifth wheel pins (both 50mm and 75mm) must be available in order to establish the wear in the fifth wheel of tractor units.

Gauge for measuring Trailer King Pin
A gauge shall be available for accurately measuring the wear in trailer king pins.

Test Plug for ABS/EBS and tool to check ISO 7638 connector
A test plug is required to check the electrical circuits of trailers fitted with ABS/EBS brake systems and to check outputs of the ISO 7638 on towing vehicles. .

Diesel Smoke Opacity Meter
A diesel smoke opacity meter is required to check the exhaust emissions of diesel engines in line with EU Directive 2009/40/EC.

Emissions Gas Analyser
An exhaust emissions gas analyser is required to check the exhaust emissions of petrol engined vehicles in line with EU Directive 2009/40/EC.

Mirror check area
A mirror check area must be provided for checking the field of vision of vehicle mirrors as outlined in Appendix 3.

5. Internal Inspection of Vehicle Stage

The following equipment is required to complete this stage of the test. The equipment must be in accordance with the specification contained in Appendix 1.

Speed Limiter Tester
An instrument must be available to check the speed at which the speed limiter is set.

6. Underside Inspection of Vehicle Stage - Pit

Pit
The pit shall be well lit, dry and painted in a light colour or tiled. It shall be free from oil deposits, water, or combustion hazards. The clear unobstructed working length of the pit shall be at least 20m exclusive of any access steps, ladders etc. There shall be at least one means of easy access either by stair case at one end of the pit or by a cross tunnel, and also adequate escape facilities either at the ends of the pit or along the length. It is recommended that the working depth of the pit be between 1.37m and 1.62m. The working width shall be such that the wheels of all vehicles within the category being tested may be accommodated on firm standing. For guidance a width between 0.850m and 1.00m is recommended.

Where, in the case of a testing centre authorised under the 2004 Vehicle Testing Regulations, the Authority is satisfied that it is not physically possible to provide a pit which meets the required length, the Authority may approve a pit with a clear unobstructed working length of less than 20 metres, provided that:

- the clear unobstructed working length of the pit exceeds 18 metres,
- the pit otherwise complies with the requirements of section 6 in all other respects, and

- the testing of CVR vehicles shall be limited to those vehicles not exceeding the maximum working length of the pit.

There shall be an effective low voltage hand lamp provided.

Jacking facilities shall be a power operated jack, on a trolley platform able to move an appropriate distance long the pit. A jacking bridge on a joist shall be stable both longitudinally and transversely and arranged so as to ensure there is no possibility of the jack falling down or tipping over.

Wheel-play (check wear) detectors shall be installed on each side of the pit at the point where the jack will be used and must be controlled by a portable hand control at this point.

7. Lighting and Headlamp Aim Stage

The area where the vehicle stands for headlamp aim testing shall be a minimum of 4m wide and 14m long. A 10m x 4m section of this area shall comply with the floor and rail standards set out in the Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirements. This may be reduced to 10m x 3m where a pit forms part of the headlamp test area. The standing area shall be marked out with continuous white or yellow lines. These lines will not be required where a pit forms part of the standing area.

The headlamp aim equipment shall comply with the Irish Standard for Headlamp Aim Test Equipment.

Mirrors shall be positioned around the test lane to enable the CVR tester to check the front and rear lights when in the vehicle's driver seat of the vehicle.

8. Brake Testing Stage

Brake Testing Static
A roller type brake tester shall be set in the floor and a level length of 12m available before and after the lateral centre line of the machine's rollers.

Roller brake tester installations on the pit will be accepted where the examination of the vehicle underside will not be impeded such as when a vehicle is placed on the brake rollers.
Until CoVIS is commissioned, Roller brake testers shall include the facilities to print out the brake test results as follows:

Brake efficiency readings for service, secondary and parking brake
Imbalance across each axle;
Brake drag.

Brake Tester Auxiliary Equipment
In addition to the roller brake test machine itself, the following items must be available:-

(i) instructions on how to operate the roller brake tester correctly;
(ii) means of calibrating the roller brake tester machine, or as an alternative, evidence that the machine is regularly calibrated at least once a year by an outside agency will be acceptable;
- means of applying a load to the axle of vehicles being tested so as to ensure that the minimum legal brake power reading may be attained (e.g. load simulator);
- four wheel chocks.

Brake Tester Location
The brake tester shall be located so that:-

(i) vehicles can be driven onto and off the rollers without difficulty and within a reasonable time;
(ii) there must be adequate clearance to enable all the brakes on a vehicle to be tested with the vehicle
(iii) facing the same direction;

(iv) the vehicle is substantially level when on the rollers; and
(v) the machine is in a building under cover and is located not closer than 1.5m (59 ins) to any entrance / exit by which vehicles enter or leave the building.

Brake Test – Dynamic
The roller brake tester must be the normal method used to test brakes, except for vehicles equipped with braking systems and/or transmissions where the use of a roller brake tester is not feasible. In such cases, a road test may be carried out using a decelerometer or block mounted brake testing meter with a manufacturer's calibration certificate not more than two years old. There shall be a reasonably level surface upon which a dynamic brake test may be safely carried out. This need not be under cover but shall not be on the public road except under exceptional circumstances.

9. Test Information / CoVIS / Minimum Specification of Test Lane Equipment

Following the introduction of CoVIS, CVR test operators must ensure that they provide and maintain software and equipment compatible with at least the following minimum standard to enable connection to CoVIS:

All equipment listed below (or equipment used to capture the following test data) must produce results in an electronic output that conforms to a secure common industry standard interface such as ASA networks or Gieglan:

- Roller brake tester (with means of recording axle weight)
- Diesel smoke opacity meter
- Steering side slip plate
- Suspension test
- Headlamp aim tester

CVR test operators shall provide appropriate secure storage for CoVIS assets in accordance with the Authority's minimum standards.

Each CVR Testing Centre shall be required to enter into a service level agreement with the CoVIS Contractor which will enable the deployment of the CoVIS solution in order to transmit test data from test equipment / software.

With regard to where vehicle testing records or documents are required to be held by a CVR test operator for inspection, where the IT system (CoVIS) allows for documents or forms to be completed or scanned and stored on the CoVIS System then this is considered acceptable as a form of record for inspection. Where the original documents are required to be available for inspection eg calibration certificates, these must continue to be kept in hard copy.

10. Insurance

CVR test operators shall have adequate insurance cover for vehicle testing activities including CoVIS. This can be confirmed with written confirmation from the insurance broker and shall include:

Property Damage Insurances: [Appropriate limit will differ for each testing centre]

- Loss or damage to insured's physical assets caused by fire or other specified perils.
- Insurance for Buildings – whether owned or required under any relevant lease agreements.
- Insurance for Contents – contents of testing centre.

Business Interruption: [Appropriate limit will differ for each testing centre dependent on turnover]

- Loss following interruption to the business due to damage to property caused by fire or other specified perils.
- Increased Cost of Working: additional expenditure necessarily incurred as a result of a specified peril.
- Rent Payable / Receivable: financial loss incurred due to a continuing obligation under lease to pay rent or a restriction from receiving rent on a premises under lease that has been damaged by a specified peril.

Computer: [Appropriate limit will differ for each testing centre dependent on replacement cost]

- Loss or damage to computer and ancillary equipment caused by a specified peril.

Employers Liability: [€13m is the standard cover required in respect of any one incident]

- Covers the legal liability for bodily injury to employees or disease contracted by them arising in the course of their employment in the business.

Public Liability: [€6.5m is the standard cover required in respect of any one incident]

- Covers legal liability resulting from accidental bodily injury to any third party person or loss of or damage to their property arising in connection with the business.

Engineering: [Appropriate limit will differ for each testing centre]

- Statutory Inspection: covers third party inspection of plant/equipment to comply with Legislation.
- Engineering: fragmentation / breakdown / explosion /sudden and unforeseen damage to plant / damage to surrounding property /explosion and third party liability.

Professional Indemnity /Defective workmanship [€2.6m is the standard cover required in respect of any one incident]:

- Covers claims arising from negligent act, error or omission in the course of professional services provided.

Note : Employers Liability and Public Liability should include a principal extension in the form of a specific indemnity in favour of the Authority. This is a formality for insurance purposes, it doesn't affect the legal responsibilities of the CVR testing operator or CVR testers and it is understood it has not cost implications for testing centres.

11. Quality Control

CVR test operators shall have in place a quality control system. Part of this system shall include a weekly audit (please see Appendix 4) which must be carried out by a person with responsibility for Commercial Vehicle Testing. The results of these checks must be uploaded onto CoVIS (when available) and the Audit Sheets must be held for inspection by an Authorised Officer.

In order to obtain and / or retain an authorisation to undertake commercial vehicle roadworthiness testing, the CVR test operator must provide evidence from an accredited ISO 9001 Certification Body that the testing centre is certified in relation to ISO 9001, fully incorporating the requirements of CITA Recommendation 9B. CVR testing centres must notify the RSA of any major non compliances / non conformances reported by the testing centre's independent ISO/CITA 9B certification assessor within one working day.

12. Branding

Compliance with the VTN and CVRT Brands will be accepted as meeting the standards in terms of premises presentation, uniforms and external & internal signage.

The CVRT branding guidelines also cover use of the CVRT branding for stationary & advertising. The CVRT Branding Guidelines can be found on the RSA website at www.CVRT.ie.

13. Premises Location

- All CVR test operators shall be in a location which does not cause congestion or danger (for example, near schools) as well as complying with local planning and by-laws. Adherence to this requirement will form part of the revised licensing application review process.

- In the case of a CVR test operator who had an authorisation under the 2004 Vehicle Testing regulations where the Authority believes that the location of the CVR testing centre gives rise to concerns in relation to congestion or danger, the CVR test operator must put forward proposals for managing traffic congestion and avoiding danger to other road users, including an independent risk assessment of the proposals, for approval by the Authority.

A sign post guiding customers to the CVR testing centre must also be provided.

14. Consistency Checks

The RSA or its representative may complete an equipment consistency check periodically across all commercial vehicle test lanes. In order to facilitate this check each testing centre shall make each lane available for the required time at their own cost and adhere to the findings of the check.

APPENDIX 1

It should be noted that equipment used in a vehicle roadworthiness test lane will be used more extensively than equipment used for normal vehicle servicing and therefore CVT testing operators must ensure that their equipment is robust enough for vehicle roadworthiness testing purposes.

Summary list of test equipment required by Road Safety Authority

Heavy Commercial Vehicle Test Scheme

1. Low voltage inspection lamp
2. 15 tonnes jacking system with appropriate extensions and saddles
3. Headlamp aim tester with electronic output
4. Heavy Commercial Vehicle Roller Brake Tester (RBT)
5. Axle load simulator
6. Air Brake Pressure Gauges and Suzie Connection
7. Wheel Play Detectors
8. Emissions Gas Analyser
9. Diesel smoke opacity meter
10. Steering Side Slip Plate
11. Decelerometer
12. Fifth wheel measuring pin
13. Speed Limiter Tester
14. Tool for measuring trailer kingpin Wear
15. Tyre tread depth gauges
16. Tyre inflation equipment
17. Test Plug for ABS/EBS and tool to check ISO 7638 connector
18. Air gauge for by passing LSV
19. 20 inch pliers
20. Tool for pressing brake
21. Light check mirrors
22. Pit lights
23. Smoke extraction
24. Glass Opacity Meter
25. Diesel data book / charts / discs
26. Pinch bar (1 meter long)
27. Wheel Chocks
28. Mirror check tool

1. Low voltage inspection lamp

The lamp must be of a low voltage type in line with Section 41 (3) of S.I. 44 of 1993 issued by the Department of Labour and S.I. 188 of 2001. Portable rechargeable light units would also be acceptable.

The lamp may incorporate a microphone when other provision has not been made for communication between pit personnel and the vehicle driver.

Power shall be at least 40 watts and the exterior of the lamp shall be protected. The lamp supply lead shall be captive to a system of running eyes along a rail or cable such that the lead cannot trail either on the pit or workshop floor.

Where a microphone is provided it is recommended that this feed into an amplifier and loudspeaker placed near to the driver's cab for communication purposes.

2. 15 tonnes jacking system with appropriate extensions and saddles

The jacking system shall be capable of lifting either one or both wheels of the axle (including low slung axles) of a vehicle for the purpose of checking the steering and wheel bearings.

The total lifting capacity must be a minimum of 15 tonnes.

The lift arrangement must be such as to lift vehicle wheels clear of floor level without recourse to unstable packing.

The jacking system must be capable of lifting the axle of an independent suspension system in the position recommended by the vehicle manufacturer for checking wear in the suspension ball joints.

The lift base of a pit jack must comply with the relevant sections of S.I. 44 referred to above and be such that the base can be moved along the pit.

The power jacking system provided must be silenced so as to meet Health and Safety Authority requirements and any exhaust must be filtered or arranged to prevent oil deposition. Jacks must be suitable for use on beam axles and independent suspension systems.

3. Headlamp Aim Tester with electronic output

The headlamp aim tester must be rail mounted and certified by a competent person as meeting the requirements of the Irish Standard for Head Lamp Aim Test Equipment and Floor Area Requirements with an additional requirement that the head lamp aim tester screen be capable of reading values as low as - 4%. It must have an electronic output.

The test area floor for HCV vehicles must be 4m wide and 14 meters long. A 10m x 4m section of this area shall comply with the floor and rail standards set out in the Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirements. This may be reduced to 10m x 3m where a pit forms part of the headlamp test area.

Headlamp Aim Tester must also be:-

a) an optical tube screen type presentation with adjustment and a suitable means to facilitate alignment.

b) capable of adjustment between heights of 500mm and 1.220m.

c) marked with vertical and horizontal centre lines or other means of assessment.

d) capable of measurement of headlamp beam aim in gradient per cent (%).

e) fitted with a photo electric cell, for the location of beam hot spots measured by a meter mounted on the testing equipment.

f) provided with calibration equipment or have access to such equipment.

The minimum acceptable standard for accuracy is as set out in B.S.A.U. 162: 1976 and its amendments.
Equipment which meets an equivalent standard is also acceptable.

4. Heavy Commercial Vehicle Roller Brake Tester (RBT)

The Roller Brake Tester (RBT) shall consist of a pair of roller sets mounted in the ground, or within a raised floor, with a separate display console. The RBT shall be safe to use, robustly constructed to acceptable engineering standards and suitable for brake testing of HCVs. It must have an electronic output.

It must be capable of weighing and recording each axle of the vehicle as presented and of measuring brake performance against

(a) G.V.W. weight using axle load simulation (present system),
(b) Air pressure applied using signals from sensors fitted to the axle (extrapolation),
(c) EU type approval brake curves.
(d) Brake reference values (values supplied by vehicle manufacturer).

Roller Set
The roller sets shall have:

(a) a means of preventing either roller set operating unless a wheel is correctly located in it.
Note: Except following calibration.
(b) a means of stopping both sets of rollers from a position within the pit in an emergency.
(c) the ability to be driven independently or simultaneously by the use of suitable controls.
(d) a means of manually stopping either or both roller sets.
(e) An automatic means of stopping either roller set individually when the tyre to roller slip reaches a pre-set limit in the range 20 to 30%.
To ensure that the slip value remains constant throughout the full range of brake force, and if variations occur in the power supply, the means of stopping the roller set shall include actual measurement of the speed of the sensing roller and the speed of the motor/drive roller train.
Note 1: A tyre to roller slip of 20% is when the surface speed of the vehicle wheel equals 80% of the surface speed of the RBT rollers.
Note 2: When both roller sets are in use and one wheel locks, only the relevant roller set shall stop.
(f) The capability of accepting an axle load of 15,000kg.
(g) A clear durable marking showing the normal forward ‘drive-on’ direction of the RBT.
(h) No part protruding more than 100mm above the floor surface.

If a cross-pit RBT is in place, a suitable system which has been approved from a health and safety perspective and which may include a protection device shall be in place to prevent the rollers from being started when a person is in the pit within reaching distance of the RBT.

Rollers
The rollers shall have:

(a) a surface that is durable and not likely to cause undue tyre damage.
(b) A roller to tyre co-efficient of friction of not less than 60% in wet conditions.
(c) The following dimensions:
  (i) minimum diameter 200mm
  (ii) not greater than 500mm between roller centres
  (iii) not greater than 880mm between inner ends of the high friction surfaces of the left and right rollers.
  (iv) not less than 2600mm between outer ends of the high friction surfaces of the left and right rollers.
  (v) (when running) a constant surface speed in the range 2 to 5.5km/h.

Note 1: The speed of the rollers shall remain within the specified range throughout the full range of brake force.
Note 2: In determining the distance between inner ends of the high friction surfaces of the left and right rollers, account must be taken of the categories of vehicles to be tested.

Brake Force Display
The brake force display shall:

(a) indicate in units of kilogram force (kgf).
(b) Indicate the brake force individually for each wheel on an axle.
(c) Be analogue and sufficiently sensitive to show the variations in brake force caused by excessive drum ovality or disc runout.
(d) If a VDU is used, include an additional digital display of brake force which shall be of a size that is readable from the vehicle driving position.
Note: If the brake force is displayed on traditional dials, an additional digital display of brake force is required.
(e) Have the means to display brake force values over two ranges:
(i) low range – max brake force value in the range 600 to 800kgf
(ii) high range – max brake force value in the range 3500 to 4000kgf

(f) be marked with graduations of not greater than:
(i) 10kgf from zero up to and including 240kgf.
(ii) 20kgf from 240kgf up to and including 800kgf.
(iii) 50kgf from 800kgf and above.
Note: If a VDU is used, a more relaxed requirement can be applied to the analogue scale provided that the digital scale exceeds the above requirement.
(g) indicate individually for each roller set when a wheel lock occurs.
(h) retain the maximum brake force values until either the indication is manually reset or the rollers are restarted.

User Controls

Note: AUTOMATIC operation of a RBT is NOT permitted.

The user controls shall be:

(a) manually operated.
(b) Suitably identified in English or with acceptable symbols.
(c) Capable of starting the roller sets independently or simultaneously.
(d) Capable of stopping the roller sets.
(e) Capable of being operated from the vehicle driving seat by remote control.

If the remote control unit is not hard-wired:

(f) suitable secondary operating controls shall be available on the console, or equivalent.
(g) The unit shall be resistant to spurious signals from other sources.
(h) A system shall be in place to ensure that each unit is dedicated to operate only one RBT when two or more are used in close proximity.
(i) Provision for safe storage shall be provided for the remote control unit when not in use.

In addition, there shall be:

(j) a visual indication for the user on the display console showing:
(i) when each roller set is in operation, and
(ii) if the RBT has a bi-directional facility, whether the roller sets are operating in ‘forward’ or ‘reverse’ direction.
(k) a durable notice stating ‘RBT shall NOT be used in automatic mode for vehicle testing if the RBT is equipped with an automatic facility’.

Brake Efficiency and Imbalance
There shall be a satisfactory means available for either the user to calculate or for the RBT to display the value of:

(a) brake efficiency, calculated from the total brake force and expressed as a percentage of the design gross vehicle weight (as specified by the vehicle manufacturer) and imbalance of brake

force between the left and right wheels on an axle, expressed as a percentage of the higher brake force.

(b) If the RBT is equipped with a device for indicating maximum brake imbalance it shall:

(i) be inhibited when both left and right brake forces are 40kgf or less,
(ii) function when one or both brake forces exceed 40kgf and one brake force is less than 70% of the other, and display the numerical difference between left and right brake forces as a percentage of the higher brake force, i.e.

$$\text{Imbalance (\%)} = \frac{\text{high force} - \text{low force}}{\text{High Force}} \times 100.$$

Calibration
A means of calibrating the brake tester shall be available and the RBT display shall be capable of showing negative numbers close to zero.
The CVR test operator shall have a system in place to ensure all of its calibration devices used for the subject RBT are checked and certified by an accredited organisation in accordance with their requirements.

Brake Force Measurement
The calibration equipment shall:

(a) be capable of checking brake force accuracy at the following values:
low range: 0, 100, 200, 400 and 600/800kgf high range: 0, 1200/1500, 2000/2500 and 3500/4000kgf
Note 1: If the brake force measurement is displayed on traditional dials, the accuracy of the calibration shall be assessed via the dials and not from any secondary means.
Note 2: If the brake force measurement is displayed on a VDU, the accuracy of the brake force measurement shall be judged against the digital values.

(b) have a method and operational accuracy that is traceable to a national physical standard.

(c) be certified by a NSAI accredited laboratory, or an equivalent European laboratory, that the whole calibration device is traceable to a national physical standard.
Note 1: All component parts of the calibration device, including any weights, shall be individually marked with an identity number to enable all parts to be kept together as a set. The certificate shall relate to the set and each calibration device produced shall require its own certificate.
Note 2: If the certificate or any other relevant document produced for the calibration device is not in English, the applicant shall make available a translation into English.
Note 3: When the static calibration has been completed, to assess the level of torque required to rotate the RBT drive train mechanism, including any unexpected cause of increased friction such as a failing roller bearing, the following test shall be carried out:

With the RBT in 'calibration mode' and with NO vehicle in the rollers, the rollers shall be rotated and the brake force displayed shall not exceed 50 kgf.

Accuracy
The RBT brake force readings shall be accurate to within:
+/-3 kgf of the true value from zero up to and including 100 kgf.
+/-3 per cent of the true value for all readings above 100 kgf.

The RBT brake force calibration device shall be accurate to within:
+/-0.3 kgf of the true value from zero up to and including 100 kgf.
+/-0.3 per cent of the true value for all readings above 100 kgf.

Instruction Manual
A comprehensive Instruction Manual shall be supplied with each RBT. The Instruction Manual shall:

(a) be written in Irish/English.
(b) Explain how to operate the RBT, including the function of each control and how to interpret the results.
(c) Detail how to use the RBT to carry out a brake performance test and make reference to the need to follow the brake test procedures detailed in the latest version of the relevant Vehicle Testers Manual.
(d) Detail the procedure for calibrating the RBT.

Identification
The RBT shall be marked with a durable identification on the exterior of the control console, or equivalent, showing the make, model and serial number.

Maintenance
The roller brake tester must be so designed and so mounted in its location pit as to enable easy access for regular maintenance and the replacement and repair of parts.

5. Axle Load Simulator

Each roller brake tester shall be fitted with an axle load simulator capable of applying a load of at least 8 tonnes to the axles of a vehicle or trailer. The load simulation must be designed or approved by the roller brake tester manufacturer.

6. Air Brake Pressure Gauges and Suzie Connection

Pressure gauges shall be provided, suitable for connection to the "suzie" connections of vehicles used as the drawing component in vehicle combinations. These gauges shall be capable of registering pressures up to 12 bar and be provided with a yearly certificate of calibration.

Air pressure gauges must also be available to establish the operating pressure of load sensing valves with facilities to bypass load sensing valves when necessary to apply higher air pressure to the axles.

7. Wheel Play Detectors

Wheel play detectors consisting of two plates, one each side of the pit are required and shall be of such size and distance apart that they can safely accommodate the tyres of vehicles in the category to be tested.

The means of operating the plates shall be capable of control from the pit such that, at the same time, the wheels on either side of the vehicle can be closely inspected (e.g. by a portable type hand control). Any air or hydraulic supply must be filtered to ensure detector reliability and an air exhaust must be filtered to avoid excessive exhaust oil depositions.

8. Emissions Gas Analyser

When vehicles with four stroke spark ignition engines are inspected an emissions gas analyzer capable of measuring the CO, HC and lambda values of exhaust gases to the method of test and standards set out in Directive 2009/40/EC and approved to the requirements of OIML Class O.

9. Diesel Smoke Opacity Meter

When vehicles with compression ignition engines are inspected, a smoke meter shall be provided capable of measuring smoke opacity as per the requirements of EU Directive 2009/40/EC.

Smoke meters shall meet the Vehicle Inspectorate (Great Britain) specifications for smoke meters dated 2003 (or current standard at time of purchase). MOT – 05 – 01 – 01 Revision 2, 2003 or an equivalent standard by the appropriate authority of another Member State of the European Union.

Means shall be provided to enable the accuracy of the smoke meter to be quickly checked. They must have an electronic output capability.

10. Steering Side Slip Plate

Side slip plate capable of accurately measuring the geometry of front and rear axles of vehicles with axle loads up to 15 tons. The side slip to be measured shall be between 0-20m/km. The side slip plate shall be of a type approved by the appropriate authority of a Member State of the European Union and meet calibration requirements. It must have an electronic output.

11. Decelerometer

A block mounted brake testing meter or decelerometer must be available for brake tests on vehicles where the use of a roller brake tester is not appropriate. This is required to be calibrated at least every two years.

12. Fifth Wheel Measuring Pin

New fifth wheel trailer pins (to fit both sizes of pins, 50mm and 75mm) fitted with an extension T/bar approximately 2m long shall be available for checking wear in fifth wheel assemblies.

13. Speed Limiter Tester

An approved instrument shall be provided to check the settings of vehicle speed limitation devices. Such instruments must comply with Annex A of the UK Vehicle Inspectorate Standard for Simulator for Checking of Speed Limiter Settings.

14. Tool for Measuring Trailer Kingpin Wear

A gauge shall be provided for measuring wear of up to 3 mm in trailer kingpins. A micrometer or vernier gauge would be acceptable.

15. Tyre Tread Depth Gauges

Tyre Tread depth gauge must be provided on the test lane.

16. Tyre Inflation Equipment

Tyre inflation equipment capable of achieving 8.2 bar (120 p.s.i.) must be available on the test lane.

17. Test Plug for ABS/EBS and tool to check ISO 7638 connector

Test plug for checking ABS/EBS systems on trailers and to check outputs of the ISO 7638 connector on towing vehicles.

18. Air gauge for by-passing LSV

A gauge must be provided to by-pass the load sensing valve on unladen vehicles with air suspension to simulate a load.

19. 20 inch pliers

A 20 inch adjustable pliers to check the tolerance on steering ball joints.

20. Tool for pressing brake

A tool will be required to press the brake pedal in order to examine the brake pipes and hoses under pressure in cases where the roadworthiness test is being carried out by a single tester.

21. Light check mirrors

Mirrors must be provided in appropriate positions around the test lane to facilitate the testing of vehicle lights by one person from the driving seat of the vehicle being tested.

22. Pit lights

Pit lighting shall be provided within the pit to provide adequate general illumination to facilitate ease of testing.

23. Smoke extraction

A smoke extraction system must be installed in the testing centre to help prevent a build up of exhaust fumes or other noxious gases, and to minimise the risks of adverse effects on the Health and Safety of staff and vehicle presenters.

24. Glass Opacity Meter

A portable glass transparency meter must be provided on the test lane which is capable of measuring the transparency of automotive glass in motor vehicles. Means shall be provided to enable the accuracy of this meter to be quickly checked and calibrated as required.

25. Diesel data book / charts / discs

Up to date information on Max RPM values for diesel engines must be available at the testing centre. These must be updated at least every 2 years.

26. Pinch bar (1 meter long)

Bar to be used as a lever to check play in steering and suspension joints etc.

27. Wheel Chocks

4 wheel chocks to be used to prevent the vehicle moving while being tested

28 Mirror Check Tool

A tool for checking the radius of curvature of wide angled mirrors must be provided as outlined in the HCV Testers Manual.

APPENDIX 2

Documentation Required for Test Equipment for testing of Heavy Commercial Vehicles:

Current calibration certificates are required to be maintained up to date for the following equipment:

1) Roller Brake Tester (requires calibration every 12 months)
2) Decelerometer (requires calibration every 24 months)
3) Air Pressure Gauge (requires calibration every 12 months)
4) Emissions Gas Analyser (requires calibration every 12 months)
5) Diesel Smoke Opacity Meter (requires calibration every 12 months)
6) Side Slip tester (requires calibration every 12 months)
7) Headlamp aim tester (requires calibration every 12 months)

Where equipment is being calibrated within 2 weeks (14 calendar days) of its current calibration certificate expiry date, it is acceptable to start the next required calibration period from the expiry of the current calibration certificate e.g. if a roller brake tester current calibration certificate expires on 15th July 2010 and it was calibrated on the 8th of July 2010, the new calibration certificate may start on the 16th July 2010 and then be due for calibration again on 15th July 2011.

In addition, written declarations shall be retained from the manufacturers to confirm that the roller brake tester, jack and jacking beam, emissions gas analyser, diesel smoke meter and speed limiter tester meet the required specifications.

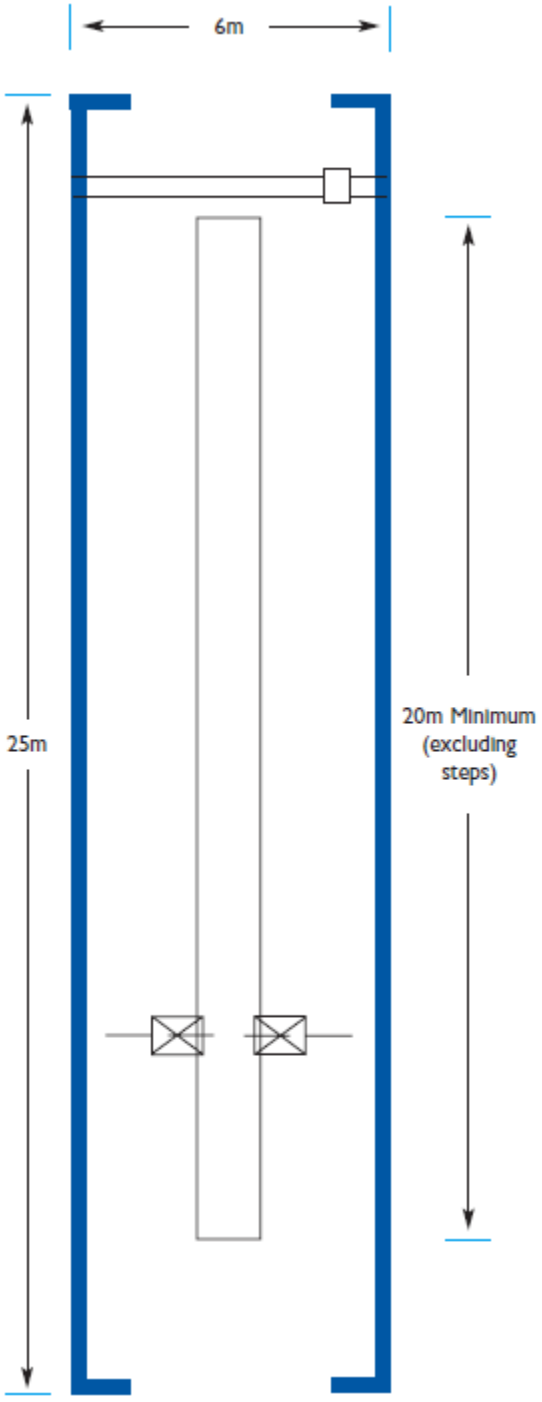
Comprehensive user/operator manuals in English must be provided for items 1,2,4,5,6 and 7 above as well as the speed limiter tester

With regards to the headlamp aim test area and tester, written declaration from a competent person that the headlamp aim test area conforms to the Irish Standards for Headlamp Aim Test Equipment and Floor Area Requirement must be retained. In addition a written declaration is required from the head lamp aim supplier that the headlamp aim tester is fitted in line with the Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirement and has been calibrated in line with the headlamp tester manufacturers' requirement.

Up to date diesel data information including Max. RPM values for diesel engines must be available and be updated every two years. It is also recommended that, where available, up to date data on ABS / EBS warning light sequences should be available.

APPENDIX 3

Test Lane Dimensions



Testing area head room and the entrance height must be a minimum of 5.3m with a minimum entrance width of 4.25m. Equipment shall be laid out with at least 1.5m between the inside of a wall, an entrance or exit door and lift platforms or a pit and there shall be at least .5m clearance around all parts of a lift including control boxes.

The area where the vehicle stands for headlamp aim testing shall be a minimum of 4m wide and 14m long. A 10m x 4m section of this area shall comply with the floor and rail standards set out in the Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirements. This may be reduced to 10m x 3m where a pit

forms part of the headlamp test area. The standing area shall be marked out with continuous white or yellow lines. These lines will not be required where a pit forms part of the standing area.

A roller type brake tester shall be set in the floor and a level length of 12m for HCV lanes available before and after the lateral centre line of the machine's rollers and shall be located not closer than 1.5 m (59 ins) to any entrance / exit by which vehicles enter or leave the building.

Areas on the ground must be marked to the dimensions shown in Figures 1 and 2 below for testing the field of vision of mirrors. This area may either be painted on the ground at a specific location in the test centre, or clearly marked out in some other manner, i.e. a rubber mat with a reflective surface that can be laid down on the ground in the appropriate position adjacent to the vehicle being tested. However the test area must be clearly visible at all times under ambient lighting conditions. The location of the test will be such that all vehicles will be tested at specific location laid out in the test centre. This location will be such that each mirror test carried out can be repeated in a similar manner.

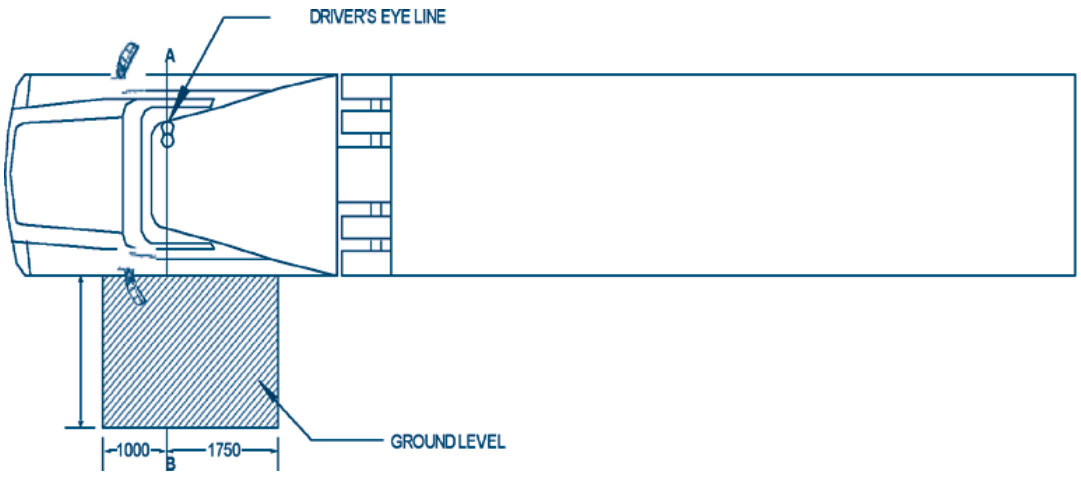


Figure 1: Field of vision of Class V close-proximity mirror. (All dimensions in millimetres).

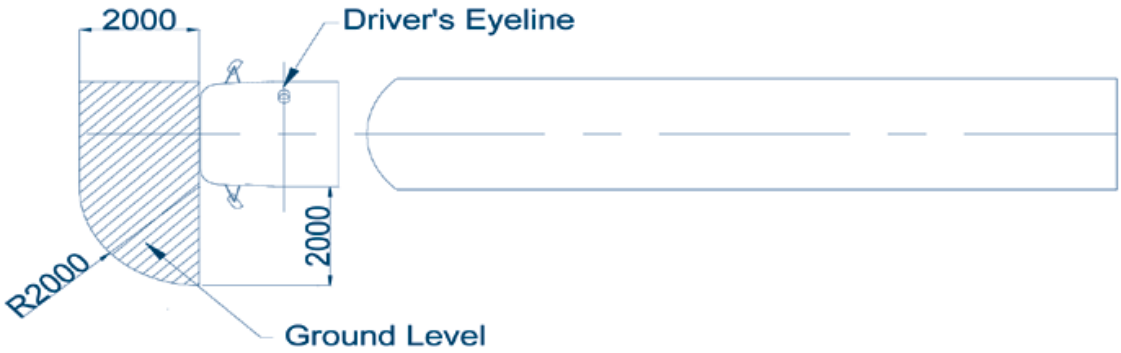


Figure 2: Field of vision of Class VI front mirror (All dimensions in millimetres).

APPENDIX 4

Weekly Audit of Premises and Equipment

CVR Testing Centre

WEEKLY AUDIT OF PREMISES & EQUIPMENT

Road Safety Authority,
Clonfert House, Bride Street, Loughrea, Co. Galway.
Tel: 091 872600 Fax: 091872660

From; To;

	WK1	WK2	WK3	WK4	WK5	Notes
Name ; Initials;						
Date;						
Common Items						
Premises:						
Clean & Sweep premises ensuring test area is clean						
Lighting:						
Check operation of all premises lighting including Lift/Pit						
Compressor/Air Pressure System:						
Drain the air receiver & ensure correct operation						
IT Equipment						
Clean surface & screen with soft tissue						
Ensure all equipment / cabling is secure and dry						
Customer waiting area:						
Check area is clean and tidy						
Check toilets are clean and in working order						
Tester's Presentation:						
Check testers have clean overalls with required badges						
LGV Specific Items						
Lift/Hoist/Pit:						
If Hoist used Hoist - check controls, oil leaks and for correct operation						
If Pit used - check that it is clean and dry						
Side slip plate:						
Check plate is secure & operating correctly						
Roller Brake Tester:						
Check roller condition & for correct operation						
Axle Jack:						
Check for oil / air leaks and that it is mounted securely						
Headlamp Tester:						
Clean surface & screen with soft tissue						
Check and clean rails and rollers						
Smoke Meter:						
Clean meter and replace filters as required						
Check cables/temperature probe-instrument/RPM sensor						
CO Tester:						
Check filters and replace as required						
HGV Specific Items						
Pit:						
Check that it is clean and dry						
Side slip plate:						
Check plate is secure & operating correctly						
Roller Brake Tester:						
Check roller condition & for correct operation						
Axle Jack:						
Check for oil / air leaks and that it is mounted securely						
Headlamp Tester:						
Clean surface & screen with soft tissue						
Check and clean rails and rollers						
Smoke Meter:						
Clean meter and replace filters as required						
Check cables/temperature probe-instrument/RPM sensor						
CO Tester:						
Check filters and replace as required						
Load Simulation:						
Check condition of straps/chains						
Check system for oil/air leaks						
Air Gauges:						
Check condition of Gauges and connections						

N.B. ALL EQUIPMENT MUST BE MAINTAINED AS PER MANUFACTURERS INSTRUCTIONS

Details of this Audit should be uploaded onto CoVIS (when available) on a weekly basis and a hard copy should be retained and available for inspection.

APPENDIX 5

Irish standard for head lamp aim test equipment and floor area requirement

1. Scope

This specification is a description for the MINIMUM performance and constructional requirements for headlamp aim testing for Private Vehicles (PV) with a gross weight not exceeding 3,500kg and accommodation for not more than 8 passengers and Light Commercial Vehicles (LCV) with a design Gross Vehicle Weight not exceeding 3,500kg.

This specification does not address health and safety requirements.

2. Reference

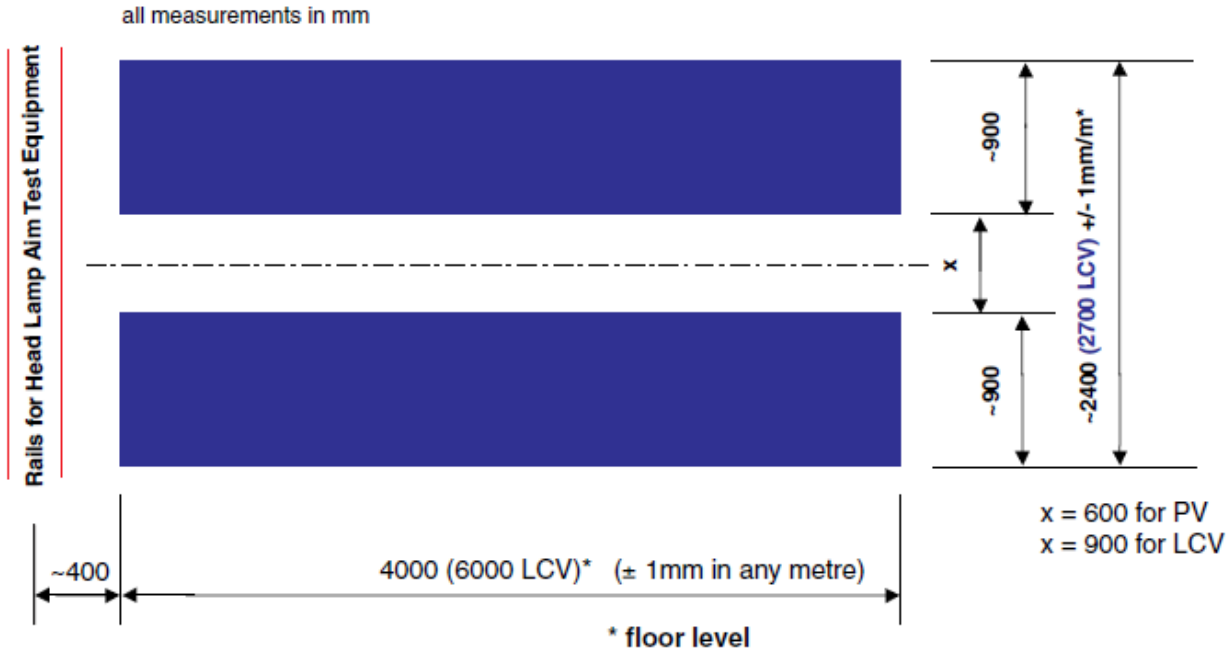
This standard is based on ISO 10604.

3. Test Area Floor

3.1. The test area floor shall be composed of two rolling tracks, which are clearly indicated on the floor.
3.2. The materials to be used may be either steel plates or a levelling compound.
3.3. The rolling track minimum dimensions shall be as follows (figure 1).

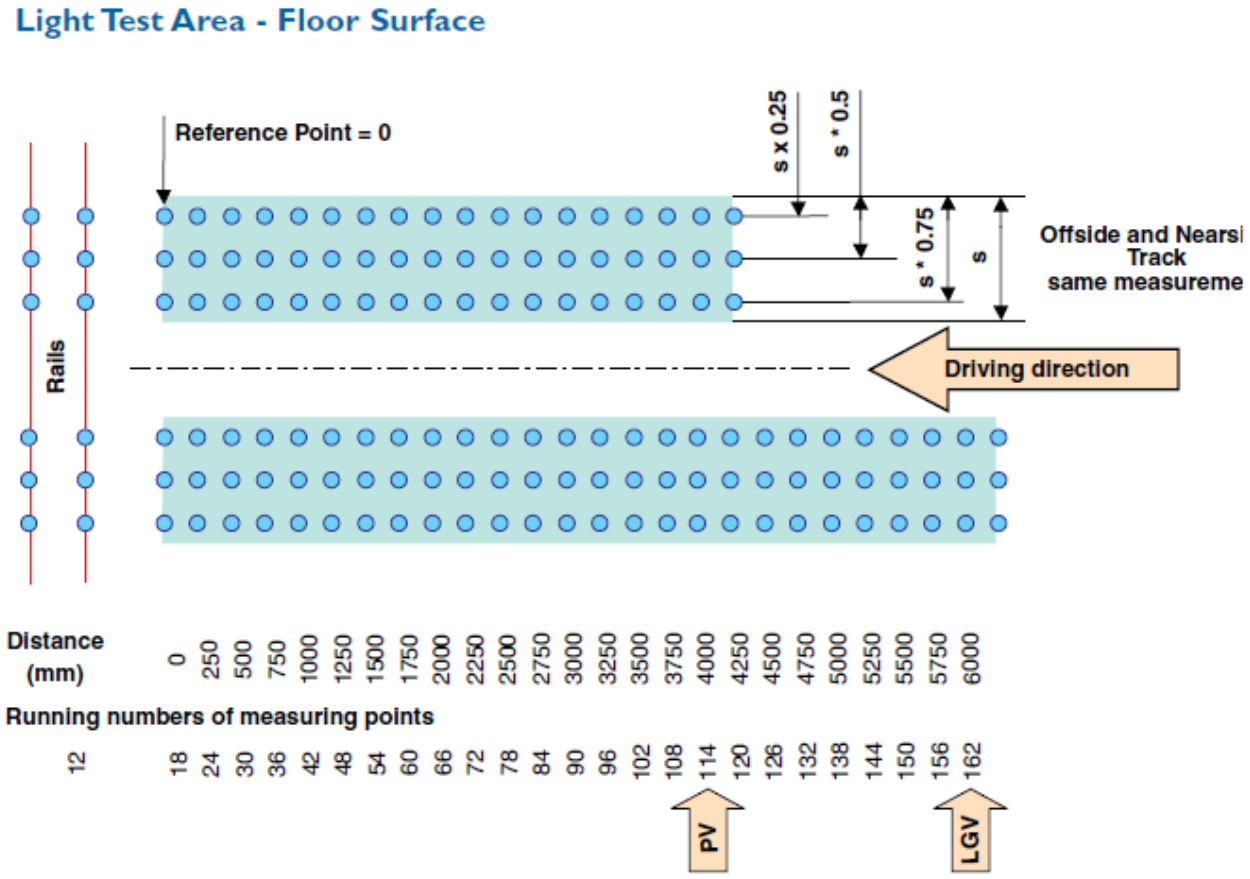
Figure 1

Light Test Area - Floor Surface



3.4 After initial levelling or re surfacing, a laser measurement by a competent engineer shall be undertaken. The grid lines for the measurement shall be as follows (figure 2).

Figure 2



3.5 The result shall be recorded in a simple form (such as an excel spreadsheet) dated and signed by the competent person who performed the laser measurement.

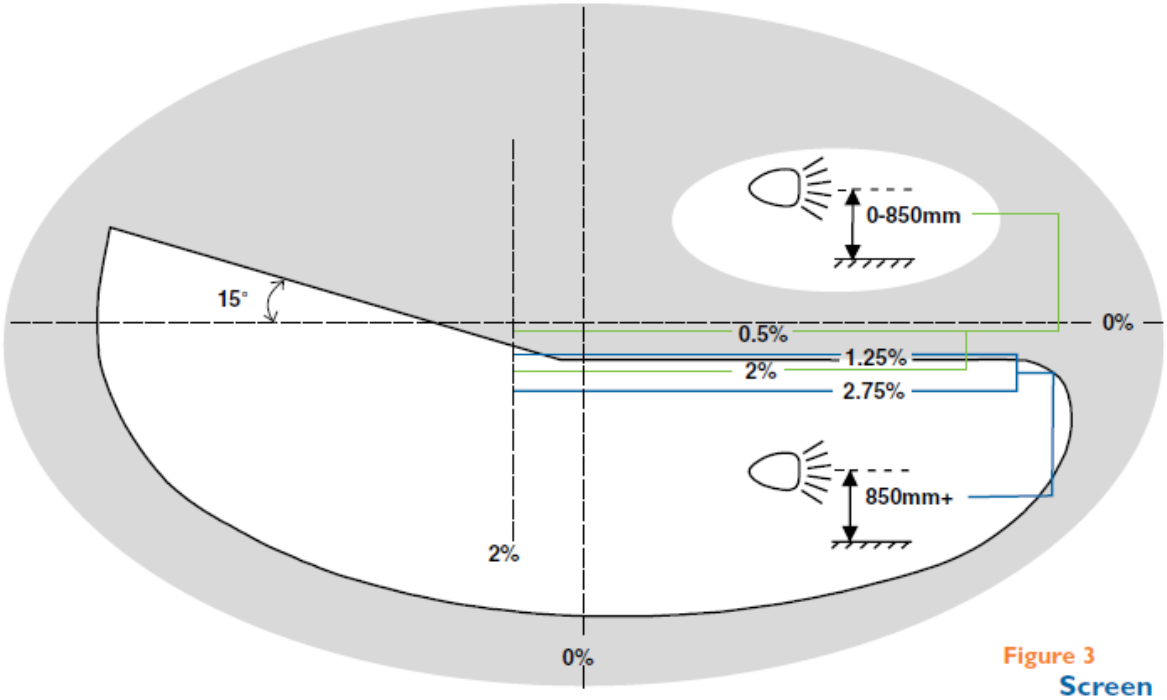


Figure 3
Screen

4. Light Test Equipment (LTE)

In principal there are two basic designs of LTE:
_ Mechanical LTE (MLTE)
_ Scanning LTE (SLTE)

4.1. Rails

4.1.1. The light test equipment shall operate on rails at all times.

4.1.2. The rails must be sturdy, robust and capable of being secured flat and level within +/- 0.5mm in any meter.

4.1.3 It is recommended that rails shall be designed to be recessed into the floor to facilitate drive-over by vehicles being tested, without distorting or collapsing the rails. This requires them to be capable of supporting a drive over axle load of at least 2,000kg for PV and 2,800kg for LCV.

4.2. Lens Assembly

4.2.1. The lens assembly shall be adjustable vertically so that the centre of the lens can be set to any height between 500mm and 1220mm above the light test area. When set to the correct height the lens assembly shall be capable of being temporarily locked in the set position.

4.2.2. The lens assembly shall be attached to the LTE in a sturdy manner with no detectable rock or flexing of the lens assembly when the unit is mounted on the LTE rails.

4.2.3. The whole LTE shall be inherently stable when the lens assembly is positioned 1220mm above the vehicle standing area.

4.2.4. A means shall be available to enable the LTE to be accurately aligned with the longitudinal axis of the vehicle. To achieve this, the lens assembly shall be capable of rotating in the horizontal plane (yaw) and when correctly aligned it shall be capable of being temporarily locked in the set position.

4.2.5. For calibration purposes only, where the LTE calibration is not preset at the factory, the lens assembly shall be adjustable in rotation in the vertical plane (pitch). Adjustment shall be possible only with the use of tools and after adjustment the mechanism shall be locked.

4.3. Aiming Screen

4.3.1. The aiming screen shall be positively located within the LTE and adjustable only with tools; attachment by adhesive is not acceptable as adjustment, either vertical or horizontal, may be necessary during calibration.

4.3.2. The aiming screen shall be marked with bandwidth lines coloured in accordance with the diagram shown in figure 3. MLTE's shall be fitted with a standard screen with only four solid red or blue lines showing the 0.5%, 1.25%, 2% and 2.75% positions. The markings shall be positioned within a tolerance of +/- 0.15mm and line thickness for defining bandwidths shall not exceed 0.35mm.

4.3.3. As an alternative to the requirements set in 4.3.2; an aiming screen may be marked with 1 single broken line in the horizontal plane and 1 single broken line in the vertical plane, which intersect at the centre point of the screen and which are used in conjunction with a calibrated scaled wheel, whose adjustments are made in accordance with the manufacturers table.

4.3.4. The aiming screen shall be clearly and permanently marked with the LTE manufacturers logo in a position that can be seen easily when installed but away from the main screen markings or shown clearly on the body of the lens assembly unit.

4.3.5. If an SLTE is used, the light test results have to be displayed either in an alpha numeric or a graphic way (or a combination of both).

4.4. Documentation/Identification

4.4.1. The LTE shall have a durable identification mark on the exterior showing the make, model and serial number.

4.4.2. The manufacturer of the LTE shall provide a clear and easy to understand user manual, written in English and available at any time, which shall explain how it operates, including the function of each device.

4.4.3. The manufacturer of the LTE shall provide a technical handbook with a description of the calibration technology.

4.4.4. The manufacturer of the LTE shall, where this is available, deliver an "EC Declaration of Conformity".

4.4.5. The manufacturer of the LTE shall deliver a "Maintenance procedure".

5. Calibration of LTE

5.1. The calibration procedure shall match the manufacturer's recommendation.
5.2. For an initial set up, the installer shall provide a calibration certificate.
5.3. A competent person shall calibrate the equipment every 12 months.
5.4. Calibration certificates shall be kept for at least 3 years and shall state the technology of calibration.

6. Vehicle Preparation

- Check that headlamp glass is clean and dry
- Seat a driver of approx. 75kg on the driver's seat
- Check tyre pressure and where necessary inflate them to the pressure recommended by the vehicle manufacturer for normal driving condition on the road
- Bring vehicles with pneumatic suspension and seat corrector to the normal road position
- Set any levelling devices to the "0" position
- Drive the vehicle on to the headlamp test area and bring it gently to a halt at the headlamp checking point, with the steering in the straight ahead position.

Tástáil Ródacmhainneachta um Fheithiclí Tráchtála
Commercial Vehicle Roadworthiness Testing

GUIDELINES FOR PREMISES AND EQUIPMENT FOR THE TESTING OF ALL VEHICLES COVERED BY THE LIGHT COMMERCIAL VEHICLE TESTERS MANUAL

SECTION B

Table of Contents

GUIDELINES FOR PREMISES AND EQUIPMENT FOR THE TESTING OF LIGHT COMMERCIAL VEHICLES UP TO 3.5 TONNES G.V.W.

1. Premises

The testing area shall be contained within premises that are permanent, fully weather proof, with concrete floors and adequate lighting. The test lane shall be dedicated to vehicle testing and be separate from other workshop activities.

CVR testing centres authorised under the 2004 Vehicle Testing Regulations must have, at the least, a solid 2m high partition wall dividing test lanes from workshops (this does not preclude an access doorway to the lane). Where the Authority is satisfied that a 2m high partition is not physically possible, the CVR test operator must put forward proposals to otherwise meet the requirement to have a **clearly defined physical partition** between test activities and other activities on the premises for approval by the Authority.

All testing centres first authorised after 21 February 2013 must have test lanes which are fully separated from all other activities conducted on the premises.

The entrance height shall be a minimum of 3.2m and a minimum entrance width of 3.5m is recommended. The test bay shall be not less than 4.25m wide with a headroom clearance of at least 3.5m high (4.9m high over a lift).

The design shall be such that all vehicles can drive in one end of the test lane and out the opposite end. Where, in the case of a testing centre authorised under the 2004 Vehicle Testing Regulations, the Authority is satisfied that a drive through is not physically possible, the CVR test operator must put forward proposals for the safe entrance and exit of vehicles for approval by the Authority.

It is required that sufficient parking space be available (at least three spaces of 7 metres x 3 metres) to accommodate any vehicles awaiting tests. The parking and the general area needed for movement of the vehicles for testing shall be arranged so that there is no undue obstruction. There shall be unobstructed access via concreted or similar surfaced road from the site entrance to the building entrance, such that vehicles can enter and leave the site in a forward direction. CVR testing centres must provide at least 3 dedicated LCV spaces per each LCV lane which are adjacent to the CVR testing centre

Within reason the testing area shall be free from oil contamination, smoke, exhaust fumes, noise or other pollution from adjacent facilities.

Testing centres must have in place a diagram of the test area showing each test lane with each clearly marked and identified with a unique number and reference to the test categories to which each lane is designated. This will be important for clearly identifying each test lane for the purposes of the new testing centre IT systems. For example a testing centre with 1 HCV lane and 2 LCV lane shall have each lane named and clearly marked with references ‘HCV1, LCV1 and LCV2’ These shall be also be clearly illustrated on the testing centre diagram, a copy of which shall be provided to the Authority.

2. Test Facilities - General

The CVR test operator will be responsible for ensuring that the premises and equipment comply with the relevant Acts, Regulations, Bye-laws, Health, Safety and Welfare requirements and Health and Safety at Work Requirements. CVR testing centres shall be maintained to a standard which is conducive to conducting roadworthiness tests in a proficient manner.

The floor area of the test lane shall be painted or otherwise to facilitate easy cleaning

An appropriate exhaust emission extraction system must be installed and shall, as far as practicable, be attached to all vehicles when the engine is running.

The level of illumination and the evenness of distribution shall be adequate for inspection work to be carried out with ease. An office shall be provided on the premises. There shall be a lockable desk, a chair, a telephone nearby and a security lockable steel floor safe for the safe custody of test documentation. The scale of these facilities may be less at sites with small throughputs.

A customer waiting room separated from the office and test lane but with a view of the test lane shall be provided. This view may be provided using CCTV if the layout of the premises prevents open viewing, however all testing centres commissioned after 21 February 2013 must have a waiting room with direct view of the test area. Space shall be provided for a television screen, two A2 sized posters and display stands which can be used to display information materials and Road Safety messages, as stipulated by the RSA.

Toilets, adjacent to the waiting room dedicated to customers must be provided. The toilets shall comply with the Health and Safety requirements. Unauthorised personnel shall be discouraged from entering the test area.

Appendix 2 lists the documentation required for testing purposes.

3. Testing Facilities

The testing operations subdivide into the following stages:

- External inspection of vehicle Stage
- Internal inspection of vehicle Stage
- Underside Inspection of Vehicle Stage
- Suspension Tester Stage
- Lighting and headlamp aim Stage
- Brake Testing Stage

As a general requirement the testing equipment shall be easily accessible from the entrance of the test lane so that the inspection can be carried out in sequence. This means that the equipment shall be positioned in the building so that access to it is unlikely to be obstructed by other vehicles on the premises.

Equipment shall be laid out with at least 1.5m between the inside of a wall, an entrance or exit door and lift platforms or a pit.

There shall be at least .5m clearance around all parts of a lift including control boxes.

Following the introduction of new testing centre IT systems, the results of tests completed on the following pieces of equipment must be reported through the central IT system automatically:

- Roller brake tester
- Diesel smoke opacity meter
- Steering side slip gauge
- Suspension tester
- Headlamp aim tester

4. External Inspection of Vehicle Stage

The provision for the external inspection of the vehicle shall be fully under cover and have a minimum of 8m in length and 4.25m in width and shall be clear of obstruction. The level of illumination falling on the sides of the vehicle must be adequate for inspection purposes at all levels.

Steering Side Slip Plate

A steering side slip plate shall be fitted in the test lane prior to the suspension test, the roller brake test and the underside inspection.

Diesel Smoke Opacity Meter
A diesel smoke opacity meter shall be provided to check the exhaust emissions of diesel engined vehicles in line with EU Directive 2009/40/EC.

Emissions Gas Analyser
An emissions gas analyzer shall be provided to check exhaust emissions of petrol engined vehicles in line with EU Directive 2009/40/EC.

5. Internal Inspection of Vehicle Stage

No special requirements.

6. Underside Inspection of Vehicle Stage

Jacking equipment together with either a lift/hoist or a pit and a portable hand lamp is required.

Wheel play detectors are required but must not reduce the minimum clearance between inner edges of the lift platforms or width of pit.

Tool for Brake Pedal
A tool to keep the brake pedal under pressure is required in order to inspect the brake pipes/hoses for leaks or bulges.

(1) Lifts must meet the following conditions.

A wheel supporting platform lift (not centre post type) or a scissor lift with:

(a) 2 platforms each at least 5.2m long to 6m long (depending on whether the lift is used for headlamp aim testing) by at least 630mm wide. Any upstands or guard rails must not be more than 25mm high; platform surfaces capable of being raised at least 1.4m from the floor;

(b) at least 800mm, but not more than 840mm between the inner edges of the platforms and at least 2.lm between the outer edges. These dimensions may be met by means of adjustable platforms;

(c) a safe working load (SWL) of at least 4700kg certified and marked in accordance with BS AU 161: Part la. 1983 or equivalent specification; jacking equipment having a minimum SWL of 2800kg capable of simultaneously raising both front or both rear wheels of any relevant vehicle, using the vehicle manufacturers recommended test procedures and jacking points;

(d) portable chocks and an appropriate chocks notice.

(e) a recess, if applicable, certified large enough (in plain view) to accept the platforms and posts, as defined in BS AU 161: Part la 1983;

(f) no walkways.

(g) confirmation, in writing by a competent person that the lift complies with all current safety standards (e.g. protection against pinching and shearing and roll off safety devices).

(h) if a scissor lift is used there must be clear access between the platforms, i.e. scissors must be located underneath the platforms rather than between them.

The lift shall be so located that:-

a) there is adequate clearance at each end of the lift platforms to cater for the overhang of a vehicle.

b) there is a clear height of at least 4.9m measured above the fully lowered lift platforms over an area 7m x 4m located symmetrically above the lift.

c) there is adequate clearance at the sides of the lift platform to enable the CVR tester to view the sides of the vehicle and to open its doors to gain access to the inside of the vehicle when it is on the lift;

d) a vehicle can be manoeuvred into a position where it can be driven on and/or off the lift, as appropriate, without difficulty within a reasonable time; and

e) it is not nearer than 1.50m to any entrance/exit by which vehicles enter or leave the building.

NOTE 1
If a lift forms part of the brake testing area (i.e. front axle on the lift while the rear axle is in the brake tester) then clarification must be sought from the lift manufacturer that the lift is suitable for the type of layout.

NOTE 2
If the vehicle "standing area" for the conduct of the headlamp aim test includes the platforms of the lift, these shall be certified as meeting the Irish Standard for the Headlamp Aim Test Equipment and Floor Area Requirement. The platforms must rest on steel stops when lowered.

(2) Pits must meet the following conditions

(a) an uninterrupted working length of at least 7.0m;
(b) a width of at least 650mm and not more than 840mm over the working length;
(c) a depth of at least 1.40m and not more than 1.80m, over the working length. Staging may be used to meet this requirement;
(d) the capacity to accommodate vehicles weighing at least 3,500kg with an axle load of 2,800 kgs;
(e) sealing, which prevents the ingress of water or a means that automatically prevents its accumulation;
(f) jacking equipment as required for a lift (see 1(c) of lift requirements).
(g) adequate access for personnel which does not intrude on the working dimensions;
(h) adequate general illumination;
(i) no upstands/guard rails more than 25mm high.

Provision shall be made for the CVR tester conducting the under-vehicle inspection to use a portable low voltage inspection hand lamp. Additional general illumination of the underside of the vehicle is recommended.

7. Lighting and Headlamp Aim Stage

The designated area for headlamp aim testing shall be a minimum of 3m wide and 6m long. Apart from a clearly identified strip of 800m wide down the centre the area shall be certified by a competent person as complying with the Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirement. A copy of the certificates and measurements obtained must be provided to the Authorised Officer.

A lift or pit may form part of this area. In such a case certification is also required.

Wheel play detectors forming part of the headlamp aim stage must meet Irish Standard for Headlamp Aim Test Equipment and Floor Area Requirement.

Where a lift forms part of the designated area marking will not be required.

The headlamp aim tester shall be rail mounted. Where rails are surface mounted and the layout is such that vehicles will be driving over the rails they shall be protected on either side by concrete, steel or wood to ensure that they are not damaged. There shall be a clearance of at least 1m at the rear of the headlamp aim tester.

Suitable equipment shall be provided or available to enable the headlamp aim tester to be checked for alignment on a regular basis.

Mirrors shall be positioned around the test lane to enable the CVR tester to check the front and rear lights when in the vehicle's driver seat of the vehicle.

8. Suspension Tester Stage

(i) The suspension tester shall not be built into or be a part of a pit facility.

(ii) The suspension tester shall be located so that:-

(iii) vehicles can be driven on and off without difficulty

(iv) the vehicle is substantially level; and

(v) it is in the building under cover and is located not nearer than 1.50m to any entrance/exit by which vehicles enter or leave the building

(vi) it is before the brake tester

(vii) it is before the underside inspection.

9. Brake Testing Stage

Brake Tester General Description
The brake tester is required in order to determine that the brakes on the vehicle being tested are at least equal to the minimum required by law and that there is no unacceptable imbalance between brakes on the same axle. This requirement implies the need for

(i) A competent fully trained operator.

(ii) Data on vehicle weights.

(iii) Accurate calibration - See Appendix 2.

(iv) Means of weighing the vehicle as presented.

(v) Brake tester instruction manual.

(vi) Wheel chocks.

Brake Tester Location
A roller type brake tester shall be set in the floor and a level floor of 7m available before and after the lateral centre line of the machine's rollers. The roller brake tester shall not normally be built into or be part of the pit facility.

The brake tester shall be located so that:-

(i) vehicles can be driven on and off the rollers without difficulty and within a reasonable time;

(ii) there must be adequate clearance to enable all the brakes on a vehicle to be tested with the vehicle facing the same direction;

(iii) the vehicle is substantially level when on the rollers; and

(iv) the machine is in a building under cover and is located not nearer than 1.50m to any entrance/exit by which vehicles enter or leave the building.

Brake Testing - Dynamic
The roller brake tester must be the normal method used to test all brakes, except for vehicles equipped with braking systems and/or transmissions where the use of a roller brake tester is not feasible. In such cases a road test must be carried out using a decelerometer with a manufacturer's calibration certificate not more than two years old. There shall be a reasonably level surface upon which a dynamic brake test may be safely carried out. This need not be under cover but shall not be on the public road except under exceptional circumstances.

10. Test Information / CoVIS / Minimum Specification of Test Lane Equipment

Following the introduction of CoVIS, CVR test operators must ensure that they provide and maintain software and equipment compatible with at least the following minimum standard to enable connection to CoVIS:

All equipment listed below (or equipment used to capture the following test data) must produce results in an electronic output that conforms to a secure common industry standard interface such as ASA networks or Gieglan:

- Roller brake tester (with means of recording axle weight)
- Diesel smoke opacity meter
- Steering side slip plate
- Suspension test
- Headlamp aim tester

CVR test operators shall provide appropriate secure storage for CoVIS assets in accordance with the Authority's minimum standards.

Each CVR Testing Centre shall be required to enter into a service level agreement with the CoVIS Contractor which will enable the deployment of the CoVIS solution in order to transmit test data from test equipment / software.

With regard to where vehicle testing records or documents are required to be held by a CVR test operator for inspection, where the IT system (CoVIS) allows for documents or forms to be completed or scanned and stored on the CoVIS System then this is considered acceptable as a form of record for inspection. Where the original documents are required to be available for inspection eg calibration certificates, these must continue to be kept in hard copy.

11. Insurance

CVR test operators shall have adequate insurance cover for vehicle testing activities including CoVIS. This can be confirmed with written confirmation from the insurance broker and shall include:

Property Damage Insurances: [Appropriate limit will differ for each testing centre]

- Loss or damage to insured's physical assets caused by fire or other specified perils.
- Insurance for Buildings – whether owned or required under any relevant lease agreements.
- Insurance for Contents – contents of testing centre.

Business Interruption: [Appropriate limit will differ for each testing centre dependent on turnover]

- Loss following interruption to the business due to damage to property caused by fire or other specified perils.
- Increased Cost of Working: additional expenditure necessarily incurred as a result of a specified peril.
- Rent Payable / Receivable: financial loss incurred due to a continuing obligation under lease to pay rent or a restriction from receiving rent on a premises under lease that has been damaged by a specified peril.

Computer: [Appropriate limit will differ for each testing centre dependent on replacement cost]

- Loss or damage to computer and ancillary equipment caused by a specified peril.

Employers Liability: [€13m is the standard cover required in respect of any one incident]

- Covers the legal liability for bodily injury to employees or disease contracted by them arising in the course of their employment in the business.

Public Liability: [€6.5m is the standard cover required in respect of any one incident]

- Covers legal liability resulting from accidental bodily injury to any third party person or loss of or damage to their property arising in connection with the business.

Engineering: [Appropriate limit will differ for each testing centre]

- Statutory Inspection: covers third party inspection of plant/equipment to comply with Legislation.
- Engineering: fragmentation / breakdown / explosion /sudden and unforeseen damage to plant / damage to surrounding property /explosion and third party liability.

Professional Indemnity /Defective workmanship [€2.6m is the standard cover required in respect of any one incident]:

- Covers claims arising from negligent act, error or omission in the course of professional services provided.

Note : Employers Liability and Public Liability should include a principal extension in the form of a specific indemnity in favour of the Authority. This is a formality for insurance purposes, it doesn't affect the legal responsibilities of the CVR testing operator or CVR testers and it is understood it has not cost implications for testing centres.

12. Quality Control

CVR test operators shall have in place a quality control system. Part of this system shall include a weekly audit (please see Appendix 3) which must be carried out by a person with responsibility for Commercial Vehicle Testing. The results of these checks must be uploaded onto CoVIS (when available) and the Audit Sheets must be held for inspection by an Authorised Officer.

In order to obtain and / or retain an authorisation to undertake commercial vehicle roadworthiness testing, the CVR test operator must provide evidence from an accredited ISO 9001 Certification Body that the testing centre is certified in relation to ISO 9001, fully incorporating the requirements of CITA Recommendation 9B. CVR testing centres must notify the RSA of any major non compliances / non conformances reported by the testing centre's independent ISO/CITA 9B certification assessor within one working day.

13. Branding

Compliance with the VTN and CVRT Brands will be accepted as meeting the standards in terms of premises presentation, uniforms and external & internal signage.

The CVRT branding guidelines also cover use of the CVRT branding for stationary & advertising. The CVRT Branding Guidelines can be found on the RSA wesite at www.CVRT.ie.

14. Premises Location

All CVR test operators shall be in a location which does not cause congestion or danger (for example, near schools) as well as complying with local planning and by-laws. Adherence to this requirement will form part of the revised licensing application review process.

In the case of a CVR test operator who had an authorisation under the 2004 Vehicle Testing regulations where the Authority believes that the location of the CVR testing centre gives rise to concerns in relation to congestion or danger, the CVR test operator must put forward proposals for managing traffic congestion and avoiding danger to other road users, including an independent risk assessment of the proposals, for approval by the Authority.

A sign post guiding customers to the CVR testing centre must also be provided.

15. Consistency Checks

The RSA or its representative may complete an equipment consistency check periodically across all commercial vehicle test lanes. In order to facilitate this check each testing centre shall make each lane available for the required time at their own cost and adhere to the findings of the check.

APPENDIX 1

Draft Guidelines for Acceptable Equipment

SUMMARY TEST EQUIPMENT REQUIRED BY ROAD SAFETY AUTHORITY

Light Commercial Vehicle Test Scheme

1. Low voltage Inspection Lamp
2. 2.8 tonne Jacking Beam
3. Headlamp aim tester mounted on rails
4. LCV Roller Brake Tester
5. Emissions Gas Analyser
6. Diesel Smoke Opacity Meter
7. Steering Side Slip Plate
8. Suspension Tester
9. Wheel Play detector
10. Tyre Tread depth gauge
11. Decelerometer
12. Tyre Inflation Equipment
13. Tool for pressing Brake Pedal
14. Light check mirrors
15. Pit lights
16. Smoke extraction
17. Glass Opacity Meter
18. Diesel Data Books, charts, discs
19. Pinch bar (1 meter long)
20. Wheel chocks

It should be noted that equipment used in a vehicle roadworthiness test lane will be used more extensively than equipment used for normal vehicle servicing and therefore all CVR testing operators must ensure that their equipment is robust enough for vehicle roadworthiness testing.

1. Low Voltage Inspection Lamp

The lamp must be of a low voltage type in line with Section 21 of S.I. 3 of 1972 issued by the Department of Labour and also S.I. 188 of 2001.

Power shall be between 40 and 60 watts and the exterior of the lamp shall be protected. The lamp supply lead shall be captive to a system of running eyes along a rail or cable such that the lead cannot trail either on the floor of the pit or workshop.

2. 2.8 tonne Jacking Beam

The jacking system shall be capable of lifting simultaneously both wheels of the front or rear axle of a vehicle using the vehicle manufacturer's recommended jacking points. The jacking equipment must have a S.W.L. of not less than 2,800 kilograms.

3. Headlamp Aim Tester mounted on rails

a) an optical tube screen type presentation with adjustment and a suitable means to facilitate alignment.

b) capable of adjustment between heights of 500mm and 1.220m.

c) marked with vertical and horizontal centre lines or other means of assessment.

d) capable of measurement of headlamp beam aim in gradient per cent (%).

e) fitted with a photo electric cell, for the location of beam hot spots measured by a meter mounted on the testing equipment.

f) provided with calibration equipment or have access to such equipment.

g) equipped with an electronic output.

The minimum acceptable standard for accuracy is as set out in B.S.A.U. 162: 1976 and its amendments.

Equipment which meets an equivalent standard is also acceptable.

4. LCV Roller Brake Tester

General

The roller brake tester must be capable of carrying out brake tests on all light commercial vehicles up to and including vehicles of 3,500kg. GVW with axle loads of 2,800kgs. It must have an electronic output.

It must also be capable of weighing each axle of the vehicle in order to establish the total weight of the vehicle as presented. (This will not be required where the axle weight is captured by the suspension tester).

The brake tester must be safe to use and be robustly constructed to acceptable engineering standards. When installed in authorised tester premises it must be secure in the ground in line with the manufacturer's recommendation.

Roller brake testers which operate automatically are not acceptable. The make, model and serial number of the machine must be clearly and durably marked on the exterior of the console.

A comprehensive user/operator manual must be provided with each RBT and it must include details of the method of calibration.

On the roller set installation of bi-directional machines there must be a clear and durable marking, for the user, showing the normal forward ‘drive on’ vehicle direction.

Roller Set

Roller sets must have:

a) two sets of rollers which can be driven independently and simultaneously by use of the appropriate controls and which are capable of simultaneously accommodating the left and right wheels of an axle.

b) rollers driven at the same nominal surface speed in the range 2 to 5.5 km/h throughout the full brake effort range;

c) a roller to tyre friction co-efficient of not less than 60% in wet conditions. The rollers must be durable and not likely to cause tyre damage;

d) a means of automatically stopping each roller set individually when tyre to roller slip is at a pre-selected point in the range 10 to 25%.

e) a means of preventing either roller set from operating unless a wheel is located on it except when calibrating the equipment;

f) rollers capable of accepting an axle load of not less than 2,800kg;

g) roller dimensions as follows:

(i) minimum diameter 150mm;
(ii) not more than 500mm between roller centres;
(iii) not more than 880mm between the inner ends and not less than 2.6 metres between the outer ends of the high friction surfaces of the left and right rollers.

Brake effort Displays

Brake effort displays must:

a) be analogue in kilogram force units (kgf) over the full brake effort range.

b) indicate the braking forces at individual road wheels;

c) have a maximum brake force display value not less than 1250kgf;

d) have:

(i) 10kgf dial graduations from ZERO up to and including 240kgf;
(ii) 20kgf dial graduations from 240kgf up to and including 800kgf;
(iii) 50kgf dial graduations from 800kgf and above.
(iv) retain maximum brake effort values until manually reset (e.g. rollers re-start).

Accuracy

Brake effort readings must be accurate within:

a) ±3 kgf of the true value from zero up to and including 100kgf; and

b) ±3% of the true value for all readings above 100kgf.

User Controls
User controls must be manually operated and:

a) suitably identified in Irish/English or acceptable symbols;

b) capable of starting the LH and RH roller sets independently and stopping both either simultaneously or independently;

c) remote control units must be either 'hard wired' or have suitable operating controls on the console, must be dedicated to operate only one RBT installation and be resistant to spurious signals from other sources.

NOTE 1:
There must be provision for the safe storage of a remote control hand set when it is not in use.

NOTE 2:
There must be a visual indication for the user, on the console or equivalent, when either roller set is in operation. For bi-directional RBTs the visual indication must show whether the roller sets are operating in the normal 'forward' or reverse' direction.

Brake Efficiency and Imbalance
There must be a satisfactory means for the user calculating or the brake tester displaying the value of:

a) brake efficiency calculated from the total braking effort, expressed as a percentage of the vehicle test weight (i.e. weight of vehicles as presented).

b) brake effort difference between the left and right wheels on an axle, expressed as a percentage of the higher brake effort;

This may be output automatically by the brake machine or determined by the operator (using a calculator if necessary).

NOTE:
A printer or plotter on its own is not an acceptable substitute for (a) or (b) above.

If a RBT is equipped with a device for indicating excessive brake imbalance it must be inhibited when left and right brake efforts are 40kgf or less and must display any imbalance which subsequently exceeds 30%.

Calibration
There must be suitable equipment for yearly calibration checks at brake effort values specified by the manufacturer or alternatively independent calibration by an outside contractor.

5. Emissions Gas Analyser

When vehicles with four stroke spark ignition engines are inspected an emissions gas analyzer capable of measuring the CO, HC and lambda values of exhaust gases to the method of test and standards set out in Directive 2009/40/EC and approved to the requirements of OIML Class O.

6. Diesel Smoke Opacity Meter

A meter capable of measuring the smoke opacity of diesel engines to the method of test and test standards set out in Directive 2009/40/EC and which has been approved to the specification issued by the Vehicle Inspectorate in Great Britain dated 2003 (MOT-05-01-01 Revision 2 2003) or to an equivalent standard by the appropriate authority of another Member State of the European Union shall be provided.

The smoke meter shall include a means for measuring engine RPM and engine temperature. The smoke meter must provide a print out showing the engine temperature, maximum RPM and idle speed for each acceleration, the date and time of the test and the vehicle registration. It must have an electronic output.

7. Steering Side Slip Plate

Side Slip plates capable of accurately measuring the geometry of front and rear axles of light commercial vehicles with a GVW up to 3.5 tonnes and an axle load of 2.8 tonnes. The range of Side Slip to be measured shall be between 0-20m/km. The Side Slip plate shall be of a type approved by the appropriate authority of a Member State of the European Union. It must have an electronic output.

8. Suspension Tester

A suspension tester shall be based on the resonance principle with a flexible base excitation. The suspension tester shall be capable of measuring suspension performance and imbalance in percentage terms. The suspension tester shall have the capability of weighing axles up to 2,800kgs. Suspension testers shall be of a model approved and used in a Member State of the European Union. It must have an electronic output.

9. Wheel Play Detector

Wheel Play Detectors shall be fitted either side of the lift or pit to establish play in steering/suspensions of vehicles with GVW up to 3.5 tonnes and an axle load of 2.8 tonnes.

10. Tyre Tread Depth Gauges

Tyre tread depth gauges must be available at all times in test bay.

11. Decelerometer

A decelerometer duly calibrated and certified must be available for brake tests on vehicles where the use of a roller brake tester is impractical.

12. Tyre inflation equipment

A means of inflating tyres to manufacturer's recommendations must be provided on the test lane.

13. Tool for Pressing Brake Pedal

A tool will be required to press the brake pedal in order to examine the brake pipes and hoses under pressure in cases where the roadworthiness test is being carried out by a single tester.

14 Light check mirrors

Mirrors must be provided in appropriate positions around the test lane to facilitate the testing of vehicle lights by one person from the driving seat of the vehicle being tested.

15. Pit lights

Pit lighting shall be provided within the pit to provide adequate general illumination to facilitate ease of testing.

16. Smoke extraction

A smoke extraction system must be installed in the testing centre to provide help to prevent a build up of exhaust fumes or other noxious gases, and to minimise the risks of adverse effects on the Health and Safety of staff and vehicle presenters.

17. Glass Opacity Meter

A portable glass transparency meter must be provided on the test lane which is capable of measuring the transparency of automotive glass in motor vehicles. Means shall be provided to enable the accuracy of this meter to be quickly checked and calibrated as required.

18. Diesel data book / charts / discs

Up to date information on Max RPM values for diesel engines must be available at the testing centre. These must be updated at least every 2 years.

19. Pinch bar (1 meter long)

Bar to be used as a lever to check play in steering and suspension joints etc

20. Wheel chocks

Wheel chocks to be used to prevent the vehicle moving while being tested

APPENDIX 2

Documentation Required for Test Equipment for testing of Light Commercial Vehicles:

Current calibration certificates are required to be maintained up to date for the following equipment:

1) Roller Brake Tester (requires calibration every 12 months)
2) Decelerometer (requires calibration every 24 months)
3) Air Pressure Gauge (requires calibration every 12 months)
4) Emissions Gas Analyser (requires calibration every 12 months)
5) Diesel Smoke Opacity Meter (requires calibration every 12 months)
6) Side Slip tester (requires calibration every 12 months)
7) Headlamp aim tester (requires calibration every 12 months)
8) Suspension tester(requires calibration every 12 months)

Where equipment is being calibrated within 2 weeks (14 calendar days) of its current calibration certificate expiry date, it is acceptable to start the next required calibration period from the expiry of the current calibration certificate e.g. if a roller brake tester current calibration certificate expires on 15th July 2010 and it was calibrated on the 8th of July 2010, the new calibration certificate may start on the 16th July 2010 and then be due for calibration again on 15th July 2011.

In addition, written declarations shall be retained from the manufacturers to confirm that the roller brake tester, lift and jacking beam, emissions gas analyser, diesel smoke meter, suspension tester and steering side slip plate meet the required specifications.

Comprehensive user/operator manuals in English must be provided for items 1,2,3,4,5,6 and 7 above

With regards to the headlamp aim test area and tester, written declaration from a Suitably Qualified Individual or Engineer who has checked the level area and confirmation that the headlamp aim test area conforms to the specifications required by the Road Safety Authority. Written declaration from headlamp aim supplier that the headlamp aim tester is fitted in line with the specifications required by the Road Safety Authority

Up to date diesel data information including Max. RPM values for diesel engines must be available and be updated every two years. It is also recommended that, where available, up to date data on ABS / EBS warning light sequences should be available.

APPENDIX 3

Weekly Audit of Premises and Equipment

CVR Testing Centre

WEEKLY AUDIT OF PREMISES & EQUIPMENT

Road Safety Authority,
Clonfert House, Bride Street, Loughrea, Co. Galway.
Tel: 091 872600 Fax: 091872660

From; To;

Name ;	WK1	WK2	WK3	WK4	WK5	Notes
Initials;						
Date;						
Common Items						
Premises:						
Clean & Sweep premises ensuring test area is clean						
Lighting:						
Check operation of all premises lighting including Lift/Pit						
Compressor/Air Pressure System:						
Drain the air receiver & ensure correct operation						
IT Equipment						
Clean surface & screen with soft tissue						
Ensure all equipment / cabling is secure and dry						
Customer waiting area:						
Check area is clean and tidy						
Check toilets are clean and in working order						
Tester's Presentation:						
Check testers have clean overalls with required badges						
LGV Specific Items						
Lift/Hoist/Pit:						
If Hoist used Hoist - check controls, oil leaks and for correct operation						
If Pit used - check that it is clean and dry						
Side slip plate:						
Check plate is secure & operating correctly						
Roller Brake Tester:						
Check roller condition & for correct operation						
Axle Jack:						
Check for oil / air leaks and that it is mounted securely						
Headlamp Tester:						
Clean surface & screen with soft tissue						
Check and clean rails and rollers						
Smoke Meter:						
Clean meter and replace filters as required						
Check cables/temperature probe-instrument/RPM sensor						
CO Tester:						
Check filters and replace as required						
HGV Specific Items						
Pit:						
Check that it is clean and dry						
Side slip plate:						
Check plate is secure & operating correctly						
Roller Brake Tester:						
Check roller condition & for correct operation						
Axle Jack:						
Check for oil / air leaks and that it is mounted securely						
Headlamp Tester:						
Clean surface & screen with soft tissue						
Check and clean rails and rollers						
Smoke Meter:						
Clean meter and replace filters as required						
Check cables/temperature probe-instrument/RPM sensor						
CO Tester:						
Check filters and replace as required						
Load Simulation:						
Check condition of straps/chains						
Check system for oil/air leaks						
Air Gauges:						
Check condition of Gauges and connections						

N.B. ALL EQUIPMENT MUST BE MAINTAINED AS PER MANUFACTURERS INSTRUCTIONS

Details of this Audit should be uploaded onto CoVIS (when available) on a weekly basis and a hard copy should be retained and available for inspection.