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► **B** **DIRECTIVE 2014/45/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**
of 3 April 2014
on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive
2009/40/EC
(Text with EEA relevance)
(OJ L 127, 29.4.2014, p. 51)

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▼B**DIRECTIVE 2014/45/EU OF THE EUROPEAN PARLIAMENT
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CHAPTER I

SUBJECT MATTER, DEFINITIONS AND SCOPE*Article 1***Subject matter**

This Directive establishes minimum requirements for a regime of periodic roadworthiness tests of vehicles used on public roads.

*Article 2***Scope****▼M1**

1. This Directive shall apply to vehicles with a design speed exceeding 25km/h of the following categories, as referred to in Regulations (EU) No 167/2013 ⁽¹⁾, (EU) No 168/2013 ⁽²⁾, and (EU) 2018/858 ⁽³⁾ of the European Parliament and of the Council:

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- motor vehicles designed and constructed primarily for the carriage of persons and their luggage comprising not more than eight seating positions in addition to the driver's seating position – vehicle category M₁;
- motor vehicles designed and constructed primarily for the carriage of persons and their luggage comprising more than eight seating positions in addition to the driver's seating position – vehicle categories M₂ and M₃;
- motor vehicles designed and constructed primarily for the carriage of goods, having a maximum mass not exceeding 3,5 tonnes – vehicle category N₁;
- motor vehicles designed and constructed primarily for the carriage of goods, having a maximum mass exceeding 3,5 tonnes – vehicle categories N₂ and N₃;

⁽¹⁾ Regulation (EU) No 167/2013 of the European Parliament and of the Council of 5 February 2013 on the approval and market surveillance of agricultural and forestry vehicles (OJ L 60, 2.3.2013, p. 1).

⁽²⁾ Regulation (EU) No 168/2013 of the European Parliament and of the Council of 15 January 2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles (OJ L 60, 2.3.2013, p. 52).

⁽³⁾ Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1);

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- trailers designed and constructed for the carriage of goods or persons, as well as for the accommodation of persons, having a maximum mass exceeding 3,5 tonnes – vehicle categories O₃ and O₄;

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- from 1 January 2022, two- or three-wheel vehicles – vehicle categories L3e, L4e, L5e and L7e equipped with a combustion engine with a displacement of more than 125 cm³; wheeled tractors of categories T1b, T2b, T3b, T4.1b, T4.2b and T4.3b the use of which mainly takes place on public roads with a maximum design speed exceeding 40km/h.

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2. Member States may exclude the following vehicles registered in their territory from the scope of application of this Directive:

- vehicles operated or used in exceptional conditions and vehicles which are never, or hardly ever, used on public roads, such as vehicles of historical interest or competition vehicles;
- vehicles covered by diplomatic immunity;
- vehicles used by armed forces, forces responsible for law and order, fire services, civil protection service and emergency or rescue services;
- vehicles used for agricultural, horticultural, forestry, farming or fishery purposes only on the territory of the Member State concerned and mainly on the terrain where such activity takes place, including agricultural roads, forestry roads or agricultural fields;
- vehicles used exclusively in small islands or sparsely populated areas;
- specialised vehicles transporting circus and funfair equipment, with a maximum design speed not exceeding 40 km/h, and only operating on the territory of the Member State concerned;

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- vehicles in categories L3e, L4e, L5e and L7e equipped with a combustion engine with a displacement of more than 125 cm³ where the Member State has put in place effective alternative road safety measures for two or three-wheel vehicles, taking into account in particular relevant road safety statistics covering the last five years. Member States shall notify such exemptions to the Commission.

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3. Member States may introduce national requirements concerning roadworthiness tests for vehicles registered in their territory which are not covered by the scope of this Directive and for vehicles listed in paragraph 2.

▼B*Article 3***Definitions**

The following definitions shall only apply for the purposes of this Directive:

- (1) ‘vehicle’ means any not rail-borne motor vehicle or its trailer;
- (2) ‘motor vehicle’ means any power-driven vehicle on wheels which is moved by its own means with a maximum design speed exceeding 25 km/h;
- (3) ‘trailer’ means any non-self propelled vehicle on wheels which is designed and constructed to be towed by a motor vehicle;
- (4) ‘semi-trailer’ means any trailer designed to be coupled to a motor vehicle in such a way that part of it rests on the motor vehicle and a substantial part of its mass and the mass of its load is borne by the motor vehicle;
- (5) ‘two- or three-wheel vehicle’ means any power-driven vehicle on two wheels, with or without a sidecar, and any tricycle or quadricycle;
- (6) ‘vehicle registered in a Member State’ means a vehicle which is registered or put into service in a Member State;
- (7) ‘vehicle of historical interest’ means any vehicle which is considered to be historical by the Member State of registration or one of its appointed authorising bodies and which fulfils all the following conditions:
 - it was manufactured or registered for the first time at least 30 years ago;
 - its specific type, as defined in the relevant Union or national law, is no longer in production;
 - it is historically preserved and maintained in its original state and has not undergone substantial changes in the technical characteristics of its main components;
- (8) ‘holder of a registration certificate’ means the legal or natural person in whose name the vehicle is registered;
- (9) ‘roadworthiness test’ means an inspection in accordance with Annex I designed to ensure that a vehicle is safe to be used on public roads and that it complies with required and mandatory safety and environmental characteristics;
- (10) ‘approval’ means a procedure whereby a Member State certifies that a vehicle satisfies the relevant administrative provisions and technical requirements referred to in Directive 2002/24/EC, Directive 2003/37/EC and Directive 2007/46/EC;

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- (11) ‘deficiencies’ means technical defects and other instances of non-compliance found during a roadworthiness test;
- (12) ‘roadworthiness certificate’ means a roadworthiness test report issued by the competent authority or a testing centre containing the result of the roadworthiness test;
- (13) ‘inspector’ means a person authorised by a Member State or by its competent authority to carry out roadworthiness tests in a testing centre or, where appropriate, on behalf of a competent authority;
- (14) ‘competent authority’ means an authority or public body entrusted by a Member State with responsibility for managing the system of roadworthiness testing, including, where appropriate, the carrying-out of roadworthiness tests;
- (15) ‘testing centre’ means a public or private body or establishment authorised by a Member State to carry out roadworthiness tests;
- (16) ‘supervising body’ means a body or bodies set up by a Member State, responsible for the supervision of testing centres. A supervising body can be part of the competent authority or competent authorities;
- (17) ‘small island’ means an island with fewer than 5 000 inhabitants which is not linked to the other parts of territory by road bridges or road tunnels;
- (18) ‘sparsely populated area’ means a predefined area with a population density of fewer than five persons per square kilometre;
- (19) ‘public road’ means a road that is of general public utility, such as a local, regional or national road, highway, expressway or motorway.

CHAPTER II

GENERAL OBLIGATIONS

*Article 4***Responsibilities**

1. Each Member State shall ensure that vehicles registered in its territory are periodically tested in accordance with this Directive by testing centres authorised by the Member State in which those vehicles are registered.
2. Roadworthiness tests shall be carried out by the Member State of registration of the vehicle, by a public body entrusted with the task by that Member State or by bodies or establishments designated and supervised by that Member State, including authorised private bodies.

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3. In accordance with the principles laid down by Regulation (EC) No 715/2007 of the European Parliament and of the Council ⁽¹⁾ and by Regulation (EC) No 595/2009 of the European Parliament and of the Council ⁽²⁾, the Commission shall, by means of implementing acts, and before 20 May 2018, adopt:

- (a) a set of technical information on braking equipment, steering, visibility, lamps, reflectors, electrical equipment, axles, wheels, tyres, suspension, chassis attachments, other equipment and nuisance necessary for roadworthiness testing of the items to be tested and on the use of the recommended test methods, in accordance with point 3 of Annex I, and
- (b) the detailed rules concerning the data format and the procedures for accessing the relevant technical information.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 19(2).

The technical information referred to in point (a) of the first subparagraph shall be made available, free of charge or at a reasonable price, by the manufacturers to testing centres and relevant competent authorities, in a non-discriminatory manner.

The Commission shall examine the feasibility of establishing a single point of access for that technical information.

4. Member States shall ensure that the responsibilities for keeping a vehicle in a safe and roadworthy condition are defined in national law.

CHAPTER III

MINIMUM REQUIREMENTS CONCERNING ROADWORTHINESS TESTS

*Article 5***Date and frequency of testing**

1. Vehicles shall be subject to a roadworthiness test at least within the following intervals, without prejudice to the period of flexibility applied in Member States under paragraph 3:

⁽¹⁾ Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (OJ L 171, 29.6.2007, p. 1).

⁽²⁾ Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (OJ L 188, 18.7.2009, p. 1).

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- (a) vehicles of category M₁ and N₁: four years after the date on which the vehicle was first registered, and thereafter every two years;
- (b) vehicles of category M₁ used as taxis or ambulances, vehicles of categories M₂, M₃, N₂, N₃, O₃ and O₄: one year after the date on which the vehicle was first registered, and thereafter annually;

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- (c) wheeled tractors of categories T1b, T2b, T3b, T4.1b, T4.2b and T4.3b the use of which mainly takes place on public roads for commercial road haulage purposes: four years after the date on which the vehicle was first registered, and thereafter every two years.

2. Member States shall establish appropriate intervals within which vehicles of categories L3e, L4e, L5e and L7e equipped with a combustion engine with a displacement of more than 125 cm³, are to be subject to a roadworthiness test.

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3. Member States or competent authorities may establish a reasonable period during which the roadworthiness test is to be carried out, not exceeding the intervals laid down in paragraph 1.

4. Notwithstanding the date of a vehicle's last roadworthiness test, the Member State or competent authority concerned may require it to undergo a roadworthiness test before the dates referred to in paragraphs 1 and 2 in the following cases:

- after an accident affecting the main safety-related components of the vehicle, such as wheels, suspension, deformation zones, airbag systems, steering or brakes;
- when the safety and environmental systems and components of the vehicle have been altered or modified;
- where the holder of the registration certificate of a vehicle has changed;
- when the vehicle has reached a mileage of 160 000 km;
- in cases where road safety is seriously affected.

*Article 6***Contents and methods of testing**

1. For vehicle categories falling within the scope of this Directive, with the exception of categories L3e, L4e, L5e and L7e with an engine displacement of more than 125 cm³, Member States shall ensure that roadworthiness tests cover at least the areas referred to in point 2 of Annex I.

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2. For each area referred to in paragraph 1, the competent authorities of the Member State or the testing centre shall carry out a roadworthiness test covering at least the items referred to in point 3 of Annex I, using the recommended or an equivalent method approved by a competent authority applicable to the testing of those items, as set out in point 3 of Annex I. The test may also include a verification as to whether the respective parts and components of the vehicle correspond to the required safety and environmental characteristics that were in force at the time of approval or, if applicable, at the time of retrofitting.

The tests shall be carried out using techniques and equipment currently available without the use of tools to dismantle or remove any part of the vehicle.

3. For vehicle categories L3e, L4e, L5e and L7e, with an engine displacement of more than 125 cm³, Member States shall determine the areas, items and appropriate methods of testing.

*Article 7***Assessment of deficiencies**

1. For each item to be tested, Annex I provides a minimum list of possible deficiencies and their level of severity.

2. Deficiencies that are found during periodic testings of vehicles shall be categorised in one of the following groups:

- (a) minor deficiencies having no significant effect on the safety of the vehicle or impact on the environment, and other minor non-compliances;
- (b) major deficiencies that may prejudice the safety of the vehicle or have an impact on the environment or put other road users at risk, or other more significant non-compliances;
- (c) dangerous deficiencies constituting a direct and immediate risk to road safety or having an impact on the environment which justify that a Member State or its competent authorities may prohibit the use of the vehicle on public roads.

3. A vehicle having deficiencies falling into more than one of the deficiency groups referred to in paragraph 2 shall be classified in the group corresponding to the more serious deficiency. A vehicle showing several deficiencies within the same inspection area as identified in the scope of the test referred to in point 2 of Annex I, may be classified in the next most serious deficiency group if it can be demonstrated that the combined effect of those deficiencies results in a higher risk to road safety.

*Article 8***Roadworthiness certificate**

1. Member States shall ensure that testing centres or, if relevant, the competent authorities, which have carried out a roadworthiness test on a vehicle issue a roadworthiness certificate for that vehicle indicating at least the standardised elements of the corresponding harmonised Union codes as laid down in Annex II.

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2. Member States shall ensure that testing centres or, if relevant, the competent authorities make the roadworthiness certificate or, in the case of an electronically produced roadworthiness certificate, a certified printout of such certificate available to the person presenting the vehicle for testing.
3. Without prejudice to Article 5, in the case of re-registration of a vehicle already registered in another Member State, each Member State shall recognise the roadworthiness certificate issued by that other Member State, as if it had itself issued that certificate, provided that the roadworthiness certificate is still valid in terms of the frequency intervals established for periodic roadworthiness tests by the re-registering Member State. In cases of doubt, the re-registering Member State may verify the validity of the roadworthiness certificate before recognising it. Member States shall communicate to the Commission a description of the roadworthiness certificate before 20 May 2018. The Commission shall inform the Committee referred to in Article 19. This paragraph shall not apply to vehicle categories L3e, L4e, L5e and L7e.
4. Without prejudice to Article 5(4) and paragraph 3 of this Article, Member States shall recognise, as a matter of principle, the validity of the roadworthiness certificate in the event that the ownership of a vehicle — having a valid proof of periodic roadworthiness test — changes.
5. As from 20 May 2018 and at the latest by 20 May 2021, testing centres shall communicate electronically, to the competent authority of the Member State concerned, the information mentioned in the roadworthiness certificates which they issue. Such communication shall take place within a reasonable time after each roadworthiness certificate is issued. Until the latter date, testing centres may communicate the relevant information to the competent authority by any other means. Member States shall determine the period during which the competent authority is to retain that information. The duration of that period shall not be less than 36 months, without prejudice to the national tax systems of the Member States.
6. Member States shall ensure that, for the purposes of checking the odometer, where an odometer is normally fitted, the information included in the previous roadworthiness test is made available to the inspectors as soon as it is available electronically. In cases where an odometer is found to have been manipulated with the aim of reducing or misrepresenting the distance record of a vehicle, such manipulation shall be punishable by effective, proportionate, dissuasive and non-discriminatory penalties.
7. Member States shall ensure that the results of the roadworthiness test are notified, or made available electronically, as soon as possible to the authority responsible for registration of the vehicle. That notification shall contain the information mentioned in the roadworthiness certificate.

*Article 9***Follow-up of deficiencies**

1. In the case of minor deficiencies only, the test shall be deemed to have been passed, the deficiencies shall be rectified, and the vehicle shall not be re-tested.
2. In the case of major deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority shall decide on the period during which the vehicle in question may be used before it is required to undergo another roadworthiness test. The subsequent

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test shall take place during a period defined by the Member State or competent authority but not later than two months following the initial test.

3. In the case of dangerous deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority may decide that the vehicle in question is not to be used on public roads and that the authorisation for its use in road traffic is to be suspended for a limited period of time, without requiring a new process of registration, until such time as the deficiencies are rectified and a new roadworthiness certificate is issued testifying that the vehicle is in a roadworthy condition.

*Article 10***Proof of test**

1. The testing centre or, if relevant, the competent authority of the Member State that has carried out a roadworthiness test on a vehicle registered in its territory shall provide a proof, such as an indication on the vehicle registration document, a sticker, a certificate or any other easily accessible information, for each vehicle which has passed such a test. The proof shall indicate the date by which the next roadworthiness test is to take place.

Member States shall communicate to the Commission a description of that proof before 20 May 2018. The Commission shall in turn inform the Committee referred to in Article 19.

2. Where the tested vehicle belongs to a vehicle category which is not subject to registration in the Member State where it has been put into service, that Member State may require the proof of test to be displayed in a visible manner on that vehicle.

3. For the purpose of free circulation, each Member State shall recognise the proof provided by a testing centre or competent authority of another Member State in accordance with paragraph 1.

CHAPTER IV

ADMINISTRATIVE PROVISIONS*Article 11***Testing facilities and equipment**

1. Member States shall ensure that testing facilities and equipment used for carrying out roadworthiness tests comply with the minimum technical requirements laid down in Annex III.

2. Member States shall ensure that the testing centres or, if relevant, the competent authority maintain the testing facilities and equipment in accordance with the specifications provided by the manufacturers.

3. Equipment used for measurements shall be periodically calibrated in line with Annex III and verified in accordance with the specifications provided by the Member State concerned or by the manufacturer of the equipment.

*Article 12***Testing centres**

1. Testing centres in which inspectors perform roadworthiness tests shall be authorised by a Member State or by its competent authority.

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2. To meet minimum requirements in terms of quality management, testing centres shall comply with the requirements laid down by the authorising Member State. Testing centres shall ensure the objectivity and the high quality of the roadworthiness tests.

*Article 13***Inspectors**

1. Member States shall ensure that roadworthiness tests are carried out by inspectors fulfilling the minimum competence and training requirements laid down in Annex IV. Member States may lay down additional requirements in respect of competence and corresponding training.

2. The competent authorities or, where applicable, approved training centres shall provide a certificate to inspectors who fulfil the minimum competence and training requirements. That certificate shall include at least the information mentioned in point 3 of Annex IV.

3. Inspectors employed or authorised by competent authorities of the Member States or by a testing centre at 20 May 2018 shall be exempted from the requirements laid down in point 1 of Annex IV.

4. When carrying out a roadworthiness test, the inspector shall be free from any conflict of interests so as to ensure, to the satisfaction of the Member State or competent authority concerned, that a high level of impartiality and objectivity is maintained.

5. The person presenting the vehicle for testing shall be informed of any deficiencies identified in the vehicle which need to be rectified.

6. The results of a roadworthiness test may only be modified, where appropriate, by the supervising body, or in accordance with the procedure set up by the competent authority, if the findings of the roadworthiness test are manifestly incorrect.

*Article 14***Supervision of testing centres**

1. Member States shall ensure that testing centres are supervised.

2. A supervising body shall perform at least the tasks provided for in point 1 of Annex V and shall fulfil the requirements laid down in points 2 and 3 of that Annex.

Member States shall make publicly available the rules and procedures covering the organisation, tasks and requirements, including the independence requirements applicable to the personnel of a supervising body.

3. Testing centres directly operated by a competent authority shall be exempted from the requirements regarding authorisation and supervision where the supervising body is part of the competent authority.

4. The requirements mentioned in paragraphs 2 and 3 of this Article may be regarded as fulfilled by Member States which require that testing centres be accredited under Regulation (EC) No 765/2008.



CHAPTER V
COOPERATION AND EXCHANGE OF INFORMATION

Article 15

Administrative cooperation between Member States

1. Member States shall designate a national contact point responsible for exchanging information with the other Member States and the Commission with regard to the application of this Directive.

2. Member States shall forward to the Commission the names and contact details of their national contact point by 20 May 2015, and shall inform it without delay of any changes thereto. The Commission shall draw up a list of all contact points and forward it to the Member States.

Article 16

Electronic vehicle information platform

The Commission shall examine the feasibility, costs and benefits of establishing an electronic vehicle information platform by taking advantage of existing and already implemented IT solutions with regard to international data exchange so as to minimise costs and avoid duplication. In examining the matter, the Commission shall consider the most appropriate way to link the existing national systems with a view to facilitating exchanges of information on data relating to roadworthiness testing and odometer readings between the competent authorities of Member States responsible for testing, registration and vehicle approval, testing centres, test equipment manufacturers and vehicle manufacturers.

The Commission shall also examine the feasibility, costs and benefits of collecting and storing available information concerning the main safety-related components of vehicles which have been involved in serious accidents as well as the possibility of making information on accident history and odometer readings available in an anonymised form to inspectors, holders of registration certificates and accident researchers.

CHAPTER VI
DELEGATED AND IMPLEMENTING ACTS

Article 17

Delegated acts

The Commission shall be empowered to adopt delegated acts in accordance with Article 18 in order to:

- update only the vehicle category designations referred to in Article 2(1) and Article 5(1) and (2) as appropriate in the event of changes to the vehicle categories stemming from amendments to the type-approval legislation referred to in Article 2(1), without affecting the scope and frequency of testing;

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- update point 3 of Annex I in respect of methods in the event that more efficient and effective test methods become available, without extending the list of items to be tested;

- adapt point 3 of Annex I, following a positive assessment of the costs and benefits involved, in respect of the list of test items, methods, reasons for failure and assessment of deficiencies in the event of a modification of mandatory requirements relevant for type-approval in Union safety or environmental legislation.

*Article 18***Exercise of delegation**

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Article 17 shall be conferred on the Commission for a period of five years from 19 May 2014. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3. The delegation of powers referred to in Article 17 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

5. A delegated act adopted pursuant to Article 17 shall enter into force only if no objection has been expressed by either the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

*Article 19***Committee Procedure**

1. The Commission shall be assisted by a committee (the ‘Roadworthiness Committee’). That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply. Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.



CHAPTER VII
FINAL PROVISIONS

Article 20

Reporting

1. By 30 April 2020, the Commission shall submit a report to the European Parliament and the Council on the implementation and effects of this Directive, in particular as regards the level of harmonisation of periodic roadworthiness tests, the effectiveness of the provisions on its scope, the frequency of testing, the mutual recognition of roadworthiness certificates in cases of re-registration of vehicles originating from another Member State and the results of the examination concerning the feasibility of introducing an electronic vehicle information platform as referred to in Article 16. The report shall also analyse whether there is a need to update the Annexes, particularly in the light of technical progress and practices. The report shall be submitted after the consultation of the committee referred to in Article 19 and shall be accompanied, if appropriate, by legislative proposals.

2. No later than 30 April 2019, the Commission shall submit to the European Parliament and to the Council a report, based on independent studies, on the effectiveness of the inclusion of light trailers and two- or three-wheel vehicles in the scope of this Directive. The report shall assess the evolution of the road safety situation in the Union and, for each subcategory of L-vehicles, compare the results of national road safety measures, taking into account the average distance travelled by those vehicles. In particular, the Commission shall assess whether the standards and costs of periodic roadworthiness testing of each category of vehicle is proportionate to the road safety objectives set. The report shall be accompanied by a detailed impact assessment analysing the costs and benefits throughout the Union, including the specificities of Member States. The report shall be made available at least six months prior to the submission of any legislative proposal, if appropriate, to include new categories within the scope of this Directive.

Article 21

Penalties

The Member States shall lay down the rules on penalties applicable to infringements of the provisions of this Directive and shall take all measures necessary to ensure that they are implemented. Those penalties shall be effective, proportionate, dissuasive and non-discriminatory.

Article 22

Transitional provisions

1. Member States may authorise the use for a period of not more than five years after 20 May 2018 of testing facilities and equipment referred to in Article 11 that do not comply with the minimum requirements laid down in Annex III for carrying out roadworthiness tests.

2. Member States shall apply the requirements laid down in Annex V at the latest as from 1 January 2023.

▼B*Article 23***Transposition**

1. Member States shall adopt and publish, by 20 May 2017, the laws, regulations and administrative measures necessary to comply with this Directive. They shall immediately inform the Commission thereof.

They shall apply those measures from 20 May 2018.

When Member States adopt those measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main measures of national law which they adopt in the field covered by this Directive.

*Article 24***Repeal**

Directive 2009/40/EC is repealed with effect from 20 May 2018.

*Article 25***Entry into force**

This Directive shall enter into force on the twentieth day following that of its publication in *the Official Journal of the European Union*.

*Article 26***Addressees**

This Directive is addressed to the Member States.

*ANNEX I***MINIMUM REQUIREMENTS CONCERNING THE CONTENTS AND RECOMMENDED METHODS OF TESTING****1. GENERAL**

This Annex identifies the vehicle systems and components to be tested; it details the recommended methods for testing them and the criteria to be used when determining whether the condition of the vehicle is acceptable.

The test must cover at least the items listed in point 3 below provided that these relate to the equipment of the vehicle being tested in the Member State concerned. The test may also include a verification as to whether the relevant parts and components of that vehicle correspond to the required safety and environmental characteristics that were in force at the time of approval or, if applicable, at the time of retrofitting.

Where the design of the vehicle does not allow the application of the test methods laid down in this Annex, the test shall be conducted in accordance with the recommended test methods accepted by the competent authorities. The competent authority must be satisfied that safety and environmental standards will be maintained.

Testing of all the items listed below shall be considered as mandatory in the context of a periodic roadworthiness test, with the exception of those marked with the indication 'X' which are related to the condition of the vehicle and its suitability for use on the road but which are not considered essential in the context of a roadworthiness test.

The 'Reasons for failure' do not apply in cases where they refer to requirements that were not prescribed in the relevant vehicle approval legislation at the time of first registration or first entry into service, or in the retrofitting requirements.

Where a method of testing is indicated as visual, it means that, in addition to looking at the items concerned, the inspector shall also, if appropriate, handle them, evaluate their noise or use any other appropriate means of inspection not involving the use of equipment.

2. SCOPE OF TEST

The test shall cover at least the following areas:

- (0) Identification of the vehicle;
- (1) Braking equipment;
- (2) Steering;
- (3) Visibility;
- (4) Lighting equipment and parts of the electrical system;
- (5) Axles, wheels, tyres, suspension;
- (6) Chassis and chassis attachments;
- (7) Other equipment;
- (8) Nuisance;
- (9) Supplementary tests for passenger-carrying vehicles of categories M₂ and M₃.

3. CONTENTS AND METHODS OF TESTING; ASSESSMENT OF DEFICIENCIES OF VEHICLES

The test shall cover at least the items, and use the minimum standards and the recommended methods, listed in the following table.

For each vehicle system and component subject to testing, the assessment of deficiencies shall be carried out in accordance with the criteria set out in that table, on a case-by-case basis.

Deficiencies not listed in this Annex shall be assessed in terms of the risks that they pose to road safety.

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Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
0. IDENTIFICATION OF THE VEHICLE					
0.1. Registration number plates (if needed by requirements ¹)	Visual inspection	(a) Number plate(s) missing or so insecurely fixed that it is (they are) likely to fall off.		X	
		(b) Inscription missing or illegible		X	
		(c) Not in accordance with vehicle documents or records.		X	
0.2. Vehicle identification/chassis/serial number	Visual inspection	(a) Missing or can not be found.		X	
		(b) Incomplete, illegible, obviously falsified, or does not match the vehicle documents.		X	
		(c) Illegible vehicle documents or clerical inaccuracies.	X		
1. BRAKING EQUIPMENT					
1.1. Mechanical condition and operation					
1.1.1. Service brake pedal/hand lever pivot	Visual inspection of the components while the braking system is operated. Note: Vehicles with power-assisted braking systems should be inspected with the engine switched off.	(a) Pivot too tight.		X	
		(b) Excessive wear or play.		X	
1.1.2. Pedal/hand lever condition and travel of the brake operating device	Visual inspection of the components while the braking system is operated Note: Vehicles with power-assisted braking systems should be inspected with the engine switched off.	(a) Excessive or insufficient reserve travel.		X	
		(b) Brake control not releasing correctly. If its functionality is affected.	X		X
		(c) Anti-slip provision on brake pedal missing, loose or worn smooth.			X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.1.3. Vacuum pump or compressor and reservoirs	Visual inspection of the components at normal working pressure. Check time required for vacuum or air pressure to reach safe working value and function of warning device, multi-circuit protection valve and pressure relief valve.	(a) Insufficient pressure/vacuum to give assistance for at least four brake applications after the warning device has operated (or gauge shows an unsafe reading); at least two brake applications after the warning device has operated (or gauge shows an unsafe reading).		X	X
		(b) Time taken to build up air pressure/vacuum to safe working value is too long according to the requirements ¹		X	
		(c) Multi-circuit protection valve or pressure relief valve not working.		X	
		(d) Air leak causing a noticeable drop in pressure or audible air leaks.		X	
		(e) External damage likely to affect the function of the braking system. Secondary braking performance not met.		X	X
1.1.4. Low pressure warning gauge or indicator	Functional check	Malfunctioning or defective gauge or indicator.	X		
		Low pressure not identifiable.		X	
1.1.5. Hand-operated brake control valve	Visual inspection of the components while the braking system is operated.	(a) Control cracked, damaged or excessively worn.		X	
		(b) Control insecure on valve or valve insecure.		X	
		(c) Loose connections or leaks in system.		X	
		(d) Unsatisfactory operation.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.1.6. Parking brake activator, lever control, parking brake ratchet, electronic parking brake	Visual inspection of the components while the braking system is operated.	(a) Ratchet not holding correctly.		X	
		(b) Wear at lever pivot or in ratchet mechanism. Excessive wear.	X		
		(c) Excessive movement of lever indicating incorrect adjustment.		X	
		(d) Activator missing, damaged or inoperative.		X	
		(e) Incorrect functioning, warning indicator shows malfunction		X	
1.1.7. Braking valves (foot valves, unloaders, governors)	Visual inspection of the components while the braking system is operated.	(a) Valve damaged or excessive air leak. If its functionality is affected.		X	X
		(b) Excessive oil discharge from compressor.	X		
		(c) Valve insecure or inadequately mounted.		X	
		(d) Hydraulic fluid discharge or leak. If its functionality is affected.		X	X
1.1.8. Couplings for trailer brakes (electrical & pneumatic)	Disconnect and reconnect braking system coupling between towing vehicle and trailer.	(a) Tap or self sealing valve defective. If its functionality is affected.	X		
		(b) Tap or valve insecure or inadequately mounted. If its functionality is affected.	X		
		(c) Excessive leaks. If its functionality is affected.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(d) Not functioning correctly. Operation of brake affected.		X	X
1.1.9. Energy storage reservoir pressure tank	Visual inspection.	(a) Tank slightly damaged or slightly corroded. Tank heavily damaged, corroded or leaking.	X	X	
		(b) Drain device operation affected. Drain device inoperative.	X	X	
		(c) Tank insecure or inadequately mounted.		X	
1.1.10. Brake servo units, master cylinder (hydraulic systems)	Visual inspection of the components while the braking system is operated, if possible.	(a) Defective or ineffective servo unit. If it is not operating.		X	X
		(b) Master cylinder defective but brake still operating. Master cylinder defective or leaking.		X	X
		(c) Master cylinder insecure but brake still operating. Master cylinder insecure.		X	X
		(d) Insufficient brake fluid below MIN mark Brake fluid significantly below MIN mark No brake fluid visible.	X	X	X
		(e) Master cylinder reservoir cap missing.	X		
		(f) Brake fluid warning light illuminated or defective.	X		
		(g) Incorrect functioning of brake fluid level warning device.	X		

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.1.11. Rigid brake pipes	Visual inspection of the components while the braking system is operated, if possible.	(a) Imminent risk of failure or fracture.			X
		(b) Pipes or connections leaking (air brake systems). Pipes or connection leaking (hydraulic brake systems).		X	X
		(c) Pipes damaged or excessively corroded. Affecting the functioning of the brakes on account of blocking or imminent risk of leaking.		X	X
		(d) Pipes misplaced. Risk of damage.	X	X	
1.1.12. Flexible brake hoses	Visual inspection of the components while the braking system is operated, if possible.	(a) Imminent risk of failure or fracture.			X
		(b) Hoses damaged, chafing, twisted or too short. Hoses damaged or chafing.	X	X	
		(c) Hoses or connections leaking (air brake systems) Hoses or connections leaking (hydraulic brake systems).		X	X
		(d) Hoses bulging under pressure. Cord impaired.		X	X
		(e) Hoses porous.		X	
1.1.13. Brake linings and pads	Visual inspection.	(a) Lining or pad excessively worn (minimum mark reached). Lining or pad excessively worn (minimum mark not visible).		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(b) Lining or pad contaminated (oil, grease etc.). Braking performance affected.		X	X
		(c) Lining or pad missing or wrongly mounted.			X
1.1.14. Brake drums, brake discs	Visual inspection.	(a) Drum or disc worn Drum or disc excessively worn, excessively scored, cracked, insecure or fractured.		X	X
		(b) Drum or disc contaminated (oil, grease, etc.). Braking performance affected.		X	X
		(c) Drum or disc missing.			X
		(d) Back plate insecure.		X	
1.1.15. Brake cables, rods, levers, linkages	Visual inspection of the components while the braking system is operated, if possible.	(a) Cable damaged or knotted. Braking performance affected.		X	X
		(b) Component excessively worn or corroded. Braking performance affected.		X	X
		(c) Cable, rod or joint insecure.		X	
		(d) Cable guide defective.		X	
		(e) Restriction to free movement of the braking system.		X	
		(f) Abnormal movement of the levers/linkage indicating maladjustment or excessive wear.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.1.16. Brake actuators (including spring brakes or hydraulic cylinders)	Visual inspection of the components while the braking system is operated, if possible.	(a) Actuator cracked or damaged. Braking performance affected.		X	X
		(b) Actuator leaking. Braking performance affected.		X	X
		(c) Actuator insecure or inadequately mounted. Braking performance affected.		X	X
		(d) Actuator excessively corroded. Likely to crack.		X	X
		(e) Insufficient or excessive travel of operating piston or diaphragm mechanism. Braking performance affected (lack of reserve movement).		X	X
		(f) Dust cover damaged. Dust cover missing or excessively damaged.	X	X	
1.1.17. Load sensing valve	Visual inspection of the components while the braking system is operated, if possible.	(a) Defective linkage.		X	
		(b) Linkage incorrectly adjusted.		X	
		(c) Valve seized or inoperative (ABS functioning). Valve seized or inoperative.		X	X
		(d) Valve missing (if required).			X
		(e) Missing data plate.	X		

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(f) Data illegible or not in accordance with requirements ¹	X		
1.1.18. Slack adjusters and indicators	Visual inspection.	(a) Adjuster damaged, seized or having abnormal movement, excessive wear or incorrect adjustment.		X	
		(b) Adjuster defective.		X	
		(c) Incorrectly installed or replaced.		X	
1.1.19. Endurance braking system (where fitted or required)	Visual inspection.	(a) Insecure connectors or mountings. If its functionality is affected.	X		
		(b) System obviously defective or missing.		X	
1.1.20. Automatic operation of trailer brakes	Disconnect brake coupling between towing vehicle and trailer.	Trailer brake does not apply automatically when coupling disconnected.			X
1.1.21. Complete braking system	Visual inspection	(a) Other system devices (e.g. anti-freeze pump, air dryer, etc.) damaged externally or excessively corroded in a way that adversely affects the braking system. Braking performance affected.		X	
		(b) Leakage of air or anti-freeze. System functionality affected.	X		
		(c) Any component insecure or inadequately mounted.		X	
		(d) Unsafe modification to any component ³ Braking performance affected.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.1.22. Test connections (where fitted or required)	Visual inspection	(a) Missing.		X	
		(b) Damaged.	X		
		Unusable or leaking.		X	
1.1.23. Overrun brake	Visual inspection and by operation	Insufficient efficiency.		X	
1.2. Service braking performance and efficiency					
1.2.1. Performance	During a test on a brake tester or, if impossible, during a road test, apply the brakes progressively up to maximum effort.	(a) Inadequate braking effort on one or more wheels. No braking effort on one or more wheels.		X	X
		(b) Braking effort from any wheel is less than 70 % of the maximum effort recorded from the other wheel on the same axle. Or, in the case of testing on the road, the vehicle deviates excessively from a straight line. Braking effort from any wheel is less than 50 % of the maximum effort recorded from the other wheel on the same axle in the case of steered axles.		X	X
		(c) No gradual variation in brake effort (grabbing).		X	
		(d) Abnormal lag in brake operation of any wheel.		X	
		(e) Excessive fluctuation of brake force during each complete wheel revolution.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.2.2. Efficiency	<p>Test with a brake tester or, if one cannot be used for technical reasons, by a road test using a deceleration recording instrument to establish the braking ratio which relates to the maximum authorised mass or, in the case of semi-trailers, to the sum of the authorised axle loads.</p> <p>Vehicles or a trailer with a maximum permissible mass exceeding 3,5 tonnes has to be inspected following the standards given by ISO 21069 or equivalent methods.</p> <p>Road tests should be carried out under dry conditions on a flat, straight road.</p>	<p>Does not give at least the minimum figure as follows ⁽¹⁾:</p> <p>1. Vehicles registered for the first time after 1/1/2012:</p> <ul style="list-style-type: none"> — Category M₁: 58 % — Categories M₂ and M₃: 50 % — Category N₁: 50 % — Categories N₂ and N₃: 50 % — Categories O₂, O₃ and O₄: <ul style="list-style-type: none"> — for semi-trailers: 45 % ⁽²⁾ — for draw-bar trailers: 50 % 		X	
		<p>2. Vehicles registered for the first time before 1/1/2012:</p> <ul style="list-style-type: none"> — Categories M₁, M₂ and M₃: 50 % ⁽³⁾ — Category N₁: 45 % — Categories N₂ and N₃: 43 % ⁽⁴⁾ — Categories O₂, O₃ and O₄: 40 % ⁽⁵⁾ 		X	
		<p>3. Other categories</p> <p>Categories L (both brakes together):</p> <ul style="list-style-type: none"> — Category L1e: 42 % — Categories L2e, L6e: 40 % — Category L3e: 50 % — Category L4e: 46 % — Categories L5e, L7e: 44 % <p>Category L (rear wheel brake):</p> <p>all categories: 25 % of the total vehicle mass</p> <p>Less than 50 % of the above values reached.</p>		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.3. Secondary (emergency) braking performance and efficiency (if met by separate system)					
1.3.1. Performance	If the secondary braking system is separate from the service braking system, use the method specified in 1.2.1.	(a) Inadequate braking effort on one or more wheels. No braking effort on one or more wheels.		X	X
		(b) Braking effort from any wheel is less than 70 % of the maximum effort recorded from another wheel on the same axle specified. Or, in the case of testing on the road, the vehicle deviates excessively from a straight line. Braking effort from any wheel is less than 50 % of the maximum effort recorded from the other wheel on the same axle in the case of steered axles.		X	X
		(c) No gradual variation in brake effort (grabbing).		X	
1.3.2. Efficiency	If the secondary braking system is separate from the service braking system, use the method specified in 1.2.2.	Braking effort less than 50 % ⁽⁶⁾ of the service brake performance defined in section 1.2.2 in relation to the maximum authorized mass. Less than 50 % of the above braking effort values reached.		X	X
1.4. Parking braking performance and efficiency					
1.4.1. Performance	Apply the brake during a test on a brake tester.	Brake inoperative on one side or, in the case of testing on the road, the vehicle deviates excessively from a straight line. Less than 50 % of the braking effort values as referred to in point 1.4.2 reached in relation to the vehicle mass during testing.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.4.2. Efficiency	Test with a brake tester. If not possible, then by a road test using either an indicating or deceleration recording instrument or with the vehicle on a slope of known gradient.	Does not give, for all vehicles, a braking ratio of at least 16 % in relation to the maximum authorized mass or, for motor vehicles, of at least 12 % in relation to the maximum authorised combination mass of the vehicle, whichever is the greater.		X	
		Less than 50 % of the above braking effort values reached.			X
1.5. Endurance braking system performance	Visual inspection and, where possible, test whether the system functions.	(a) No gradual variation of efficiency (not applicable to exhaust brake systems).		X	
		(b) System not functioning.		X	
1.6. Anti-lock braking system (ABS)	Visual inspection and inspection of warning device and/or using electronic vehicle interface.	(a) Warning device malfunctioning.		X	
		(b) Warning device shows system malfunction.		X	
		(c) Wheel speed sensors missing or damaged.		X	
		(d) Wirings damaged.		X	
		(e) Other components missing or damaged.		X	
		(f) System indicates failure via the electronic vehicle interface.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
1.7. Electronic brake system (EBS)	Visual inspection and inspection of warning device and/or using electronic vehicle interface.	(a) Warning device malfunctioning.		X	
		(b) Warning device shows system malfunction.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
1.8. Brake fluid	Visual inspection	Brake fluid contaminated or sedimented. Imminent risk of failure.		X	X
2. STEERING					
2.1. Mechanical condition					
2.1.1. Steering gear condition	With the vehicle over a pit or on a hoist and with the road wheels off the ground or on turntables, rotate the steering wheel from lock to lock. Visual inspection of the operation of the steering gear.	(a) Roughness in operation of gear.		X	
		(b) Sector shaft twisted or splines worn. Affecting functionality.		X	X
		(c) Excessive wear in sector shaft. Affecting functionality.		X	X
		(d) Excessive movement of sector shaft. Affecting functionality.		X	X
		(e) Leaking. Formation of drops.	X	X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
2.1.2. Steering gear casing attachment	With vehicle on a pit or hoist and the weight of the vehicle road wheels on the ground, rotate steering/handle bar wheel clockwise and anticlockwise or using a specially adapted wheel play detector. Visual inspection of the attachment of gear casing to chassis.	(a) Steering gear casing not properly attached. Attachments dangerously loose or relative movement to chassis/bodywork visible.		X	X
		(b) Elongated fixing holes in chassis. Attachments seriously affected.		X	X
		(c) Missing or fractured fixing bolts. Attachments seriously affected.		X	X
		(d) Steering gear casing fractured. Stability or attachment of casing affected.		X	X
2.1.3. Steering linkage condition	With the vehicle over a pit or on a hoist and with the road wheel on the ground, rock steering wheel clockwise and anticlockwise or using a specially adapted wheel play detector. Visual inspection of steering components for wear, fractures and security.	(a) Relative movement between components which should be fixed. Excessive movement or likely to unlink.		X	X
		(b) Excessive wear at joints. A very serious risk of unlinking.		X	X
		(c) Fractures or deformation of any component. Affecting function.		X	X
		(d) Absence of locking devices.		X	
		(e) Misalignment of components (e.g. track rod or drag link).		X	
		(f) Unsafe modification ³ . Affecting function.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(g) Dust cover damaged or deteriorated. Dust cover missing or severely deteriorated.	X	X	
2.1.4. Steering linkage operation	With the vehicle over a pit or on a hoist and with the road wheel on the ground, rock steering wheel clockwise and anti-clockwise or using a specially adapted wheel play detector. Visual inspection of steering components for wear, fractures and security.	(a) Moving steering linkage fouling a fixed part of the chassis.		X	
		(b) Steering stops not operating or missing.		X	
2.1.5. Power steering	Check steering system for leaks and hydraulic fluid reservoir level (if visible). With the road wheels on the ground and with the engine running, check that the power steering system is operating.	(a) Fluid leak or functions affected.		X	
		(b) Insufficient fluid (below MIN mark). Insufficient reservoir.	X	X	
		(c) Mechanism not working. Steering affected.		X	X
		(d) Mechanism fractured or insecure. Steering affected.		X	X
		(e) Misalignment or fouling of components. Steering affected.		X	X
		(f) Unsafe modification ³ . Steering affected.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(g) Cables/hoses damaged, excessively corroded. Steering affected.		X	X
2.2. Steering wheel, column and handle bar					
2.2.1. Steering wheel/handle bar condition	With the vehicle over a pit or on a hoist and the mass of the vehicle on the ground, push and pull the steering wheel in line with column, push steering wheel/handle bar in various directions at right angles to the column/forks. Visual inspection of play, and condition of flexible couplings or universal joints.	(a) Relative movement between steering wheel and column indicating looseness. Very serious risk of unlinking.		X	X
		(b) Absence of retaining device on steering wheel hub. Very serious risk of unlinking.		X	X
		(c) Fracture or looseness of steering wheel hub, rim or spokes. Very serious risk of unlinking.		X	X
2.2.2. Steering column/yokes and forks and steering dampers	With the vehicle over a pit or on a hoist and the mass of the vehicle on the ground, push and pull the steering wheel in line with column, push steering wheel/ handle bar in various directions at right angles to the column/forks. Visual inspection of play, and condition of flexible couplings or universal joints.	(a) Excessive movement of centre of steering wheel up or down.		X	
		(b) Excessive movement of top of column radially from axis of column.		X	
		(c) Deteriorated flexible coupling.		X	
		(d) Attachment defective. Very serious risk of unlinking.		X	X
		(e) Unsafe modification ³			X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
2.3. Steering play	With the vehicle over a pit or on a hoist, the mass of the vehicle on the road wheels, the engine, if possible, running for vehicles with power steering and with the road wheels in the straight-ahead position, lightly turn the steering wheel clockwise and anti-clockwise as far as possible without moving the road wheels. Visual inspection of free movement.	Free play in steering excessive (for example, movement of a point on the rim exceeding one fifth of the diameter of the steering wheel or not in accordance with the requirements ¹ . Safe steering affected.		X	X
2.4. Wheel alignment (X) ²	Check alignment of steered wheels with suitable equipment.	Alignment not in accordance with vehicle manufacturer's data or requirements ¹ . Straight on driving affected; directional stability impaired.	X	X	
2.5. Trailer steered axle turntable	Visual inspection or using a specially adapted wheel play detector	(a) Component slightly damaged. Component heavily damaged or cracked.		X	X
		(b) Excessive play. Straight on driving affected; directional stability impaired.		X	X
		(c) Attachment defective. Attachment seriously affected.		X	X
2.6. Electronic Power Steering (EPS)	Visual inspection and consistency check between the angle of the steering wheel and the angle of the wheels when switching on/off the engine, and/or using the electronic vehicle interface	(a) EPS malfunction indicator lamp (MIL) indicates any kind of failure of the system.		X	
		(b) Inconsistency between the angle of the steering wheel and the angle of the wheels. Steering affected.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Power assistance not working.		X	
		(d) System indicates failure via the electronic vehicle interface.		X	
3. VISIBILITY					
3.1. Field of vision	Visual inspection from driving seat.	Obstruction within driver's field of view that materially affects his view in front or to the sides (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
3.2. Condition of glass	Visual inspection.	(a) Cracked or discoloured glass or transparent panel (if permitted) (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
		(b) Glass or transparent panel (including reflecting or tinted film) that does not comply with specifications in the requirements ¹ , (outside cleaning area of windscreen wipers).	X		
		Inside cleaning area of windscreen wipers affected or outer mirrors not visible.		X	
		(c) Glass or transparent panel in unacceptable condition.		X	
		Visibility through inside cleaning area of windscreen wipers heavily affected.			X
3.3. Rear-view mirrors or devices	Visual inspection.	(a) Mirror or device missing or not fitted according to the requirements ¹ (at least two rear-view devices available).		X	
		Fewer than two rear-view devices available.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(b) Mirror or device slightly damaged or loose. Mirror or device inoperative, heavily damaged, loose or insecure.	X	X	
		(c) Necessary field of vision not covered.		X	
3.4. Windscreen wipers	Visual inspection and by operation.	(a) Wipers not operating or missing or not in accordance with the requirements ¹		X	
		(b) Wiper blade defective. Wiper blade missing or obviously defective.	X	X	
3.5. Windscreen washers	Visual inspection and by operation.	Washers not operating adequately (lack of washing fluid but pump operating or water-jet misaligned). Washers not operating.	X	X	
3.6. Demisting system (X) ²	Visual inspection and by operation.	System inoperative or obviously defective.	X		
4. LAMPS, REFLECTORS AND ELECTRICAL EQUIPMENT					
4.1. Headlamps					
4.1.1. Condition and operation	Visual inspection and by operation.	(a) Defective or missing light/light source.(multiple light/light sources; in the case of LED, up to 1/3 not functioning). Single light/light sources; in the case of LED, seriously affected visibility.	X	X	
		(b) Slightly defective projection system (reflector and lens). Heavily defective or missing projection system (reflector and lens).	X	X	

▼C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Lamp not securely attached.		X	
4.1.2. Alignment	Determine the horizontal aim of each headlamp on dipped beam using a headlamp aiming device or using the electronic vehicle interface.	(a) Aim of a headlamp not within limits laid down in the requirements ¹ .		X	
		(b) System indicates failure via the electronic vehicle interface.		X	
4.1.3. Switching	Visual inspection and by operation or using the electronic vehicle interface	(a) Switch does not operate in accordance with the requirements ¹ (Number of headlamps illuminated at the same time) Maximum permitted light brightness to the front exceeded.	X		
		(b) Function of control device impaired.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
4.1.4. Compliance with requirements ¹ .	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹ .		X	
		(b) Products on lens or light source which obviously reduce light brightness or change emitted colour.		X	
		(c) Light source and lamp not compatible.		X	
4.1.5. Levelling devices (where mandatory)	Visual inspection and by operation, if possible, or using the electronic vehicle interface.	(a) Device not operating.		X	
		(b) Manual device cannot be operated from driver's seat.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
4.1.6. Headlamp cleaning device (where mandatory)	Visual inspection and by operation if possible.	Device not operating. In the case of gas-discharging lamps.	X	X	
4.2. Front and rear position lamps, side marker lamps, end outline marker lamps and daytime running lamps					
4.2.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source.		X	
		(b) Defective lens.		X	
		(c) Lamp not securely attached. Very serious risk of falling off.	X	X	
4.2.2. Switching	Visual inspection and by operation.	(a) Switch does not operate in accordance with the requirements ¹ .		X	
		Rear position lamps and side marker lamps can be switched off when headlamps are on.		X	
		(b) Function of control device impaired.		X	
4.2.3. Compliance with requirements ¹	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹ . Red light to the front or white light to the rear; heavily reduced light brightness.	X	X	
		(b) Products on lens or light source which reduce light, brightness or change emitted colour. Red light to the front or white light to the rear; heavily reduced light brightness.	X	X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
4.3. Stop Lamps					
4.3.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source(multiple light source in the case of LED up to 1/3 not functioning). Single light sources; in the case of LED less than 2/3 functioning. All light sources not functioning.	X	X	X
		(b) Slightly defective lens (no influence on emitted light). Heavily defective lens (emitted light affected).	X	X	
		(c) Lamp not securely attached. Very serious risk of falling off.	X	X	
4.3.2. Switching	Visual inspection and by operation or using the electronic vehicle interface.	(a) Switch does not operate in accordance with the requirements ¹ . Delayed operation. No operation at all.	X	X	X
		(b) Function of control device impaired.		X	
		(c) System indicates failure via the electronic vehicle interface.		X	
		(d) Emergency brake light functions fail to operate, or do not operate correctly.		X	
4.3.3. Compliance with requirements ¹ .	Visual inspection and by operation.	Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹ . White light to the rear; heavily reduced light brightness.	X	X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
4.4. Direction indicator and hazard warning lamps					
4.4.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source (multiple light source in the case of LED up to 1/3 not functioning). Single light sources; in the case of LED less than 2/3 functioning.	X		
		(b) Slightly defective lens (no influence on emitted light). Heavily defective lens (emitted light affected).	X		
		(c) Lamp not securely attached. Very serious risk of falling off.	X		
4.4.2. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements ¹ . No operation at all.	X		
4.4.3. Compliance with requirements ¹ .	Visual inspection and by operation.	Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹ .		X	
4.4.4. Flashing frequency	Visual inspection and by operation.	Rate of flashing not in accordance with the requirements ¹ .(frequency more than 25 % deviating).	X		
4.5. Front and rear fog lamps					
4.5.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source. (multiple light source in the case of LED up to 1/3 not functioning). Single light sources; in the case of LED less than 2/3 functioning.	X		
		(b) Slightly defective lens (no influence on emitted light). Heavily defective lens (emitted light affected).	X		

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Lamp not securely attached. Very serious risk of falling off or dazzling oncoming traffic.	X	X	
4.5.2. Alignment (X) ²	By operation and using a headlamp aiming device	Front fog lamp out of horizontal alignment when the light pattern has cut-off line (cut-off line too low). Cut-off line above that for dipped beam headlamps.	X	X	
4.5.3. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements ¹ . Not operative.	X	X	
4.5.4. Compliance with requirements ¹ .	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹		X	
		(b) System does not operate in accordance with the requirements ¹		X	
4.6. Reversing lamps					
4.6.1. Condition and operation	Visual inspection and by operation.	(a) Defective light source.	X		
		(b) Defective lens.	X		
		(c) Lamp not securely attached. Very serious risk of falling off.	X	X	
4.6.2. Compliance with requirements ¹	Visual inspection and by operation.	(a) Lamp, emitted colour, position, brightness or marking not in accordance with the requirements ¹		X	
		(b) System does not operate in accordance with the requirements ¹ .		X	

▼C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
4.6.3. Switching	Visual inspection and by operation.	Switch does not operate in accordance with the requirements ¹ . Reversing lamp can be switched on with gear not in reverse position.	X	X	
4.7. Rear registration plate lamp					
4.7.1. Condition and operation	Visual inspection and by operation.	(a) Lamp throwing direct or white light to the rear.	X		
		(b) Defective light source. (Multiple light source). Defective light source. (Single light source).	X	X	
		(c) Lamp not securely attached. Very serious risk of falling off.	X	X	
4.7.2. Compliance with requirements ¹	Visual inspection and by operation.	System does not operate in accordance with the requirements ¹ .	X		
4.8. Retro-reflectors, conspicuity (retro reflecting) markings and rear marking plates					
4.8.1. Condition	Visual inspection.	(a) Reflecting equipment defective or damaged. Reflecting affected.	X	X	
		(b) Reflector not securely attached. Likely to fall off.	X	X	
4.8.2. Compliance with requirements ¹	Visual inspection.	Device, reflected colour or position not in accordance with the requirements ¹ . Missing or reflecting red colour to the front or white colour to the rear.	X	X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
4.9. Tell-tales mandatory for lighting equipment					
4.9.1. Condition and operation	Visual inspection and by operation.	Not operating.	X		
		Not operating for main beam headlamp or rear fog lamp.		X	
4.9.2. Compliance with requirements ¹	Visual inspection and by operation.	Not in accordance with the requirements ¹ .	X		
4.10. Electrical connections between towing vehicle and trailer or semi-trailer	Visual inspection: if possible examine the electrical continuity of the connection.	(a) Fixed components not securely attached. Loose socket.	X		
		(b) Damaged or deteriorated insulation. Likely to cause a short-circuit fault.	X		
		(c) Trailer or towing vehicle electrical connections not functioning correctly. Trailer brake lights not working at all.		X	
4.11. Electrical wiring	Visual inspection with vehicle over a pit or on a hoist, including inside the engine compartment (if applicable).	(a) Wiring insecure or not adequately secured. Fixings loose, touching sharp edges, connectors likely to be disconnected. Wiring likely to touch hot parts, rotating parts or the ground, connectors disconnected (relevant parts for braking, steering).	X		
		(b) Wiring slightly deteriorated. Wiring heavily deteriorated. Wiring extremely deteriorated (relevant parts for braking, steering).	X		

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Damaged or deteriorated insulation. Likely to cause a short-circuit fault. Imminent risk of fire, formation of sparks.	X	X	X
4.12. Non obligatory lamps and retro-reflectors (X) ²	Visual inspection and by operation.	(a) A lamp/retro-reflector fitted not in accordance with the requirements ¹ . Emitting/reflecting red light to the front or white light to the rear.	X	X	
		(b) Lamp operation not in accordance with the requirements ¹ . Number of headlights simultaneously operating exceeding permitted light brightness; Emitting red light to the front or white light to the rear.	X	X	
		(c) Lamp/retro-reflector not securely attached. Very serious risk of falling off.	X	X	
4.13. Battery(ies)	Visual inspection.	(a) Insecure. Not properly attached; likely to cause a short-circuit fault.	X	X	
		(b) Leaking. Loss of hazardous substances.	X	X	
		(c) Defective switch (if required).		X	
		(d) Defective fuses (if required).		X	
		(e) Inappropriate ventilation (if required).		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
5. AXLES, WHEELS, TYRES AND SUSPENSION					
5.1. Axles					
5.1.1. Axles	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Axle fractured or deformed.			X
		(b) Insecure fixing to vehicle. Stability impaired, functionality affected: Extensive movement relative to its fixtures.		X	X
		(c) Unsafe modification ³ . Stability impaired, functionality affected, insufficient clearance to other vehicle parts or to the ground.		X	X
5.1.2. Stub axles	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes. Apply a vertical or lateral force to each wheel and note the amount of movement between the axle beam and stub axle.	(a) Stub axle fractured.			X
		(b) Excessive wear in the swivel pin and/or bushes. Likelihood of loosening; directional stability impaired.		X	X
		(c) Excessive movement between stub axle and axle beam. Likelihood of loosening; directional stability impaired.		X	X
		(d) Stub axle pin loose in axle. Likelihood of loosening; directional stability impaired.		X	X
		(a) Excessive play in a wheel bearing. Directional stability impaired; danger of demolishment.		X	X
		(b) Wheel bearing too tight, jammed. Danger of overheating; danger of demolishment.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
5.2. Wheels and tyres					
5.2.1. Road wheel hub	Visual inspection.	(a) Any wheel nuts or studs missing or loose. Missing fixing or loose to an extent which very seriously affects road safety.		X	X
		(b) Hub worn or damaged. Hub worn or damaged in such a way that secure fixing of wheels is affected.		X	X
5.2.2. Wheels	Visual inspection of both sides of each wheel with vehicle over a pit or on a hoist.	(a) Any fracture or welding defect.			X
		(b) Tyre retaining rings not properly fitted. Likely to come off.		X	X
		(c) Wheel badly distorted or worn. Secure fixing to hub affected; secure fixing of tyre affected.		X	X
		(d) Wheel size, technical design, compatibility or type not in accordance with the requirements ¹ and affecting road safety.		X	
5.2.3. Tyres	Visual inspection of the entire tyre by either rotating the road wheel with it off the ground and the vehicle over a pit or on a hoist, or by rolling the vehicle backwards and forwards over a pit.	(a) Tyre size, load capacity, approval mark or speed category not in accordance with the requirements ¹ and affecting road safety. Insufficient load capacity or speed category for actual use, tyre touches other fixed vehicle parts impairing safe driving.		X	X
		(b) Tyres on same axle or on twin wheels of different sizes.		X	

▼C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Tyres on same axle of different construction (radial/cross-ply).		X	
		(d) Any serious damage or cut to tyre. Cord visible or damaged.		X	X
		(e) Tyre tread wear indicator becomes exposed. Tyre tread depth not in accordance with the requirements ¹ .		X	X
		(f) Tyre rubbing against other components (flexible anti spray devices). Tyre rubbing against other components (safe driving not impaired)	X	X	
		(g) Re-grooved tyres not in accordance with requirements ¹ . Cord protection layer affected.		X	X
		(h) Tyre pressure monitoring system malfunctioning or tyre obviously underinflated. Obviously inoperative.	X	X	
5.3. Suspension system					
5.3.1. Springs and stabiliser	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Insecure attachment of springs to chassis or axle. Relative movement visible. fixings very seriously loose.		X	X
		(b) A damaged or fractured spring component. Main spring (-leaf), or additional leafs very seriously affected.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(c) Spring missing Main spring (-leaf), or additional leafs very seriously affected.		X	X
		(d) Unsafe modification ³ Insufficient clearance to other vehicle parts; spring system inoperative.		X	X
5.3.2. Shock absorbers	Visual inspection with vehicle over a pit or on a hoist or using special equipment, if available.	(a) Insecure attachment of shock absorbers to chassis or axle. Shock absorber loose.	X	X	
		(b) Damaged shock absorber showing signs of severe leakage or malfunction.		X	
5.3.2.1. efficiency testing of damping (X) ²	Use special equipment and compare left/right differences	(a) Significant difference between left and right.		X	
		(b) Given minimum values not reached.		X	
5.3.3. Torque tubes, radius arms, wishbones and suspension arms	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Insecure attachment of component to chassis or axle. Likelihood of loosening; directional stability impaired.		X	X
		(b) A damaged or excessively corroded component. Stability of component affected or component fractured.		X	X
		(c) Unsafe modification ³ . Insufficient clearance to other vehicle parts; system inoperative.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
5.3.4. Suspension joints	Visual inspection with vehicle over a pit or on a hoist. Wheel play detectors may be used and are recommended for vehicles having a maximum mass exceeding 3,5 tonnes	(a) Excessive wear in swivel pin and/or bushes or at suspension joints. Likelihood of loosening; directional stability impaired.		X	X
		(b) Dust cover severely deteriorated. Dust cover missing or fractured.	X	X	
5.3.5. Air suspension	Visual inspection	(a) System inoperable.			X
		(b) Any component damaged, modified or deteriorated in a way that would adversely affect the functioning of the system. Functioning of system seriously affected.		X	X
		(c) Audible system leakage.		X	
6. CHASSIS AND CHASSIS ATTACHMENTS					
6.1. Chassis or frame and attachments					
6.1.1. General condition	Visual inspection with vehicle over a pit or on a hoist.	(a) Slight fracture or deformation of any side or cross-member. Serious fracture or deformation of any side or cross-member.		X	X
		(b) Insecurity of strengthening plates or fastenings. Majority of fastenings loose; insufficient strength of parts.		X	X
		(c) Excessive corrosion which affects the rigidity of the assembly. Insufficient strength of parts.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.1.2. Exhaust pipes and silencers	Visual inspection with vehicle over a pit or on a hoist.	(a) Insecure or leaking exhaust system		X	
		(b) Fumes entering cab or passengers compartment. Danger to health of persons on board.		X	X
6.1.3. Fuel tank and pipes (including heating fuel tank and pipes)	Visual inspection with vehicle over a pit or on a hoist, use of leak detecting devices in the case of LPG/CNG/LNG systems.	(a) Insecure tank or pipes, creating particular risk of fire.			X
		(b) Leaking fuel or missing or ineffective filler cap. Risk of fire; excessive loss of hazardous material.		X	X
		(c) Chafed pipes. Damaged pipes.	X		
		(d) Fuel stopcock (if required) not operating correctly.		X	
		(e) Fire risk due to: — leaking fuel; — fuel tank or exhaust not properly shielded; — engine compartment condition.			X
		(f) LPG/CNG/LNG or hydrogen system not in accordance with requirements; any part of the system defective ¹			X
6.1.4. Bumpers, lateral protection and rear underrun devices	Visual inspection.	(a) Looseness or damage likely to cause injury when grazed or contacted. Parts likely to fall off; functionality heavily affected.		X	X
		(b) Device obviously not in compliance with the requirements ¹		X	

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.1.5. Spare wheel carrier (if fitted)	Visual inspection.	(a) Carrier not in proper condition	X		
		(b) Carrier fractured or insecure.		X	
		(c) A spare wheel not securely fixed in carrier Very serious risk of falling off.		X	X
6.1.6. Mechanical coupling and towing device	Visual inspection for wear and correct operation with special attention to any safety device fitted and/or use of measuring gauge.	(a) Component damaged, defective or cracked (if not in use). Component damaged, defective or cracked (if in use)		X	X
		(b) Excessive wear in a component. Below wear limit.		X	X
		(c) Attachment defective. Any attachment loose with a very serious risk of falling off.		X	X
		(d) Any safety device missing or not operating correctly.		X	
		(e) Any coupling indicator not working.		X	
		(f) Obstruct registration plate or any lamp (when not in use) Registration plate not readable (when not in use).	X		X
		(g) Unsafe modification ³ (secondary parts). Unsafe modification ³ (primary parts).		X	X
		(h) Coupling too weak.		X	

▼C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.1.7. Transmission	Visual inspection.	(a) Loose or missing securing bolts Loose or missing securing bolts to such an extent that road safety is seriously endangered.		X	X
		(b) Excessive wear in transmission shaft bearings. Very serious risk of loosening or cracking.		X	X
		(c) Excessive wear in universal joints or transmission chains/belts. Very serious risk of loosening or cracking.		X	X
		(d) Deteriorated flexible couplings. Very serious risk of loosening or cracking.		X	X
		(e) A damaged or bent shaft.		X	
		(f) Bearing housing fractured or insecure. Very serious risk of loosening or cracking.		X	X
		(g) Dust cover severely deteriorated. Dust cover missing or fractured.	X	X	
		(h) Illegal power-train modification.		X	
6.1.8. Engine mountings	Visual inspection not necessarily on a pit or hoist.	Deteriorated, obviously and severely damaged mountings. Loose or fractured mountings.		X	X
6.1.9. Engine performance (X) ²	Visual inspection and/or using electronic interface	(a) Control unit modified affecting safety and/or the environment.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(b) Engine modification affecting safety and/or the environment.			X
6.2. Cab and bodywork					
6.2.1. Condition	Visual inspection	(a) A loose or damaged panel or part likely to cause injury. Likely to fall off.		X	X
		(b) Insecure body pillar. Stability impaired.		X	X
		(c) Permitting entry of engine or exhaust fumes. Danger to health of persons on board.		X	X
		(d) Unsafe modification ³ . Insufficient clearance to rotating or moving parts and road.		X	X
6.2.2. Mounting	Visual inspection over a pit or on a hoist.	(a) Body or cab insecure. Stability affected.		X	X
		(b) Body/cab obviously not located squarely on chassis.		X	
		(c) Insecure or missing fixing of body/cab to chassis or cross-members and if symmetrical		X	
		Insecure or missing fixing of body/cab to chassis or cross-members to such an extent that road safety is very seriously endangered.			X
		(d) Excessive corrosion at fixing points on integral bodies. Stability impaired.		X	X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.2.3. Doors and door catches	Visual inspection.	(a) A door will not open or close properly.		X	
		(b) A door likely to open inadvertently or one that will not remain closed (sliding doors). A door likely to open inadvertently or one that will not remain closed (turning doors).		X	X
		(c) Door, hinges, catches or pillar deteriorated. Door, hinges, catches or pillar missing or loose.	X	X	
6.2.4. Floor	Visual inspection over a pit or on a hoist.	Floor insecure or badly deteriorated.		X	
		Insufficient stability.			X
6.2.5. Driver's seat	Visual inspection.	(a) Seat with defective structure. Loose seat.		X	X
		(b) Adjustment mechanism not functioning correctly. Seat moving or backrest not fixable.		X	X
6.2.6. Other seats	Visual inspection.	(a) Seats in defective condition or insecure (secondary parts). Seats in defective condition or insecure (main parts).	X	X	
		(b) Seats not fitted in accordance with requirements ¹ . Permitted number of seats exceeded; positioning not in compliance with approval.	X	X	
6.2.7. Driving controls	Visual inspection and by operation.	Any control necessary for the safe operation of the vehicle not functioning correctly.		X	
		Safe operation affected.			X

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.2.8. Cab steps	Visual inspection.	(a) Step or step rung insecure. Insufficient stability.	X		
		(b) Step or rung in a condition likely to cause injury to users.		X	
6.2.9. Other interior and exterior fittings and equipment	Visual inspection.	(a) Attachment of other fitting or equipment defective.		X	
		(b) Other fitting or equipment not in accordance with the requirements ¹ . Parts fitted likely to cause injuries; safe operation affected.	X		
		(c) Leaking hydraulic equipment. Extensive loss of hazardous material.	X		
6.2.10. Mudguards (wings), spray suppression devices	Visual inspection.	(a) Missing, loose or badly corroded. Likely to cause injuries; likely to fall off.	X		
		(b) Insufficient clearance to tyre/wheel (spray suppression). Insufficient clearance to tyre/wheel (mudguards).	X		
		(c) Not in accordance with the requirements ¹ . Insufficient coverage of tread.	X		
6.2.11. Stand	Visual inspection.	(a) Missing, loose or badly corroded.		X	
		(b) Not in accordance with the requirements ¹		X	
		(c) Risk of unfolding when the vehicle is in motion.			X

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.2.12. Handgrips and footrests	Visual inspection.	(a) Missing, loose or badly corroded.		X	
		(b) Not in accordance with the requirements ¹		X	
7. OTHER EQUIPMENT					
7.1. Safety-belts/buckles and restraint systems					
7.1.1. Security of safety-belts/buckles mounting	Visual inspection.	(a) Anchorage point badly deteriorated. Stability affected.		X	X
		(b) Anchorage loose.		X	
7.1.2. Condition of safety-belts/buckles.	Visual inspection and by operation.	(a) Mandatory safety-belt missing or not fitted.		X	
		(b) Safety-belt damaged. Any cut or sign of overstretching.	X	X	
		(c) Safety-belt not in accordance with the requirements ¹ .		X	
		(d) Safety-belt buckle damaged or not functioning correctly.		X	
		(e) Safety-belt retractor damaged or not functioning correctly.		X	
7.1.3. Safety belt load limiter	Visual inspection, and/or using electronic interface	(a) Load limiter obviously missing or not suitable with the vehicle.		X	
		(b) System indicates failure via the electronic vehicle interface.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
7.1.4. Safety belt Pre-tensioners	Visual inspection, and/or using electronic interface	(a) Pre-tensioner obviously missing or not suitable with the vehicle.		X	
		(b) System indicates failure via the electronic vehicle interface.		X	
7.1.5. Airbag	Visual inspection, and/or using electronic interface	(a) Airbags obviously missing or not suitable with the vehicle.		X	
		(b) System indicates failure via the electronic vehicle interface.		X	
		(c) Airbag obviously non-operative.		X	
7.1.6. SRS Systems	Visual inspection of MIL, and/or using electronic interface	(a) SRS MIL indicates any kind of failure of the system.		X	
		(b) System indicates failure via the electronic vehicle interface.		X	
7.2. Fire extinguisher (X) ²	Visual inspection.	(a) Missing.		X	
		(b) Not in accordance with the requirements ¹ If required (e.g. taxi, buses, coaches, etc.).	X		X
7.3. Locks and anti- theft device	Visual inspection and by operation	(a) Device not functioning to prevent vehicle being driven.	X		
		(b) Defective Inadvertently locking or blocking.		X	X
7.4. Warning triangle (if required) (X) ²	Visual inspection.	(a) Missing or incomplete.	X		
		(b) Not in accordance with the requirements ¹ .	X		

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
7.5. First aid kit. (if required) (X) ²	Visual inspection.	Missing, incomplete or not in accordance with the requirements ¹ .	X		
7.6. Wheel chocks (wedges) (if required) (X) ²	Visual inspection.	Missing or not in good condition, insufficient stability or dimension.		X	
7.7. Audible warning device	Visual inspection and by operation	(a) Not working properly. Not working at all.	X		
		(b) Control insecure.	X		
		(c) Not in accordance with the requirements ¹ .	X		
		Emitted sound likely to be confused with official sirens.		X	
7.8. Speedometer	Visual inspection or by operation during road test or by electronical means.	(a) Not fitted in accordance with the requirements ¹ . Missing (if required).	X		
		(b) Operation impaired. Not operational at all.	X		
		(c) Not capable of being sufficiently illuminated. Not capable of being illuminated at all.	X		
7.9. Tachograph (if fitted/required)	Visual inspection.	(a) Not fitted in accordance with the requirements ¹ .		X	
		(b) Not operational.		X	
		(c) Defective or missing seals.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(d) Installation plaque missing, illegible or out of date.		X	
		(e) Obvious tampering or manipulation.		X	
		(f) Size of tyres not compatible with calibration parameters.		X	
7.10. Speed limitation device (if fitted/required)	Visual inspection and by operation if equipment available.	(a) Not fitted in accordance with the requirements ¹ .		X	
		(b) Obviously not operational.		X	
		(c) Incorrect set speed (if checked).		X	
		(d) Defective or missing seals.		X	
		(e) Plaque missing or illegible.		X	
		(f) Size of tyres not compatible with calibration parameters.		X	
7.11. Odometer if available (X) ²	Visual inspection, and/or using electronic interface	(a) Obviously manipulated (fraud) to reduce or misrepresent the vehicle's distance record.		X	
		(b) Obviously inoperative.		X	
7.12. Electronic Stability Control (ESC) if fitted/required	Visual inspection, and/or using electronic interface	(a) Wheel speed sensors missing or damaged.		X	
		(b) Wirings damaged.		X	
		(c) Other components missing or damaged.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(d) Switch damaged or not functioning correctly.		X	
		(e) ESC MIL indicates any kind of failure of the system.		X	
		(f) System indicates failure via the electronic vehicle interface.		X	

▼ M1

7.13. eCall (if fitted, in accordance with EU type approval legislation)

7.13.1. Fitment and configuration	Visual inspection complemented, where made possible by the technical characteristics of the vehicle and where the necessary data is made available, with the use of electronic interface	(a) System or any component missing		X	
		(b) Software version incorrect	X		
		(c) System coding incorrect	X		
7.13.2. Condition	Visual inspection complemented, where made possible by the technical characteristics of the vehicle and where the necessary data is made available, with the use of electronic interface	(a) System or components damaged	X		
		(b) eCall MIL indicates any kind of failure of the system	X		
		(c) eCall electronic control unit failure	X		
		(d) Mobile network communication device failure	X		
		(e) GPS signal failure	X		
		(f) Audio components not connected	X		

▼ M1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
		(g) Power source not connected or insufficient charge	X		
		(h) System indicates failure via the electronic vehicle interface	X		
7.13.3. Performance	Visual inspection complemented, where made possible by the technical characteristics of the vehicle and where the necessary data is made available, with the use of electronic interface	(a) Minimum set of data (MSD) incorrect	X		
		(b) Audio components not working in order	X		

▼ C1

8. NUISANCE

8.1. Noise

8.1.1. Noise suppression system	Subjective evaluation (unless the inspector considers that the noise level may be borderline, in which case a measurement of noise emitted by stationary vehicle using a sound level meter may be conducted)	(a) Noise levels in excess of those permitted in the requirements ¹ .		X	
		(b) Any part of the noise suppression system loose, damaged, incorrectly fitted, missing or obviously modified in a way that would adversely affect the noise levels. Very serious risk of falling off.		X	X

8.2. Exhaust emissions

8.2.1. Positive ignition engine emissions

8.2.1.1. Exhaust emissions control equipment	Visual inspection	(a) Emission control equipment fitted by the manufacturer absent, modified or obviously defective.		X	
		(b) Leaks which would affect emission measurements.		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
8.2.1.2. Gaseous emissions	<p>— For vehicles up to emission classes Euro 5 and Euro V ⁽⁷⁾: measurement using an exhaust gas analyser in accordance with the requirements¹ or reading of OBD. Tailpipe testing shall be the default method of exhaust emission assessment. On the basis of an assessment of equivalence, and by taking into account the relevant type- approval legislation, Member States may authorise the use of OBD in accordance with the manufacturer's recommendations and other requirements.</p> <p>— For vehicles as of emission classes Euro 6 and Euro VI ⁽⁸⁾: measurement using an exhaust gas analyser in accordance with the requirements¹ or reading of OBD in accordance with the manufacturer's recommendations and other requirements¹.</p> <p>Measurements not applicable for two-stroke engines.</p>	(a) Either gaseous emissions exceed the specific levels given by the manufacturer;		X	
		(b) Or, if this information is not available, the CO emissions exceed, (i) for vehicles not controlled by an advanced emission control system, — 4,5 %, or — 3,5 % according to the date of first registration or use specified in requirements ¹ . (ii) for vehicles controlled by an advanced emission control system, — at engine idle: 0,5 % — at high idle: 0,3 % or — at engine idle: 0,3 % ⁽⁷⁾ — at high idle: 0,2 % according to the date of first registration or use specified in requirements ¹ .		X	
		(c) Lambda coefficient outside the range $1 \pm 0,03$ or not in accordance with the manufacturer's specification;		X	
		(d) OBD read-out indicating significant malfunction.		X	

▼C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
8.2.2. Compression ignition engine emissions					
8.2.2.1. Exhaust emission control equipment	Visual inspection	(a) Emission control equipment fitted by the manufacturer absent or obviously defective.		X	
		(b) Leaks which would affect emission measurements.		X	
8.2.2.2. Opacity Vehicles registered or put into service before 1 January 1980 are exempted from this requirement	<p>— For vehicles up to emission classes Euro 5 and Euro V ⁽⁷⁾:</p> <p>Exhaust gas opacity to be measured during free acceleration (no load from idle up to cut-off speed) with gear lever in neutral and clutch engaged or reading of OBD. The tailpipe testing shall be the default method of exhaust emission assessment. On the basis of an assessment of equivalence, Member States may authorise the use of OBD in accordance with the manufacturer's recommendations and other requirements.</p> <p>— For vehicles as of emission classes Euro 6 and Euro VI ⁽⁸⁾:</p> <p>Exhaust gas opacity to be measured during free acceleration (no load from idle up to cut-off speed) with gear lever in neutral and clutch engaged or reading of OBD in accordance with the manufacturer's recommendations and other requirements¹.</p> <p>Vehicle preconditioning:</p> <p>1. Vehicles may be tested without preconditioning, although for safety reasons checks should be made that the engine is warm and in a satisfactory mechanical condition.</p>	(a) For vehicles registered or put into service for the first time after the date specified in requirements ¹ . opacity exceeds the level recorded on the manufacturer's plate on the vehicle;		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
	<p>2. Precondition requirements:</p> <p>(i) Engine shall be fully warm, for instance the engine oil temperature measured by a probe in the oil level dipstick tube to be at least 80 °C, or normal operating temperature if lower, or the engine block temperature measured by the level of infrared radiation to be at least an equivalent temperature. If, owing to the vehicle configuration, this measurement is impractical, the establishment of the engine's normal operating temperature may be made by other means, for example by the operation of the engine cooling fan.</p> <p>(ii) Exhaust system shall be purged by at least three free acceleration cycles or by an equivalent method.</p>				
		<p>(b) Where this information is not available or requirements¹ do not allow the use of reference values,</p> <ul style="list-style-type: none"> — for naturally aspirated engines: 2,5 m⁻¹, — for turbo-charged engines: 3,0 m⁻¹, or — for vehicles identified in requirements¹ or first registered or put into service for the first time after the date specified in requirements¹: 1,5 m⁻¹ ⁽⁹⁾ or 0,7 m⁻¹ ⁽⁸⁾ 		X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
	<p>Test procedure:</p> <ol style="list-style-type: none"> 1. Engine and any turbocharger fitted, to be at idle before the start of each free acceleration cycle. For heavy-duty diesels, this means waiting for at least 10 seconds after the release of the throttle. 2. To initiate each free acceleration cycle, the throttle pedal must be fully depressed quickly and continuously (in less than one second) but not violently, so as to obtain maximum delivery from the injection pump. 3. During each free acceleration cycle, the engine shall reach cut-off speed or, for vehicles with automatic transmissions, the speed specified by the manufacturer or, if this data is not available, then two thirds of the cut-off speed, before the throttle is released. This could be checked, for instance, by monitoring engine speed or by allowing a sufficient time to elapse between initial throttle depression and release, which in the case of vehicles of categories M₂, M₃, N₂ and N₃, should be at least two seconds. 4. Vehicles shall only be failed if the arithmetic means of at least the last three free acceleration cycles are in excess of the limit value. This may be calculated by ignoring any measurement that departs significantly from the measured mean, or the result of any other statistical calculation that takes account of the scattering of the measurements. Member States may limit the number of test cycles. 				

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
	5. To avoid unnecessary testing, Member States may fail vehicles which have measured values significantly in excess of the limit values after fewer than three free acceleration cycles or after the purging cycles. Equally to avoid unnecessary testing, Member States may pass vehicles which have measured values significantly below the limits after fewer than three free acceleration cycles or after the purging cycles				
8.3. Electromagnetic interference suppression					
Radio interference (X) ²		Any requirements of the requirements ¹ not met.	X		
8.4. Other items related to the environment					
8.4.1. Fluid leaks		Any excessive fluid leak, other than water, likely to harm the environment or to pose a safety risk to other road users. Steady formation of drops that constitutes a very serious risk.		X	X
9. SUPPLEMENTARY TESTS FOR PASSENGER-CARRYING VEHICLES CATEGORIES M ₂ ' M ₃					
9.1. Doors					
9.1.1. Entrance and exit doors	Visual inspection and by operation.	(a) Defective operation.		X	
		(b) Deteriorated condition. Likely to cause injuries.	X	X	
		(c) Defective emergency control.		X	
		(d) Remote control of doors or warning devices defective.		X	
		(e) Not in accordance with the requirements ¹ . Insufficient door width.	X	X	

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
9.1.2. Emergency exits	Visual inspection and by operation (where appropriate)	(a) Defective operation.		X	
		(b) Emergency exits signs illegible. Emergency exits signs missing.	X	X	
		(c) Missing hammer to break glass.	X		
		(d) Not in accordance with requirements ¹ . Insufficient width or access blocked.	X	X	
9.2. Demisting and defrosting system (X) ²	Visual inspection and by operation	(a) Not operating correctly. Affecting safe operation of the vehicle.	X	X	
		(b) Emission of toxic or exhaust gases into driver's or passenger compartment. Danger to health of persons on board.		X	X
		(c) Defective defrosting (if compulsory).		X	
9.3. Ventilation & heating system (X) ²	Visual inspection and by operation	(a) Defective operation. Risk to health of persons on board.	X	X	
		(b) Emission of toxic or exhaust gases into driver's or passenger compartment. Danger to health of persons on board.		X	X
9.4. Seats					
9.4.1. Passenger seats (including seats for accompanying personnel)	Visual inspection	Folding seats (if allowed) not working automatically. Blocking an emergency exit.	X	X	
9.4.2. Driver's seat (additional requirements)	Visual inspection	(a) Defective special devices such as anti- glare shield. Field of vision impaired.	X	X	
		(b) Protection for driver insecure or not in accordance with requirements ¹ . Likely to cause injuries.	X	X	

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
9.5. Interior lighting and destination devices (X) ²	Visual inspection and by operation	Device defective or not in accordance with requirements ¹ . Not operational at all.	X	X	
9.6. Gangways, standing areas	Visual inspection	(a) Insecure floor. Stability affected.		X	X
		(b) Defective rails or grab handles. Insecure or un-useable.	X	X	
		(c) Not in accordance with the requirements ¹ . Insufficient width or space.	X	X	
9.7. Stairs and steps	Visual inspection and by operation (where appropriate)	(a) Deteriorated condition. Damaged condition. Stability affected.	X	X	X
		(b) Retractable steps not operating correctly.		X	
		(c) Not in accordance with requirements ¹ . Insufficient width or exceeding height.	X	X	
9.8. Passenger communication system (X) ²	Visual inspection and by operation.	Defective system. Not operational at all.	X	X	
9.9. Notices (X) ²	Visual inspection.	(a) Missing, erroneous or illegible notice.	X		
		(b) Not in accordance with requirements ¹ . False information.	X	X	
9.10. Requirements regarding the transportation of children. (X) ²					
9.10.1. Doors	Visual inspection	Protection of doors not in accordance with the requirements ¹ regarding this form of transport.		X	
9.10.2. Signalling and special equipment	Visual inspection	Signalling or special equipment absent or not in accordance with requirements ¹	X		

▼ C1

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
9.11. Requirements regarding the transportation of persons with reduced mobility (X) ²					
9.11.1. Doors, ramps and lifts	Visual inspection and operation	(a) Defective operation. Safe operation affected.	X	X	
		(b) Deteriorated condition. Stability affected; likely to cause injuries.	X	X	
		(c) Defective control(s). Safe operation affected.	X	X	
		(d) Defective warning device(s). Not operating at all.	X	X	
		(e) Not in accordance with the requirements ¹ .		X	
9.11.2. Wheelchair restraint system	Visual inspection and by operation if appropriate	(a) Defective operation. Safe operation affected.	X	X	
		(b) Deteriorated condition. Stability affected; likely to cause injuries.	X	X	
		(c) Defective control(s). Safe operation affected.	X	X	
		(d) Not in accordance with the requirements ¹ .		X	
9.11.3. Signalling and special equipment	Visual inspection	Signalling or special equipment absent or not in accordance with requirements ¹ .		X	
9.12. Other special equipment (X) ²					
9.12.1. Installations for food preparation	Visual inspection	(a) Installation not in accordance with the requirements ¹ .		X	
		(b) Installation damaged to such an extent that it would be dangerous to use it.		X	

▼ **C1**

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
9.12.2. Sanitary installation	Visual inspection	Installation not in accordance with the requirements ¹ . Likely to cause injuries.	X	X	
9.12.3. Other devices (e.g. audiovisual systems)	Visual inspection	Not in accordance with the requirements ¹ . Safe operation of vehicle affected.	X	X	

(¹) The vehicle categories which are outside the scope of this Directive are included for guidance.

(²) 43 % for semi-trailers approved before 1 January 2012.

(³) 48 % for vehicles not fitted with ABS or type-approved before 1 October 1991.

(⁴) 45 % for vehicles registered after 1988 or from the date specified in requirements, whichever is the later.

(⁵) 43 % for semi-trailers and draw-bar trailers registered after 1988 or from the date specified in requirements, whichever is the later.

(⁶) E.g. 2,5 m/s² for N₁, N₂ and N₃ vehicles registered for the first time after 1.1.2012.

(⁷) Type-approved in accordance with Directive 70/220/EEC, Regulation (EC) No 715/2007, Annex I, Table 1 (Euro 5), Directive 88/77/EEC and Directive 2005/55/EC.

(⁸) Type-approved in accordance with Regulation (EC) No 715/2007, Annex I, Table 2 (Euro 6) and Regulation (EC) No 595/2009 (Euro VI).

(⁹) Type-approved in accordance with limits in row B, Section 5.3.1.4 of Annex I to Directive 70/220/EEC as amended by Directive 98/69/EC or later; row B1, B2 or C, Section 6.2.1 of Annex I to Directive 88/77/EEC or first registered or put into service after 1 July 2008.

NOTES:

¹ 'Requirements' are laid down by type-approval at the date of approval, first registration or first entry into service as well as by retrofitting obligations or by national legislation in the country of registration. These reasons for failure apply only when compliance with requirements has been checked.

² (X) identifies items which relate to the condition of the vehicle and its suitability for use on the road but which are not considered essential in a roadworthiness test.

³ Unsafe modification means a modification that adversely affects the road safety of the vehicle or has a disproportionately adverse effect on the environment.

*ANNEX II***MINIMUM CONTENTS OF A ROADWORTHINESS CERTIFICATE**

The roadworthiness certificate issued following a roadworthiness test shall cover at least the following elements preceded by the corresponding harmonised Union codes:

- (1) Vehicle Identification Number (VIN number or chassis number)
- (2) Registration plate number of the vehicle and country symbol of the State of registration
- (3) Place and date of the test
- (4) Odometer reading at the time of the test, if available
- (5) Vehicle category, if available
- (6) Identified deficiencies and their level of severity
- (7) Result of the roadworthiness test
- (8) Date of the next roadworthiness test or date of expiry of the current certificate, if this information is not provided by other means
- (9) Name of testing organisation or centre and signature or identification of the inspector responsible for the test
- (10) Other information



ANNEX III

MINIMUM REQUIREMENTS CONCERNING ROADWORTHINESS FACILITIES AND TEST EQUIPMENT

I. Facilities and equipment

Roadworthiness tests undertaken in accordance with the recommended methods specified in Annex I shall be carried out by using appropriate facilities and equipment. This may include, where applicable, the use of mobile test units. The test equipment that is necessary will depend on the vehicle categories to be tested, as described in Table I. Facilities and equipment shall comply with the following minimum requirements:

- (1) A test facility with adequate space for the evaluation of vehicles which meets the necessary health and safety requirements;
- (2) A test lane of sufficient size for each test, a pit or lift and, for vehicles having a maximum mass exceeding 3,5 tonnes, a device to lift a vehicle on one of the axles, equipped with appropriate lighting and, where necessary, with aeration devices;
- (3) For testing any vehicle, a roller brake tester capable of measuring, displaying and recording the braking forces and the air pressure in air brake systems in accordance with Annex A to standard ISO 21069-1 on the technical requirements of roller brake tester or equivalent standards;
- (4) For testing vehicles having a maximum mass not exceeding 3,5 tonnes, a roller brake tester in accordance with item 3, which may not include the recording of braking forces, pedal force and the air pressure in air brake systems and their display;

or

A plate brake tester equivalent to the roller brake tester in accordance with item 3, which may not include the recording capability of the braking forces, pedal force and the display of air pressure in air brake systems;

- (5) A deceleration recording instrument, while non-continuous measurement instruments must record/store measurements at least 10 times per second;
- (6) Facilities for the testing of air brake systems, such as manometers, connectors and hoses;
- (7) A wheel/axle load measuring device to determine the axle loads (optional facilities for measuring two-wheel loads, such as wheel weight pads and axle weight pads);
- (8) A device for testing the wheel-axle suspension (wheel play detector) without lifting the axis, meeting the following requirements:
 - (a) The device must be equipped with at least two power-operated plates that can be moved in opposite sense in both the longitudinal and the transversal directions;
 - (b) The movement of the plates must be controllable by the operator from the testing position;
 - (c) For vehicles having a maximum mass exceeding 3,5 tonnes, the plates shall comply with the following technical requirements:
 - Longitudinal and transversal movement of at least 95 mm,
 - Longitudinal and transversal movement speed 5 cm/s to 15 cm/s;
- (9) A Class II sound level meter, if sound level is measured;

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- (10) A 4-gas analyser in accordance with Directive 2004/22/EC of the European Parliament and of the Council ⁽¹⁾;
- (11) A device for measuring the absorption coefficient with sufficient accuracy;
- (12) One headlamp aiming device allowing the setting of the headlight to be tested in accordance with the provisions for the setting of headlights of motor vehicles (Directive 76/756/EEC); the light/dark boundary must be easily recognisable in daylight (without direct sunlight);
- (13) A device for measuring the tread depth of tyres;
- (14) A device to connect to the electronic vehicle interface, such as an OBD scan tool;
- (15) A device to detect LPG/CNG/LNG leakage, if such vehicles are tested.

Any of the above devices may be combined in one composite device, provided that this does not affect the accuracy of each device.

II. Calibration of equipment used for measurements

Unless specified otherwise by the relevant Union legislation, the interval between two successive calibrations may not exceed:

- (i) 24 months for the measurement of weight, pressure and sound level,
- (ii) 24 months for the measurement of forces,
- (iii) 12 months for the measurement of gaseous emissions.

⁽¹⁾ Directive 2004/22/EC of the European Parliament and of the Council of 31 March 2004 on measuring instruments (OJ L 135, 30.4.2004, p. 1).

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Table I⁽¹⁾

Minimum equipment required for the purpose of performing a roadworthiness test																		
Vehicles		Category		Equipment required for each item listed in section I														
	Maximum mass			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Motorcycles			1															
		L1e	P	x								x	x		x	x	x	
		L3e,L4e	P	x								x	x		x	x	x	
		L3e,L4e	D	x								x		x	x	x	x	
		L2e	P	x	x							x	x		x	x	x	
		L2e	D	x	x							x		x	x	x	x	
		L5e	P	x	x							x	x		x	x	x	
		L5e	D	x	x							x		x	x	x	x	
		L6e	P	x	x							x	x		x	x	x	
		L6e	D	x	x							x		x	x	x	x	
		L7e	P	x	x							x	x		x	x	x	
		L7e	D	x	x							x		x	x	x	x	
2. Vehicles for the carriage of persons																		

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Minimum equipment required for the purpose of performing a roadworthiness test

Vehicles		Category		Equipment required for each item listed in section I														
	Maximum mass			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Up to 3 500 kg	M ₁ ,M ₂	P	x	x		x					x	x		x	x	x	x
	Up to 3 500 kg	M ₁ ,M ₂	D	x	x		x					x		x	x	x	x	
	> 3 500 kg	M ₂ ,M ₃	P	x	x	x		x	x	x	x	x	x		x	x	x	x
	> 3 500 kg	M ₂ ,M ₃	D	x	x	x		x	x	x	x	x		x	x	x	x	
3. Vehicles for the carriage of goods																		
	Up to 3 500 kg	N ₁	P	x	x		x					x	x		x	x	x	x
	Up to 3 500 kg	N ₁	D	x	x		x					x		x	x	x	x	
	> 3 500 kg	N ₂ ,N ₃	P	x	x	x		x	x	x	x	x	x		x	x	x	x
	> 3 500 kg	N ₂ ,N ₃	D	x	x	x		x	x	x	x	x		x	x	x	x	
4. ►M1 Special vehicles derived from a category N vehicle, T1b, T2b, T3b, T4.1b, T4.2b and T4.3b ◀																		
	Up to 3 500 kg	N ₁	P	x	x		x					x	x		x	x	x	x
	Up to 3 500 kg	N ₁	D	x	x		x					x		x	x	x	x	

▼B

Minimum equipment required for the purpose of performing a roadworthiness test

Vehicles		Category	Equipment required for each item listed in section I														
	Maximum mass		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	> 3 500 kg	N ₂ ,N ₃ , ►MI T1b, T2b, T3b, T4.1b, T4.2b and T4.3b ◀	P	x	x	x		x	x	x	x	x		x	x	x	x
	> 3 500 kg	N ₂ ,N ₃ , ►MI T1b, T2b, T3b, T4.1b, T4.2b and T4.3b ◀	D	x	x	x		x	x	x	x	x		x	x	x	x
5. Trailers	Up to 750 kg	O ₁		x												x	
	> 750 to 3 500 kg	O ₂		x	x		x									x	
	> 3 500 kg	O ₃ ,O ₄		x	x	x			x	x	x					x	

⁽¹⁾ The vehicle categories which are outside the scope of this Directive are included for guidance.
P...petrol (positive ignition); D...diesel (compression ignition)

*ANNEX IV***MINIMUM REQUIREMENTS CONCERNING THE COMPETENCE,
TRAINING AND CERTIFICATION OF INSPECTORS**

1. Competence

Before authorising an applicant for a position as inspector to carry out periodic roadworthiness tests, Member States or competent authorities shall verify that that person:

(a) has a certified knowledge and understanding relevant for road vehicles in the following areas:

- mechanics;
- dynamics;
- vehicle dynamics;
- combustion engines;
- material and material processing;
- electronics;
- electrics;
- electronic vehicle components;
- IT applications;

(b) has at least three years of documented experience or equivalent, such as documented mentorship or studies, and appropriate training in the road vehicle field set out above.

2. Initial and refresher training

Member States or competent authorities shall ensure that inspectors receive the appropriate initial and refresher training or undergo appropriate examination, including in theoretical and practical elements, to enable them to be authorised to carry out roadworthiness tests.

The minimum contents of the initial and refresher training or appropriate examination shall include the following topics:

(a) Initial training or appropriate examination

The initial training provided by the Member State or by an authorised training centre of the Member State shall cover at least the following topics:

(i) vehicle technology:

- braking systems,
- steering systems,
- fields of vision,
- light installation, lighting equipment and electronic components,
- axles, wheels and tyres,
- chassis and bodywork,
- nuisance and emissions,
- additional requirements for special vehicles,

(ii) testing methods;

(iii) assessment of deficiencies;

▼ B

- (iv) legal requirements applicable on the vehicle condition for approval;
- (v) legal requirements relating to roadworthiness testing;
- (vi) administrative provisions relating to vehicle approval, registration and roadworthiness testing;
- (vii) IT applications relating to testing and administration.

(b) Refresher training or appropriate examination

Member States shall ensure that inspectors regularly receive refresher training or undergo an appropriate examination provided or set by the Member State or by an authorised training centre of the Member State.

Member States shall ensure that the contents of the refresher training or appropriate examination enable inspectors to maintain and refresh the requisite knowledge and skills in relation to the topics referred to in point (a), (i) to (vii) above.

3. Certificate of competence

The certificate or equivalent documentation issued to an inspector authorised to carry out roadworthiness tests shall include at least the following information:

- identification of the inspector (first name, surname);
- vehicle categories for which the inspector is authorised to carry out roadworthiness tests;
- name of the issuing authority;
- date of issue.

*ANNEX V***SUPERVISING BODIES**

Rules and procedures concerning supervising bodies established by Member States in accordance with Article 14 shall cover the following minimum requirements:

1. Tasks and activities of the supervising bodies

Supervising bodies shall perform at least the following tasks:

(a) Supervision of testing centres:

- checking whether the minimum requirements for premises and test equipment are met;
- verifying the mandatory requirements of the authorised entity;

(b) Verifying training and examination of inspectors:

- verifying the initial training of inspectors;
- verifying the periodic refresher training of inspectors;
- periodic refresher training of supervising body examiners;
- conducting or supervising examinations.

(c) Auditing:

- pre-audit of testing centres prior to authorisation;
- periodic re-audit of testing centres;
- special audit in the case of irregularities;
- audit of training/examination centres.

(d) Monitoring, using measures such as the following:

- re-testing of a statistically valid proportion of tested vehicles;
- ‘mystery shopper’ checks (use of defective vehicle optional);
- analysis of results of roadworthiness tests (statistical methods);
- appeal tests;
- investigation of complaints.

(e) Validation of measurement results of roadworthiness tests.

(f) Proposing the withdrawal or suspension of authorisation of testing centres and/or of inspectors:

- where the centre or inspector concerned does not fulfil a significant authorisation requirement;
- where major irregularities are detected;
- where there are continued negative audit results;
- where there is a loss of good repute on the part of the centre or inspector in question.

2. Requirements concerning the supervising body

Requirements applicable to the personnel employed by a supervising body shall cover the following areas:

- technical competence;
- impartiality;
- standards of qualification and training.

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3. Contents of the rules and procedures

Each Member State or its competent authority shall lay down the relevant rules and procedures, which shall include at least the following items:

- (a) Requirements concerning the authorisation and supervision of testing centres:
 - application for authorisation to operate as a testing centre;
 - responsibilities of testing centres;
 - pre-authorisation visit, or visits, to verify that all requirements are complied with;
 - authorisation of testing centres;
 - periodic re-testing/audits of testing centres;
 - periodic checks on testing centres to see whether they are continuing to comply with the applicable rules and procedures;
 - evidence-based unannounced special checks or audits of testing centres;
 - analysis of test data to see whether evidence exists of non-compliance with the applicable rules and procedures;
 - withdrawal or suspension of authorisations granted to testing centres.
- (b) Inspectors of testing centres:
 - requirements to become a certified inspector;
 - initial training, refresher training and examinations;
 - withdrawal or suspension of certification of inspectors.
- (c) Equipment and premises:
 - requirements for test equipment;
 - requirements for testing premises;
 - requirements for signage;
 - requirements for maintenance and calibration of testing equipment;
 - requirements for computerised systems.
- (d) Supervising bodies:
 - powers of the supervising bodies;
 - requirements applicable to staff of supervising bodies;
 - appeals and complaints.