COUNCIL OF THE EUROPEAN UNION

Brussels, 5 December 2013 (OR. en)

17415/13

ENT 336
MI 1133

COVER NOTE

From:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	21 November 2013
To:	Mr Uwe CORSEPIUS, Secretary-General of the Council of the European Union
No. Cion doc.:	C(2013) 7994 final
Subject:	COMMISSION DELEGATED REGULATION (EU) No …/.. of 21.11.2013 supplementing Regulation (EU) No 168/2013 of the European Parliament and of the Council with regard to the vehicle construction and general requirements for the approval of two- or three-wheel vehicles and quadricycles

Delegations will find attached document C(2013) 7994 final.

Encl.: C(2013) 7994 final

EUROPEAN
COMMISSION

Brussels, 21.11.2013
C(2013) 7994 final

COMMISSION DELEGATED REGULATION (EU) No …/..

of 21.11.2013

supplementing Regulation (EU) No 168/2013 of the European Parliament and of the Council with regard to the vehicle construction and general requirements for the approval of two- or three-wheel vehicles and quadricycles

(Text with EEA relevance)

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE DELEGATED ACT

(a) Grounds for and objectives of the delegated act

The term 'L-category vehicles' covers a wide range of different vehicle types with two, three or four wheels, e.g. two- and three-wheel mopeds, two- and three-wheel motorcycles, motorcycles with side-cars and light four-wheel vehicles (quadricycles) such as on-road quads and quadri-mobiles.

Type-approval requirements applying to new L-category vehicles are currently set out in Directive 2002/24/EC of the European Parliament and of the Council[1] (the 'Framework Directive'). In addition, a series of Directives referred to in the Framework Directive contain detailed technical requirements relating to L-category vehicles.

The Commission has identified the following key concerns as regards the current provisions for the type-approval of new L-category vehicles and these concerns need to be addressed:

– the complexity of the legal framework;

– the level of emissions and their increase as a proportion of total road transport emissions, which are decreasing overall;

– vehicle functional safety aspects related to type-approval requirements;

– the lack of a legal framework for vehicles fitted with new technologies; and

– the availability on the internal market, and registration of, certain imported vehicles, systems, components or separate technical units which do not comply with the current type-approval requirements regarding vehicle functional safety and/or environmental protection.

This delegated act consolidates current type-approval requirements regarding the vehicle construction of L-category vehicles, updating them in line with technical progress and simplifying them as much as possible by referring to international requirements in this area (e.g. UNECE regulations).

(b) Existing provisions in the area of the delegated act on vehicle construction

– Framework Directive 2002/24/EC;

– Directives 93/33/EEC[2], 97/24/EC[3], 2000/7/EC[4], 2009/62/EC[5], 2009/78/EC[6], 2009/79/EC[7] and 2009/139/EC[8].

---

1 OJ L 124, 9.5.2002, p. 1.
2 OJ L 188, 29.7.1993, p. 32.
3 OJ L 226, 18.8.1997, p. 1.

Type-approval legislation is addressed in the CARS 21 initiative launched in 2005 to carry out a regulatory and policy review of the automotive sector to inform the Commission's thinking on future policy options. CARS 21 was partly a response to concerns expressed by automotive industry stakeholders that the cumulative cost of regulation had a negative effect on competitiveness and made vehicles unnecessarily expensive. The CARS 21 Final Report concluded that, while most of the legislation in force should be maintained for the protection of citizens and the environment, arrangements should be simplified by means of rationalisation and international harmonisation. Plans for this simplification were set out in the Commission's *Second progress report on the strategy for simplifying the regulatory environment*. Any initiative taken should be aligned with this strategy. Referring to UNECE regulations that replace current EU legislation is a particularly effective way of reducing complexity and the burden on vehicle manufacturers, approval authorities and technical services.

In line with the European strategy on air quality, the European Union has constantly tightened the emission standards for motor vehicles, in particular for hydrocarbons, carbon monoxide, nitrogen oxides and particulate matter. This will now also be the case for L-category vehicles with this delegated act regarding their vehicle construction.

The type-approval measures in this legal framework are aligned with the European Road Safety Action Plan 2011-20 and the European Road Safety Charter (ERSC) 2000-10. The ERSC aimed to halve the number of road fatalities by 2010. Riders of L-category vehicles belong to a vulnerable group, with the highest fatality and injury rates of all road users.

For these reasons, this delegated act on vehicle construction and general requirements stipulates detailed technical provisions and test procedures, with reference to the Codecision act, 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-wheeled vehicles and quadricycles[9] to help achieve the EU's goals in terms of environmental and road safety objectives, uniform rules for vehicle manufacturers and other stakeholders for the construction of L-category vehicles. The items covered by this Regulation are either stand-alone topics relating to vehicle construction or affect the environmental and propulsion unit performance as well as the functional safety of L-category vehicles. In addition, general detailed elements such as the arrangements for type-approval, conformity of production requirements, and the procedure for the assessment of technical services are set out in this delegated act to Regulation (EU) No 168/2013.

2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT

(a) Consultation of interested parties

The European Commission launched a public consultation to gather the views of interested parties on its proposals for new legislation on L-category vehicle approval. The consultation document provided background and asked for opinions on the proposals.

---

4 OJ L 106, 3.5.2000, p. 1.
5 OJ L 198, 30.7.2009, p. 20.
6 OJ L 231, 3.9.2009, p. 8.
7 OJ L 201, 1.8.2009, p. 29.
8 OJ L 322, 9.12.2009, p. 3.
9 OJ L60, 2.3.2013, p. 52

The consultation targeted the groups most affected, including type-approval authorities, manufacturers, suppliers and consumers. It was published in English, French and German on a dedicated website.

The Commission has acknowledged the receipt of all responses to the consultation, and these have been made publicly available.

(b) Consultation methods, main sectors targeted and general profile of respondents

The Commission consulted stakeholders in a number of ways:

The public consultation, covering possible controversial aspects of the Codecision proposal, took place on the internet between 22 December 2008 and 27 February 2009. Reactions were received from Member States, the L-category vehicle and component manufacturing industry, transport organisations, user organisations, other non-governmental organisations and private individuals.

The contents of the draft Codecision proposal and the delegated acts were discussed in several meetings of the Commission's Working Group (MCWG) on L category vehicles.

Finally, many bilateral meetings were held in which individual stakeholders could freely express their views.

(c) Impact assessment

For each of the main aspects of the Codecision act, including parts of this delegated act, the possible economic, environmental, safety and social advantages and disadvantages of the various options were assessed in both qualitative and quantitative terms. The options were then compared and one preferred option, or a logical combination of two options, was identified and described. These preferred options form the basis of the Codecision act and its delegated acts.

However, many detailed technical aspects of this delegated act on vehicle construction were carried over from the repealed Directives referred to in Article 81 of the Codecision act and for these an impact assessment was deemed unnecessary.

The draft impact assessment report was scrutinised by the Impact Assessment Board, whose recommendations for its improvement were incorporated as far as possible. The Board's opinion on the report was published together with the Codecision proposal, the final report and its executive summary.

3. LEGAL ELEMENTS OF THE DELEGATED ACT

(a) Legal basis

The legal basis of this delegated act is 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[10].

[10] OJ L60, 2.3.2013, p. 52

(b) Choice of instruments

The use of a Regulation is considered to be appropriate in that it provides the required assurance for compliance while not requiring transposition into Member States' legislation.

The delegated act uses the 'split-level approach' originally introduced at the request of the European Parliament and used in other legislation for EU type-approval of motor vehicles. This approach provides for legislation in three steps:

– the fundamental provisions and scope are laid down by the European Parliament and the Council in Regulation (EU) No 168/2013 based on Article 114 of TFEU in accordance with the ordinary legislative procedure;

– the technical specifications associated with the fundamental provisions are laid down in three delegated acts (Article 290 of TFEU):

  (a) a Regulation on environmental and propulsion unit performance requirements;

  (b) a Regulation on vehicle functional safety requirements;

  (c) a Regulation on vehicle construction requirements and general type-approval subjects containing requirements regarding:

    (1) powertrain tampering prevention measures (anti-tampering);

    (2) arrangements for type-approval procedures;

    (3) conformity of production requirements;

    (4) coupling devices and attachments;

    (5) devices to prevent unauthorised use;

    (6) electromagnetic compatibility (EMC);

    (7) external projections;

    (8) fuel storage;

    (9) load platforms;

    (10) masses and dimensions;

    (11) functional on-board diagnostics (OBD);

    (12) passenger handholds and footrests;

    (13) registration plate space;

    (14) access to repair and maintenance information;

    (15) stands;

(16) performance standards and assessment of technical services; and

– an Implementing Act (Article 291 of TFEU) sets out the administrative provisions regarding the information document, the definitions in the type-approval certificate, the certificate of conformity and associated production conformity requirements, etc.

COMMISSION DELEGATED REGULATION (EU) No …/..

of 21.11.2013

supplementing Regulation (EU) No 168/2013 of the European Parliament and of the Council with regard to the vehicle construction and general requirements for the approval of two- or three-wheel vehicles and quadricycles

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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[11], and in particular Articles 18(3), 20(2), 21(5), 25(8), 33(6), 57(12) and 65 thereto,

Whereas:

(1) The internal market comprises an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured. To that end, comprehensive EU type-approval and a strengthened market surveillance system for L-category vehicles and its systems, components and separate technical units, as defined by Regulation (EU) No 168/2013, apply.

(2) The term 'L-category vehicles' covers a wide range of light vehicle types with two, three or four wheels, e.g. powered cycles, two- and three-wheel mopeds, two- and three-wheel motorcycles, motorcycles with side-cars and four-wheel vehicles (quadricycles) such as on-road quads, all-terrain vehicles and quadrimobiles.

(3) By Council Decision 97/836/EC[12], the Union acceded to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions ('Revised 1958 Agreement').

---

11 OJ L 60, 2.3.2013, p 52.

12 Council Decision 97/836/EC of 27 November 1997 with a view to accession by the European Community to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions ('Revised 1958 Agreement') (OJ L 346, 17.12.1997, p. 78).

(4) Manufacturers apply for type approval for L category vehicles, their systems, components or separate technical units in accordance with Regulation (EU) No 168/2013. In the Union legislation most requirements on vehicle parts are taken over from the corresponding UNECE regulations. UNECE regulations are constantly amended in line with technological progress and the respective Union regulations have to be regularly updated accordingly. In order to avoid this duplication, the CARS 21 High Level Group recommended the replacement of several Union directives by way of the incorporation and compulsory application of the corresponding UNECE regulations in Union law, referred to in Annex I.

(5) The possibility of applying UNECE regulations by virtue of Union legislation that provides for the incorporation of those UNECE regulations for the purpose of EU vehicle type-approval is provided for in Regulation (EU) No 168/2013. Under that Regulation, type-approval in accordance with UNECE regulations which apply on a compulsory basis is regarded as EU type-approval in accordance with that Regulation and its delegated and implementing acts.

(6) UNECE regulation No 10 on electromagnetic compatibility (EMC) should be made obligatory and replace Chapter 8 of Directive 97/24/EC of the European Parliament and of the Council of 17 June 1997 on certain components and characteristics of two or three-wheel motor vehicles[13] in order for vehicles to comply with only one set of EMC requirements, which are world-wide accepted by contracting parties to the 1958 Agreement. UNECE regulation No 62 on protection against unauthorised use should be made obligatory and replace Council Directive 93/33/EEC of 14 June 1993 on protective devices intended to prevent the unauthorized use of two- or three-wheel motor vehicles[14] with the same objective of mutual recognition between contracting parties to the 1958 Agreement.

(7) The compulsory application of UNECE regulations helps avoiding duplication not only of technical requirements but also of certification and administrative procedures. In addition, type-approval that is directly based on internationally agreed standards could improve market access in third countries, in particular those which are contracting parties to the Revised 1958 Agreement, and thus enhance the Union industry's competitiveness.

(8) Pursuant to the provisions of Regulation (EU) No 168/2013, the L-category vehicles, systems, components and separate technical units covered by that Regulation may not be placed or made available on the market or enter into service in the Member States unless they comply with the provisions of that Regulation.

(9) Functional safety or environmental performance requirements call for restrictions on tampering with certain types of L-category vehicles. If they are not to prove an obstacle to owner servicing and maintenance, such restrictions should be strictly limited to tampering which significantly modifies the vehicle's performance and pollutant emissions, noise emissions and vehicle functional safety in a harmful way. As harmful tampering affects both items, detailed requirements regarding powertrain and noise

---

13 OJ L 226, 18.8.1997, p. 1

14 OJ L 188, 29.7.1993, p. 32.

abatement tampering prevention requirements should be laid down in this delegated act on vehicle construction.

(10) Subcategories L6e-A (light on-road quads), L7e-A (heavy on-road quads) and L7e-B (heavy terrain quads) are vehicles with a high centre of gravity in comparison to their width and wheelbase. They have a wide range of passenger/load carrying configurations and they may be operated in off-road conditions. Multiple lateral static stability criteria should be established and incorporated in Annex XI regarding masses and dimensions because of the importance of vehicle rollover stability in the off-road environment. Both tilt-table angle (TTA) and lateral-stability coefficient (Kst) are used as static stability indicators. Kst is a three-dimensional static measurement and serves as an indicator of level-terrain vehicle stability, whereas the TTA test simulates a vehicle operating on a side slope and tests the static longitudinal stability. The vehicle state for these static tests ranges from the operational but otherwise unloaded L6e-A, L7e-A and L7e-B vehicles to both loaded and unloaded conditions. In addition, the vehicle should be constructed by designing the masses and dimensions of the vehicle so as to respect minimum pitch stability. Associated testing should be is representative of a fully loaded vehicle directly ascending and descending a steep slope.

(11) On -board diagnostics ('OBD') is essential for effective and efficient repair and maintenance of vehicles. Accurate diagnostics allows the repairer to identify fast which smallest exchangeable unit has to be repaired or replaced. In order to address the rapid technical developments in the area of propulsion control systems it is appropriate to review the list of devices monitored for electric circuit malfunctions in 2017. By 1 January 2018 it should be established whether identified if additional devices and malfunctions should be added to the list set out in Appendix 2 to Annex XII to provide sufficient time to the Member States, vehicle manufacturers, their suppliers and the repair industry to adapt before the entry into force of OBD stage II.

(12) OBD stage I mandatory as of 2016 should not oblige manufacturers to change fuelling hardware and should not impose fitting of an electronic carburettor or electronic fuel injection, providing the vehicle complies with the requirements laid down in Regulation (EU) No 168/2013 and its delegated acts. Compliance with the OBD stage I requirements requires that if fuel delivery, spark delivery or intake air are electronically controlled, the applicable input and/or output circuits need to be monitored, limited to the items listed in appendix 2 to Annex XII. If for example a motorcycle would be equipped with a mechanically actuated carburettor, but at the same time with electronically controlled spark delivery, the primary ignition coil circuits need to be monitored. In the case of a mechanical carburettor fitted with a throttle position sensor providing a circuit signal as input to the PCU / ECU to determine the engine load, which on its turn would be used to electronically control spark delivery, requires monitoring of that throttle position sensor circuit. Also other sensors and/or actuator circuits captured by points 3.3.5 and 3.3.6. of Annex XII will need to be monitored although not directly used to control fuel delivery, spark delivery or intake air. An example of such a case would be the wheel speed sensor circuits in case the vehicle speed would be calculated in the PCU / ECU from the wheel rotation speeds and which would subsequently be used to control the environmental performance of the motorcycle or would be used to trigger a torque limiting default mode.

(13) Unrestricted access to vehicle repair information, via a standardised format which can be used to retrieve the technical information, and effective competition on the market for vehicle repair and maintenance information ('RMI') services are necessary to improve the functioning of the internal market, particularly as regards the free movement of goods, freedom of establishment and freedom to provide services. A great proportion of such information relates to on-board diagnostic (OBD) systems and their interaction with other vehicle systems. It is appropriate to lay down technical specifications that manufacturers' websites should follow, along with targeted measures to ensure reasonable access for small and medium-sized enterprises (SMEs). Common standards agreed with the involvement of stakeholders can facilitate the exchange of information between manufacturers and service providers. It is therefore appropriate that manufacturers use the technical specifications of the OASIS format and that the Commission will request in due course the European Committee for Standardisation ('CEN') and the International Organization for Standardization ('ISO') to develop this format into a standard with a view to replacing the OASIS format.

(14) In order to further pursue the harmonized approach for access to RMI in all sectors of type-approval legislation taken in Chapter XV of Regulation (EU) No. 168/2013 the provisions of which follow Regulations of the European Parliament and of the Council (EC) Nos 595/2009[15] and 715/2007[16] , it is appropriate to carry over to this Regulation the provisions on access to repair and maintenance information set out in the implementing regulation to Regulations (EC) Nos 595/2009 and 715/2007, namely Commission Regulation (EU) No 582/2011[17]and adapt them to the specificities of the L-category vehicle sector.

(15) In particular, it is appropriate to adopt specific procedures for access to vehicle repair and maintenance information in the case of multi-stage type-approval. It is also appropriate to adopt specific requirements and procedures for access to vehicle repair and maintenance information in the case of customer adaptations and small volume production.

(16) In order to exclude that application of the provisions on access to repair and maintenance information imposes too much burden upon vehicle manufacturers in the short term with respect to certain systems which are carried over from old to new vehicle types, it is appropriate to introduce an exhaustive list of certain limited derogations from the general provisions on access to vehicle OBD and vehicle repair and maintenance information as exhaustively listed in this Regulation.

---

15 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).

16 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).

17 Commission Regulation (EU) No 582/2011 of 25 May 2011 implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI) and amending Annexes I and III to Directive 2007/46/EC of the European Parliament and of the Council (OJ L 167, 25.6.2011, p. 1).

(17) When examining the major policy areas which affect the competitiveness of the European automotive industry, the 'CARS 21 High Level Group' agreed on a number of recommendations aimed at enhancing the industry's global competitiveness and employment while sustaining further progress in safety and environmental performance, which was published in a report by the Commission in 2006 entitled 'CARS 21: A Competitive Automotive Regulatory System for the 21st century'. In the area of simplification, the High Level Group proposed *inter alia* two legislative measures, introducing the possibility of manufacturers conducting approval tests themselves, i.e. to be designated as a technical service ('self-testing'), and the possibility of using computer simulations instead of physical tests ('virtual testing'). This Regulation should therefore set out the detailed conditions with respect to virtual testing and self-testing as set out in Articles 32, 64 and 65 of Regulation (EU) No 168/2013.

(18) Computer-aided techniques, in particular Computer- Aided-Design, are used widely throughout the engineering process from conceptual design and layout of components and equipment, through strength and dynamic analysis of assemblies to definition of manufacturing methods. Available software makes possible the use of virtual testing methods based on such techniques, the introduction of which was identified by the 'CARS 21 High Level Group' as a means of reducing manufacturers' costs by no longer obliging them to build prototypes for the purposes of type-approval. Manufacturers not wishing to take advantage of virtual testing methods should be allowed to continue to use the existing physical test methods.

(19) Type-approval tests are conducted by technical services duly notified to the Commission by the type-approval authorities of the Member States after their skills and competence have been assessed under the relevant international standards. Those standards contain the necessary requirements to allow a manufacturer or a subcontracting party acting on his behalf to be designated as a technical service by the approval authority within the meaning of Directive 2002/24/EC[18] (the Framework Directive). However, in order to prevent potential conflicts of interest, the responsibilities of the manufacturers should be specified. In addition, the conditions under which a manufacturer may subcontract tests should be clarified.

(20) One of the main features of the EU type-approval system is the high level of confidence which should exist between the approval authority and the technical services it has appointed. It is therefore important to ensure that the information exchange between technical services and approval authority is marked by transparency and clarity.

(21) A virtual testing method should provide for the same level of confidence in the results as a physical test. Therefore, it is appropriate to lay down relevant conditions to ensure that the manufacturer acting as in-house technical service, a subcontracting party acting on behalf of the manufacturer or the technical service can properly validate the mathematical models used.

---

[18] Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC (OJ L 124, 9.5.2002, p. 1).

(22) Checks on the conformity of vehicles, components or separate technical units throughout the production process are an essential part of the EU type-approval process. These conformity checks are carried out through conducting physical tests on vehicles, components or separate technical units taken from the production line. Virtual methods should not be permissible for the purposes of conformity of production testing, even if they have been used for type-approval purposes.

(23) This Regulation should apply from the date of application of Regulation (EU) No 168/2013,

HAS ADOPTED THIS REGULATION:

CHAPTER I
SUBJECT MATTER AND DEFINITIONS

Article 1
Subject matter

1. This Regulation establishes the detailed technical requirements and test procedures regarding vehicle construction and general requirements for the approval of L-category vehicles and the systems, components and separate technical units intended for such vehicles in accordance with Regulation (EU) No 168/2013 and sets out a list of UNECE regulations and amendments thereto.

2. It also establishes performance standards for technical services and the procedure for their assessment.

Article 2
Definitions

The definitions of Regulation (EU) No 168/2013 shall apply. In addition, the following definitions shall apply:

(1) ‘anti-tampering measures’ means a series of technical requirements and specifications the aim of which is to prevent, as far as possible, unauthorised modifications of the vehicle's powertrain which may prejudice functional safety, in particular by increasing vehicle performance, and damage the environment, and are not permitted by Annex II;

(2) ‘inlet conduit’ means the combination of the inlet passage and the intake pipe;

(3) ‘inlet passage’ means the passage for the intake of air within the cylinder, cylinder-head or crankcase;

(4) ‘intake pipe’ means a part connecting the carburettor or air-control system and the cylinder, cylinder-head or crankcase;

(5) ‘intake system’ means the combination of the inlet conduit and the intake silencer;

(6) ‘exhaust system’ means the combination of the exhaust pipe, the expansion box, the exhaust silencer and pollution control device(s);

(7) ‘special tools’ means tools in conjunction with anti-tampering devices which are made available only to distributors authorised by the vehicle manufacturer and are not available to the general public;

(8) ‘spark delivery of the ignition system’ means all the characteristics of the spark generated in the ignition system of a positive ignition ‘(PI)’ engine used to ignite the air-fuel mixture, such including timing, level and positioning;

(9) ‘fuel feed system’ means the set of components including and between fuel storage and air-fuel blending or injecting device(s);

(10) ‘conformity of production’ (CoP) means the ability to ensure that each series of products produced is in conformity with the specification, performance and marking requirements in the type-approval;

(11) ‘quality management system’ means a set of interrelated or interacting elements that organisations use to direct and control how quality policies are implemented and quality objectives are achieved;

(12) ‘audit’ means an evidence-gathering process used to evaluate how well audit criteria are being applied targeting to be objective, impartial and independent, and handled in a systematic and documented audit process;

(13) ‘corrective actions’ means a problem-solving process in the quality management process with subsequent steps taken to remove the causes of a nonconformity or undesirable situation and designed to prevent their recurrence;

(14) ‘certification’ means an attestation by a national accreditation body that an organisation meets the requirements set by harmonised standards and, where applicable, any additional requirements, including those set out in relevant sectorial schemes, for carrying out a specific conformity assessment activity;

(15) ‘coupling device for L-category vehicle’ means all parts and devices fitted to the frames, load-bearing parts of the bodywork and chassis of the vehicles by means of which towing and towed vehicles are connected together, including fixed or detachable parts for attaching, adjusting or operating the coupling devices;

(16) ‘coupling ball and towing bracket’ means a coupling device employing a spherical device and a bracket fitted on the L-category vehicle for connecting to the trailer by means of a coupling head;

(17) ‘coupling head’ means a mechanical coupling device on the drawbar of trailers for connecting to a coupling ball on the L-category vehicle;

(18) ‘coupling point’ means the centre of engagement of the coupling fitted to a towed vehicle within the coupling fitted to a towing vehicle;

(19) ‘secondary coupling’ means a connecting device capable in the event of separation of the main coupling, to ensure that the trailer remains connected to the towing vehicle and that there is some residual steering action;

(20) ‘plate edge’ means the outline of a plate which would have a total of four clearly identifiable edges if its shape were flat and rectangular and of an overall material thickness not exceeding 10 mm;

(21) ‘stem’ means any projection or part which appears to have a round or virtually round shape, including bolt and screw heads, with a relatively constant overall diameter and which has a free end that can be contacted;

(22) ‘mesh size’ means the number of openings per (linear) inch of mesh;

(23) ‘load platform’ means a platform attached to the structure of the L-category vehicle for the carriage of load;

(24) ‘standard equipment’ means the basic configuration of a vehicle equipped with all the features required under the regulatory acts referred to in Annex II to Regulation (EU) No 168/2013, including all features that are fitted without giving rise to any further specifications on configuration or equipment level;

(25) ‘optional equipment’ means features that are not included in the standard equipment and may be fitted to a vehicle under the responsibility of the manufacturer;

(26) ‘mass of the optional equipment’ means the mass of the equipment which may be fitted to the vehicle in addition to the standard equipment, in accordance with the manufacturer’s specifications;

(27) ‘mass of the coupling’ means the mass of the coupling device and the parts necessary for attaching the coupling to the vehicle;

(28) ‘technically permissible maximum mass at the coupling point’ means the mass, corresponding to the maximum permissible static vertical load on the coupling point (‘S’ or ‘U’ value), of a towing vehicle, on the basis of the construction features of the coupling and the towing vehicle;

(29) ‘actual mass’ in relation to a vehicle means the mass in running order as referred to in Article 5 of Regulation (EU) No 168/2013, plus the mass of the driver (75 kg), plus the mass of the alternative propellant storage if applicable and plus the mass of optional equipment fitted to an individual vehicle;

(30) ‘technically permissible maximum laden mass’ (M) means the maximum mass allocated to a vehicle on the basis of its construction features and design performances;

(31) ‘technically permissible maximum towable mass’ (TM) means the maximum mass capable of being towed by a towing vehicle;

(32) ‘axle’ means the common axis of rotation of two or more wheels whether power driven or freely rotating, and whether in one or more segments located in the same plane perpendicular to the longitudinal centre-line of the vehicle;

(33) ‘technically permissible maximum mass on the axle’ means the mass corresponding to the maximum permissible static vertical load transmitted to the ground by the wheels of the axle, on the basis of the construction features of the axle and the vehicle and their design performances;

(34) ‘pay-mass’ means the difference between the technically permissible maximum laden mass and the actual mass of the vehicle;

(35) ‘longitudinal plane’ means a vertical plane running parallel to the straight-ahead direction of travel of the vehicle;

(36) ‘emission control system’ means the electronic engine management controller and any emission-related component in the exhaust or evaporative system which supplies an input to or receives an output from this controller;

(37) ‘malfunction indicator’ (‘MI’) means a visible or audible indicator that clearly informs the driver of the vehicle in the event of malfunctions as referred to in Article 21 of Regulation (EU) No 168/2013;

(38) ‘malfunction’ means the failure of a component or system that would result in emissions exceeding the OBD thresholds laid down in Section (B) of Annex VI to Regulation (EU) No 168/2013, or the triggering of any operating mode which significantly reduces engine torque, or the OBD system being unable to fulfil the basic monitoring requirements of Annex XII;

(39) ‘secondary air’ means air introduced into the exhaust system by means of a pump or aspirator valve or other means intended to aid in the oxidation of HC and CO contained in the exhaust gas flow;

(40) ‘engine misfire’ means a lack of combustion in the cylinder of a positive-ignition engine due to the absence of spark, poor fuel metering, poor compression or any other cause.

(41) ‘type I test’ means the applicable driving cycle used for emission approvals;

(42) ‘driving cycle’ means a test cycle consisting of engine start-up, driving mode where a malfunction would be detected if present, and engine shut-off;

(43) ‘warm-up cycle’ means vehicle operation whereby the coolant temperature rises by at least 22 K from engine start-up to at least 343.2 K (70°C);

(44) ‘fuel trim’ refers to feedback adjustments to the base fuel schedule;

(45) ‘short-term fuel trim’ refers to dynamic or instantaneous adjustments to the base fuel schedule;

(46) ‘long-term fuel trim’ refers to much more gradual adjustments to the fuel calibration schedule which compensate for vehicle differences and gradual changes that occur over time;

(47) ‘calculated load value’ means referring to an indication of the current airflow divided by peak airflow, where peak airflow is corrected for altitude, if available. This definition

provides a dimensionless number that is not engine-specific and provides the service technician with an indication of the proportion of engine capacity being used (with wide open throttle as 100%);

(48) ‘permanent emission default mode’ refers to a case where the engine management controller permanently switches to a setting that does not require an input from a failed component or system where such a failed component or system would result in increasing emissions from the vehicle exceeding the limits set out in Section (B) of Annex VI to Regulation (EU) No 168/2013;

(49) ‘power take-off unit’ means an engine-driven output provision for the purposes of powering auxiliary, vehicle-mounted equipment;

(50) ‘access to OBD’ means the availability of all emission and safety critical related on-board diagnostic information including all fault codes required for the inspection, diagnosis, servicing or repair of environmental or functional-safety-related parts of the vehicle, via the serial interface for the standard diagnostic connection, pursuant to point 3.12 of appendix 1 to Annex XII.

(51) ‘unrestricted access to the OBD system’ means:

(a) access not dependent on an access code obtainable only from the manufacturer, or a similar device; or

(b) access allowing evaluation of the data produced without the need for any unique decoding information, unless that information itself is standardised information;

(52) ‘standardised data’ means that all data stream information, including all fault codes used, is produced only in accordance with industry standards which, by virtue of the fact that their format and their permitted options are clearly defined, provide for a maximum level of harmonisation in the L-category vehicle industry, and the use of which is expressly permitted in this Regulation;

(53) ‘deficiency’ in respect of vehicle OBD systems, means a situation in which up to two separate components or systems that are monitored contain temporary or permanent operating characteristics that impair their otherwise efficient OBD monitoring or do not meet all other detailed requirements for OBD;

(54) ‘significant reduction of propulsion torque’ means a propulsion torque less than or equal to 90 % of torque in normal operation mode;

(55) ‘surface of patterned mesh’ means a surface consisting of a pattern of shapes, such as round, oval, diamond, rectangular or square holes, spread evenly at intervals not exceeding 15 mm;

(56) ‘surface of grille’ means a surface consisting of parallel bars spread evenly and not more than 15 mm apart;

(57) ‘nominal surface’ means a theoretical geometrically perfect surface without taking into account surface irregularities such as protrusions or indentations;

(58) ‘inclination’ means the degree of angular deviation in relation to a vertical plane;

(59) ‘customer adaptation’ means any change to a vehicle, system, component or separate technical unit made at the request of a customer and subject to approval;

(60) ‘carry-over system’ means a system, as defined in Article 3(15) of Regulation (EU) No 168/2013, carried over from an old type of vehicle to a new type of vehicle;

(61) ‘stand’ means a device firmly attached to the vehicle and able to maintain the fully unattended vehicle in its intended parking position;

(62) ‘prop stand’ means a stand which, when extended or swung into the position of use, supports the vehicle on one side only, leaving both wheels in contact with the ground;

(63) ‘centre stand’ means a stand which, when swung into the position of use, supports the vehicle by providing one or more areas of contact between the vehicle and the ground on both sides of the longitudinal median plane of the vehicle;

(64) ‘transverse tilt’ means the sideways gradient, expressed as a percentage, of the actual supporting surface where the line formed by the intersection of the longitudinal median plane of the vehicle and the supporting surface is perpendicular to the line of maximum gradient;

(65) ‘longitudinal tilt’ means the fore and aft gradient, expressed as a percentage, of the actual supporting surface where the longitudinal median plane of the vehicle is parallel to, and thus in line with, the line of maximum gradient;

(66) ‘in-use position’ of a stand refers to a stand being extended or opened and put in the intended position for parking;

(67) ‘not-in-use position’ of a stand refers to a stand being retracted or closed and kept in the position for travelling.

CHAPTER II
OBLIGATIONS OF MANUFACTURERS REGARDING VEHICLE CONSTRUCTION

Article 3

Fitting and demonstration requirements related to vehicle construction

1. In order to comply with the vehicle construction requirements as laid down in Article 18 of, and Annex II to, Regulation (EU) No 168/2013, manufacturers shall equip L-category vehicles with systems, components and separate technical units affecting functional safety and environmental protection that are designed, constructed and assembled so as to enable the vehicle in normal use and maintained according to the prescriptions of the manufacturer to comply with the detailed technical requirements and testing procedures.

2. In accordance with Articles 6 to 20 manufacturers shall demonstrate by means of physical demonstration testing to the approval authority that the L-category vehicles made available on the market, registered or entering into service in the Union comply with the vehicle construction requirements of Chapter III of Regulation (EU) No 168/2013 and comply with the detailed technical requirements and test procedures laid down in Articles 6 to 20 of this Regulation.

3. Manufacturers shall ensure that spare parts and equipment that are made available on the market or are entering into service in the Union comply with the relevant requirements of Regulation (EU) No 168/2013, as specified by the detailed technical requirements and test procedures referred to in this Regulation. An approved L-category vehicle equipped with such a spare part or equipment shall meet the same test requirements and performance limit values as a vehicle equipped with an original part or equipment satisfying endurance requirements up to and including those set out in Articles 22(2), 23 and 24 of Regulation (EU) No 168/2013.

4. Manufacturers shall also ensure that type-approval procedures for verifying conformity of production are followed with regard to the detailed vehicle construction requirements laid down in Article 33 of Regulation (EU) No 168/2013 and the detailed technical requirements in this Regulation.

5. Where applicable, the manufacturers shall submit to the approval authority a description of the measures taken to prevent tampering with the powertrain management system including the emission and functional safety control computers.

Article 4

Application of UNECE regulations

1. The UNECE regulations and amendments thereto set out in Annex I to this Regulation shall apply to type approval.

2. Vehicles with a maximum design vehicle speed lower than or equal to 25 km/h shall meet all the relevant requirements of UNECE regulations applying to vehicles with a maximum vehicle design speed higher than 25 km/h.

3. References to vehicle categories L1, L2, L3, L4, L5, L6 and L7 in the UNECE regulations shall be understood as references to vehicle categories L1e, L2e, L3e, L4e, L5e, L6e and L7e respectively under this Regulation, including any sub-categories.

Article 5

Technical specifications on vehicle construction requirements and test procedures

1. The vehicle construction test procedures shall be performed in accordance with the test requirements laid down in this Regulation.

2. The test procedures shall be carried out or witnessed by the approval authority or, if authorised by the approval authority, by the technical service.

3. The measurement methods and test results shall be reported to the approval authority in the test report format laid down pursuant to Article 32(1) of Regulation (EU) No 168/2013.

Article 6

Requirements applying to powertrain tampering prevention (anti-tampering) measures

The test procedures and requirements applying to powertrain tampering prevention (anti-tampering) measures referred to in Annex II (C1) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex II to this Regulation.

Article 7

Requirements applying to the arrangements for type-approval procedures

The test procedures and requirements applying to arrangements for type-approval referred to in Annex II (C2) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex III to this Regulation.

.

Article 8

Requirements applying to conformity of production (CoP)

The test procedures and requirements applying to conformity of production (CoP) referred to in Annex II (C3) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex IV to this Regulation.

Article 9

Requirements applying to coupling devices and attachments

The test procedures and requirements applying to coupling devices and attachments referred to in Annex II (C4) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex V to this Regulation.

Article 10

Requirements applying to devices to prevent unauthorised use

The test procedures and requirements applying to devices to prevent unauthorised use referred to in Annex II (C5) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex VI to this Regulation.

Article 11

Requirements applying to electromagnetic compatibility (EMC)

The test procedures and requirements applying to electromagnetic compatibility (EMC) referred to in Annex II (C6) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex VII to this Regulation.

Article 12

Requirements applying to external projections

The test procedures and requirements applying to external projections referred to in Annex II (C7) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex VIII to this Regulation.

Article 13

Requirements applying to fuel storage

The test procedures and requirements applying to fuel storage referred to in Annex II (C8) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex IX to this Regulation.

Article 14

Requirements applying to load platforms

The test procedures and requirements applying to load platforms referred to in Annex II (C9) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex X to this Regulation.

Article 15

Requirements applying to masses and dimensions

The test procedures and requirements applying to masses and dimensions referred to in Annex II (C10) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XI to this Regulation.

Article 16

Requirements applying to the functional on-board diagnostics

The test procedures and requirements applying to functional on-board diagnostics referred to in Annex II (C11) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XII to this Regulation.

Article 17

Requirements applying to passenger handholds and footrests

The test procedures and requirements applying to passenger handholds and footrests referred to in Annex II (C12) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XIII to this Regulation.

Article 18

Requirements applying to the registration plate space

The test procedures and requirements applying to the registration plate space referred to in Annex II (C13) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XIV to this Regulation.

Article 19

Requirements applying to access to repair and maintenance information

The test procedures and requirements applying to access to repair and maintenance information referred to in Annex II (C14) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XV to this Regulation.

Article 20

Requirements applying to stands

The test procedures and requirements applying to stands referred to in Annex II (C15) to Regulation (EU) No 168/2013 shall be conducted and verified in accordance with Annex XVI to this Regulation.

CHAPTER III
OBLIGATIONS AND REQUIREMENTS RELATING TO TECHNICAL SERVICES

Article 21

Performance standards and assessment of technical services

Technical services have to comply with the performance standards and the procedure for their assessment referred to in Annex II (C16) to Regulation (EU) No 168/2013, which shall be verified in accordance with Annex XVII to this Regulation.

Article 22

Permissibility of self-testing

With respect to the Self-testing by in-house technical services referred to in Article 64 (1) of Regulation (EU) No 168/2013, such tests shall only be conducted where permitted in Annex III to this Regulation.

CHAPTER IV
OBLIGATIONS OF THE MEMBER STATES

Article 23

Type-approval of vehicles, systems, components and separate technical units

In accordance with Articles 18, 25 and 33 of Regulation (EU) No 168/2013 and with effect from the dates laid down in Annex IV to Regulation (EU) No 168/2013, national authorities shall, as regards new vehicles not complying with Regulation (EU) No 168/2013 and this Regulation, consider certificates of conformity to be no longer valid for the purposes of Article 43(1) of Regulation (EU) No 168/2013 and shall, on grounds relating to emissions, fuel or energy consumption, or the applicable functional safety or vehicle construction requirements, prohibit the making available on the market, registration or entry into service of such vehicles.

CHAPTER V
FINAL PROVISIONS

Article 24

Entry into force

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

It shall apply from 1 January 2016.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 21.11.2013

For the Commission
The President
José Manuel BARROSO