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Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles

(Text with EEA relevance)

{SWD(2016) 9 final}
{SWD(2016) 10 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

1.1. Grounds for and objectives of the proposal

The legal framework for the type-approval of automotive products covers three categories of vehicles: motor vehicles and their trailers, motorcycles, and tractors. The objective of this proposal is to revise the legal framework for the type-approval of motor vehicles and their trailers. The legal framework for the two other vehicle categories has already been the subject of a major revision in 2013.

Type-approval requirements for motor vehicles and their trailers are currently set out in Directive 2007/46/EC of the European Parliament and of the Council (the 'Framework Directive')[1]. This framework aims at facilitating the free movement of motor vehicles and trailers in the internal market by laying down harmonised requirements designed to achieve common environmental and safety objectives. Directive 2007/46/EC covers motor vehicles for the carriage of passengers (category M) and of goods (category N), and their trailers (category O), as well as their systems and components. It provides a framework under which separate regulatory acts with specific safety and environmental requirements are operating. These regulatory acts deal with a multitude of detailed technical requirements for different types of vehicles, systems and components.

As part of the commitments the Commission made in its CARS2020 Action Plan for a strong, competitive and sustainable European car industry[2], the EU type-approval framework for motor vehicles has been the subject of a comprehensive fitness check in 2013. It confirmed that the EU type-approval legal framework is appropriate for achieving the main goals of harmonisation, effective operation of the internal market and fair competition. However, it was also recognised that differences in interpretation and strictness in application of the requirements across Member States are reducing the effectiveness of the framework. The Commission Staff Working document on this Fitness Check therefore acknowledged room for improvement and singled out the review of Directive 2007/46/EC as a matter of priority, with the need to focus on the following aspects:

- introduction of market surveillance provisions to complement the type-approval requirements;
- clarification of the recall and safeguard procedures, as well as the conditions for granting extensions to approvals for existing types of vehicle;
- improving the enforcement of the type-approval framework by harmonising and enhancing the type-approval and conformity of production procedures applied by Member State authorities and technical services;
- clarification of the roles and responsibilities of economic operators in the supply chain, and of the authorities and parties involved in the enforcement of the framework; and
- improving the suitability of alternative type-approval schemes (national small series and individual approvals) and of the multi-stage type-approval process to provide appropriate flexibility for niche markets and SMEs, without however distorting the level playing field.

[1] OJ L 263, 9.10.2007, p. 1

[2] COM/2012/0636 final

Although the fitness check confirmed that the existing regulatory framework has its merits in meeting policy objectives, it has come under harsh criticism after the discovery that a German manufacturer (VW) had for several years used software to manipulate the emission performance of its cars. Within a week of the outbreak of the scandal, the Commission announced that it would reinforce the type-approval system, in particular by ensuring adequate supervisory mechanisms to ensure a correct and harmonised application of the type-approval procedures. In an internal market with 28 Member States and in a sector subject to constant technological and scientific progress, substantial divergences in the interpretation and application of the rules entail the risk of undermining the effectiveness of the system and therefore the main policy objectives of ensuring the safety and health of citizens and the protection of the environment. Many stakeholders openly called for such a revision in the aftermath of the VW scandal.

This revision aims to overcome these flaws and gaps and to restore the citizen's trust in the capability of the regulatory system to ensure an adequate level of protection of health and the environment.

1.2. Existing provisions in the area of the proposal

– Directive 2007/46/EC of the European Parliament and of the Council establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and technical units intended for such vehicles.

– Regulation 765/2008/EC on accreditation and market surveillance, containing rules for the European policy on accreditation[3] (control of the competence of laboratories and certification/inspection bodies delivering certificates in the EU) and for the policy in the field of market surveillance and controls of products from third countries (for safe products whatever their origin).

– Decision 768/2008/EC establishing a common framework for the marketing of products[4], containing standard provisions to be used in EU internal market legislation for products (e.g. definitions, obligations of economic operators, safeguard clause, etc.).

2. RESULTS OF CONSULTATIONS WITH THE INTERESTED PARTIES AND IMPACT ASSESSMENTS

The European Commission launched a public consultation in 2010[5], seeking to gather the views of interested parties on its intention to revise the framework directive. The aim of this public consultation was to verify whether the areas identified by the Commission services as having a potential for improving the enforcement of EU type-approval legislation for motor vehicles would provide the right scope and focus for the envisaged review of Framework Directive 2007/46/EC.

Forty relevant responses were received which, overall, indicated a strong support for the aims of the initiative. Whilst 74% of the respondents concurred that the current type-approval framework was already of fairly high quality, 57.6% of them considered that nonetheless more could be done to emphasise and properly focus the legal application of market surveillance principles, with 47% of respondents saying

3 OJ L 218, 13.8.2008, p. 30
4 OJ L 218, 13.8.2008, p. 82
5 http://ec.europa.eu/enterprise/sectors/automotive/documents/consultations/2010-internal-market/index_en.htm

that existing market surveillance provisions are ineffective, while just 2.9% agreed it was effective. This outcome clearly demonstrated that stakeholders share the view that more can and should be done to complement the ex-ante controls offered by the type-approval framework with ex-post market surveillance provisions.

The Commission services also commissioned a number of external studies to accompany and feed in to the Impact Assessment process. An ex-post evaluation study[6] on the framework directive was carried out in the first half of 2011, followed by an impact assessment (IA) study[7] in the second half of 2011. This study assessed the impact of the possible options developed for each of the needs identified by the Commission services and which were confirmed to be relevant by the public consultation. Based on the results of the public consultation and the IA study, a preferred combination of policy options for addressing these needs has been identified.

Further work on the preparation of the impact assessment and the review of the Framework Directive was undertaken in 2012/2013 by means of a fitness check pilot project. A study contract has been awarded for that purpose which was finalised in March 2013. A Commission Staff working document reporting on the outcome of the fitness check pilot project was published in November 2013[8], highlighting the priorities for the envisaged revision of Directive 2007/46/EC (See point 1.1 above).

High level involvement of stakeholders has taken place in the context of the CARS 21 High Level Group, resulting in a number of recommendations in relation to the type-approval framework that have been taken up by the Commission in its CARS 2020 Action Plan adopted in November 2012.

Finally, and in line with the commitments the European Commission made in its CARS 2020 Action Plan, a competitiveness proofing study has been carried out in the second half of 2013 to complement the above mentioned actions. The need for mitigating measures for SMEs has been considered in the context of this study, which demonstrated that for the combination of policy options retained there would not be any significant impacts for the SMEs in the sector to the extent that they would require mitigating measures.

In addition, specific exchanges with Member States' authorities have taken place during the entire impact assessment process at meetings of the Technical Committee Motor Vehicles (TCMV) and the Type-Approval Authorities Experts Group (TAAEG). Exchange of views with industry and user associations about the initiative have taken place in the framework for the Motor Vehicles Working Group (MVWG). All interested stakeholders have also been consulted by the external study contractors for the collection of data and views.

Triggered by the outburst of the VW emissions scandal, the European Parliament adopted on 5 October 2015 a Resolution on emission measurements in the automotive sector, calling on the Commission for significantly strengthening the current EU type approval regime including more EU oversight, in particular with regard to market surveillance, coordination and follow up regime for vehicles sold in the Union.

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6 http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-internal-market-legislation_en.pdf

7 http://ec.europa.eu/enterprise/sectors/automotive/files/projects/impact-assessment-internal-market-legislation_en.pdf

8 SWD(2013) 466 final

3. LEGAL ELEMENTS OF THE PROPOSAL

3.1. Legal basis

The legal basis of the proposal is Article 114 of the Treaty on the Functioning of the European Union (TFEU).

3.2. Subsidiarity principle

The framework legislation for the type-approval of motor vehicles contributes to the implementation of the internal market for goods. This proposal envisages at rendering the implementation and enforcement of this legislation more effective as part of the overall policy objective to deepen the internal market strategy.

Although Member States are responsible for the implementation of the legislation in their territory, ensuring a harmonised and co-ordinated approach based on commonly applicable criteria and uniformly applied by Member States is essential for maintaining a level playing field across the EU by means of a harmonised interpretation, implementation and enforcement of the type-approval requirements, and backed-up by harmonised provisions on market surveillance to provide Member States with adequate means for post-market controls and for taking effective and common remedial action against the presence of non-compliant and unsafe products on the market.

The differences in the national organisation of type-approval and market surveillance in the Member States may give rise to a non-harmonised enforcement when viewed in the framework of the Union's Internal Market which no longer has internal borders and where controls at national borders have practically disappeared. To avoid that non-compliant products are placed on their territory, Member States also depend to a large extent on the effectiveness of the enforcement policy of their neighbours. Consequently, weaknesses in enforcement by one single Member State can seriously undermine the efforts taken by other Member States to prevent non-compliant products from entering their market. This interdependence is reinforced by the fact that the competence of enforcement authorities is limited to the national territory. Where remedial action is needed beyond the border, these authorities must rely on their colleagues in other Member States.

This is due to fact that the type-approval framework is based on the principle that all new vehicles produced in conformity with a type of vehicle approved by one Member State benefit from the right of being freely marketed and registered in the other Member States. This right applies to all such vehicles, irrespective of their origin of production. This means that also vehicles produced outside the EU can be freely imported within the EU provided they the manufacturer has certified that they have been produced in compliance with a type of vehicle approved in one of the EU Member States. In view of the global nature of automotive sector, with substantial imports of automotive products from outside the EU, this important cross-border dimension calls for co-ordinated action at EU level to ensure a level playing field.

If actions were to be taken individually by Member States at national level to address market problems, this may entail the risk of creating obstacles to the free movement of motor vehicles ensured by the framework legislation. Hence it is justified to take action at EU level.

3.3. Proportionality principle

The proposal complies with the proportionality principle because it does not go beyond what is necessary in order to achieve the objectives of ensuring the proper functioning of the internal market while at the same time providing for a high level of public safety and environmental protection.

The measures proposed to reinforce and further harmonise the implementation of the type-approval procedures are based on the agreed principles laid down in the common framework for the marketing of products, and on the reference provisions for Union harmonisation legislation for products as laid down in Annex I of Decision No 768/2008/EC. Where necessary and justified, these provisions have been adapted to the specificities of the automotive sector, in particular with the view to recognise the existence of an already well-established type-approval framework and to ensure full coherence with this framework. This has in particular the case for the provisions on the information exchange and co-operation between market surveillance authorities on the one hand and the type-approval authorities and their designated technical services on the other.

3.4. Choice of instruments

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

The proposal continues to build on the 'split-level approach' already introduced in the EU type-approval framework for 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 a Regulation based on Article 114 TFEU in accordance with the ordinary legislative procedure.

– the detailed technical specifications associated with the fundamental provisions will be laid down in delegated acts adopted by the Commission in accordance with Article 290 of the Treaty on the Functioning of the European Union.

– implementing acts setting out the administrative provisions, such as the template for the information document and the type-approval certificates, the certificate of conformity, etc. will be adopted by the Commission in accordance with Article 291 of the Treaty on the Functioning of the European Union.

4. BUDGETARY IMPLICATION

The budgetary implications of this proposal are as follows:

- Commission staff to organise and participate in 'joint assessments' of technical services;
- Costs for national assessors participating in 'joint assessments' of technical services in accordance with the Commission's rules on the reimbursement of expenses incurred by experts;
- Commission staff to provide scientific, technical and logistic support to the peer review system (joint audits of technical services)and to the coordination of

Member States' market surveillance activities in the field of automotive products;

- Commission staff to manage and further develop the EU regulatory framework for the type-approval and market-surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (functioning of this Regulation and preparation of delegated/implementing acts) and to support and monitor Member States in ensuring its effective and efficient implementation;
- Costs for organising meetings of the Enforcement Forum laid down in Article 10, including reimbursement of the travel expenses of the Member States;
- Costs for the establishment and management of the supervisory mechanism in respect of conformity assessments carried out by technical services;
- Costs for running compliance and conformity testing of motor vehicles by the Commission and
- Costs for participation in international regulatory cooperation, in particular in UNECE;

Details of the costs are set out in the legislative financial statement.

In view of the constraints of the Multiannual Financial Framework 2014-2020 the implementation of the legislative proposal will have to be built on existing resources and to be designed in such a manner that additional financial resources under the EU budget are not needed. Actions foreseen in this draft proposal for a Regulation will have no budgetary impact on EU budget over and beyond the appropriations already foreseen in the official financial programming of the Commission as any requirements for financial resources would have to be met through assigned revenues and internal redeployment.

For the period following 31 December 2020, the amount shall be subject to the multiannual financial framework in force for the period commencing in 2021, in accordance with Article 312 of the Treaty on the Functioning of the European Union.

5. OPTIONAL ELEMENTS

5.1. European Economic Area

The proposed act concerns matters relating to the European Economic Area (EEA) and should therefore be extended to the EEA.

5.2. Repeal of existing legislation

The adoption of the proposal will lead to the repeal of existing legislation.

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THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee[9],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) The internal market comprises an area without internal frontiers in which the free movement of goods, persons, services and capital must be ensured. Internal market rules should be transparent, simple and consistent, thus providing legal certainty and clarity for the benefit of businesses and consumers.

(2) To that end, a comprehensive EU type-approval framework for motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, was established by Directive 2007/46/EC of the European Parliament and of the Council[10].

(3) An assessment of the Union legal framework for the type-approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, carried out in 2013[11], showed that the framework established by Directive 2007/46/EC is appropriate for achieving the main goals of harmonisation, effective operation of the internal market and fair competition, and therefore should continue to apply.

(4) In that assessment it was concluded, however, that there is a need to introduce market surveillance provisions to complement the type-approval requirements, a need to clarify the recall and safeguard procedures, as well as the conditions for granting extensions to approvals for existing types of vehicle, a need to improve the enforcement of the type-approval framework by harmonising and enhancing the type-

9 OJ C , , p. .

10 Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive)(OJ L 263, 9.10.2007, p. 1).

11 Commission Staff Working Document 'Fitness Check of the EU legal framework for the type-approval of motor vehicles' (SWD(2013) 466 final).

approval and conformity of production procedures applied by Member States' authorities and technical services, a need to clarify the roles and responsibilities of economic operators in the supply chain, and of the authorities and parties involved in the enforcement of the framework, and a need to improve the suitability of alternative type-approval schemes (national small series and individual vehicle approvals) and of the multi-stage type-approval process to provide appropriate flexibility for niche markets and SMEs, without however distorting the level playing field.

(5) In addition, recent problems encountered with the implementation of the type-approval framework have revealed particular weaknesses and demonstrate the need for a fundamental revision to ensure a robust, transparent, predictable and sustainable regulatory framework that provides a high level of safety and of health and environmental protection.

(6) This Regulation sets out the harmonised rules and principles for the type-approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, and the individual vehicle approval, with a view to ensuring the proper functioning of the internal market for the benefit of businesses and consumers and to offer a high level of safety and protection of health and the environment.

(7) This Regulation lays down the substantive technical and administrative type-approval requirements for motor vehicles of categories M and N and their trailers (category O), and for the systems, components and separate technical units intended for such vehicles with a view to ensuring an adequate level of safety and environmental performance. These categories cover motor vehicles for the carriage of passengers, motor vehicles for the carriage of goods, and their trailers, respectively.

(8) This Regulation should strengthen the current type-approval framework, in particular through the introduction of provisions on market surveillance. Market surveillance in the automotive sector should be introduced by specifying the obligations of the economic operators in the supply chain, the responsibilities of the enforcement authorities in the Member States, and the measures to be taken when automotive products are encountered on the market that represent serious safety or environmental risks or that do not comply with the type-approval requirements.

(9) An effective implementation of the type-approval requirements should be ensured by enhancing the provisions on conformity of production by, inter alia, providing for mandatory periodic audits of the conformity control methods and the continued conformity of the products concerned and by reinforcing the requirements relating to the competence, obligations and performance of the technical services that carry out tests for whole-vehicle type-approval under the responsibility of type-approval authorities . The proper functioning of technical services is crucial for ensuring a high level of safety and environmental protection and citizens' confidence in the system. The criteria for designation of technical services provided by Directive 2007/46/EC should be laid down in greater detail in order to assure their consistent application. The assessment methods of technical services in the Member States have a tendency to progressively differ due to the increased complexity of their work. Therefore, it is necessary to provide for procedural obligations that ensure an information exchange and monitoring of Member States' practices for the assessment, designation, notification and monitoring of their technical services. Those procedural obligations should remove any existing discrepancies in the methods used and in the interpretation of the criteria for the designation of technical services.

(10) The need for control and monitoring of technical services by the designating authorities has increased since technical progress has raised the risk that technical services do not possess the necessary competence to test new technologies or devices emerging within their scope of designation. As technical progress shortens product cycles and as the intervals of surveillance on-site assessments and of the monitoring vary between designating authorities, minimum requirements with regard to the intervals of the surveillance and monitoring of the technical services should be established.

(11) Designation and monitoring of technical services by the Member States, in accordance with detailed and strict criteria, should therefore be subject to supervisory controls at Union level, including independent audits as a condition for the renewal of their notification after five years. The position of technical services vis-à-vis manufacturers should be strengthened, including their right and duty to carry out unannounced factory inspections and to conduct physical or laboratory tests on products covered by this Regulation, in order to ensure continuous compliance by manufacturers after they have obtained a type-approval for their products.

(12) In order to increase transparency and mutual trust and to further align and develop the criteria for the assessment, designation, and notification of technical services, as well as extension and renewal procedures, Member States should cooperate with each other and with the Commission. They should consult each other and the Commission on questions with general relevance for the implementation of this Regulation and inform each other and the Commission on their model assessment checklist.

(13) Where designation of a technical service is based on accreditation in the meaning of Regulation (EC) No 765/2008 of the European Parliament and of the Council[12], accreditation bodies and designating authorities should exchange information relevant for the assessment of the competence of technical services.

(14) The Member States should levy fees for the designation and monitoring of technical services to ensure sustainability of the monitoring of those technical services by Member States and to establish a level playing field for technical services. In order to ensure transparency, the Member States should inform the Commission and the other Member States before they adopt the level and structure of the fees.

(15) When, in spite of the measures taken to ensure a coherent application and follow up of the requirements by the Member States, the competence of a technical service is in doubt, the Commission should have the possibility to investigate individual cases.

(16) In order to ensure that tests and reports provided by technical services are not influenced by non-legitimate circumstances, the organisation and operation of technical services should ensure full impartiality. To be able to carry out their tasks in a coherent and systematic manner the technical services should possess a satisfactory management system including provisions on professional secrecy. In order to allow technical services to perform their work properly, the level of knowledge and competence and independence of their personnel should be guaranteed at all times.

(17) The independence of technical services vis-à-vis manufacturers should be ensured, including by avoiding direct or indirect payments by the manufacturers for the type-approval inspections and tests they have carried out. Therefore the Member States

[12] Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30).

should establish a type-approval fee structure that should cover the costs for carrying out all type-approval tests and inspections carried out by the technical services designated by the type-approval authority, as well as the administrative costs for issuing the type-approval and the costs for carrying out ex-post compliance verification tests and inspections.

(18) A robust compliance enforcement mechanism is necessary in order to ensure that the requirements under this Regulation are met. Ensuring compliance with the type-approval and conformity of production requirements of the legislation governing the automotive sector should remain the key responsibility of the approval authorities, as it is an obligation closely linked to the issuing of the type-approval and requires detailed knowledge of its content. It is therefore important that the performance of approval authorities is regularly verified by means of peer-reviews, to ensure that a uniform level of quality and stringency is applied by all approval authorities in enforcing the type-approval requirements. Moreover, it is important to provide for the verification of the correctness of the type approval itself.

(19) Closer coordination between national authorities through information exchange and coordinated assessments under the direction of a coordinating authority is fundamental for ensuring a consistently high level of safety and health and environmental protection within the internal market. This should also lead to more efficient use of scarce resources at national level. For this purpose a Forum should be established for Member States and the Commission to exchange information on and to coordinate their activities related to the enforcement of type-approval legislation. The currently informal cooperation between Member States in this respect would benefit from a more formal framework.

(20) The rules on Union market surveillance and control of products entering the Union market provided for in Regulation (EC) No 765/2008 apply to motor vehicles and their trailers, and to systems, components and separate technical units intended for such vehicles without preventing Member States from choosing the competent authorities to carry out those tasks. Market surveillance may be a competence shared between different national authorities to take account of the national market surveillance systems in the Member States established under Regulation (EC) No 765/2008. Effective coordination and monitoring at Union and national levels should guarantee that approval and market surveillance authorities enforce the new type-approval and market surveillance framework.

(21) It is necessary to include rules on market surveillance in this Regulation in order to reinforce the rights and obligations of the national competent authorities, to ensure effective coordination of their market surveillance activities and to clarify the applicable procedures.

(22) In order to increase transparency in the approval process and facilitate the exchange of information and the independent verification by market surveillance authorities, approval authorities and the Commission, type approval documentation should be provided in electronic format and be made publicly available, subject to exemptions due to protection of commercial interests and the protection of personal data.

(23) The obligations of national authorities concerning market surveillance provided in this Regulation are more specific than those laid down in Article 19 of Regulation (EC) No 765/2008 to take account of the specificities of the type-approval framework and the need to complement that framework with an effective market surveillance

mechanism ensuring a robust ex-post verification of compliance of the products covered by this Regulation.

(24) Those more specific obligations for national authorities provided in this Regulation should include ex-post compliance verification testing and inspections of a sufficient number of vehicles placed on the market. The selection of the vehicles to be subject to this ex-post compliance verification should be based on an appropriate risk assessment which takes account of the seriousness of the possible non-compliance and the likelihood of its occurrence.

(25) In addition, the Commission should organise and carry out or require to carry out ex-post compliance verification tests and inspections, independent from those carried out by Member States under their national market surveillance obligations. When non-compliance is established by those tests and inspections, or where it is found that a type approval has been granted on the basis of incorrect data the Commission should be entitled to initiate Union-wide remedial actions to restore the conformity of the vehicles concerned and to investigate the reasons for the incorrectness of the type approval. Appropriate funding should be ensured in the general budget of the Union to enable the execution of such compliance verification testing and inspections. In view of the budgetary constraints of the Multiannual Financial Framework 2014-2020 the implementation of the legislative proposal will have to be built on existing resources and to be designed in such a manner that they do not generate additional financial resources. The Commission should be entitled to impose administrative fines where non-compliance is established.

(26) In order to ensure a high level of vehicle functional safety, the protection of vehicle's occupants and other road users, and environmental protection, the technical requirements and environmental standards applicable to vehicles, systems, components and separate technical units should continue to be harmonised and adapted to technical and scientific progress.

(27) The objectives of this Regulation should not be affected by the fact that certain systems, components, separate technical units or parts and equipment can be fitted to or in a vehicle after that vehicle has been placed on the market, registered or entered into service. Appropriate measures should therefore be taken to ensure that the systems, components, separate technical units or parts and equipment that can be fitted to or in vehicles and that can significantly impair the functioning of systems that are essential for environmental protection or functional safety are controlled by an approval authority before they are placed on the market, registered or entered into service.

(28) The EU type-approval system has to enable each Member State to confirm that every type of vehicle and every type of system, component and separate technical unit intended for such type of vehicle has undergone the tests and inspections provided for in this Regulation to verify its compliance with the type-approval requirements of this Regulation and that its manufacturer has obtained a type-approval certificate for it. The EU type-approval system obliges a manufacturer to produce his vehicles, systems, components and separate technical units in conformity with the approved type. A vehicle manufacturer has to certify this by issuing a certificate of conformity for every vehicle. Every vehicle accompanied by a valid certificate of conformity should be permitted to be made available on the market and registered for use throughout the Union.

(29) Conformity of production is one of the cornerstones of the EU type-approval system, and therefore the arrangements set up by the manufacturer to ensure such conformity should be approved by the competent authority or by an appropriately qualified technical service designated for that purpose, and be subject to regular verification by means of independent periodic audits. In addition, approval authorities should ensure the verification of the continued conformity of the products concerned.

(30) The continued validity of the type-approvals requires that the manufacturer informs the authority that has approved his type of vehicle about any changes to the characteristics of the type or the safety and environmental performance requirements applicable to that type. It is therefore important that the validity of issued type-approval certificates is limited in time and that those certificates can only be renewed when the approval authority has verified and is satisfied that the type of vehicle continues to comply with all the applicable requirements. Furthermore, the conditions for extending type-approvals should be clarified to ensure a uniform application of the procedures and enforcement of the type-approval requirements throughout the Union.

(31) The assessment of reported serious risks to safety and of harm to public health and the environment should be conducted at national level, but coordination at Union level should be ensured where the reported risk or harm may exist beyond the territory of one Member State with the objective of sharing resources and ensuring consistency regarding the corrective action to be taken to mitigate the identified risk and harm.

(32) In order to ensure that all vehicles, systems, components and separate technical units placed on the market offer a high level of safety and environmental protection, the manufacturer or any other economic operator in the supply chain should take effective corrective measures, including the recall of vehicles, where a vehicle, system, component or separate technical unit presents a serious risk for users or the environment as referred to in Article 20 of Regulation (EC) No 765/2008. Approval authorities should be empowered to assess and verify whether those measures are sufficient. The authorities of other Member States' should have the right to take safeguard measures in case they would consider that the manufacturer's corrective measures are not sufficient.

(33) Appropriate flexibility should be provided by means of alternative type-approval schemes for manufacturers who produce vehicles in small series. They should be able to benefit from the advantages of the Union internal market provided that their vehicles comply with the specific EU type-approval requirements for vehicles produced in small series. In certain limited cases, it is appropriate to allow for national small series type-approval. In order to prevent misuse, any simplified procedure for vehicles produced in small series should be restricted to cases of very limited production. It is therefore necessary to define precisely the concept of vehicles produced in small series in terms of the number of vehicles produced, the requirements to be complied with and the conditions for placing those vehicles on the market. It is equally important to specify an alternative approval scheme for individual vehicles, in particular to provide sufficient flexibility for the approval of vehicles built in multiple stages.

(34) The Union is a contracting party to the Agreement of the United Nations Economic Commission for Europe (UNECE) 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')[13]. The Union has accepted a significant number of regulations annexed to the Revised 1958 Agreement and has therefore the obligation to accept type-approvals issued in accordance with those regulations, as complying with the equivalent Union requirements. For the purpose of simplifying its type-approval framework and aligning it with the international framework of the UNECE, the Union in Regulation (EC) No 661/2009 of the European Parliament and of the Council[14] repealed its specific type-approval Directives and replaced them with the obligatory application of the relevant UNECE regulations. To reduce the administrative burden of the type-approval process, manufacturers of vehicles, systems, components and separate technical units should be allowed to seek type-approval in accordance with this Regulation, where appropriate, directly by means of obtaining approval under the relevant UNECE regulations referred to in the Annexes to this Regulation.

(35) Consequently, UNECE regulations and the amendments thereto which the Union has voted in favour of or that the Union applies, in accordance with Council Decision 97/836/EC[15], should be incorporated within the EU type-approval legislation. Accordingly, the power should be delegated to the Commission to amend the Annexes to this Regulation and to adopt delegated acts to ensure that the references to the UNECE regulations and their respective amendments in the list of the relevant regulatory acts are kept up-to-date.

(36) Unrestricted access to vehicle repair and maintenance information, via a standardised format that can be used to retrieve the technical information, and effective competition on the market for services providing such information is necessary to improve the functioning of the internal market, particularly as regards the free movement of goods, the freedom of establishment and the freedom to provide services. The requirements for the provision of repair and maintenance information have so far been laid down in Regulation (EC) No 715/2007 of the European Parliament and of the Council[16], Regulation (EC) No 595/2009 of the European Parliament and of the Council[17], Commission Regulation (EU) No 692/2008[18] and Commission Regulation

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13 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. 81).

14 Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 200, 31.7.2009, p. 1).

15 Council Decision 97/836/EC of 27 November 1997 (OJ L 346, 17.12.1997, p. 78).

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 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).

18 Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council 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 199, 28.7.2008, p. 1).

(EU) No 582/2011[19]. Those requirements should be consolidated in this Regulation and Regulations (EC) No 715/2007, (EC) No 595/2009, (EU) No 692/2008 and (EU) No 582/2011 should be amended accordingly.

(37) Whereas technical progress introducing new methods or techniques for vehicle diagnostics and repair, such as remote access to vehicle information and software, should not weaken the objectives of this Regulation with respect to access to repair and maintenance information for independent operators.

(38) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council[20].

(39) In order to supplement this Regulation with further technical details, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of type-approval requirements concerning the environmental and safety performance of motor vehicles and their trailers, and of systems, components and separate technical units for such vehicles. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level. The Commission, when preparing and drawing up delegated acts, should ensure simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.

(40) Member States should lay down rules on penalties for the infringements of this Regulation and ensure that those rules are implemented. Those penalties should be effective, proportionate and dissuasive. Member States shall report the imposed penalties to the Commission annually, to monitor the coherence of the implementation of these provisions.

(41) In the interests of clarity, rationality and simplification, Directive 2007/46/EC should be repealed and replaced by this Regulation. The adoption of a Regulation ensures that provisions are directly applicable and that they can be updated in a timely and more efficient manner to take better account of technical progress and regulatory developments in the context of the Revised 1958 Agreement.

(42) In order to properly implement the compliance verification by the Commission and to ensure a level playing field for economic operators and national authorities, the Commission should be competent to impose harmonized administrative fines upon the economic operators found to have infringed upon this regulation regardless of where the vehicle, system, component or separate technical unit was originally type-approved.

(43) Whenever the measures provided for in this Regulation entail the processing of personal data, they should be carried out in accordance with Directive 95/46/EC of the

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[19] 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).

[20] Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

European Parliament and of the Council[21] and Regulation (EC) No 45/2001 of the European Parliament and of the Council[22], as well as the national implementing measures thereto.

(44) In order to enable Member States and national authorities as well as economic operators to prepare for the application of the new rules introduced by the act, an application date following the entry into force should be set.

(45) Since the objectives of this Regulation, namely to lay down harmonised rules on the administrative and technical requirements for the type-approval of vehicles of categories M, N and O, and of systems, components and separate technical units, and on market surveillance of such vehicles, systems, components and separate technical units, cannot be sufficiently achieved by the Member States, but can rather, by reason of their scale and effects, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives,

HAVE ADOPTED THIS REGULATION:

CHAPTER I
SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1
Subject matter

1. This Regulation establishes the administrative provisions and technical requirements for the type-approval and placing on the market of all new vehicles, systems, components and separate technical units intended for such vehicles referred to in Article 2(1). It also applies to individual vehicle approvals.

2. This Regulation establishes the requirements for the market surveillance of vehicles, systems, components and separate technical units that are subject to approval in accordance with this Regulation, as well as of parts and equipment for such vehicles.

Article 2
Scope

1. This Regulation shall apply to motor vehicles of categories M and N and their trailers of category O, that are intended to be used on public roads, including those designed and constructed in one or more stages, and to systems, components and separate technical units, as well as to parts and equipment, designed and constructed for such vehicles and trailers.

2. This Regulation does not apply to the following vehicles:

[21] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (OJ L 281, 23.11.1995, p. 31).

[22] Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (OJ L 8, 12.1.2001, p. 1).

(a) agricultural or forestry vehicles, as defined in Regulation (EU) No 167/2013 of the European Parliament and of the Council[23];

(b) two- or three-wheel vehicles and quadricycles, as defined in Regulation (EU) No 168/2013 of the European Parliament and of the Council[24];

(c) vehicles that are used on tracks.

3. For the following vehicles and machinery, the manufacturer may apply for type-approval or individual vehicle approval under this Regulation, provided that those vehicles fulfil the substantive requirements of this Regulation:

(a) vehicles designed and constructed for use principally on construction sites or in quarries, port or airport facilities;

(b) vehicles designed and constructed for use by the armed services, civil defence, fire services and forces responsible for maintaining public order;

(c) any self-propelled vehicle designed and constructed specifically to perform work and that, because of its construction characteristics, is not suitable for carrying passengers or for transporting goods.

4. For the following vehicles, the manufacturer may apply for individual vehicle approval under this Regulation:

(a) vehicles intended exclusively for racing on roads;

(b) prototypes of vehicles used on the road under the responsibility of a manufacturer to perform a specific test programme provided they have been specifically designed and constructed for that purpose.

Article 3
Definitions

For the purposes of this Regulation, the following definitions shall apply:

(1) ‘type-approval’ means the procedure whereby a type-approval authority certifies that a type of vehicle, system, component or separate technical unit satisfies the relevant administrative provisions and technical requirements;

(2) ‘market surveillance’ means the activities carried out and measures taken by the market surveillance authorities to ensure that vehicles, systems, components or separate technical units as well as parts and equipment made available on the market comply with the requirements set out in the relevant Union legislation and do not endanger health, safety or any other aspect of public interest protection;

(3) ‘vehicle’ means any motor vehicle or its trailer as defined in points (10) and (11);

(4) ‘system’ means an assembly of devices combined to perform one or more specific functions in a vehicle and that is subject to the requirements of this Regulation or any of the regulatory acts listed in Annex IV;

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[23] 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 or forestry vehicles (OJ L 60, 2.03.2013, p. 1).

[24] 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, 2.03.2013, p. 52).

(5) ‘component’ means a device that is intended to be part of a vehicle and that may be type-approved independently of that vehicle and that is subject to the requirements of this Regulation or any of the regulatory acts listed in Annex IV;

(6) ‘separate technical unit’ means a device intended to be part of a vehicle that may be type-approved separately, but only in relation to one or more specified types of vehicle and that is subject to the requirements of this Regulation or any of the regulatory acts listed in Annex IV;

(7) ‘parts’ means goods used for the assembly, repair and maintenance of a vehicle as well as spare parts;

(8) ‘equipment’ means goods other than parts that can be added to or installed on a vehicle;

(9) ‘manufacturer’ means a natural or legal person who is responsible for all aspects of the type-approval of a vehicle, system, component or separate technical unit, or the individual vehicle approval, or the authorisation process for parts and equipment, for ensuring conformity of production and for market surveillance matters regarding that vehicle, system, component, separate technical unit, part and equipment produced, irrespective of whether that person is or is not directly involved in all stages of the design and construction of that vehicle, system, component or separate technical unit concerned;

(10) ‘motor vehicle’ means any power-driven vehicle designed and constructed to be moved by its own means, having at least four wheels, being complete, completed or incomplete, with a maximum design speed exceeding 25 km/h;

(11) ‘trailer’ means any non-self-propelled vehicle on wheels designed and constructed to be towed by a motor vehicle;

(12) ‘approval authority’ means the authority or authorities of a Member State, notified to the Commission by that Member State, with competence for all aspects of the type-approval of a vehicle, system, component or separate technical unit, or of the individual vehicle approval, for the authorisation process for parts and equipment, for issuing and, if appropriate, withdrawing or refusing approval certificates, for acting as the contact point for the approval authorities of the other Member States, for designating the technical services, and for ensuring that the obligations regarding the conformity of production of the manufacturer are met;

(13) ‘market surveillance authority’ means the national authority or authorities responsible for carrying out market surveillance on the territory of the Member State;

(14) ‘national authority’ means an approval authority or any other authority involved in and responsible for market surveillance, border control or registration in a Member State in respect of vehicles, systems, components, separate technical units and parts or equipment;

(15) ‘placing on the market’ means making available a vehicle, system, component, separate technical unit, part or equipment for the first time in the Union;

(16) ‘registration’ means the permanent or temporary administrative authorisation for the entry into service in road traffic of a vehicle, including the identification of the vehicle and the issuing of a serial number;

(17) ‘entry into service’ means the first use, for its intended purpose, in the Union, of a vehicle, system, component, separate technical unit, part or equipment;

(18) ‘economic operator’ means the manufacturer, the manufacturer’s representative, the importer or the distributor;

(19) ‘whole-vehicle type-approval’ means the procedure whereby an approval authority certifies that an incomplete, complete or completed type of vehicle satisfies the relevant administrative provisions and technical requirements;

(20) ‘multi-stage type-approval’ means the procedure whereby one or more approval authorities certify that depending on the state of completion, an incomplete or completed type of vehicle satisfies the relevant administrative provisions and technical requirements;

(21) ‘incomplete vehicle’ means any vehicle that requires at least one further stage of completion in order to meet the relevant technical requirements of this Regulation and of the regulatory acts listed in Annex IV;

(22) ‘EU type-approval’ means the procedure whereby an approval authority certifies that a type of vehicle, system, component or separate technical unit satisfies the relevant administrative provisions and technical requirements of this Regulation and of the regulatory acts listed in Annex IV;

(23) ‘type-approval certificate’ means the document whereby the approval authority officially certifies that a type of vehicle, system, component or separate technical unit is type-approved;

(24) ‘manufacturer’s representative’ means any natural or legal person established in the Union who is duly appointed by the manufacturer to represent the manufacturer before the approval authority or the market surveillance authority and to act on the manufacturer’s behalf in matters covered by this Regulation;

(25) ‘importer’ means a natural or legal person established in the Union who places on the market a vehicle, system, component, separate technical unit, part or equipment that has been manufactured in a third country;

(26) ‘national type-approval’ means the procedure whereby an approval authority certifies that a type of vehicle, system, component or separate technical unit satisfies the relevant administrative provisions and technical requirements laid down by the national law of a Member State, the validity of such approval being restricted to the territory of that Member State;

(27) ‘certificate of conformity’ means the document set out in Annex IX, issued by the manufacturer, which certifies that a produced vehicle conforms to the approved type of vehicle;

(28) ‘distributor’ means a dealer or any other natural or legal person in the supply chain, other than the manufacturer or the importer, who makes available on the market a vehicle, system, component, separate technical unit, part or equipment;

(29) ‘making available on the market’ means any supply of a vehicle, system, component, separate technical unit, part or equipment for distribution or use on the market in the course of a commercial activity, whether in return for payment or free of charge;

(30) ‘step-by-step type-approval’ means the procedure consisting of the step-by-step collection of the whole set of EU type-approval certificates for the systems, components and separate technical units forming part of a vehicle, and which leads, at the final stage, to the whole-vehicle type-approval;

(31) ‘single-step type-approval’ means the procedure whereby an approval authority certifies that a type of vehicle, system, component or separate technical unit as a whole satisfies the relevant administrative provisions and technical requirements by means of a single operation;

(32) ‘mixed type-approval’ means a step-by-step type-approval for which one or more system type-approvals have been obtained during the final stage of the approval of the whole vehicle, without the need to issue the EU type-approval certificates for those systems;

(33) ‘completed vehicle’ means a vehicle resulting from the multi-stage type-approval that meets the relevant technical requirements of this Regulation and of the regulatory acts listed in Annex IV;

(34) ‘complete vehicle’ means a vehicle that does not need to be completed in order to meet the relevant technical requirements of this Regulation and of the regulatory acts listed in Annex IV;

(35) ‘type of vehicle’ means a particular category of vehicles that shares at least the essential criteria specified in Part B of Annex II, and that may contain variants and versions as referred thereto;

(36) ‘technical service’ means an organisation or body designated by the approval authority as a testing laboratory to carry out tests, or as a conformity assessment body to carry out the initial assessment and other tests or inspections;

(37) ‘base vehicle’ means any vehicle that is used at the initial stage of a multi-stage type-approval;

(38) ‘system type-approval’ means the procedure whereby an approval authority certifies that a type of system satisfies the relevant administrative provisions and technical requirements;

(39) ‘separate technical unit type-approval’ means the procedure whereby an approval authority certifies that a type of separate technical unit satisfies the relevant administrative provisions and technical requirements in relation to one or more specified types of vehicles;

(40) ‘component type-approval’ means the procedure whereby an approval authority certifies that a type of component independently of a vehicle satisfies the relevant administrative provisions and technical requirements;

(41) ‘virtual testing method’ means computer simulations, including calculations, to demonstrate that a vehicle, a system, a component or a separate technical unit fulfils the technical requirements of a regulatory act listed in Annex IV without requiring the use of a physical vehicle, system, component or separate technical unit;

(42) ‘individual vehicle approval’ means the procedure whereby an approval authority certifies that a particular vehicle, whether unique or not, satisfies the relevant administrative provisions and technical requirements for EU individual vehicle approval and national individual vehicle approval;

(43) ‘end-of-series vehicle’ means a vehicle that is part of a stock and that, due to the entry into force of new technical requirements against which it has not been type-approved, cannot or can no longer be made available on the market, registered or entered into service;

(44) ‘alternative requirements’ means administrative provisions and technical requirements that aim to ensure a level of functional safety, environmental protection and occupational safety that to the greatest extent practicable is equivalent to the level provided for by one or more of the regulatory acts listed in Annex IV;

(45) ‘spare parts’ means goods that are to be installed in or on a vehicle to replace original parts of that vehicle, including goods that are necessary for the use of a vehicle, with the exception of fuel;

(46) ‘vehicle repair and maintenance information’ means all information required for diagnosing, servicing, inspecting, periodic monitoring, repairing, re-programming or re-initialising of a vehicle as well as for the fitting on vehicles of parts and equipment, and that is provided by the manufacturer to his authorised dealers and repairers, including all subsequent amendments and supplements to that information;

(47) ‘independent operator’ means a natural or legal person, other than an authorised dealer or repairer, who is directly or indirectly involved in the repair and maintenance of vehicles, including repairers, manufacturers or distributors of repair equipment, tools or spare parts, publishers of technical information, automobile clubs, roadside assistance operators, operators offering inspection and testing services, operators offering training for installers, manufacturers and repairers of equipment for alternative fuel vehicles; it also means authorised repairers, dealers or distributors within the distribution system of a given vehicle manufacturer to the extent that they provide repair and maintenance services for vehicles in respect of which they are not members of the vehicle manufacturer’s distribution system;

(48) ‘authorised repairer’ means a natural or legal person providing repair and maintenance services for vehicles operating within the manufacturer’s distribution system;

(49) ‘independent repairer’ means a natural or legal person providing repair and maintenance services for vehicles not operating within the manufacturer’s distribution system;

(50) ‘*vehicle* on-board diagnostic (OBD) information’ means the information relating to a system on board of a vehicle or that is connected to an engine and that has the capability of detecting a malfunction, and, where applicable, of indicating its occurrence by means of an alert system, of identifying the likely area of malfunction by means of information stored in a computer memory, and of communicating that information off-board;

(51) ‘vehicle produced in small series’ means a type of vehicle of which the number of units that is made available on the market, registered or entered into service does not exceed the quantitative annual limits laid down in Annex XII;

(52) ‘special purpose vehicle’ (SPV) means a vehicle of category M, N or O having specific technical features to perform a function that requires special arrangements or equipment;

(53) ‘Semi–trailer’ means a towed vehicle, in which the axle(s) is (are) positioned behind the centre of gravity of the vehicle (when uniformly loaded), and which is equipped with a connecting device permitting horizontal and vertical forces to be transmitted to the towing vehicle.

(54) ‘national accreditation body’ means the sole body in a Member State that performs accreditation with authority derived from the State, as laid down in Article 2(11) of Regulation (EC) No 765/2008;

(55) ‘on-site assessment’ means a verification by the type-approval authority in the premises of the technical service or of one of its subcontractors or subsidiaries;

(56) ‘surveillance on-site assessment’ means a periodic routine on-site assessment which is neither the on-site assessment undertaken for the initial designation, nor the on-site assessment undertaken for the renewal of the designation;

Article 4
Vehicle categories

1. For the purposes of this Regulation, the following vehicle categories shall apply:

(a) Category M comprises motor vehicles designed and constructed primarily for the carriage of persons and their luggage, namely:

(i) Category M_1: motor vehicles comprising not more than eight seating positions in addition to the driver’s seating position and without space for standing passengers. The number of seating positions may be restricted to the driver’s seating position;

(ii) Category M_2: motor vehicles comprising more than eight seating positions in addition to the driver’s seating position and having a maximum mass not exceeding 5 tonnes. These motor vehicles may have space for standing passengers;

(iii) Category M_3: motor vehicles comprising more than eight seating positions in addition to the driver’s seating position and having a maximum mass exceeding 5 tonnes. These motor vehicles may have space for standing passengers.

(b) Category N comprises motor vehicles designed and constructed primarily for the carriage of goods, namely:

(i) Category N_1: motor vehicles having a maximum mass not exceeding 3,5 tonnes;

(ii) Category N_2: motor vehicles having a maximum mass exceeding 3,5 tonnes but not exceeding 12 tonnes;

(iii) Category N_3: motor vehicles having a maximum mass exceeding 12 tonnes.

(c) Category O comprises trailers designed and constructed for the carriage of goods or of persons, as well as for the accommodation of persons, namely:

(i) Category O_1: trailers having a maximum mass not exceeding 0,75 tonnes;

(ii) Category O_2: trailers having a maximum mass exceeding 0,75 tonnes but not exceeding 3,5 tonnes;

(iii) Category O_3: trailers having a maximum mass exceeding 3,5 tonnes but not exceeding 10 tonnes;

(iv) Category O_4: trailers having a maximum mass exceeding 10 tonnes.

2. The criteria for the categorisation of vehicles, types of vehicle, variants and versions are specified in Annex II.

The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex II concerning the categorisation of vehicle sub-categories, types of vehicle and types of bodywork in order to adapt it to technical progress.

CHAPTER II
GENERAL OBLIGATIONS

Article 5
General substantive requirements

1. Vehicles, systems, components and separate technical units shall comply with the requirements of the regulatory acts listed in Annex IV.

2. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex IV to take account of technological and regulatory developments by introducing and updating references to regulatory acts containing the requirements with which vehicles, systems, components and separate technical units have to comply.

Article 6
Obligations of Member States

1. Member States shall establish or appoint the approval authorities and the market surveillance authorities. Member States shall notify the Commission of the establishment and appointment of such authorities.

That notification shall include the name of those authorities, their address, including their electronic address, and their competences. The Commission shall publish on its website a list and details of the approval authorities and the market surveillance authorities.

2. Member States shall permit the placing on the market, registration or entry into service of only those vehicles, systems, components and separate technical units that comply with the requirements set out in this Regulation.

3. Member States shall not prohibit, restrict or impede the placing on the market, registration or entry into service of vehicles, systems, components or separate technical units that comply with the requirements set out in this Regulation, except in the cases provided in Article 52.

By way of derogation from that rule, Member States are not obliged to allow the placing on the market, registration or entry into service of vehicles that are type-approved in accordance with this Regulation, but exceed the harmonised dimensions laid down in Annex I to Council Directive 96/53/EC[25].

[25] Council Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic (OJ L 235 17.9.1996, p. 59).

4. Member States shall organise and carry out market surveillance and controls of vehicles, systems, components or separate technical units entering the market, in accordance with Chapter III of Regulation (EC) No 765/2008.

5. Member States shall take the necessary measures to ensure that market surveillance authorities may, where they consider it necessary and justified, be entitled to enter the premises of economic operators and seize the necessary samples of vehicles, systems, components and separate technical units for the purposes of compliance testing.

6. The Member States shall periodically review and assess the functioning of their type-approval activities. Such reviews and assessments shall be carried out at least every four years and the results thereof shall be communicated to the other Member States and the Commission. The Member State concerned shall make a summary of the results accessible to the public, in particular the number of type-approval granted and the identity of the corresponding manufacturers.

7. The Member States shall periodically review and assess the functioning of their surveillance activities. Such reviews and assessments shall be carried out at least every four years and the results thereof shall be communicated to the other Member States and the Commission. The Member State concerned shall make a summary of the results accessible to the public.

Article 7
Obligations of approval authorities

1. Approval authorities shall only approve such vehicles, systems, components or separate technical units that comply with the requirements of this Regulation.

2. Approval authorities shall carry out their duties independently and impartially. They shall observe confidentiality where necessary in order to protect commercial secrets, subject to the obligation of information laid down in Article 9(3) in order to protect the interests of users in the Union.

3. A Member State where more than one approval authority is responsible for vehicle approval including individual vehicle approval, shall designate a unique type approval authority responsible for the exchange of information with the approval authorities of the other Member States and for the obligations laid down in Chapter XV of this Regulation.

   Approval authorities within a Member State shall cooperate with each other by sharing information relevant to their role and functions.

4. Where an approval authority is informed in accordance with Articles 8(5), 9(5), 52(4) or 54, it shall take all necessary measures to review the approval granted and, where appropriate, correct or withdraw the approval depending on the reasons and the seriousness of the deviations demonstrated.

5. The Commission may adopt implementing acts to lay down the common criteria to appoint, review and assess the approval authorities at national level. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

Article 8

Obligations of market surveillance authorities

1. Market surveillance authorities shall perform regular checks to verify compliance of vehicles, systems, components and separate technical units with the requirements set out in this Regulation as well as with the correctness of the type approvals. Those checks shall be performed on an adequate scale, by means of documentary checks and real-drive and laboratory tests on the basis of statistically relevant samples. When doing so, market surveillance authorities shall take account of established principles of risk assessment, complaints and other information.

2. Market surveillance authorities shall require economic operators to make the documentation and information available as they consider necessary for the purpose of carrying out their activities.

3. For type-approved vehicles, systems, components and separate technical units, market surveillance authorities shall take due account of certificates of conformity presented by economic operators.

4. Market surveillance authorities shall take appropriate measures to alert users within their territories within an adequate timeframe of hazards they have identified relating to any vehicle, system, component and separate technical unit so as to prevent or reduce the risk of injury or other damage.

   Market surveillance authorities shall cooperate with economic operators regarding actions which could prevent or reduce risks caused by vehicles, systems, components and separate technical units made available by those operators.

5. Where the market surveillance authorities of one Member State decide to withdraw a vehicle, system, component and separate technical unit from the market in accordance with Article 49(5), they shall inform the economic operator concerned and where applicable the relevant approval authority.

6. Market surveillance authorities shall carry out their duties independently and impartially. They shall observe confidentiality where necessary in order to protect commercial secrets, subject to the obligation of information laid down in Article 9(3) to the fullest extent necessary in order to protect the interests of users in the European Union.

7. The Member States shall periodically review and assess the functioning of their surveillance activities. Such reviews and assessments shall be carried out at least every four years and the results thereof shall be communicated to the other Member States and the Commission. The Member State concerned shall make a summary of the results accessible to the public.

8. The market surveillance authorities of different Member States shall coordinate their market surveillance activities, cooperate with each other and share with each other and with the Commission the results thereof. Where appropriate, the market surveillance authorities shall agree on work-sharing and specialisation.

9. Where more than one authority in a Member State is responsible for market surveillance and external border controls, those authorities shall cooperate with each other, by sharing information relevant to their role and functions.

10. The Commission may adopt implementing acts to lay down the criteria for setting out the scale, scope and frequency with which the compliance verification checks of samples taken referred to in paragraph 1 have to be performed. Those implementing

acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

Article 9
Compliance verification by the Commission and enforcement co-ordination with Member States

1. The Commission shall organise and carry out, or require to be carried out, on an adequate scale, tests and inspections of vehicles, systems, components and separate technical units already made available on the market, with a view to verifying that those vehicles, systems, components and separate technical units conform to the type approvals and to applicable legislation as well as to ensure the correctness of the type approvals.

   Those tests and inspections may take place on new vehicles supplied by manufacturers or the economic operator as provided in paragraph 2 below.

   Those tests and inspections may also take place on registered vehicles in agreement with the vehicle registration holder.

2. Manufacturers holding type-approvals or the economic operators shall, upon request, supply to the Commission a statistically relevant number of production vehicles, systems, components and separate technical units selected by the Commission that are representative for the vehicles, systems, components and separate technical units available for placing on the market under that type-approval. Those vehicles, systems, components and separate technical units shall be supplied for testing at the time and place and for the period the Commission may require.

3. For the purpose of enabling the Commission to carry out the testing referred to in paragraphs 1 and 2, Member States shall make available to the Commission all data related to the type-approval of the vehicle, systems, components and separate technical units subject to compliance verification testing. Those data shall include at least the information included in the type-approval certificate and its attachments referred to Article 26(1).

   For vehicles approved in accordance with the step-by-step or multistage type-approval procedure, Member States shall also provide the Commission with the type-approval certificate and its attachments referred to in Article 26(1) for the underlying type-approvals of systems, components and separate technical units.

4. Vehicle manufacturers shall make public data which are needed for the purpose of compliance verification testing by third parties. The Commission shall adopt implementing acts in order to define the data to be made public and the conditions for such publication, subject to the protection of commercial secrets and the preservation of personal data pursuant to Union and national legislation. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

5. Where the Commission establishes that the vehicles tested or inspected do not comply with the type-approval requirements laid down in this Regulation or any of the regulatory acts listed in Annex IV or that the type approval has been granted on the basis of incorrect data, it shall require in accordance with Article 54(8) without delay the economic operator concerned to take all appropriate corrective measures to bring the vehicles in compliance with those requirements, or it shall take restrictive measures, either by requiring the economic operator to withdraw the vehicles

concerned from the market, or to recall them within a reasonable period of time, depending on the seriousness of the established non-compliance.

Where those tests and inspections put into question the correctness of the type approval itself, the Commission shall inform the approval authority or authorities concerned as well as the Forum for Exchange of Information on Enforcement.

The Commission shall publish a report of its findings following any compliance verification testing it has carried out.

Article 10
Forum for Exchange of Information on Enforcement

1. The Commission shall establish and chair a Forum for Exchange of Information on Enforcement ('the Forum').

   This Forum shall be composed of members appointed by the Member States.

2. The Forum shall coordinate a network of the national authorities responsible for the type-approval and market surveillance.

   Its advisory tasks shall comprise inter alia the promotion of good practices, the exchange of information on enforcement problems, cooperation, development of working methods and tools, development of an electronic information exchange procedure, evaluation of harmonised enforcement projects, penalties and joint inspections.

3. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to lay down the composition, appointment process, detailed tasks, working methods and rules of procedure of the Forum.

Article 11
General obligations of manufacturers

1. The manufacturer shall ensure that the vehicles, systems, components or separate technical units that he has manufactured and that have been placed on the market, or entered into service have been manufactured and approved in accordance with the requirements set out in this Regulation.

2. In the case of multi-stage type-approval, the manufacturer shall also be responsible for the approval and conformity of production of the systems, components or separate technical units that he has added at the stage of vehicle completion. Any manufacturer who modifies components, systems or separate technical units already approved at earlier stages shall be responsible for the approval and conformity of production of the modified components, systems or separate technical units. The manufacturer of the previous stage shall provide information to the manufacturer of the subsequent stage regarding any change that may affect component type-approval, system type-approval or separate technical unit type-approval or the whole-vehicle type-approval. Such information shall be provided as soon as the new extension to the whole-vehicle type-approval has been issued and at the latest on the starting date of production of the incomplete vehicle.

3. The manufacturer who modifies an incomplete vehicle in such a manner that it qualifies as a different category of vehicle, with the consequence that the requirements already assessed in a previous stage of type-approval have changed,

shall also be responsible for compliance with the requirements applicable to the category of vehicles for which the modified vehicle qualifies.

4. For the purposes of EU type-approval, a manufacturer established outside the Union shall appoint a single representative established within the Union to represent the manufacturer before the approval authority. That manufacturer shall also appoint a single representative established within the Union for the purposes of market surveillance, who may be the same representative appointed for the purposes of EU type-approval.

5. The manufacturer shall be responsible to the approval authority for all aspects of the approval procedure and for ensuring conformity of production, whether or not he is directly involved in all stages of the construction of a vehicle, system, component or separate technical unit.

6. The manufacturer shall establish procedures to ensure that series production of vehicles, systems, components and separate technical units remains in conformity with the approved type.

7. In addition to the statutory plate fixed to their vehicles and type-approval marks fixed to their components or separate technical units in accordance with Article 36, the manufacturer shall indicate his name, registered trade name or registered trade mark and his contact address in the Union on his vehicles, components or separate technical units made available on the market or, where that is not possible, on the packaging or in a document accompanying the component or separate technical unit.

Article 12

Obligations of manufacturers concerning their vehicles, systems, components, separate technical units or parts and equipment that are not in conformity or that present a serious risk

1. A manufacturer who considers that a vehicle, system, component, separate technical unit, or part or equipment that has been placed on the market or entered into service is not in conformity with this Regulation or that the type approval has been granted on the basis incorrect data, shall immediately take the appropriate measures necessary to bring that vehicle, system, component, separate technical unit, part or equipment into conformity, to withdraw it from the market or to recall it, as appropriate.

   The manufacturer shall immediately inform the approval authority that has granted the approval in detail of the non-conformity and of any measures taken.

2. Where the vehicle, system, component, separate technical unit, part or equipment presents a serious risk, the manufacturer shall immediately provide detailed information on the non-conformity and on any measures taken to the approval and market surveillance authorities of the Member States in which the vehicle, system, component, separate technical unit, part or equipment has been made available on the market or has entered into service to that effect.

3. The manufacturer shall keep the information package referred to in Article 24(4) for a period of ten years after the placing on the market of a vehicle and for a period of five years after the placing on the market for a system, component or separate technical unit.

   The vehicle manufacturer shall keep at the disposal of the approval authorities a copy of the certificates of conformity referred to in Article 34.

4. The manufacturer shall, upon a reasoned request from a national authority, provide that authority, through the approval authority, with a copy of the EU type-approval certificate or the authorisation referred to in Article 55(1) demonstrating conformity of the vehicle, system, component or separate technical unit, in a language that can be easily understood by the national authority.

The manufacturer shall, following a reasoned request from a national authority, cooperate with that authority on any action taken in accordance with Article 20 of Regulation (EC) No 765/2008 to eliminate the risks posed by the vehicle, system, component, separate technical unit, part or equipment that he has made available on the market.

Article 13

Obligations of manufacturer's representatives concerning market surveillance

1. The manufacturer's representative for market surveillance shall perform the tasks specified in the mandate received from the manufacturer. That mandate shall provide for that representative to do at least the following:

   (a) have access to the information folder referred to in Article 22 and the certificate of conformity referred to in Article 34 in one of the official Union languages. Such documentation shall be made available to the approval authorities for a period of ten years after the placing on the market of a vehicle and for a period of five years after the placing on the market for a system, component or separate technical unit;

   (b) following a reasoned request from an approval authority, provide that authority with all the information and documentation necessary to demonstrate the conformity of production of a vehicle, system, component or separate technical unit;

   (c) cooperate with the approval or market surveillance authorities, at their request, on any action taken to eliminate the serious risk posed by vehicles, systems, components, separate technical units, parts or equipment covered by that mandate;

   (d) immediately inform the manufacturer about complaints and reports relating to risks, suspected incidents, non-compliance issues with vehicles, systems, components, separate technical units, parts or equipment covered by that mandate;

   (e) terminate that mandate if the manufacturer acts contrary to his obligations under this Regulation.

2. A manufacturer's representative who terminates the mandate on the grounds referred to in point (e) of paragraph 1 shall immediately inform the type approval authority that granted the approval and the Commission.

3. The details of a change shall address at least the following aspects:

   (a) the date of termination of the mandate with the outgoing authorised representative and date of beginning of the mandate with the incoming manufacturer's representative;

(b) the date until which the outgoing manufacturer's representative may be indicated in the information supplied by the manufacturer, including any promotional material;

(c) the transfer of documents, including confidentiality aspects and property rights;

(d) the obligation of the outgoing manufacturer's representative after the end of the mandate to forward to the manufacturer or incoming manufacturer's representative any complaints or reports about risks and suspected incidents related to a vehicle, system, component, separate technical unit, part or equipment for which he had been designated as manufacturer's representative.

Article 14
Obligations of importers

1. The importer shall place on the market only vehicles, systems, components or separate technical units that have either received EU type-approval or national type-approval, or parts or equipment that comply with the requirements of Regulation (EC) No 765/2008.

2. Before placing on the market a type-approved vehicle, system, component or separate technical unit, the importer shall verify that an information package referred to in Article 24(4) has been put together by the approval authority, and that the system, component or separate technical unit bears the required type-approval mark and complies with Article 11(7).

   In the case of a vehicle, the importer shall ensure that the vehicle is accompanied by the required certificate of conformity.

3. Where the importer considers that a vehicle, system, component or separate technical unit is not in conformity with the requirements of this Regulation, and in particular that it does not correspond to its type-approval, he shall not place on the market, allow to enter into service or register the vehicle, system, component or separate technical unit, until it has been brought into conformity. Where he considers that the vehicle, system, component, separate technical unit, part or equipment presents a serious risk, he shall inform the manufacturer and the market surveillance authorities thereof. For type-approved vehicles, systems, components and separate technical units, he shall also inform the approval authority that has granted the type-approval.

4. The importer shall indicate his name, registered trade name or registered trade mark and his contact address on the vehicle, system, component, separate technical unit, part or equipment, or, where this is not possible, on its packaging or in a document accompanying the system, component, separate technical unit, part or equipment.

5. The importer shall ensure that the vehicle, system, component or separate technical unit is accompanied by the instructions and information required by Article 63 in the official language or languages of the Member States concerned.

6. The importer shall, to protect the health and safety of consumers, investigate and keep a register of complaints and recalls of vehicles, systems, components, separate technical units, parts or equipment that he has placed on the market and keep his distributors informed of such monitoring.

Article 15

Obligations of importers concerning their vehicles, systems, components or separate technical units that are not in conformity or concerning their vehicles, systems, components, separate technical units, parts or equipment that present a serious risk

1. Where a vehicle, system, component or separate technical unit that has been placed on the market by the importer is not in conformity with this Regulation, the importer shall immediately take the appropriate measures necessary to bring that vehicle, system, component or separate technical unit into conformity, to withdraw it from the market or to recall it, as appropriate.

2. Where a vehicle, system, component, separate technical unit, part or equipment presents a serious risk, the importer shall immediately provide detailed information on the serious risk to the manufacturer and the approval and market surveillance authorities of the Member States in which the vehicle, system, component, separate technical unit, part or equipment has been placed on the market.

   The importer shall also inform the approval and market surveillance authorities of any action taken and give details, in particular of the serious risk and of corrective measures taken by the manufacturer.

3. The importer shall, for a period of ten years after the placing on the market of the vehicle and for a period of five years as from the placing on the market for a system, component or separate technical unit, keep a copy of the certificate of conformity at the disposal of the approval and market surveillance authorities and ensure that the information package referred to in Article 24(4) can be made available to those authorities, upon request.

4. The importer shall, upon a reasoned request from a national authority, provide that authority with all the information and documentation necessary to demonstrate the conformity of a vehicle, system, component or separate technical unit in a language that can be easily understood by that authority. The importer shall, following a reasoned request from a national authority, cooperate with that authority on any action taken in accordance with Article 20 of Regulation (EC) No 765/2008 to eliminate the risks posed by the vehicle, system, component, separate technical unit, part or equipment that he has made available on the market.

Article 16

Obligations of distributors

A distributor shall verify, before making available on the market, registering or entering into service of a vehicle, system, component or separate technical unit, that that vehicle, system, component or separate technical unit bears the required statutory plate or type-approval mark, that it is accompanied by the required documents and by instructions and safety information, required by Article 63, in the official language or languages of the relevant Member State, and that the manufacturer and the importer have complied with the requirements set out in Article 11(7) and Article 14(4) respectively.

Article 17

Obligations of distributors concerning their vehicles, systems, components or separate technical units that are not in conformity or concerning their vehicles, systems, components, separate technical units, parts or equipment that present a serious risk

1. Where the distributor considers that a vehicle, system, component or separate technical unit is not in conformity with the requirements of this Regulation, he shall not make available on the market, register or enter into service the vehicle, system, component or separate technical unit until it has been brought into conformity.

2. The distributor who considers that a vehicle, system, component or separate technical unit that he has made available on the market is not in conformity with this Regulation, shall inform the manufacturer or the importer to ensure that the appropriate measures necessary to bring that vehicle, system, component or separate technical unit into conformity, to withdraw it from the market or to recall it, as appropriate, are taken in accordance with Article 12(1) or Article 15(1).

3. Where the vehicle, system, component, separate technical unit, part or equipment presents a serious risk, the distributor shall immediately provide detailed information on that serious risk to the manufacturer, the importer and the approval and market surveillance authorities of the Member States in which that vehicle, system, component, separate technical unit, part or equipment has been made available on the market. The distributor shall also inform them of any action taken and give details, in particular of the serious risk and of corrective measures taken by the manufacturer.

4. The distributor shall, following a reasoned request from a national authority, cooperate with that authority on any action taken in accordance with Article 20 of Regulation (EC) No 765/2008 to eliminate the risks posed by the vehicle, system, component, separate technical unit, part or equipment that he has made available on the market.

Article 18

Cases in which obligations of manufacturers apply to importers and distributors

An importer or distributor shall be considered a manufacturer for the purposes of this Regulation and shall be subject to the obligations of the manufacturer under Articles 8, 11 and 12, where the importer or distributor makes available on the market, registers or is responsible for the entry into service of a vehicle, system, component or separate technical unit under its name or trademark or modifies a vehicle, system, component or separate technical unit in such a way that it may no longer comply with the applicable requirements.

Article 19

Identification of economic operators

Upon a request of an approval authority or a market surveillance authority, for a period of ten years after the placing on the market of a vehicle and for a period of five years after the placing on the market of a system, component, separate technical unit, part or equipment, economic operators shall provide information on the following:

(a) the identity of any economic operator who has supplied them with a vehicle, system, component, separate technical unit, part or equipment;

(b) the identity of any economic operator to whom they have supplied a vehicle, system, component, separate technical unit, part or equipment.

CHAPTER III
PROCEDURES FOR EU TYPE-APPROVAL

Article 20
Procedures for EU type-approval

1. Where applying for a whole-vehicle type-approval, the manufacturer may choose one of the following procedures:

   (a) step-by-step type-approval;

   (b) single-step type-approval;

   (c) mixed type-approval.

   In addition, the manufacturer may choose multi-stage type-approval for an incomplete or completed vehicle.

2. For system type-approval, component type-approval and separate technical unit type-approval only the single-step type-approval is applicable.

3. Multi-stage type-approval shall be granted in respect of an incomplete or completed type of vehicle that, having regard to the state of completion of the vehicle, conforms to the particulars in the information folder provided for in Article 22 and meets the technical requirements laid down in the relevant regulatory acts listed in Annex IV.

   The multi-stage type-approval shall also apply to complete vehicles converted or modified by another manufacturer after their completion.

4. The EU type-approval for the final stage of completion shall be granted only after the approval authority has verified that the type of vehicle approved at the final stage meets at the time of the approval all applicable technical requirements. Verification shall include a documentary check of all requirements covered by an EU type-approval for an incomplete type of vehicle granted in the course of a multi-stage procedure, even where granted for a different category of vehicle.

5. The choice of type-approval referred to in paragraph 1 shall not affect the applicable substantive requirements with which the approved type of vehicle has to comply with at the time of issuing of the whole-vehicle type-approval.

6. Multi-stage type-approval may also be used by a single manufacturer, provided it is not used to circumvent the requirements applicable to vehicles built in a single stage. Vehicles built by a single manufacturer are not considered to be built in multiple stages for the purposes of Articles 39, 40 and 47 of this Regulation.

Article 21
Application for EU type-approval

1. The manufacturer shall submit to the approval authority an application for EU type-approval and the information folder referred to in Article 22.

2. Only one application may be submitted in respect of a particular type of vehicle, system, component or separate technical unit and in one Member State only.

3. A separate application shall be submitted for each type of vehicle, system, component or separate technical unit to be approved.

Article 22
Information folder

1. The information folder referred to in Article 21(1) shall include the following:

   (a) an information document, as set out in Annex I for single-step or mixed type-approval or in Annex III for step-by-step type-approval;

   (b) all data, drawings, photographs and other relevant information;

   (c) for vehicles, an indication of the procedure(s) chosen in accordance with Article 20(1);

   (d) any additional information requested by the approval authority in the context of the application procedure.

2. The information folder shall be supplied in an electronic format to be provided by the Commission but may also be supplied on paper.

3. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annexes I and III to take account of technical and regulatory developments by updating the template for the information document, including a harmonised electronic format as referred to in paragraph 2.

Article 23
Additional information to be provided with an application for certain EU type-approvals

1. An application for a step-by-step type-approval shall, in addition to the information folder referred to in Article 22, be accompanied by the complete set of EU type-approval certificates, including the test reports, required pursuant to the applicable acts listed in Annex IV.

   In case of an application for a system type-approval, component type-approval or separate technical unit type-approval, pursuant to the applicable acts listed in Annex IV, the approval authority shall have access to the information folder until the whole-vehicle type-approval is either issued or refused.

2. An application for a mixed type-approval shall, in addition to the information folder referred to in Article 22, be accompanied by the EU type-approval certificates, including the test reports, required pursuant to the applicable acts listed in Annex IV.

   For systems for which no EU type-approval certificate has been presented, the application shall, in addition to the information folder referred to in Article 22, be accompanied by the information specified in Annex I, required for the approval of those systems during the vehicle approval phase, and by a test report instead of the EU type-approval certificate.

3. An application for a multi-stage type-approval shall be accompanied by the following information:

   (a) in the first stage, those parts of the information folder and the EU type-approval certificates that are relevant to the state of completion of the base vehicle;

   (b) in the second and subsequent stages, those parts of the information folder and the EU type-approval certificates that are relevant to the current stage of completion, together with a copy of the EU type-approval certificate for the

vehicle issued at the preceding stage of construction and full details of any changes or additions that the manufacturer has made to the vehicle.

The information specified in points (a) and (b) may be supplied in accordance with Article 22(2).

4. The approval authority and technical services shall have access to the software and algorithms of the vehicle.

The approval authority may, by reasoned request, also require the manufacturer to supply any additional information needed to take a decision on which tests are required, or to facilitate the execution of those tests.

CHAPTER IV
CONDUCT OF PROCEDURES FOR EU TYPE-APPROVAL

Article 24
General provisions on conduct of procedures for EU type-approval

1. For each type of vehicle, system, component or separate technical unit, only one EU type-approval may be issued.

2. An approval authority having received an application in accordance with Article 21 shall grant an EU type-approval only after having verified all of the following:

(a) the conformity of production arrangements referred to in Article 29;

(b) that no type-approval has been issued yet for the type of vehicle, system, component or separate technical unit concerned;

(c) the compliance of the type of vehicle, system, component or separate technical unit with the applicable requirements;

(d) in the case of whole-vehicle type-approvals according to the step-by-step, mixed and multi-stage procedures, the approval authority shall verify, in accordance with Article 20(4), that the systems, components and separate technical units are covered by separate type-approvals pursuant to the requirements applicable at the time of granting the whole-vehicle type-approval.

3. The procedures with respect to EU type-approval as set out in Annex V and with respect to multi-stage type-approval as set out in Annex XVII shall apply.

The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex V to take account of regulatory and technological developments by updating the procedures with respect to EU type-approval and Annex XVII with respect to multi-stage type-approval.

4. The approval authority shall put together an information package consisting of the information folder referred to in Article 22, accompanied by the test reports and all other documents that were added to the information folder by the technical service or by the approval authority while carrying out their tasks.

The information package shall contain an index indicating clearly all the pages and the format of each document and recording chronologically the management of the EU type-approval.

The approval authority shall keep the information package available for a period of ten years after the end of validity of the EU type-approval concerned.

5. The approval authority shall refuse to grant EU type-approval where it finds that a type of vehicle, system, component or separate technical unit, albeit in compliance with the applicable requirements, presents a serious risk to safety or may seriously harm the environment or public health. In that case, it shall immediately send to the approval authorities of the other Member States and to the Commission a detailed file explaining the reasons for its decision and setting out the evidence for its findings.

6. In accordance with Article 20(4) and (5), in the case of step-by-step, mixed and multi-stage type-approval procedures, the approval authority shall refuse to grant EU type-approval, where it finds that systems, components or separate technical units do not comply with the requirements set out in this Regulation or in the acts listed in Annex IV.

The approval authority shall ask the approval authorities which approved the systems, components or separate technical units to act in accordance with Article 54(2).

Article 25

Notification of EU type-approvals issued, amended, refused and withdrawn

1. The approval authority shall, within one month of issuing or amending the EU type-approval certificate, send to the approval authorities of the other Member States and the Commission a copy of the EU type-approval certificate, together with the attachments, including the test reports referred to in Article 23, for each type of vehicle, system, component and technical unit that it has approved. That copy shall be sent by means of a common secure electronic exchange system or in the form of a secure electronic file.

2. The approval authority shall send, at three-monthly intervals, to the approval authorities of the other Member States and the Commission a list of the EU type-approvals for systems, components or separate technical units it has issued, amended, refused to grant or withdrawn during the preceding period. That list shall contain the information specified in Annex XIV.

3. Where requested by an approval authority of another Member State or the Commission, the approval authority that has issued an EU type-approval shall, within one month of receiving that request, send to the requesting approval authority a copy of the EU type-approval certificate, together with the attachments, by means of a common secure electronic exchange system or in the form of a secure electronic file.

4. The approval authority shall without delay inform the approval authorities of the other Member States and the Commission of its refusal or withdrawal of any EU type-approval, stating the reasons for its decision.

5. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex XIV by updating the template for the notification of the EU type-approvals for systems, components or separate technical units that have been issued, amended, refused, or withdrawn.

Article 26
EU type-approval certificate

1. The EU type-approval certificate shall contain, as attachments, the following:

   (a) the information package referred to in Article 24(4);

   (b) the test reports required by the regulatory acts referred to in Article 28(1) in the case of a system, component or separate technical unit type-approval, or the test results sheet in the case of whole-vehicle type-approval;

   (c) the name(s) and the specimen(s) of the signature(s) of the person(s) authorised to sign the certificates of conformity and a statement of their position in the company;

   (d) in the case of a whole-vehicle type-approval, a filled-out specimen of the certificate of conformity.

2. The EU type-approval certificate shall be issued in accordance with the template laid down in Annex VI and numbered in accordance with the harmonised system laid down in Annex VII. The test result sheet shall be provided using the template set out in Annex VIII. Those documents shall be available in electronic format.

   The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annexes VI, VII and VIII to take account of technical and regulatory developments by updating the templates for the type-approval certificate, its numbering system, and the test result sheet, respectively, including providing the relevant electronic formats.

3. In respect of each type of vehicle, system, component or separate technical unit, the approval authority shall:

   (a) complete all the relevant sections of the EU type-approval certificate, including its attachments;

   (b) compile the index to the information package;

   (c) issue the completed EU type-approval certificate, together with its attachments, to the manufacturer without delay.

4. In case of an EU type-approval the validity of which has been restricted in accordance with Articles 37 and 41 and Part III of Annex IV, or in relation to which certain provisions of this Regulation or of the regulatory acts referred to in Annex IV do not apply, the EU type-approval certificate shall specify those restrictions or the non-application of the relevant provisions.

5. Where the vehicle manufacturer chooses the mixed type-approval procedure, the approval authority shall complete the information package with the references to the test reports required by the regulatory acts referred to in Article 28(1) for the systems, components or separate technical units for which no EU type-approval certificate has been issued.

6. Where the vehicle manufacturer chooses the single-step type-approval procedure, the approval authority shall append to the EU type-approval certificate a list of relevant regulatory acts in accordance with the template provided in the Appendix to Annex VI.

Article 27

Specific provisions concerning EU type-approvals for systems, components or separate technical units

1. An EU type-approval shall be granted in respect of a system, component or separate technical unit that conforms to the particulars in the information folder provided for in Article 22 and that meets the technical requirements laid down in the relevant acts listed in Annex IV.

2. Where components or separate technical units, whether or not intended for repair, servicing or maintenance, are also covered by a system type-approval with respect to a vehicle, no additional component or separate technical unit type-approval shall be required, unless provided for under the relevant acts listed in Annex IV.

3. Where a component or separate technical unit fulfils its function or offers a specific feature only in conjunction with other parts of the vehicle, thereby making it possible to verify compliance only where the component or separate technical unit is operating in conjunction with those other vehicle parts, the scope of the component or the separate technical unit EU type-approval shall be restricted accordingly.

   In those cases, the EU type-approval certificate shall specify any restriction on the use of the component or the separate technical unit and shall indicate the special conditions for its fitting in a vehicle.

   Where that component or separate technical unit is fitted in a vehicle, the approval authority shall verify, at the time of the approval of the vehicle, compliance with any applicable restrictions on the use or conditions for fitting.

Article 28

Tests required for EU type-approval

1. Compliance with the technical requirements of this Regulation and of the regulatory acts listed in Annex IV shall be demonstrated by means of appropriate tests in accordance with the relevant regulatory acts listed in Annex IV, performed by designated technical services.

2. The manufacturer shall provide the approval authority with the vehicles, systems, components or separate technical units that are required under the relevant acts listed in Annex IV for the performance of the required tests.

3. The required tests shall be performed on those vehicles, systems, components and separate technical units that are representative of the type to be approved.

4. At the request of the manufacturer and subject to the agreement of the approval authority, virtual testing methods may be used as alternatives to the test procedures referred to in paragraph 1 in accordance with Annex XVI.

5. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex XVI to take account of technical and regulatory developments by updating the list of regulatory acts in respect of which virtual testing methods may be used by a manufacturer or a technical service and the specific conditions under which virtual testing methods are to be used.

Article 29

Conformity of production arrangements

1. An approval authority that has granted an EU type-approval shall take the necessary measures in accordance with Annex X to verify, where necessary in cooperation with the approval authorities of the other Member States, that the manufacturer produces the vehicles, systems, components or separate technical units in conformity with the approved type.

2. An approval authority that has granted a whole-vehicle type-approval shall verify a statistically relevant number of samples of vehicles and certificates of conformity on their compliance with Articles 34 and 35 and shall verify that the data in the certificates of conformity are correct.

3. An approval authority that has granted an EU type-approval shall take the necessary measures to verify, where necessary in cooperation with the approval authorities of the other Member States, that the arrangements referred to in paragraphs 1 and 2 continue to be adequate so that vehicles, systems, components or separate technical units in production continue to conform to the approved type and certificates of conformity continue to comply with Articles 34 and 35.

4. In order to verify that a vehicle, system, component or separate technical unit conforms to the approved type, the approval authority that has granted the EU type-approval shall carry out checks or tests required for EU type-approval, on samples taken at the premises of the manufacturer, including production facilities.

5. An approval authority that has granted an EU type-approval and establishes that the manufacturer no longer produces the vehicles, systems, components or separate technical units in conformity with the approved type, or establishes that the certificates of conformity no longer comply with Articles 34 and 35, even though production is continued, shall take the necessary measures to ensure that the procedure for conformity of production is followed correctly or withdraw the type-approval.

6. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex X to take account of technological and regulatory developments by updating the conformity of production procedures.

Article 30

National fee structure for type-approvals and market surveillance costs

1. Member States shall establish a national fee structure to cover the costs for their type-approvals and market surveillance activities as well as for the type-approval testing and conformity of production testing and inspections carried out by the technical services they have designated.

2. Those national fees shall be levied on the manufacturers who have applied for type-approval in the Member State concerned. Fees shall not be levied directly by technical services.

3. The national fee structure shall also cover the costs for the compliance verification inspections and tests carried out by the Commission in accordance with Article 9.

These contributions shall constitute external assigned revenues for the general budget of the European Union, according to Art. 21(4) of the Financial Regulation[26].

4. Member States shall notify the details of their national fee structure to the other Member States and the Commission. The first notification shall be effected on [*date of entry into force of this Regulation + 1 year]*. Subsequent updates of the national fee structures shall be notified to the other Member States and to the Commission on a yearly basis.

5. The Commission may adopt implementing acts in order to define the top-up referred to in paragraph 3 to be applied to the national fees referred to in paragraph 1. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

CHAPTER V
AMENDMENTS TO AND VALIDITY OF EU TYPE-APPROVALS

Article 31
General provisions on amendments and validity of EU type-approvals

1. The manufacturer shall inform without delay the approval authority that has granted the EU type-approval of any change in the particulars recorded in the information package.

   The approval authority shall decide whether that change is to be covered by an amendment, in the form of either a revision or an extension of the EU type-approval in accordance with the procedures laid down in Article 32, or whether this change requires a new type-approval.

2. An application for that amendment shall be submitted exclusively to the approval authority that has granted the original EU type-approval.

3. Where the approval authority finds that that amendment needs the repetition of inspections or tests, it shall inform the manufacturer accordingly.

4. Where the approval authority on the basis of the inspections or tests referred to in paragraph 3 finds that the requirements for EU type-approval continue to be fulfilled, the procedures referred to in Article 32 shall apply.

5. Where the approval authority finds that the changes in the particulars recorded in the information package are substantial, to the extent that they cannot be covered by an extension of the existing type-approval, it shall refuse to amend the EU type-approval and shall request the manufacturer to apply for a new EU type-approval.

Article 32
Revisions and extensions of EU type-approvals

1. The amendment shall be designated a ‘revision’ where the approval authority finds that despite the change in the particulars recorded in the information package the concerned type of vehicle, system, component or separate technical unit continues to

[26] Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2015 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1–96).

comply with the applicable requirements for this type and that, therefore, no inspections or tests need to be repeated.

In that case, the approval authority shall issue without delay the revised pages of the information package as necessary, marking each revised page to show clearly the nature of the change and the date of reissue, or issue a consolidated, updated version of the information package, accompanied by a detailed description of the changes.

2. The amendment shall be designated an 'extension' where the approval authority finds that the particulars recorded in the information package have changed and where any of the following occurs:

(a) further inspections or tests are required to verify continued compliance with the requirements upon which the existing type-approval has been based;

(b) any information on the EU type-approval certificate, except for its attachments, has changed;

(c) new requirements under any act listed in Annex IV become applicable to the approved type of vehicle, system, component or separate technical unit.

In the event of an extension, the approval authority shall issue without delay an updated EU type-approval certificate denoted by an extension number, incremented in accordance with the number of successive extensions already granted. That approval certificate shall clearly state the reason for the extension and the date of reissue and validity.

3. Whenever amended pages or a consolidated, updated version are issued, the index to the information package shall be amended accordingly to show the date of the most recent extension or revision, or the date of the most recent consolidation of the updated version.

4. No extension to the type-approval of a type of vehicle shall be required if the new requirements referred to in point (c) of paragraph 2 are, from a technical point of view, irrelevant to that type of vehicle or concern categories of vehicle other than the category to which it belongs.

Article 33
Termination of validity

1. Type-approvals for vehicles, systems, components and separate technical units shall be issued for a limited period of 5 years without the possibility of prolongation. The expiry date shall be indicated in the type-approval certificate. After the expiry of the type-approval certificate, it may be renewed upon application by the manufacturer and only where the approval authority has verified that the type of vehicle, system, component and separate technical unit complies with all the requirements of the relevant regulatory acts for new vehicles, systems, components and separate technical units of that type.

2. An EU type-approval of a vehicle shall become invalid before its expiry date in any of the following cases:

(a) where new requirements applicable to the approved type of vehicle become mandatory for the making available on the market, registration or entry into service of vehicles, and the type-approval cannot be extended in accordance with point (c) of Article 32(2);

(b) where the production of vehicles in conformity with the approved type of vehicle is permanently discontinued on a voluntary basis;

(c) where the validity of the type-approval certificate expires due to a restriction referred to in Article 37(6);

(d) where the type-approval has been withdrawn in accordance with Article 29(5) or Article 53(1);

(e) where the type-approval was found to be based on false declarations, falsified test results or where data were withheld which would have led to the refusal to grant the type approval.

3. Where the type-approval of only one variant within a type of vehicle or one version within a variant becomes invalid, the EU type-approval of the type of vehicle in question shall become invalid only in so far as the particular variant or version is concerned.

4. Where production of a particular type of vehicle, system, component or separate technical unit is permanently discontinued, the manufacturer shall notify without delay the approval authority that granted the EU type-approval for that type of vehicle, system, component or separate technical unit thereof.

Within one month of receiving the notification referred to in the first subparagraph, the approval authority that granted the EU type-approval for the type of vehicle, system, component or separate technical unit shall inform the approval authorities of the other Member States accordingly.

5. Where an EU type-approval certificate for a type of vehicle, system, component or separate technical unit is due to become invalid, the manufacturer shall notify without delay the approval authority that granted the EU type-approval thereof.

6. Upon reception of the notification made by the manufacturer, the approval authority that granted the EU type-approval shall communicate without delay to the approval authorities of the other Member States and the Commission all relevant information for the making available on the market, registering or entering into service of vehicles, where appropriate.

That communication shall specify the date of production and the vehicle identification number ('VIN'), as defined in Article 2 of Commission Regulation (EU) 19/2011[27], of the last vehicle produced.

[27] Commission Regulation (EU) 19/2011 concerning type-approval requirements for the manufacturer's statutory plate and for the vehicle identification number of motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 8, 12.1.2011, p. 1).

CHAPTER VI
CERTIFICATE OF CONFORMITY AND MARKINGS

Article 34
General provisions on the certificate of conformity

1. The manufacturer shall issue a certificate of conformity as a paper document to accompany each vehicle, whether complete, incomplete or completed, that is manufactured in conformity with the approved type of vehicle.

   The certificate of conformity shall be delivered free of charge to the buyer together with the vehicle. Its delivery may not be made dependent on an explicit request or the submission of additional information to the manufacturer.

   For a period of ten years after the production date of the vehicle, the manufacturer shall, at the request of the vehicle owner, issue a duplicate of the certificate of conformity against a payment not exceeding the cost of issuing it. The word 'duplicate' shall be clearly visible on the face of any duplicate certificate.

2. The manufacturer shall use the template for the certificate of conformity set out in Annex IX.

   The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex IX to take account of technological and regulatory developments by updating the template for the certificate of conformity.

3. The certificate of conformity shall be drawn up in at least one of the official languages of the Union.

4. The person(s) authorised to sign certificates of conformity shall be employed by the manufacturer and shall be duly authorised to fully engage the legal responsibility of the manufacturer with respect to the design and the construction of the vehicle or to the conformity of its production.

5. The certificate of conformity shall be completed in its entirety and shall not contain restrictions as regards the use of the vehicle other than those provided for in this Regulation or any of the regulatory acts listed in Annex IV.

6. Without prejudice to paragraph 1, the manufacturer may also transmit the certificate of conformity by electronic means to the national authorities responsible for registration.

Article 35
Specific provisions on the certificate of conformity

1. In case of an incomplete or completed vehicle, the manufacturer shall fill in only those fields of the certificate of conformity that concern the additions or changes carried out at the current stage of approval and, where applicable, shall attach all certificates of conformity delivered at the previous stages.

2. The certificate of conformity shall, for vehicles type-approved in accordance with Article 37, display in its title: 'For complete/completed vehicles, type-approved in application of Article 37 of Regulation (EU) No …/201X of the European Parliament and of the Council of ... on the approval and market surveillance of motor vehicles (provisional approval)' [*PO: please insert the reference*].

3. The certificate of conformity shall, for vehicles type-approved in accordance with Article 39, display in its title 'For complete/completed vehicles type-approved in small series', and in close proximity thereto the year of production followed by a sequential number, between 1 and the limit indicated in the table in Annex XII, denoting, in respect of each year of production, the position of that vehicle within the production allocated for that year.

Article 36
Statutory plate
and type-approval mark of components or separate technical units

1. The manufacturer of a vehicle shall affix to every vehicle manufactured in conformity with the approved type a statutory plate with the marking required by the relevant regulatory acts listed in Annex IV.

2. The manufacturer of a component or separate technical unit shall affix to every component or separate technical unit manufactured in conformity with the approved type, whether or not it is part of a system, the type-approval mark required by the relevant regulatory acts listed in Annex IV.

   Where no such type-approval mark is required, the manufacturer shall affix to the component or separate technical unit at least the trade name or trade mark of the manufacturer, and the type number or an identification number.

3. The EU type-approval mark shall be in accordance with Annex VII.

CHAPTER VII
NEW TECHNOLOGIES OR NEW CONCEPTS

Article 37
Exemptions for new technologies or new concepts

1. The manufacturer may apply for an EU type-approval in respect of a type of vehicle, system, component or separate technical unit that incorporates new technologies or new concepts that are incompatible with one or more regulatory acts listed in Annex IV.

2. The approval authority shall grant the EU type-approval referred to in paragraph 1 where all of the following conditions are met:

   (a) the application for the EU type-approval states the reasons why the new technologies or new concepts make the vehicle, system, component or separate technical unit incompatible with one or more regulatory acts listed in Annex IV;

   (b) the application for the EU type-approval describes the safety and environmental implications of the new technology or new concept and the measures taken in order to ensure at least an equivalent level of safety and environmental protection as that provided by the requirements from which exemption is sought;

   (c) test descriptions and results are presented proving that the condition in point (b) is met.

3. The granting of EU type-approvals exempting new technologies or new concepts shall be subject to authorisation by the Commission. That authorisation shall be given by means of an implementing act. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 87(2).

4. Pending the decision on authorisation by the Commission, the approval authority may issue a provisional EU type-approval, valid only in the territory of the Member State of that approval authority, in respect of a type of vehicle covered by the exemption sought. The approval authority shall inform without delay the Commission and the other Member States thereof by means of a file containing the information referred to in paragraph 2.

   The provisional nature and the limited territorial validity of the EU type-approval shall be apparent from the heading of the type-approval certificate and the heading of the certificate of conformity.

5. Approval authorities of other Member States may decide to accept the provisional EU type-approval referred to in paragraph 4 within their territory, provided they inform in writing the approval authority that granted the provisional EU type-approval of their acceptance.

6. Where appropriate, the authorisation of the Commission referred to in paragraph 3 shall specify whether it is subject to any restrictions, in particular with regard to the maximum number of vehicles covered. In all cases, the EU type-approval shall be valid for at least 36 months.

7. Where the Commission refuses authorisation referred to in paragraph 3, the approval authority shall immediately inform the holder of the provisional type-approval referred to in paragraph 4 that the provisional EU type-approval approval shall be revoked six months after the date of the Commission's refusal.

   However, vehicles that have been manufactured in conformity with the provisional EU type-approval before it ceased to be valid may be placed on the market, registered or entered into service in any Member State that has accepted the provisional EU type-approval in accordance with paragraph 5.

Article 38
Subsequent adaptation of regulatory acts

1. Where the Commission has authorised the granting of an EU type-approval in accordance with Article 37, it shall immediately take the necessary steps to adapt the regulatory acts concerned to the latest technological developments.

   Where the exemption under Article 37 relates to a UNECE regulation, the Commission shall make proposals to amend the relevant UNECE regulation in accordance with the provisions of Annex III of Council Decision 97/836/EC.

2. Once the relevant regulatory acts have been amended, any restriction in the Commission decision authorising the granting of an EU type-approval shall be lifted.

3. Where the necessary steps to adapt the regulatory acts referred to in paragraph 1 have not been taken, the Commission may authorise the extension of the provisional EU type-approval by means of a decision and at the request of the Member State that granted the provisional EU type-approval. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

CHAPTER VIII
VEHICLES PRODUCED IN SMALL SERIES

Article 39

EU type-approval of vehicles produced in small series

1. At the request of the manufacturer and within the quantitative annual limits set out in Section 1 of Annex XII, Member States shall grant an EU type-approval for a type of vehicle produced in small series that satisfies at least the requirements set out in Appendix 1 to Part I of Annex IV.

2. Paragraph 1 shall not apply to special purpose vehicles.

3. EU type-approval certificates for vehicles produced in small series shall be numbered in accordance with Annex VII.

Article 40

National type-approval of vehicles produced in small series

1. The manufacturer may apply for a national type-approval of vehicles produced in small series within the quantitative annual limits set out in Section 2 of Annex XII. Those limits shall apply to the making available on the market, registration or entry into service of vehicles of the approved type on the market of each Member State in a given year.

2. Member States may decide to exempt any type of vehicle referred to in paragraph 1 from one or more of the substantive requirements laid down in the regulatory acts listed in Annex IV, provided that those Member States lay down relevant alternative requirements.

3. For the national type-approval of vehicles produced in small series, the approval authority shall accept systems, components or separate technical units that are type-approved in accordance with the acts listed in Annex IV.

4. The national type-approval certificate of vehicles produced in small series shall be drafted in accordance with the template set out in Annex VI, but shall bear the heading ‘National small series vehicle type-approval certificate’ and shall specify the content and the nature of the exemptions granted pursuant to paragraph 2. Type-approval certificates shall be numbered in accordance with the harmonised system referred to in Annex VII.

Article 41

Validity of a national type-approval of vehicles produced in small series

1. The validity of a national type-approval of vehicles produced in small series shall be restricted to the territory of the Member State of the approval authority that has granted that type-approval.

2. At the request of the manufacturer, the approval authority shall send to the approval authorities of the Member States designated by the manufacturer a copy of the type-approval certificate and its attachments, either by registered or electronic mail.

3. The approval authorities of the Member States designated by the manufacturer shall, within three months of receipt of the documents referred to in paragraph 2, decide whether they accept the type-approval or not.

The approval authorities of the Member States shall accept the national type-approval, unless they have reasonable grounds to believe that the national technical requirements in accordance with which the type of vehicle has been approved are not equivalent to their own.

4. The approval authorities of Member States shall communicate within two months their decision to the approval authority that has granted the national type-approval.

5. At the request of an applicant who wishes to place on the market, register or enter in to service in another Member State a vehicle with national type-approval of vehicles produced in small series, the approval authority that granted the national type-approval of vehicles produced in small series shall provide the national authority of the other Member State with a copy of the type-approval certificate, including the information package.

The national authority of the other Member State shall permit the placing on the market, registration or entry into service of such vehicle, unless it has reasonable grounds to believe that the national technical requirements in accordance with which the type of vehicle has been approved are not equivalent to its own.

CHAPTER IX
INDIVIDUAL VEHICLE APPROVALS

Article 42
EU individual vehicle approvals

1. Member States shall grant an EU individual vehicle approval for a vehicle that complies with the requirements set out in Appendix 2 to Part I of Annex IV or, for special purpose vehicles, in Part III of Annex IV.

2. An application for an EU individual vehicle approval shall be submitted by the manufacturer, or by the owner of the vehicle, or by the representative of the latter, provided that that representative is established within the Union.

3. Member States shall not carry out destructive tests to establish whether the vehicle complies with the requirements set out in paragraph 1 and shall use any relevant information provided by the applicant for that purpose.

4. An EU individual vehicle approval certificate shall comply with the template set out in Annex VI. EU individual vehicle approval certificates shall be numbered in accordance with Annex VII.

5. Member States shall permit the placing on the market, registration or entry into service of vehicles with a valid EU individual vehicle approval certificate.

Article 43
National individual vehicle approvals

1. Member States may decide to exempt a particular vehicle, whether unique or not, from compliance with one or more of the provisions of this Regulation or with the substantive requirements laid down in the regulatory acts listed in Annex IV, provided that those Member States impose relevant alternative requirements.

2. An application for national individual vehicle approval shall be submitted by the manufacturer, or by the owner of the vehicle, or by the representative of the latter, provided that that representative is established within Union.

3. Member States shall not carry out destructive tests to establish whether the vehicle complies with the alternative requirements set out in paragraph 1 and shall use any relevant information provided by the applicant for that purpose.

4. For the purpose of a national individual vehicle approval, the approval authority shall accept systems, components or separate technical units that are type-approved in accordance with the acts listed in Annex IV.

5. A Member State shall issue without delay a national individual vehicle approval certificate where the vehicle conforms to the description appended to the application and satisfies the relevant alternative requirements.

6. The format of the national individual vehicle approval certificate shall follow the template of the EU type-approval certificate set out in Annex VI and shall contain at least the information necessary to apply for the registration provided for in Council Directive 1999/37/EC[28].

A national individual vehicle approval certificate shall bear the VIN of the vehicle concerned and shall bear the heading 'National individual vehicle approval certificate'.

Article 44
Validity of national individual vehicle approvals

1. The validity of a national individual vehicle approval shall be restricted to the territory of the Member State that granted the approval.

2. At the request of an applicant who wishes to make available on the market, register or enter into service in another Member State a vehicle with a national individual vehicle approval, the Member State that granted the approval shall provide the applicant with a statement of the technical provisions against which the vehicle has been approved.

3. A Member State shall permit a vehicle for which another Member State has granted a national individual vehicle approval in accordance with Article 43 to be made available on the market, registered or entered into service, unless that Member State has reasonable grounds to believe that the relevant alternative requirements against which the vehicle has been approved are not equivalent to its own.

4. The provisions of this Article may apply to vehicles that have been type-approved in accordance with this Regulation and that have been modified before their first registration or entry into service.

Article 45
Specific provisions

1. The procedures set out in Articles 43 and 44 may apply to a particular vehicle during the successive stages of its completion in accordance with a multi-stage type-approval.

[28] Council Directive 1999/37/EC of 29 April 1999 on the registration documents for vehicles (OJ L 138, 1.6.1999, p. 57).

2. The procedures set out in Articles 43 and 44 may not replace an intermediate stage within the normal sequence of a multi-stage type- approval and may not apply for the purposes of obtaining the first-stage approval of a vehicle.

CHAPTER X
MAKING AVAILABLE ON THE MARKET, REGISTRATION OR ENTRY INTO SERVICE

Article 46

Making available on the market, registration or entry into service of vehicles other than end-of-series vehicles

1. Without prejudice to Articles 49 to 51, vehicles for which whole-vehicle type-approval is mandatory, or for which the manufacturer has obtained that type-approval, shall only be made available on the market, registered or enter into service if they are accompanied by a valid certificate of conformity issued in accordance with Articles 34 and 35.

   Incomplete vehicles may be made available on the market or entered into service, but the national authorities responsible for vehicle registration may refuse the registration and the use on the road of such vehicles.

2. Vehicles exempted from the requirement concerning a certificate of conformity may also be made available on the market, registered or entered into service if they comply with the relevant technical requirements of this Regulation.

3. The number of vehicles produced in small series made available on the market, registered or entered into service in the course of a single year shall not exceed the quantitative annual limits laid down in Annex XII.

Article 47

Making available on the market, registration or entry into service of end-of-series vehicles

1. End-of-series vehicles for which the EU type-approval has become invalid pursuant to Article 33(2)(a) may only be made available on the market, registered or entered into service, provided that the requirement set out in paragraph 4 and the time limits laid down in paragraphs 2 and 4 are complied with.

   The first subparagraph shall only apply to vehicles that were already on the territory of the Union and had not yet been made available on the market nor registered or entered into service before their EU type-approval lost its validity.

2. Paragraph 1 shall apply to complete vehicles for a period of 12 months from the date on which the EU type-approval became invalid, and to completed vehicles for a period of 18 months from that date.

3. A manufacturer wishing to make available on the market, register or enter into service end-of-series vehicles in accordance with paragraph 1 shall submit a request for that purpose to the national authority of the Member State that granted the EU type-approval. That request shall specify any technical or economic reasons preventing those vehicles from complying with the new type-approval requirements and shall include the VIN of the vehicles concerned.

The national authority concerned shall decide, within three months of receipt of that request, whether to permit the placing on the market, registration and entry into service of those vehicles within the territory of the Member State concerned and determine the number of vehicles in respect of which permission may be granted.

4. Only end-of-series vehicles with a valid certificate of conformity that has remained valid for at least three months after its date of issue, but for which the type-approval has become invalid pursuant to point (a) of Article 33(2), may be made available on the market, registered or entered into service in the Union.

5. The certificate of conformity of the vehicles made available on the market, registered or entered into service in accordance with this Article shall include a special entry indicating that those vehicles are end-of-series vehicles, as well as the date until which those vehicles may be made available on the market, registered or entered into service in the Union.

6. Member States shall keep records of the VIN of the vehicles that they permitted to be made available on the market, registered or entered into service in accordance with this Article.

Article 48
Making available on the market or entry into service of components and separate technical units

1. Components or separate technical units, including those intended for the aftermarket, may only be made available on the market or entered into service where they comply with the requirements of the relevant regulatory acts listed in Annex IV and are marked in accordance with Article 36.

2. Paragraph 1 shall not apply to components or separate technical units specifically constructed or designed for new vehicles that are not covered by this Regulation.

3. Member States may permit the making available on the market or entry into service of components or separate technical units that are exempted under Article 37 or to be used on vehicles covered by approvals granted under Article 39, 40, 42 and 43 concerning the component or separate technical unit in question.

4. Member States may also permit the making available on the market or entry into service of components or separate technical units to be used on vehicles that were not required to be type-approved under this Regulation or under Directive 2007/46/EC at the time those vehicles were made available on the market, registered or entered into service.

CHAPTER XI
SAFEGUARD CLAUSES

Article 49
Procedure for dealing with vehicles, systems, components or separate technical units presenting a serious risk at national level

1. Market surveillance authorities of one Member State that have taken action pursuant to Article 20 of Regulation (EC) No 765/2008 and Article 8 of this Regulation, or that have sufficient reason to believe that a vehicle, system, component or separate technical unit covered by this Regulation presents a serious risk to the health or

safety of persons or to other aspects of the protection of public interests covered by this Regulation, shall inform without delay the approval authority that granted the approval about its findings.

2. The approval authority referred to in paragraph 1 shall carry out an evaluation in relation to the vehicle, system, component or separate technical unit concerned covering all the requirements laid down in this Regulation. The relevant economic operators shall cooperate fully with the approval and market surveillance authorities.

Where, in the course of that evaluation, the approval authority that granted the approval finds that the vehicle, system, component or separate technical unit does not comply with the requirements laid down in this Regulation, it shall require without delay the relevant economic operator to take all appropriate corrective measures to bring the vehicle, system, component or separate technical unit into compliance with those requirements, or take restrictive measures, either to withdraw the vehicle, system, component or separate technical unit from the market, or to recall it within a reasonable period, depending on the nature of the risk.

Article 21 of Regulation (EC) No 765/2008 shall apply to the restrictive measures referred to in the second subparagraph.

3. The relevant approval authority shall inform the Commission and the other Member States of the results of the evaluation referred to in paragraph 1 and the action required of the economic operator.

4. The economic operator shall, in accordance with the obligations referred to in Articles 11 to 19, ensure that all appropriate corrective measures are taken in respect of all non-compliant vehicles, systems, components or separate technical units that it has placed on the market, registered or has entered into service in the Union.

5. Where the economic operator does not take adequate corrective measures within the period referred to in the second subparagraph of paragraph 2, the national authorities shall take all appropriate provisional restrictive measures to prohibit or restrict the making available on the market, registration or entry into service of non-compliant vehicles, systems, components or separate technical units on their national market, or to withdraw them from that market or to recall them.

Article 50
Notification and objection procedures
related to restrictive measures taken at national level

1. The national authorities shall inform the Commission and the other Member States without delay of the restrictive measures taken in accordance with Article 49(1) and (5).

The information provided shall include all available details, in particular the data necessary for the identification of the non-compliant vehicle, system, component or separate technical unit, its origin, the nature of the non-conformity alleged and the risk involved, the nature and duration of the national restrictive measures taken, and the arguments put forward by the relevant economic operator.

2. The approval authority referred to in Article 49(1) shall indicate whether the non-conformity is due to either of the following:

(a) failure of the vehicle, system, component or separate technical unit to meet requirements relating to the health or safety of persons, the protection of the

environment or to other aspects of the protection of public interests covered by this Regulation;

(b) shortcomings in the relevant regulatory acts listed in Annex IV.

3. Member States other than the Member State initiating the procedure shall inform within one month of the receipt of the information referred to in paragraph 1 the Commission and the other Member States of any restrictive measures adopted and of any additional information at their disposal relating to the non-conformity of the vehicle, system, component or separate technical unit concerned, and, in the event of disagreement with the notified national measure, of their objections.

4. Where, within one month of the receipt of the information referred to in paragraph 1, an objection has been raised by either another Member State or the Commission in respect of a restrictive measure taken by a Member State, that measure shall be evaluated by the Commission in accordance with Article 51.

5. Where, within one month of the receipt of the information referred to in paragraph 1, no objection has been raised by either another Member State or the Commission in respect of a restrictive measure taken by a Member State, that measure shall be deemed justified. The other Member States shall ensure that similar restrictive measures are taken in respect of the vehicle, system, component or separate technical unit concerned.

Article 51
Union safeguard procedure

1. Where, during the procedure set out in Article 50(3) and (4), objections have been raised against a restrictive measure taken by a Member State, or where the Commission has considered that a national measure is contrary to Union legislation, the Commission shall evaluate without delay the national measure after having consulted the Member States and the relevant economic operator or operators. On the basis of the results of that evaluation, the Commission shall adopt a decision on whether the national measure is considered justified or not. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

   The Commission shall address its decision to all Member States and shall immediately communicate it to the relevant economic operators. The Member States shall implement the Commission decision without delay and inform the Commission accordingly.

2. Where the Commission considers the national measure to be justified, all Member States shall take the necessary measures to ensure that the non-compliant vehicle, system, component or separate technical unit is withdrawn from their market, and shall inform the Commission accordingly. Where the Commission considers the national measure to be unjustified, the Member State concerned shall withdraw or adapt the measure, in accordance with the Commission decision referred to in paragraph 1.

3. Where the national measure is considered justified and is attributed to shortcomings in regulatory acts referred to in Annex IV, the Commission shall propose appropriate measures as follows:

(a) where regulatory acts are concerned, the Commission shall propose the necessary amendments to the act concerned;

(b) where UNECE regulations are concerned, the Commission shall propose the necessary draft amendments to the relevant UNECE regulations in accordance with the provisions of Annex III of Council Decision 97/836/EC.

Article 52

Compliant vehicles, systems, components or separate technical units that present a serious risk to safety or serious harm to health and the environment

1. Where, having performed an evaluation under Article 49(1), a Member State finds that vehicles, systems, components or separate technical units, although they comply with the applicable requirements or are properly marked, present a serious risk to safety or may seriously harm the environment or public health, it shall require the relevant economic operator to take all appropriate corrective measures to ensure that the vehicle, system, component or separate technical unit concerned, when placed on the market, registered or entered into service, no longer presents that risk, or it shall take restrictive measures to withdraw the vehicle, system, component or separate technical unit from the market or to recall it within a reasonable period, depending on the nature of the risk.

   The Member State may refuse to register such vehicles until the economic operator has taken all appropriate corrective measures.

2. The economic operator shall ensure that appropriate corrective measures are taken in respect of all vehicles, systems, components or separate technical units referred to in paragraph 1.

3. The Member State shall within one month of the request referred to in paragraph 1 provide the Commission and the other Member States with all available information, in particular the data necessary for the identification of the vehicle, system, component or separate technical unit concerned, the origin and the supply chain of the vehicle, system, component or separate technical unit, the nature of the risk involved and the nature and duration of the national restrictive measures taken.

4. The Commission shall consult without delay the Member States and the relevant economic operator or operators and, in particular, the approval authority that granted the type-approval, and shall evaluate the national measure taken. On the basis of that evaluation, the Commission shall decide whether the national measure referred to in paragraph 1 is considered justified or not, and where necessary, propose appropriate measures. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

5. The Commission shall address its decision to all Member States and shall immediately communicate it to the relevant economic operator or operators.

Article 53

General provisions related to non-compliant vehicles, systems, components or separate technical units

1. Where vehicles, systems, components or separate technical units accompanied by a certificate of conformity or bearing an approval mark do not conform to the approved type, or are not in conformity with this regulation or were approved on the basis of

incorrect data, the approval authorities, market surveillance authorities or the Commission may take the necessary restrictive measures in accordance with Article 21 of Regulation (EC) No 765/2008, to prohibit or restrict the making available on the market, registration or entry into service on the market of non-compliant vehicles, systems, components or separate technical units, or to withdraw them from that market or to recall them, including the withdrawal of the type-approval by the approval authority that granted the EU type-approval, until the relevant economic operator has taken all appropriate corrective measures to ensure that vehicles, systems, components or separate technical units are brought into conformity.

2. For the purposes of paragraph 1, deviations from the particulars in the EU type-approval certificate or the information package shall be deemed to constitute a failure to conform to the approved type.

Article 54

Notification and objection procedures related to non-compliant vehicles, systems, components or separate technical units

1. Where an approval authority or market surveillance authority finds that vehicles, systems, components or separate technical units are not in conformity with this Regulation or that the type-approval has been granted on the basis of incorrect data or that vehicles, systems, components or separate technical units accompanied by a certificate of conformity or bearing an approval mark do not conform to the approved type, it may take all appropriate restrictive measures in accordance with Article 53(1).

2. The approval authority or market surveillance authority or the Commission shall also request the approval authority that granted the EU type-approval to verify that vehicles, systems, components or separate technical units in production continue to conform to the approved type or, where applicable, that vehicles, systems, components or separate technical units already placed on the market are brought back into conformity.

3. In the case of a whole-vehicle type-approval, where the non-conformity of a vehicle is due to a system, component or separate technical unit, the request referred to in paragraph 2 shall also be addressed to the approval authority that granted the EU type-approval for that system, component or separate technical unit.

4. In the case of a multi-stage type-approval, where the non-conformity of a completed vehicle is due to a system, component or separate technical unit that forms part of the incomplete vehicle or to the incomplete vehicle itself, the request referred to in paragraph 2 shall also be addressed to the approval authority that granted the EU type-approval for that system, component, separate technical unit or incomplete vehicle.

5. On receipt of the request referred to in paragraphs 1 to 4 the approval authority that granted the EU type-approval shall carry out an evaluation in relation to the vehicles, systems, components or separate technical units concerned covering all the requirements laid down in this Regulation. The approval authority shall also verify the data on the basis of which the approval was granted. The relevant economic operators shall fully cooperate with the approval authority.

6. Where non-conformity is established by the approval authority that granted the EU type-approval for a vehicle, system, component or separate technical unit, that approval authority shall require without delay the relevant economic operator to take all appropriate corrective measures to bring the vehicle, system, component or separate technical unit into compliance and where necessary the approval authority that granted the EU type-approval shall take the measures referred to in Article 53(1) as soon as possible and at the latest within one month of the date of the request.

7. The national authorities taking restrictive measures in accordance with Article 53(1) shall immediately inform the Commission and the other Member States.

8. Where, within one month after the notification of the restrictive measures taken by an approval authority or a market surveillance authority in accordance with Article 53(1), an objection has been raised by another Member State in respect of the notified restrictive measure or where the Commission establishes a non-compliance in accordance with Article 9(5), the Commission shall consult without delay the Member States and the relevant economic operator or operators and, in particular, the approval authority that granted the type-approval, and shall evaluate the national measure taken. On the basis of that evaluation, the Commission may decide to take the necessary restrictive measures foreseen in Article 53(1) by means of implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

   The Commission shall address its decision to all Member States and shall immediately communicate it to the relevant economic operators. The Member States shall implement the Commission decision without delay and inform the Commission accordingly.

9. Where, within one month after the notification of the restrictive measures taken in accordance with Article 53(1), no objection has been raised by either another Member State or by the Commission in respect of a restrictive measure taken by a Member State, that measure shall be deemed justified. The other Member States shall ensure that similar restrictive measures are taken in respect of the vehicle, system, component or separate technical unit concerned.

Article 55

Placing on the market and entry into service of parts or equipment that may pose a serious risk to the correct functioning of essential systems

1. Parts or equipment that may pose a serious risk to the correct functioning of systems that are essential for the safety of the vehicle or for its environmental performance shall not be placed on the market or entered into service and shall be prohibited, unless they have been authorised by an approval authority in accordance with Article 56(1) and (4).

2. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to lay down the requirements that the parts and equipment referred to in paragraph 1 have to comply with.

   Those requirements may be based on the regulatory acts listed in Annex IV or may consist of a comparison of the parts or equipment with the environmental or safety performance of the original parts or equipment, as appropriate. In either case, the requirements shall ensure that the parts or equipment do not impair the functioning of

those systems that are essential for the safety of the vehicle or its environmental performance.

3. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex XIII to take account of technical and regulatory developments by updating the list of parts or equipment on the basis of information regarding:

   (a) the seriousness of the risk to the safety or environmental performance of vehicles fitted with the parts or equipment in question;

   (b) the potential effect on consumers and aftermarket manufacturers of a possible authorisation for the parts or equipment under Article 56(1).

4. Paragraph 1 shall not apply to original parts or equipment and to parts or equipment belonging to a system that has been type-approved in accordance with the regulatory acts listed in Annex IV, except where the type-approval relates to aspects other than the serious risk referred to in paragraph 1.

   For the purposes of this paragraph, original parts or equipment means parts or equipment that are manufactured according to the specifications and production standards provided by the vehicle manufacturer for the assembly of the vehicle in question.

5. Paragraph 1 shall not apply to parts or equipment that are exclusively produced for racing vehicles. Parts or equipment listed in Annex XIII that are used both in racing and on the road shall not be made available for vehicles intended for use on public roads, unless they comply with the requirements laid down in the delegated acts referred to in paragraph 2 and have been authorised by the Commission by means of implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

Article 56
Related requirements for parts or equipment that may pose a serious risk to the correct functioning of essential systems

1. A manufacturer of parts or equipment may apply for the authorisation referred to in Article 55(1) by submitting to the approval authority an application accompanied by a test report that is drafted by a designated technical service and that certifies that the parts or equipment for which authorisation is sought comply with the requirements referred to in Article 55(2). The manufacturer may submit only one application for each type of part or equipment and to one approval authority only.

2. The application for the authorisation shall include details of the manufacturer of parts or equipment, the type, the identification and part numbers of the parts or equipment, the vehicle manufacturer’s name, the type of vehicle and, where appropriate, the year of construction or any other information permitting the identification of the vehicle to which the parts or equipment are to be fitted.

   The approval authority shall authorise the placement on the market and the entering into service of the parts or equipment where it finds, taking into account the test report referred to in paragraph 1 and other evidence, that the parts or equipment in question comply with the requirements referred to in Article 55(2).

The approval authority shall issue to the manufacturer without delay an authorisation certificate in accordance with the template set out in Appendix 1 of Annex XI, numbered in accordance with point 2 of Annex XI.

The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex XI to take account of technical and regulatory developments by updating the template and the numbering system for the authorisation certificate.

3. The manufacturer shall inform without delay the approval authority that gave the authorisation of any change affecting the conditions under which the authorisation has been issued. That approval authority shall decide whether the authorisation has to be reviewed or reissued and whether further tests are necessary.

The manufacturer shall ensure that the parts or equipment are produced and continue to be produced under the conditions under which the authorisation has been issued.

4. Before issuing any authorisation, the approval authority shall verify the existence of arrangements and procedures for ensuring effective control of the conformity of production.

Where the approval authority finds that the conditions for issuing the authorisation are no longer fulfilled, it shall request the manufacturer to take the necessary measures to ensure that the parts or equipment are brought into conformity. Where necessary, it shall withdraw the authorisation.

5. Upon request of a national authority of another Member State, the approval authority that has issued the authorisation shall, within one month of the receipt of that request, send to the former a copy of the issued authorisation certificate together with its attachments by means of a common secure electronic exchange system. The copy may also take the form of a secure electronic file.

6. An approval authority that disagrees with the authorisation issued by another Member State shall bring the reasons for its disagreement to the attention of the Commission. The Commission shall take the appropriate measures in order to resolve the disagreement, which may include, where necessary, requiring the withdrawal of the authorisation, after having consulted the relevant approval authorities. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

7. Until the list referred to in Article 55(3) has been established, Member States may maintain national provisions dealing with parts or equipment that may affect the correct functioning of systems essential for the safety of the vehicle or its environmental performance.

Article 57

General provisions on recall of vehicles, systems, components or separate technical units

1. A manufacturer who has been granted a whole-vehicle type-approval and is obliged to recall vehicles in accordance with Article 12(1), Article 15(1), Article 17(2), Article 49(1), Article 49(6), Article 51(4), Article 52(1), and Article 53(1) of this Regulation or Article 20 of Regulation (EC) No 765/2008, shall immediately inform the approval authority that granted the whole-vehicle type-approval thereof.

2. A manufacturer of systems, components or separate technical units, who has been granted an EU type-approval and is obliged to recall systems, components or

separate technical units in accordance with Article 12(1), Article 15(1), Article 17(2), Article 49(1), Article 49(6), Article 51(4), Article 52(1), and Article 53(1) of this Regulation or Article 20 of Regulation (EC) No 765/2008, shall immediately inform the approval authority that granted the EU type-approval.

3. The manufacturer shall propose to the approval authority that granted the type-approval a set of appropriate remedies to bring the vehicles, systems, components or separate technical units in conformity and, where appropriate, to neutralise the serious risk referred to in Article 20 of Regulation (EC) No 765/2008.

The approval authority shall carry out an evaluation to verify whether the proposed remedies are sufficient and timely enough, and it shall communicate the remedies that it has approved to the approval authorities of the other Member States and to the Commission without delay.

Article 58

Specific provisions on recall of vehicles, systems, components or separate technical units

1. Where an approval authority or the Commission considers that the remedies referred to in Article 57(3) are insufficient or are not implemented quickly enough, they shall notify their concern to the approval authority that granted the EU type-approval and the Commission without delay.

The approval authority that granted the EU type-approval shall request the manufacturer to take corrective measures to address the concerns notified. Where the manufacturer does not propose and implement effective corrective measures, the approval authority that granted the EU type-approval shall take all restrictive measures required, including the withdrawal of the EU type-approval and mandatory recall, and inform the approval authorities of the other Member States and the Commission about the restrictive measures taken. In the case of withdrawal of the EU type-approval, the approval authority shall inform without delay the manufacturer by registered letter or equivalent electronic means of that withdrawal.

2. Where an approval authority considers that the restrictive measures taken by the approval authority that granted the EU type-approval pursuant to article 58(1) are not sufficient or timely enough, .it shall inform the Commission thereof and it may take appropriate restrictive measures to prohibit or restrict the making available on the market, registration or entry into service of the concerned non-compliant vehicles, systems, components or separate technical units on their national market, or to withdraw them from that market or to recall them.

3. The Commission shall hold appropriate consultations with the parties involved and shall decide whether the restrictive measures taken by the approval authority that granted the EU type-approval are sufficient and timely enough, and where necessary, propose appropriate measures to ensure that the conformity is restored and/or the serious risk referred to in Article 57(3) is effectively neutralised. That decision shall also address the suitability of the restrictive measures taken by approval authorities who considered the action taken by the approval authority that granted the EU type-approval as not sufficient or timely enough. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

The Commission shall address its decision to the Member States concerned and shall immediately communicate it to the relevant economic operators.

4. The Member States shall implement without delay the Commission decision and inform the Commission accordingly.

5. Where, within one month of receipt of the notification regarding the approved remedies referred to in Article 57(3), no objection has been raised against those remedies by either another Member State or the Commission, those remedies shall be deemed justified. The other Member States shall ensure that those remedies are applied in respect of the vehicles, systems, components or separate technical units concerned that have been made available on the market, registered, or entered into service in their territory.

Article 59

Right to be heard of economic operators, notification of decisions and remedies available

1. Except in cases where immediate action is necessary for reasons of serious risk to human health, safety and the environment, the economic operator concerned shall be given the opportunity to make submissions to the national authority within an appropriate period of time before any measure pursuant to Articles 49 to 58 is adopted by the national authorities of the Member States.

   If action has been taken without the economic operator's being heard, the economic operator shall have the opportunity to make submissions as soon as possible and the national authority shall review the measure promptly thereafter.

2. Any measure adopted by the national authorities shall state the exact grounds on which it is based.

   Where the measure is addressed to a specific economic operator, it shall be notified without delay to the economic operator concerned, who shall at the same time be informed of the remedies available under the law of the Member State concerned and of the time limits to which such remedies are subject.

   Where the measure is of general scope, it shall be appropriately published in the national official journal or in an equivalent instrument.

3. Any measure adopted by the national authorities shall be immediately withdrawn or amended upon the economic operator's demonstrating that effective corrective action has been taken.

CHAPTER XII
INTERNATIONAL REGULATIONS

Article 60

UNECE regulations required for EU type-approval

1. UNECE regulations or amendments thereto which the Union has voted in favour of or that the Union applies and that are listed in Annex IV shall be part of the requirements for the EU type-approval of a vehicle.

2. The approval authorities of the Member States shall accept approvals granted in accordance with the UNECE regulations referred to in paragraph 1 and, where applicable, the relevant approval marks, in place of the corresponding approvals and approval marks granted in accordance with this Regulation and the regulatory acts adopted pursuant to this Regulation.

3. Where the Union has voted in favour of a UNECE regulation or amendments thereto for the purpose of whole-vehicle type-approval, the Commission shall adopt a delegated act in accordance with Article 88 to make the UNECE regulation or amendments thereto compulsory or to amend this Regulation, as appropriate.

That delegated act shall specify the dates of mandatory application of the UNECE regulation or amendments thereto and include transitional provisions, where appropriate.

Article 61
Equivalence of UNECE regulations for the purpose of EU type-approval

1. The UNECE regulations listed in Part II of Annex IV are recognised as being equivalent to the corresponding regulatory acts to the extent that they share the same scope and subject matter.

2. The approval authorities of the Member States shall accept type-approvals granted in accordance with the UNECE regulations referred to in paragraph 1 and, where applicable, the relevant approval marks, in place of the corresponding type-approvals and approval marks that have been granted in accordance with this Regulation and the regulatory acts adopted pursuant to this Regulation.

Article 62
Equivalence with other regulations

The Council may, acting by qualified majority on a proposal from the Commission, recognise the equivalence between the conditions or provisions for EU type-approval of systems, components and separate technical units laid down by this Regulation and the conditions or provisions laid down by international regulations or regulations of third countries in the framework of multilateral or bilateral agreements between the Union and third countries.

CHAPTER XIII
PROVISION OF TECHNICAL INFORMATION

Article 63
Information intended for users

1. The manufacturer shall not supply any technical information related to the particulars of the type of vehicle, system, component or separate technical unit provided for in this Regulation, or in the delegated or implementing acts adopted pursuant to this Regulation, that diverges from the particulars of the type-approved by the approval authority.

2. The manufacturer shall make available to users all relevant information and necessary instructions describing any special conditions or restrictions linked to the use of a vehicle, a system, a component or a separate technical unit.

3. The information referred to in paragraph 2 shall be supplied in the official language or languages of the Member State where the vehicle, system, component or separate technical unit is to be placed on the market, registered or is to be entered into service. It shall be provided in the owner's manual after acceptance by the approval authority.

Article 64
Information intended for manufacturers

1. The vehicle manufacturer shall make available to the manufacturers of systems, components or separate technical units all particulars that are necessary for EU type-approval of systems, components or separate technical units or to obtain the authorisation referred to in Article 55(1).

   The vehicle manufacturer may impose a binding agreement on the manufacturers of systems, components or separate technical units to protect the confidentiality of any information that is not in the public domain, including information related to intellectual property rights.

2. The manufacturer of systems, components or separate technical units shall provide the vehicle manufacturer with all detailed information on the restrictions that apply to his type-approvals and that are either referred to in Article 27(3) or imposed by a regulatory act listed in Annex IV.

CHAPTER XIV
ACCESS TO REPAIR AND MAINTENANCE INFORMATION

Article 65
Manufacturers' obligations to provide vehicle repair and maintenance information

1. Manufacturers shall provide to independent operators unrestricted and standardised access to vehicle OBD information, diagnostic and other equipment, tools including any relevant software and vehicle repair and maintenance information.

   Manufacturers shall provide a standardised, secure and remote facility to enable independent repairers to complete operations that involve access to the vehicle security system.

2. Until the Commission has adopted the relevant standard through the work of the European Committee for Standardization (CEN) or comparable standardisation bodies, the vehicle OBD and vehicle repair and maintenance information shall be presented in an easily accessible manner that can be processed by independent operators with reasonable effort.

   The vehicle OBD and the vehicle repair and maintenance information shall be made available on the websites of manufacturers using a standardised format or, if this is not feasible, due to the nature of the information, in another appropriate format. In particular, this access shall be granted in a manner which is non-discriminatory compared to the provision given or access granted to authorised dealers and repairers.

3. The Commission shall establish and update the appropriate technical specifications on how vehicle OBD and vehicle repair and maintenance information shall be provided. The Commission shall take into account current information technology, foreseeable vehicle technology developments, existing ISO standards and the possibility of a worldwide ISO standard.

4. The details of the requirements with regard to access to vehicle repair and maintenance information, in particular technical specifications on how vehicle repair and maintenance information shall be provided, are laid down in Annex XVIII.

5. Manufacturers shall also make training material available to independent operators and authorised dealers and repairers.

6. The manufacturer shall ensure that the vehicle repair and maintenance information shall always be accessible, except as required for maintenance purposes of the information system.

   The manufacturer shall make subsequent amendments and supplements to vehicle repair and maintenance information available on its websites at the same time they are made available to authorised repairers.

7. For the purposes of manufacturing and servicing of OBD-compatible replacement or service parts and diagnostic tools and test equipment, manufacturers shall provide the relevant vehicle OBD and vehicle repair and maintenance information on a non-discriminatory basis to any interested manufacturer or repairer of component, diagnostic tool or test equipment.

8. For the purposes of the design, manufacturing and the repair of automotive equipment for alternative-fuel vehicles, manufacturers shall provide the relevant vehicle OBD and vehicle repair and maintenance information on a non-discriminatory basis to any interested manufacturer, installer or repairer of equipment for alternative-fuel vehicles.

9. Independent repairers shall have access free of charge to repair and maintenance records of a vehicle that are kept in a central database of the vehicle manufacturer or in a database on its behalf.

   Those independent repairers shall be able to enter into the relevant database information on the repair and maintenance they have carried out.

10. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend and supplement Annex XVIII to take account of technical and regulatory developments or prevent misuse by updating the requirements concerning the access to vehicle OBD and vehicle repair and maintenance information and by adopting and integrating the standards referred to in paragraphs 2 and 3.

Article 66

Obligations with regard to several type-approval holders

1. The manufacturer responsible for the respective type-approval of a system, component or separate technical unit or for a particular stage of a vehicle shall be responsible, in the event of a mixed type-approval, a step-by-step type-approval or a multi-stage type-approval, for communicating to both the final manufacturer and the independent operators the repair and maintenance information relating to the particular system, component or separate technical unit or to the particular stage.

2. The final manufacturer shall be responsible for providing to independent operators information about the whole vehicle.

Article 67

Fees for access to vehicle repair and maintenance information

1. The manufacturer may charge reasonable and proportionate fees for access to vehicle repair and maintenance information other than the records referred to in Article 65(8). Those fees shall not discourage access to that information by failing to take into account the extent to which the independent operator uses it.

2. The manufacturer shall make available vehicle repair and maintenance information, including transactional services, such as reprogramming, or technical assistance, on an hourly, daily, monthly, and yearly basis, with fees for access to such information varying in accordance with the respective periods of time for which access is granted.

   In addition to time-based access, manufacturers may offer transaction-based access, for which fees are charged per transaction and not based on the duration for which access is granted.

   Where both access systems are offered by the manufacturer, independent repairers shall choose an access system, either time-based or transaction-based.

Article 68

Proof of compliance with repair and maintenance information obligations

1. The manufacturer that has applied for EU type-approval or national type-approval shall provide the approval authority with proof of compliance with Articles 65 to 70 within six months from the date of the respective type-approval.

2. Where that proof of compliance is not provided within the period referred to in paragraph 1, the approval authority shall take appropriate measures in accordance with Article 69.

Article 69

Compliance with the obligations regarding access to vehicle OBD and vehicle repair and maintenance information

1. An approval authority may at any time, whether on its own initiative, on the basis of a complaint, or on the basis of an assessment by a technical service, check the compliance of a manufacturer with Articles 65 to 70, and with the terms of the Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information laid down in Appendix 1 of Annex XVIII.

2. Where an approval authority finds that the manufacturer has failed to comply with his obligations regarding access to vehicle OBD and vehicle repair and maintenance information, the approval authority that granted the relevant type-approval shall take appropriate measures to remedy the situation.

   Those measures may include withdrawal or suspension of the type-approval, fines, or other measures adopted pursuant to Article 89.

3. Where an independent operator or a trade association representing independent operators files a complaint to the approval authority on the failure of the manufacturer to comply with Articles 65 to 70, the approval authority shall carry out an audit in order to verify compliance by the manufacturer.

4. When carrying out the audit, the approval authority may ask a technical service or any other independent expert to carry out an assessment to verify whether the obligations concerning access to vehicle OBD and vehicle repair and maintenance information have been met.

Article 70
Forum on Access to Vehicle Information

1. The Forum on Access to Vehicle Information established in accordance with Article 13(9) of Regulation (EC) No 692/2008 shall carry out its activities in accordance with the provisions laid down in Annex XVIII.

2. The Forum referred to in paragraph 1 shall advise the Commission on measures to prevent misuse of vehicle OBD and vehicle repair and maintenance information.

CHAPTER XV
ASSESSMENT, DESIGNATION, NOTIFICATION AND MONITORING OF TECHNICAL SERVICES

Article 71
Type approval authority responsible for technical services

1. The type approval authority designated by the Member State in accordance with Article 7(3), hereinafter referred to as the ‘type-approval authority', shall be responsible for the assessment, designation, notification and the monitoring of technical services, including, where appropriate, the subcontractors or subsidiaries of those technical services.

2. The type-approval authority shall be established, organised and operated so as to safeguard its objectivity and impartiality and to avoid any conflicts of interests with the technical services.

3. The type-approval authority shall be organised so that the notification of a technical service is done by personnel different from those who carried out the assessment of the technical service.

4. The type-approval authority shall not perform any activities that technical services perform and shall not provide consultancy services on a commercial or competitive basis.

5. The type-approval authority shall safeguard the confidentiality of the information it obtains.

6. The type-approval authority shall have a sufficient number of competent personnel at its disposal for the proper performance of the tasks foreseen by this Regulation

7. Member States shall provide the Commission and the other Member States with information on their procedures for the assessment, designation and notification of technical services and for the monitoring of technical services, and of any changes thereto.

8. The type-approval authority shall be peer-reviewed by two type-approval authorities of other Member States every two years.

The Member States shall draw up the annual plan for the peer-review, ensuring an appropriate rotation in respect of reviewing and reviewed type-approval authorities, and submit it to the Commission.

The peer-review shall include an on-site visit to a technical service under the responsibility of the reviewed authority. The Commission may participate in the review and decide on its participation on the basis of a risk assessment analysis.

9. The outcome of the peer-review shall be communicated to all Member States and to the Commission and a summary of the outcome shall be made publicly available. It shall be discussed by the Forum established in Article 10 on the basis of an assessment of this outcome carried out by the Commission and issue recommendations.

10. The Member States shall provide information to the Commission and the other Member States on how it has addressed the recommendations in the peer-review report.

Article 72
Designation of technical services

1. The type-approval authorities shall designate technical services for one or more of the following categories of activities, depending on their field of competence:

   (a) category A: tests referred to in this Regulation and in the acts listed in Annex IV that those technical services carry out in their own facilities;

   (b) category B: supervision of the tests referred to in this Regulation and in the acts listed in Annex IV, where those tests are performed in the manufacturer's facilities or in the facilities of a third party;

   (c) category C: assessment and monitoring on a regular basis of the procedures of the manufacturer for controlling conformity of production;

   (d) category D: supervision or performance of tests or inspections for the surveillance of conformity of production.

2. A Member State may designate an approval authority as a technical service for one or more of the categories of activities referred to in paragraph 1. Where an approval authority is designated as a technical service and is financed by a Member State, or is subject to managerial and financial control by that Member State, Articles 72 to 85 and Appendices 1 and 2 to Annex V shall apply.

3. A technical service shall be established under the national law of a Member State and have legal personality, except for an accredited in-house technical service of a manufacturer, as referred to in Article 76.

4. A technical service shall take out liability insurance for its activities unless that liability is assumed by the Member State in accordance with national law, or the Member State itself is directly responsible for the conformity assessment.

5. Technical services of a third country, other than those designated in accordance with Article 76, may be notified for the purposes of Article 78 only where a bilateral agreement between the Union and the third country concerned provides for the possibility of designating those technical services. This shall not prevent a technical service established under the national law of a Member State in accordance with

paragraph 3 from establishing subsidiaries in third countries, provided that the subsidiaries are directly managed and controlled by the designated technical service.

Article 73
Independence of the technical services

1. A technical service, including its personnel, shall be independent and shall carry out the activities for which it has been designated with the highest degree of professional integrity and the requisite technical competence in the specific field in which it operates and shall be free from all pressures and inducements, particularly financial, that might influence its judgment or the results of its assessment activities, especially such pressures or inducements emanating from persons or groups of persons with an interest in the results of those activities.

2. A technical service shall be a third-party organisation or body that is not involved in the process of design, manufacturing, supply or maintenance of the vehicle, system, component or separate technical unit it assesses, tests or inspects.

   An organisation or body belonging to a business association or professional federation representing undertakings that are involved in the design, manufacturing, supply or maintenance of the vehicles, systems, components or separate technical units that it assesses, tests or inspects, may be considered as fulfilling the requirements of the first subparagraph, provided that its independence and the absence of any conflict of interest are demonstrated to the designating approval authority of the relevant Member State.

3. A technical service, its top-level management and the personnel responsible for carrying out the activities for which they are designated in accordance with Article 72(1) shall not design, manufacture, supply, or maintain the vehicles, systems, components or separate technical units that they assess, nor represent parties engaged in those activities. This shall not preclude the use of those vehicles, systems, components or separate technical units that are necessary for the operation of the technical service or the use of such vehicles, systems, components or separate technical units for personal purposes.

4. A technical service shall ensure that the activities of its subsidiaries or subcontractors do not affect the confidentiality, objectivity or impartiality of the categories of activities for which it has been designated.

5. The personnel of a technical service shall observe professional secrecy with regard to all information obtained in carrying out their tasks under this Regulation, except in relation to the approval authority or where required by Union or national law.

Article 74
Competence of the technical services

1. A technical service shall be capable of carrying out all the activities for which it is applying to be designated in accordance with Article 72(1). It shall demonstrate to the type approval authority that it has all of the following:

   (a) its personnel has the appropriate skills, the specific technical knowledge, the vocational training and sufficient and appropriate experience to perform the activities for which it is seeking to be designated;

(b) it possesses the descriptions of the procedures relevant for the performance of the activities for which it is seeking to be designated, taking due account of the degree of complexity of the technology of the relevant vehicle, system, component or separate technical unit in question, as well as the mass or serial nature of the production process. The technical service shall demonstrate the transparency and reproducibility of those procedures;

(c) it has the necessary means to perform the tasks connected with the categories of activities for which it is seeking to be designated and that it has access to all necessary equipment or facilities.

2. A technical service shall also demonstrate that it has the appropriate skills, the specific technical knowledge and proven experience to carry out tests and inspections for assessing the conformity of the vehicles, systems, components and separate technical units with this Regulation, with the regulatory acts listed in Annex IV and its compliance with the standards listed in Appendix 1 to Annex V.

Article 75
Subsidiaries of and subcontracting by technical services

1. Technical services may subcontract, with the agreement of their designating type-approval authority, some of the categories of activities for which they have been designated in accordance with Article 72(1), or have those activities carried out by a subsidiary.

2. Where a technical service subcontracts specific tasks from the categories of activities for which it has been designated or has recourse to a subsidiary to perform those tasks, it shall ensure that the subcontractor or the subsidiary complies with the requirements set out in Articles 73 and 74 and it shall inform the type-approval authority thereof.

3. Technical services shall take full responsibility for the tasks performed by their subcontractors or subsidiaries, regardless of their place of establishment.

4. Technical services shall keep at the disposal of the type-approval authority the relevant documents concerning the assessment of the qualifications of the subcontractor or the subsidiary and the tasks performed by them.

Article 76
In-house technical services of the manufacturer

1. An in-house technical service of a manufacturer may be designated for category A activities as referred to in Article 72(1)(a) only with regard to the regulatory acts listed in Annex XV. An in-house technical service shall constitute a separate and distinct part of the manufacturer's company and shall not be involved in the design, manufacturing, supply or maintenance of the vehicles, systems, components or separate technical units that it assesses.

2. An in-house technical service shall comply with the following requirements:

(a) it has been accredited by a national accreditation body as defined in point 11 of Article 2 of Regulation (EC) No 765/2008 and in accordance with Appendices 1 and 2 to Annex V to this Regulation;

(b) the in-house technical service, including its personnel, is organisationally identifiable and has reporting methods within the manufacturer’s company of

which they form part that ensures its impartiality and demonstrates that impartiality to the relevant national accreditation body;

(c) neither the in-house technical service nor its personnel is engaged in any activity that might conflict with its independence or its integrity to perform the activities for which it has been designated;

(d) it supplies its services exclusively to the manufacturer's company of which it forms part.

3. An in-house technical service does not need to be notified to the Commission for the purposes of Article 78, but information concerning its accreditation shall be given by the manufacturer of which it forms part or by the national accreditation body to the type-approval authority at the request of that authority.

4. The Commission shall be empowered to adopt delegated acts in accordance with Article 88 to amend Annex XV to take account of technical and regulatory developments by updating the list of regulatory acts and restrictions contained therein.

Article 77
Assessment and designation of technical services

1. Before designating a technical service, the type-approval authority shall assess it in accordance with an assessment check-list that covers at least the requirements listed in Appendix 2 of Annex V. The assessment shall include an on-site assessment of the premises of the applying technical service, and, where relevant, of any subsidiary or sub-contractor, located inside or outside the Union.

Representatives of the type-approval authorities of at least two other Member States shall, in coordination with the type-approval authority of the Member State in which the applicant technical service is established, and together with a representative of the Commission, form a joint assessment team and participate in the assessment of the applicant technical service, including the on-site assessment. The designating type-approval authority of the Member State where the applicant technical service is established shall give those representatives timely access to the documents necessary to assess the applicant technical service.

2. The joint assessment team shall raise findings regarding non-compliance of the applicant technical service with the requirements set out in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V during the assessment process. These findings shall be discussed between the designating approval authority and the joint assessment team with a view to finding common agreement with respect to the assessment of the application.

3. The joint assessment team shall produce within 45 days after the on-site assessment a report setting out the extent to which the applicant complies with the requirements set out in in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V of this Regulation.

4. This report shall contain a summary of identified non-compliances. Divergent opinions between members of the joint assessment team shall be reflected in the report, together with a recommendation whether the applicant could be designated as technical service.

5. The Member States shall notify to the Commission the names of the representatives of the type-approval authority to call upon for each joint assessment.

6. The competence of a technical service shall be assessed in accordance with the provisions of Appendix 2 to Annex V.

7. The type-approval authority shall notify the assessment report to the Commission and to designating authorities of the other Member States with documentary evidence regarding the competence of the technical service and the arrangements in place to regularly monitor the technical service and ensure that it continues to comply with the requirements of this Regulation.

   The notifying type-approval authority shall furthermore submit evidence of the availability of competent personnel for monitoring the technical service in accordance with Article 71(6).

8. The type-approval authorities of the other Member States and the Commission may review the assessment report and the documentary evidence, raise questions or concerns and request further documentary evidence within one month after the notification of the assessment report and the documentary evidence..

9. The type-approval authority of the Member State where the applicant technical service is established shall respond to the questions, concerns and requests for further documentary evidence within four weeks following their receipt.

10. The type-approval authorities of the other Member States or the Commission may individually or jointly address recommendations to the type-approval authority of the Member State where the applicant technical service is established within four weeks following the receipt of the response referred to in paragraph 9. That type-approval authority shall take account of the recommendations when it takes the decision on the designation of the technical service. Where that type-approval authority decides not to follow the recommendations addressed by the other Member States or the Commission, it shall give the reasons therefor within two weeks after taking its decision.

11. The validity of the designation of technical services shall be limited to a maximum of five years.

12. The approval authority that intends to be designated as a technical service in accordance with Article 72(2) shall document compliance with the requirements of this Regulation through an assessment conducted by independent auditors. Those auditors shall not belong to the same approval authority and shall comply with the requirements laid down in Appendix 2 of Annex V.

Article 78
Notification to the Commission concerning technical services

1. Member States shall notify to the Commission the name, the address, including the electronic address, the responsible persons and the category of activities of every technical service that they have designated. The notification shall clearly specify the scope of the designation, the conformity assessment activities and procedures, the type of products and the subjects listed in Annex IV for which the technical services have been designated, and subsequent modifications to any of those details.

   That notification shall be made prior to the conduct of any activity referred to in Article 72(1) by the designated technical services.

2. Within 28 days of a notification, a Member State or the Commission may raise written objections, setting out its arguments, with regard either to the technical service or to its monitoring by the type-approval authority. When a Member State or the Commission raises objections, the effect of the notification shall be suspended. In this case, the Commission shall consult the parties involved and shall decide by means of an implementing act whether the suspension of the notification can be lifted or not. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 87(2).

   Where no objection is raised or where the Commission is of the opinion that the notification may be accepted fully or partially, the Commission shall publish the notification in accordance with paragraph 5.

3. The same technical service may be designated by several type-approval authorities and notified to the Commission by the Member States of those type-approval authorities, irrespective of the category or categories of activities that that technical service shall carry out in accordance with Article 72(1).

4. Where a regulatory act listed in Annex IV requires a type-approval authority to designate a specific organisation or competent body to carry out an activity not included in the categories of activities referred to in Article 72(1), the Member State shall make the notification referred to in paragraph 1.

5. The Commission shall publish on its website an updated list and details of the technical services and the specific organisations and competent bodies that have been notified to it in accordance with this Article.

Article 79
Changes to and renewal of designations of technical services

1. Where the type-approval authority has ascertained or has been informed that a technical service no longer complies with the requirements laid down in this Regulation, that authority shall restrict, suspend or withdraw the designation, as appropriate, depending on the seriousness of the failure to comply with those requirements.

   The type-approval authority shall immediately inform the Commission and the other Member States of any suspension, restriction or withdrawal of a notification.

   The Commission shall update the information published referred to in Article 78(4) accordingly.

2. In the event of a restriction, suspension or withdrawal of the designation, or where the technical service has ceased its activity, the designating approval authority shall transfer the files of that technical service to another technical service for further processing or keep them available for the approval authorities or for the market surveillance authorities.

3. The type-approval authority shall inform the other type-approval authorities and the Commission when non-compliance of the technical service has an impact on type-approval certificates issued on the basis of the inspection and test reports issued by the technical service subject of the change in notification.

   Within two months after having notified the changes to the notification, the type-approval authority shall submit a report on its findings regarding the non-compliance to the Commission and the other type-approval authorities. Where necessary to

ensure the safety of vehicles, systems, components or separate technical units already placed on the market, the designating type-approval authority shall instruct the concerned approval authorities to suspend or withdraw within a reasonable period of time, any certificates which were unduly issued.

4. The other certificates which were issued on the basis of inspection and test reports issued by the technical service for which the notification has been suspended, restricted or withdrawn shall remain valid in the following circumstances:

(a) in the case of suspension of a notification, on condition that, within three months after the suspension, the type-approval authority that issued the type-approval certificate confirms in writing to the type-approval authorities of the other Member States and the Commission that it is assuming the functions of the technical service during the period of suspension;

(b) in the case of restriction or withdrawal of a notification, for a period of three months after the restriction or withdrawal. The type-approval authority that issued the certificates may extend the validity of the certificates for further periods of three months, for a maximum period altogether, of twelve months, provided it is assuming during that period the functions of the technical service whose notification has been restricted or withdrawn.

The type-approval authority assuming the functions of the technical service shall immediately inform the other type-approval authorities, the other technical services and the Commission thereof.

5. An extension of the scope of the technical service's designation may be granted in accordance with the procedure set out in Article 77 and subject to the notification referred to in Article 78.

6. A designation as technical service can only be renewed after the type-approval authority has verified whether the technical service continues to comply with the requirements of this Regulation. That assessment shall be carried out in accordance with the procedure set out in Article 77.

Article 80
Monitoring of technical services

1. The type-approval authority shall continuously monitor the technical services to ensure compliance with the requirements set out in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V.

Technical services shall, on request, supply all relevant information and documents, required to enable that type-approval authority to verify compliance with those requirements.

Technical services shall, without delay, inform the type-approval authority of any changes, in particular regarding their personnel, facilities, subsidiaries or subcontractors, which may affect compliance with the requirements set out in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V, or their ability to perform the conformity assessment tasks relating to the vehicles, systems, components and separate technical units for which they have been designated.

2. Technical services shall respond without delay to requests by a type-approval authority or by the Commission in relation to the conformity assessments they have carried out.

3. The type-approval authority of the Member State in which the technical service is established shall ensure that the technical service carries out its obligation laid down in paragraph 2, unless there is a legitimate reason for not doing so.

When the type-approval authority of the Member State in which the technical service is established invokes a legitimate reason, it shall inform the Commission thereof.

The Commission shall consult without delay the Member States. On the basis of that evaluation, the Commission shall decide by means of an implementing act whether the legitimate reason is considered justified or not. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

The technical service or the type-approval authority may request that any information transmitted to the authorities of another Member State or to the Commission shall be treated confidentially.

3. At least every 30 months, the type-approval authority shall assess whether each technical service under its responsibility continues to satisfy the requirements set out in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V. This assessment shall include an on-site visit to each technical service under its responsibility.

Within two months after finalising this assessment of the technical service, the Member States shall report to the Commission and to the other Member States on those monitoring activities. The reports shall contain a summary of the assessment which shall be made publicly available.

4. Five years after the notification of a technical service, and every fifth years thereafter, the assessment to determine whether the technical service still complies with the requirements set out in Articles 72 to 76, in Articles 84 and 85 and in Appendix 2 to Annex V shall be carried out by the type-approval authority of the Member State in which the technical service is established and a joint assessment team designated in accordance with the procedure described in Article 77(1) to (4).

Article 81
Challenge to the competence of technical services

1. The Commission shall investigate all cases where concerns have been brought to its attention regarding the competence of a technical service or the continued compliance by a technical service with the requirements and responsibilities to which it is subject under this Regulation. It may also commence such investigations on its own initiative.

The Commission shall investigate the responsibility of the technical service in the case where it is demonstrated or where there are justified grounds to consider that a type approval has been granted on the basis of false data or that the test results have been falsified or that data or technical specifications have been withheld that would have led to the refusal to grant the type approval,.

2. The Commission shall consult the type-approval authority of the Member State where the technical service is established as part of the investigation referred to in paragraph 1. The type-approval authority of that Member State shall provide the Commission, upon request, with all relevant information relating to the performance and the compliance with the requirements concerning independence and competence of the technical service concerned.

3. The Commission shall ensure that all sensitive information obtained in the course of its investigations is treated confidentially.

4. Where the Commission ascertains that a technical service does not or no longer comply with the requirements for its designation or that it is responsible for any of the wrong-doings referred to in paragraph 1, it shall inform the Member State of the type-approval authority thereof.

The Commission shall request that Member State to take restrictive measures, including the suspension, restriction or withdrawal of the designation, where necessary.

Where the Member State fails to take the necessary restrictive measures, the Commission may, by means of implementing acts, suspend, restrict or withdraw the designation of the technical service concerned. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2). The Commission shall notify the Member State concerned of its decision and shall update the information published referred to in Article 78(4) accordingly.

Article 82

Exchange of information on assessment, designation and monitoring of technical services

1. Type-approval authorities shall consult each other and the Commission on questions with general relevance with regard to the implementation of the requirements set out in this Regulation in relation with the assessment, designation and monitoring of technical services.

2. Type-approval authorities shall communicate to each other and the Commission not later than two years after the entry into force of this Regulation the model for assessment check-list used in accordance with Article 77(1) and thereafter the adaptations made to this check-list until the Commission has adopted a harmonised assessment check-list. The Commission shall be empowered to adopt implementing acts to establish the template of the assessment check-list. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

3. When the assessment reports referred to in Article 77(3) indicate discrepancies in the general practice of type-approval authorities, Member States or the Commission may request an exchange of information.

4. The exchange of information shall be co-ordinated by the Forum referred to in Article 10.

Article 83

Cooperation with national accreditation bodies

1. Where designation of a technical service is based on accreditation within the meaning of Regulation (EC) No 765/2008, Member States shall ensure that the national accreditation body that has accredited a particular technical service is kept informed by the type-approval authority on incident reports and other information that relate to matters under the control of the technical service when that information is relevant for the assessment of the performance of the technical service.

2. Member States shall ensure that the national accreditation body in charge of the accreditation of a particular technical service is kept informed by the type-approval

authority of the Member State where the technical service is established on findings relevant for the accreditation. The national accreditation body shall inform the type-approval authority of the Member State where the technical service is established on its findings.

Article 84
Operational obligations of technical services

1. Technical services shall carry out the activities for which they have been designated in accordance with Article 72(1).

2. Technical services shall comply at all times with all of the following:

   (a) allow their approval authority to witness the performance of the technical service during the conformity assessment;

   (b) provide their approval authority, upon request, with information on the categories of activities for which they have been designated.

3. Where a technical service finds that a manufacturer does not comply with the requirements laid down in this Regulation, it shall report this to the approval authority in order for the approval authority to require the manufacturer to take appropriate corrective measures. The approval authority shall refuse to issue a type-approval certificate where those appropriate corrective measures have not been taken.

Article 85
Information obligations of technical services

1. Technical services shall inform their approval authority of the following:

   (a) any non-conformity encountered which may require a refusal, restriction, suspension or withdrawal of a type-approval certificate;

   (b) any circumstances affecting the scope of and conditions for their designation;

   (c) any request for information which they have received from market surveillance authorities regarding their activities.

2. Upon request from their approval authority, technical services shall provide information on the activities within the scope of their designation and on any other activity performed, including cross-border activities and subcontracting.

Article 86
National fees for costs relating to the activities exercised by the type-approval authorities

1. The Member States shall levy fees on technical services applying to be designated established in their territory to cover wholly or partly, the costs relating to the activities exercised by the national authorities responsible for technical services in accordance with this Regulation.

2. The Commission may adopt implementing acts in order to set out the structure and the level of the fees referred to in paragraph 1, taking into account the objectives of safety and the protection of human health and the environment, support of innovation and cost-effectiveness. When fixing the appropriate level of the fees, particular attention shall be paid to technical services that submitted a valid certificate

delivered by the national accreditation body as referred to in Article 83 and to technical services that are small and medium-sized enterprises as defined in Commission Recommendation 2003/361/EC[29]. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 87(2).

CHAPTER XVI
IMPLEMENTING AND DELEGATED POWERS

Article 87
Committee procedure

1. The Commission shall be assisted by the Technical Committee — Motor Vehicles. 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.

Article 88
Exercise of the 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 4(2), Article 5(2), Article 10(3), Article 22(3), Article 24(3), Article 25(5), Article 26(2), Article 28(5), Article 29(6), Article 34(2), Article 55(2) and (3), Article 56(2), Article 60(3), Article 65(10), Article 76(4) and Article 90(2) shall be conferred on the Commission for an indeterminate period of time from the date of entry into force of this Regulation.

3. The delegation of power referred to in Article 4(2), Article 5(2), Article 10(3), Article 22(3), Article 24(3), Article 25(5), Article 26(2), Article 28(5), Article 29(6), Article 34(2), Article 55(2) and (3), Article 56(2), Article 60(3), Article 65(10), Article 76(4) and Article 90(2) 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 4(2), Article 5(2), Article 10(3), Article 22(3), Article 24(3), Article 25(5), Article 26(2), Article 28(5), Article 29(6), Article 34(2), Article 55(2) and (3), Article 56(2), Article 60(3), Article 65(10), Article 76(4) and Article 90(2) shall enter into force only if no objection has been expressed either by 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

[29] Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36).

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.

CHAPTER XVII
FINAL PROVISIONS

Article 89
Penalties

1. Member States shall lay down the rules on penalties for infringement by economic operators and technical services of their obligations laid down in the Articles of this Regulation, in particular Articles 11 to 19 and 72 to 76, 84 and 85 and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive.

2. The types of infringements by economic operators and technical services subject to penalties shall be at least the following:

   (a) making false declarations during approval procedures or procedures leading to a recall;

   (b) falsifying test results for type-approval;

   (c) withholding data or technical specifications that could lead to the recall of vehicles, systems, components and separate technical units, or to the refusal or withdrawal of type-approval certificate;

3. In addition to the types of infringements set out in paragraph 2, the types of infringements by economic operators that are also subject to penalties shall be at least the following:

   (a) refusing to provide access to information;

   (b) making available on the market vehicles, systems, components or separate technical units subject to approval without such approval or falsifying documents or markings with that intention.

4. Member States shall notify the provisions implementing paragraphs 1 to 3 to the Commission by dd/mm/yyyy [*PO: please insert the date 12 months after entry into force of this Regulation.*] and shall notify the Commission without delay of any subsequent amendment affecting those provisions.

5. Member States shall report to the Commission every year on the penalties they have imposed.

Article 90
Administrative fines

1. Where the compliance verification by the Commission referred to in Article 9(1) and (4), or Article 54(1) reveals non-compliance of the vehicle, system, component, separate technical unit with the requirements laid down in this Regulation, the Commission may impose administrative fines upon the concerned economic operator for the infringement of this Regulation. The administrative fines provided for shall be effective, proportionate and dissuasive. In particular the fines

shall be proportionate to the number of non-compliant vehicles registered in the Union market, or the number of non-compliant systems, components or separate technical unit made available on the Union market.

The administrative fines imposed by the Commission shall not be in addition to the penalties imposed by the Member States in accordance with Article 89 for the same infringement and shall not exceed EUR 30 000 per non-compliant vehicle, system, component or separate technical unit.

2. The Commission may adopt delegated acts in accordance with Article 88 to lay down the methods for the calculation and collection of the administrative fines referred to in paragraph 1.

3 The amounts of administrative fines shall be considered as revenue for the general budget of the European Union.

Article 91
Amendments to Regulation (EC) No 715/2007

1. Regulation (EC) No 715/2007 is amended as follows:

(1) The title of the Regulation is replaced by the following:

'Regulation (EC) No 715/2007of 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)';

(2) in Article 1, paragraph 2 is replaced by the following:

'2. In addition, this Regulation lays down rules for in-service conformity, durability of pollution control devices, vehicle OBD systems and measurement of fuel consumption.';

(3) in Article 3, points 14 and 15 are deleted;

(4) Articles 6 to 9 are deleted;

(5) in Article 13(2), point (e) is deleted.

(6) The following Article 11a shall be inserted:

'*Article 11a*

1. On the basis of appropriate and representative samples, approval authorities shall verify that

(a) vehicles that have entered into service conform to the CO_2 emission and fuel consumption values recorded in the type approval certificates and certificates of conformity;

(b) CO_2 emissions and fuel consumption values determined through the applicable test procedure are representative of emissions measured under real driving conditions.

2. The Commission may adopt implementing acts in order to determine the verification procedures referred to in points (a) and (b) and any action necessary to take into account the result of those verifications. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article […].'

2. References to the deleted provisions of Regulation (EC) No 715/2007 shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in point 1 of Annex XVIII to this Regulation.

Article 92
Amendments to Regulation (EC) No 595/2009

1. Regulation (EC) No 595/2009 is amended as follows:

(1) in Article 1, paragraph 2 is replaced by the following:

'2. This Regulation also lays down rules for in-service conformity of vehicles and engines, durability of pollution control devices, vehicle OBD systems, measurement of fuel consumption and CO2 emissions and accessibility of vehicle OBD.'

(2) in Article 3, points 11 and 13 are deleted;

(3) Article 6 is deleted;

(4) in Article 11(2), point (e) is deleted.

2. References to the deleted provisions of Regulation (EC) No 595/2009 shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in point 2 of Annex XVIII to this Regulation.

Article 93
Amendment to Regulation (EC) No 692/2008

1. Annex XIV to Regulation (EC) No 692/2008 is deleted.

2. References to the deleted provisions of Regulation (EC) No 692/2008 shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in point 3 of Annex XVIII to this Regulation.

Article 94
Amendments to Regulation (EU) No 582/2011

1. Regulation (EU) No 582/2011 is amended as follows:

(1) Articles 2a to 2h are deleted;

(2) Annex XVII is deleted.

2. References to the deleted provisions of Regulation (EU) No 582/2011 shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in point 4 of Annex XVIII to this Regulation.

Article 95
Repeal of Directive 2007/46/EC

Directive 2007/46/EC is repealed with effect from 1 January 201X.

References to Directive 2007/46/EC shall be construed as references to this Regulation and shall be read in accordance with the correlation table set out in point 5 of Annex XVIII to this Regulation.

Article 96
Transitional provisions

1. This Regulation shall not invalidate any whole-vehicle type-approval or EU type-approval granted to vehicles or to systems, components or separate technical units before [*PO: please insert the date of application as mentioned in Article 98*].

2. Approval authorities shall grant extensions and revisions of whole-vehicle type-approvals and EU type-approvals to the vehicles, systems, components or separate technical units referred to in paragraph 1 in accordance with Articles 31 and 32 of this Regulation.

3. The validity of whole-vehicle type-approvals referred to in paragraph 1 shall terminate at the latest on *[PO: please insert the date, which should be the date of application as mentioned in Article 98 + 5 years]* and approval authorities may only renew those whole-vehicle type-approvals in accordance with the provisions of Article 33 of this Regulation.

4. Technical services already designated before the entry into force of this Regulation shall be subject to the assessment referred to in Article 77.

   The designation of technical services already designated before the entry into force of this Regulation shall be renewed within two years of the entry into force of this Regulation where those technical services comply with the relevant requirements set out in this Regulation.

   The validity of the designation of technical services made before the entry into force of this Regulation shall terminate at the latest two years after the date of entry into force of this Regulation.

Article 97
Reporting

1. By 31 December 20xx *[PO: please insert the year, which should be the year of application as mentioned in Article 98 + 5 years]*Member States shall inform the Commission of the application of the type-approval and market surveillance procedures laid down in this Regulation.

2. On the basis of the information supplied under paragraph 1, the Commission shall present an evaluation report to the European Parliament and the Council on the application of this Regulation, including on the functioning of the compliance verification in accordance with Article 9 by 31 December 20yy. *[PO: please insert the year, which should be the year 20xx as mentioned in paragraph 1 + 1 year]*

Article 98
Entry into force and application

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 201X.

However, from [...] [*PO: please insert the date 12 months after entry into force of this Regulation.*], national authorities shall not refuse to grant EU type-approval or national type-approval for a new type of vehicle, or prohibit registration, placing on the market or entry into service of a new vehicle where the vehicle concerned complies with this Regulation and the

delegated and implementing acts adopted pursuant to this Regulation, if a manufacturer so requests.

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

Done at Brussels,

For the European Parliament	*For the Council*
The President	*The President*

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

1.2. Policy area(s) concerned in the ABM/ABB structure

1.3. Nature of the proposal/initiative

1.4. Objective(s)

1.5. Grounds for the proposal/initiative

1.6. Duration and financial impact

1.7. Management mode(s) planned

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

2.2. Management and control system

2.3. Measures to prevent fraud and irregularities

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

3.2. Estimated impact on expenditure

3.2.1. Summary of estimated impact on expenditure

3.2.2. Estimated impact on operational appropriations

3.2.3. Estimated impact on appropriations of an administrative nature

3.2.4. Compatibility with the current multiannual financial framework

3.2.5. Third-party contributions

3.3. Estimated impact on revenu

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LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Regulation of the European Parliament and of the Council on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles

1.2. Policy area(s) concerned in the ABM/ABB structure[30]

Internal market, Industry, Entrepreneurship and SMEs - Internal market for goods and services

1.3. Nature of the proposal/initiative

☒ The proposal/initiative relates to **a new action**

☐ The proposal/initiative relates to **a new action following a pilot project/preparatory action**[31]

☐ The proposal/initiative relates to **the extension of an existing action**

☐ The proposal/initiative relates to **an action redirected towards a new action**

1.4. Objective(s)

1.4.1. The Commission's multiannual strategic objective(s) targeted by the proposal/initiative

The proposal aims at contributing to the General Objective to ensure an open internal market for goods and services conducive to growth and jobs

1.4.2. Specific objective(s) and ABM/ABB activity(ies) concerned

Specific objective No 1: To regularly review existing internal market rules in specific sectors and propose new initiatives whenever appropriate

Specific objective No 2: To ensure the correct application of EU law

Specific objective No 3: EU businesses benefit from a regulatory level playing field and consistent market access at international level

ABM/ABB activity(ies) concerned

Internal market for goods

[30] ABM: activity-based management; ABB: activity-based budgeting.

[31] As referred to in Article 54(2)(a) or (b) of the Financial Regulation.

1.4.3. Expected result(s) and impact

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

– European citizens (vehicle users as well as other road users) should benefit from the measures aimed at avoiding poor safety and environmental performance of motor vehicles in those instances where unsafe and non-compliant automotive products are involved, which are contributing to road accidents and poor air quality, both resulting in harm to personal health.

– Economic operators in the automotive supply chain should benefit from the measures aimed at doing away with an unlevelled playing field and unfair competition from those ignoring or not complying with the rules of the game. SMEs in the automotive sector are the most vulnerable to suffer from the market failures and regulatory shortcomings and particular attention is given to the potential impact the envisaged measures may have on them.

– National enforcement authorities should benefit from the measures aimed at addressing the regulatory shortcomings and avoiding additional burden upon them to remedy these shortcomings by taking corrective actions against non-compliant and unsafe products on their markets.

1.4.4. Indicators of results and impact

Specify the indicators for monitoring implementation of the proposal/initiative.

– changes in the views of/complaints from consumers received by enforcement authorities relating to motor vehicles and vehicle components;

– changes in the number/percentage of non-compliant and unsafe automotive products present on the EU market (e.g. compared with existing surveys);

– changes in the number/percentage of safeguard measures taken by EU authorities against non-compliant and unsafe products both from intra-EU and extra-EU manufacturers/importers (i.e. taking into account increased traceability requirements for automotive products);

– changes in trends in RAPEX notifications for vehicles; and

– changes in trends in voluntary recalls of motor vehicles (as an indicator for the effectiveness of the policy options retained in reducing the number of automotive products on the market representing a safety or environmental risk).

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term

The existing regulatory framework is being criticised for not sufficiently ensuring reliable ex-ante conformity assessments and effective post-market controls. The criticism has arisen in the aftermath of the findings in September 2015 that VW over several years manipulated the controls of the exhaust gas treatment devices.

In reponse to this criticism and weaknesses identified in the evaluation of the type-approval framework this proposal contains a wide range of measures related to:

- Traceability of products and role and responsibilities of economic operators in the supply chain;

- Responsibilities of and co-operation between the different national authorities involved in the enforcement of the technical harmonisation legislation for motor vehicles;

- quality of the type-approval and conformity assessment tasks carried out by technical services;

- post-market safeguard procedures and the provisions for the recall of vehicles, and

- procedures for ensuring conformity of production.

1.5.2. Added value of EU involvement

Member States are responsible for the implementation of the legislation in their territory, but ensuring a harmonised and co-ordinated approach based on commonly applicable criteria and uniformly applied by Member States is essential for maintaining a level playing field across the EU by means of a harmonised interpretation, implementation and enforcement of the type-approval requirements, and backed-up by harmonised provisions on market surveillance to provide Member States with adequate means for post-market controls and for taking effective and common remedial action against the presence of non-compliant and unsafe products on the market.

1.5.3. Lessons learned from similar experiences in the past

The existing directive relating to the type-approval of motor vehicles, has been the subject of a revision in 2007. However, experience with the implementation has demonstrated that the mechanisms for ensuring a harmonised implementation and enforcement are not sufficiently robust. Important divergences in the interpretation and application of the rules have emerged, thus undermining the directive's main objectives, i.e. achieving an adequate level of safety and environmental performance of motor vehicles.

1.5.4. Compatibility and possible synergy with other appropriate instruments

Enhanced coherence is expected with other legislation in the field of type-approval (e.g. concerning agricultural tractors and motorcycles), which has been reviewed in 2013.

Synergies are expected in the field of market surveillance by building on the principles and standard reference provisions of the NLF regulation 765/2008 and Decision 768/2008.

1.6. Duration and financial impact

☐ Proposal/initiative of **limited duration**

– ☐ Proposal/initiative in effect from [DD/MM]YYYY to [DD/MM]YYYY

– ☐ Financial impact from YYYY to YYYY

☒ Proposal/initiative of **unlimited duration**

– Implementation with a start-up period from 2017 to 2020,

– followed by full-scale operation.

1.7. Management mode(s) planned[32]

☒ **Direct management** by the Commission

– ☒ by its departments, including by its staff in the Union delegations;

– ☐ by the executive agencies

☐ **Shared management** with the Member States

☐ **Indirect management** by entrusting budget implementation tasks to:

– ☐ third countries or the bodies they have designated;

– ☐ international organisations and their agencies (to be specified);

– ☐the EIB and the European Investment Fund;

– ☐ bodies referred to in Articles 208 and 209 of the Financial Regulation;

– ☐ public law bodies;

– ☐ bodies governed by private law with a public service mission to the extent that they provide adequate financial guarantees;

– ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that provide adequate financial guarantees;

– ☐ persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.

– *If more than one management mode is indicated, please provide details in the 'Comments' section.*

Comments

The Commission intends to ensure the implementation of the measures concerned via centralised direct management through its own services, in particular via the JRC for the technical and scientific support, this will be regulated through the administrative arrangement instrument.

[32] Details of management modes and references to the Financial Regulation may be found on the BudgWeb site: http://www.cc.cec/budg/man/budgmanag/budgmanag_en.html

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

The Technical Committee Motor Vehicles (TCMV), set up by this Regulation, and the Forum laid down in Article 10 will provide a platform to regularly discuss issues related to the implementation of the strenghtened regulatory framework for the type-approval and market surveillance of motor vehicles.

Member states will have to report to the Commission on a yearly basis the penalties they have implemented.

Five years after its entry into force, Member States shall inform the Commission of the application of the type-approval and market surveillance procedures laid down in this Regulation. Based on this information, the Commission shall report to the European Parliament and to the Council about the implementation of the new Regulation.

2.2. Management and control system

2.2.1. Risk(s) identified

The measures proposed to limit the duration of validity of the designation of technical sevrices could result in a temporary shortage of technical services and could result in delays for the manufacturers to have their products type-approved.

2.2.2. Information concerning the internal control system set up

The introduction of a coordinated supervision of technical services will be accompanied by suitable transitional provisions to enable technical services designated under Directive 2007/46/EC to have their designation renewed in accordnace with the provisions of the new Regulation, within a two years time span from the date of entry into force of the Regulation. The Commission shall create guidance to ensure a proportionate and workable operation of the new supervisory mechanism.

2.2.3. Estimate of the costs and benefits of the controls and assessment of the expected level of risk of error

The costs for the supervisory control mechanism will consist of the participation of EU Member states' experts and Commission representative in joint audits of technical services. The benefit will consist of ensuring a high level of reliability in the performance of conformity assessment activities carried out by technical services.

2.3. Measures to prevent fraud and irregularities

Specify existing or envisaged prevention and protection measures.

In addition to the application of all regulatory control mechanisms, the Commission services will devise an anti-fraud strategy in line with the Commission's anti-fraud strategy (CAFS) adopted on 24 June 2011 in order to ensure inter alia that its internal anti-fraud related controls are fully aligned with the CASF and that its fraud risk management approach is geared to identify fraud risk areas, in particular in relation to the financing of implementing activities of this Regulation. In particular a series of measures will be put in place such as:

- decisions, agreements and contracts resulting from the financing of implementing activities of the Regulation will expressly entitle the Commission, including OLAF, and the Court of Auditors to conduct audits, on-the-spot checks and inspections;

- during the evaluation phase of a call for proposals/tender, the proposers and tenderers will be checked against the published exclusion criteria based on declarations and the Early Warning System (EWS);

Moreover,the Commission will control a strict application of the rules on conflict of interests for the implementing actions under this Regulation.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Chapter 02.03 Internal market of goods and services	Diff./Non-diff.[33]	from EFTA countries [34]	from candidate countries[35]	from third countries	within the meaning of Article 21(2)(b) of the Financial Regulation
1a	02.03.01 Operation and development of the internal market of goods and services	Diff	YES	NO	NO	NO

[33] Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.

[34] EFTA: European Free Trade Association.

[35] Candidate countries and, where applicable, potential candidate countries from the Western Balkans.

3.2. Estimated impact on expenditure

3.2.1. Actions foreseen in this draft proposal for a Regulation will have no budgetary impact on EU budget over and beyond the appropriations already foreseen in the official financial programming of the Commission as any requirements for financial resources would have to be met through assigned revenues and redeployment.

3.2.2. Summary of estimated impact on expenditure

EUR million (to three decimal places)

Heading of multiannual financial framework	1a	Competitiveness for Growth and Jobs

DG: GROW			Year **2017**	Year **2018**	Year **2019**	Year **2020**	**TOTAL of years 2017-2020**	Following Years[36]
• Operational appropriations								
Number of budget line: 02.03.01	Commitments	(1)	9,450	9,285	9,020	6,557	**34,312**	6,594
	Payments	(2)	5,600	9,835	9,170	9,707	**34,312**	
Appropriations of an administrative nature financed from the envelope of specific programmes[37]								
Number of budget line		(3)						
TOTAL appropriations for DG GROW	Commitments	=1+1a +3	9,450	9,285	9,020	6,557	**34,312**	6,594
	Payments	=2+2a +3	5,600	9,835	9,170	9,707	**34,312**	

[36] For the period following 31 December 2020, the amount shall be subject to the multiannual financial framework in force for the period commencing in 2021, in accordance with Article 312 of the Treaty on the Functioning of the European Union

[37] Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

• TOTAL operational appropriations	Commitments	(4)	9,450	9,285	9,020	6,557	**34,312**	6,594
	Payments	(5)	5,600	9,835	9,170	9,707	**34,312**	
• TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)						
TOTAL appropriations under HEADING 1a of the multiannual financial framework	Commitments	=4+ 6	9,450	9,285	9,020	6,557	**34,312**	6,594
	Payments	=5+ 6	5,600	9,835	9,170	9,707	**34,312**	

Heading of multiannual financial framework	5	'Administrative expenditure'

EUR million (to three decimal places)

		Year **2017**	Year **2018**	Year **2019**	Year **2020**	**TOTAL of years 2017-2020**	Following Years[38]
DG: GROW							
• Human resources		1,206	1,206	1,206	1,206	**4,824**	1,206
• Other administrative expenditure		0,235	0,240	0,244	0,249	**0,968**	0,254
TOTAL DG GROW	Appropriations	1,441	1,446	1,450	1,455	**5,792**	1,460

TOTAL appropriations under HEADING 5 of the multiannual financial framework	(Total commitments = Total payments)	1,441	1,446	1,450	1,455	**5,792**	1,460

EUR million (to three decimal places)

		Year **2017**	Year **2018**	Year **2019**	Year **2020**	**TOTAL of years 2017-2020**	**Following Years**
TOTAL appropriations under HEADINGS 1 to 5 of the multiannual financial framework	Commitments	10,891	10,731	10,470	8,012	**40,104**	8,054
	Payments	7,041	11,281	10,620	11,262	**40,104**	**1,460**

[38] For the period following 31 December 2020, the amount shall be subject to the multiannual financial framework in force for the period commencing in 2021, in accordance with Article 312 of the Treaty on the Functioning of the European Union.

3.2.3. Estimated impact on operational appropriations

– ☐ The proposal/initiative does not require the use of operational appropriations

– ☒ The proposal/initiative requires the use of operational appropriations, as explained below:

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			Year **2017**		Year **2018**		Year **2019**		Year **2020**		**TOTAL of years 2017-2020**	FollowingYears	
	OUTPUTS												
	Type[39]	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	**Total No**	Total cost	Cost
SPECIFIC OBJECTIVE No 1[40]…	Establish mechanisms to ensure harmonised implementation and enforcement of the type-approval and market surveillance rules by all Member States with a sustainable, effective and credible mùanagement at EU level, with access to internal and external technical and scientific expertise, enabling improved coordination, cooperation and resource sharing between enforcement authorities in the Member States												
- Output	TCMV and Enforcement Forum meetings		20 meeting days	0,500	20 meeting days	0,510	20 meeting days	0,520	20 meeting days	0,530	**2.06**	20 meeting days	0,541
- Output	Technical and scientific support (JRC)			7,700		7,500		7,200		4,700	**27,100**		4,700
- Output	Audits/ joint assessments of technical services			1,250		1,275		1,300		1,327	**5,152**		1,353
Subtotal for specific objective No 1				9,450		9,285		9,020		6,557	**34,312**		6,594
TOTAL COST				9,450		9,285		9,020		6,557	**34,312**		6,594

39 Outputs are products and services to be supplied (e.g.: number of student exchanges financed, number of km of roads built, etc.).

40 As described in point 1.4.2. 'Specific objective(s)…'

3.2.4. Estimated impact on appropriations of an administrative nature

3.2.4.1. Summary

– ☐ The proposal/initiative does not require the use of appropriations of an administrative nature

– ☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	Year 2017	**Year 2018**	**Year 2019**	**Year 2020**	**Total of years 2017-2020**	Following Years
HEADING 5 of the multiannual financial framework						
Human resources (DG-GROW)	1,206	1,206	1,206	1,206	**4,824**	1,206
Other administrative expenditure (DG-GROW)	0,235	0,240	0,244	0,249	**0,968**	0,254
Subtotal HEADING 5 of the multiannual financial framework	1,441	1,446	1,450	1,455	**5,792**	1,460

Outside HEADING 5[41] of the multiannual financial framework						
Human resources						
Other expenditure of an administrative nature						
Subtotal outside HEADING 5 of the multiannual financial framework						

TOTAL	1,441	1,446	1,450	1,455	**5,792**	1,460

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from DG-GROW that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

[41] Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research

3.2.4.2. Estimated requirements of human resources

– ☐ The proposal/initiative does not require the use of human resources.

– ☒ The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

		Year **2017**	Year **2018**	Year **2019**	Year **2020**	Following years[42]
• Establishment plan posts (officials and temporary staff)						
02 01 01 01 (Headquarters and Commission's Representation Offices)		9 (GROW)	9 (GROW)	9 (GROW)	9 (GROW)	9 (GROW)
XX 01 01 02 (Delegations)						
XX 01 05 01 (Indirect research)						
10 01 05 01 (Direct research)						
• External staff (in Full Time Equivalent unit: FTE)[43]						
XX 01 02 01 (AC, END, INT from the 'global envelope')						
XX 01 02 02 (AC, AL, END, INT and JED in the delegations)						
XX 01 04 **yy** [44]	- at Headquarters					
	- in Delegations					
XX 01 05 02 (AC, END, INT - Indirect research)						
10 01 05 02 (AC, END, INT - Direct research)						
Other budget lines (specify)						
TOTAL		9	9	9	9	9

XX is the policy area or budget title concerned.

The human resources required will be met by staff from DG GROW who are already assigned to management of the current type-approval framework and/or have been redeployed within or from outside the DG (estimated needs: 6 AD/FTE and 3 AST/FTE).

Description of tasks to be carried out:

Officials and temporary staff	Control of appropriate imlementation and enforcement of this Regulation; development of delegated/implementing acts and guidance; organisation and supervision of 'joint assessments' of technical services and control of designation and monitoring process by Member States; coordination of market surveillance activities at EU level
External staff	

42 See Footnote 38.

43 AC= Contract Staff; AL = Local Staff; END= Seconded National Expert; INT = agency staff; JED= Junior Experts in Delegations.

44 Sub-ceiling for external staff covered by operational appropriations (former 'BA' lines).

3.2.5. Compatibility with the current multiannual financial framework

– ☒ The proposal/initiative is compatible the current multiannual financial framework.

– ☐ The proposal/initiative will entail reprogramming of the relevant heading in the multiannual financial framework.

Explain what reprogramming is required, specifying the budget lines concerned and the corresponding amounts.

– ☐ The proposal/initiative requires application of the flexibility instrument or revision of the multiannual financial framework.

Explain what is required, specifying the headings and budget lines concerned and the corresponding amounts.

3.2.6. Third-party contributions

– The proposal/initiative does not provide for co-financing by third parties.

– ☒The proposal/initiative provides for the co-financing estimated below:

Appropriations in EUR million (to three decimal places)

	Year **2017**	Year **2018**	Year **2019**	Year **2020**	Total	Following Years
Specify the co-financing body*: Member States through their national fee structure to finance their type-approval and market surveillance activities and to contribute to the costs for the independent compliance verification testing by the Commission*						
TOTAL appropriations co-financed	7,700	7,500	7,200	4,700	27,100	xx

3.3. Estimated impact on revenue

– ☐ The proposal/initiative has no financial impact on revenue.

– ☒ The proposal/initiative has the following financial impact:

– ☐ on own resources

– ☒ on miscellaneous revenue (contributions from Member States as indicated in section 3.2.5)

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative[45]						
		Year **2017**	Year **2018**	Year **2019**	Year **2020**			
Article 6600		7,700	7,500	7,200	4,700			

For miscellaneous 'assigned' revenue, specify the budget expenditure line(s) affected.

02.0301 Operation and development of the internal market of goods and services

Specify the method for calculating the impact on revenue.

[45] As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 25 % for collection costs.

EUROPEAN
COMMISSION

Brussels, 27.1.2016
COM(2016) 31 final

ANNEXES 1 to 19

ANNEXES

to the proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles

{SWD(2016) 9 final}
{SWD(2016) 10 final}

List of Annexes

ANNEX I

INFORMATION DOCUMENT - COMPLETE LIST OF INFORMATION FOR THE PURPOSE OF EU TYPE-APPROVAL OF VEHICLES, SYSTEMS, COMPONENTS OR SEPARATE TECHNICAL UNITS ([a])

PART I

The information documents for the purpose of EU type-approval of vehicles, systems, components or separate technical units as required for by this Regulation and the regulatory acts referred to in Annex IV shall consist only of extracts from, and adhere to the item numbering system of, this complete list.

The following information shall be supplied in triplicate and include a list of contents. Any drawings shall be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, shall show sufficient detail.

If the systems, components or separate technical units referred to in this annex have electronic controls, information concerning their performance shall be supplied.

1. **GENERAL**

1.1. Make (trade name of manufacturer): …

1.2. Type: …

1.2.0.1. Chassis: …

1.2.0.2. Bodywork/complete vehicle: …

1.2.1. Commercial name(s) (if available): …

1.2.2. For multi-stage type-approved vehicles, type-approval information of the base/previous stage vehicle (list the information for each stage. This can be done with a matrix)

Type: ……

Variant(s): ……..

Version(s): ……...

Type-approval number, including extension number …….

1.3. Means of identification of type, if marked on the vehicle / component / separate technical unit ([1]) ([b]): …

1.3.0.1. Chassis: …

1.3.0.2. Bodywork/complete vehicle: …

1.3.1. Location of that marking: …

1.3.1.1. Chassis: …

1.3.1.2. Bodywork/complete vehicle: …

1.4. Category of vehicle ([c]): …

1.4.1. Classification(s) according to the dangerous goods which the vehicle is intended to transport: …

1.5. Company name and address of manufacturer: …

1.5.1. For multi-stage type-approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle……

1.6. Location and method of attachment of statutory plates and location of vehicle identification number: …

1.6.1. On the chassis: …

1.6.2. On the bodywork: …

1.7. (Not attributed)

1.8. Name(s) and address(es) of assembly plant(s): …

1.9. Name and address of the manufacturer's representative (if any): …

2. **GENERAL CONSTRUCTION CHARACTERISTICS**

2.1. Photographs and/or drawings of a representative vehicle / component / separate technical unit ([1]): …

2.2. Dimensional drawing of the whole vehicle: …

2.3. Number of axles and wheels: …

2.3.1. Number and position of axles with twin wheels: …

2.3.2. Number and position of steered axles: …

2.3.3. Powered axles (number, position, interconnection): …

2.4. Chassis (if any) (overall drawing): …

2.5. Material used for the side-members ([d]): …

2.6. Position and arrangement of the engine: …

2.7. Driving cab (forward control or bonneted) ([e]): …

2.8. Hand of drive: left/right ([1]).

2.8.1. Vehicle is equipped to be driven in right/left ([1]) hand traffic.

2.9. Specify if the towing vehicle is intended to tow semi-trailers or other trailers and, if the trailer is a semi-, drawbar-, centre-axle- or rigid drawbar trailer: …

2.10. Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …

3. **MASSES AND DIMENSIONS** ([f]) ([g]) ([6])

(in kg and mm) (Refer to drawing where applicable)

3.1. **Wheelbase(s) (fully loaded)** ([g1])**:**

3.1.1. Two-axle vehicles: …

3.1.2. Vehicles with three or more axles

3.1.2.1. Axle spacing between consecutive axles going from the foremost to the rearmost axle: …

3.1.2.2. Total axle spacing: …

3.2. **Fifth wheel**

3.2.1. In the case of semi-trailers

3.2.1.1. Distance between the axis of the fifth wheel kingpin and the rearmost end of the semi-trailer: …

3.2.1.2. Maximum distance between the axis of the fifth wheel kingpin and any point on the front of the semi-trailer: …

3.2.1.3. Semi-trailer reference wheelbase (as required in point 3.2 of Part D of Annex I to Commission Regulation (EU) No 1230/2012[1]: …

3.2.2. In the case of semi-trailer towing vehicles

3.2.2.1. Fifth wheel lead (maximum and minimum; indicate the permissible values in the case of an incomplete vehicle) ([g2]): …

3.2.2.2. Maximum height of the fifth wheel (standardised) ([g3]): …

3.3. **Axle track(s) and width(s)**

3.3.1. Track of each steered axle ([g4]): …

3.3.2. Track of all other axles ([g4]): …

3.3.3. Width of the widest rear axle: …

3.3.4. Width of the foremost axle (measured at the outermost part of the tyres excluding the bulging of the tyres close to the ground): …

3.4. **Range of vehicle dimensions (overall)**

3.4.1. For chassis without bodywork

3.4.1.1. Length ([g5]): …

3.4.1.1.1. Maximum permissible length: …

3.4.1.1.2. Minimum permissible length: …

3.4.1.1.3. In the case of trailers, maximum permissible drawbar length ([g6]): …

3.4.1.2. Width ([g7]): …

3.4.1.2.1. Maximum permissible width: …

3.4.1.2.2. Minimum permissible width: …

3.4.1.3. Height (in running order) ([g8]) (for suspensions adjustable for height, indicate normal running position): …

3.4.1.4. Front overhang ([g9]): …

3.4.1.4.1. Approach angle ([g10]): …… degrees.

3.4.1.5. Rear overhang ([g11]): …

3.4.1.5.1. Departure angle ([g12]): …… degrees.

3.4.1.5.2. Minimum and maximum permissible overhang of the coupling point ([g13]): …

[1] Commission Regulation (EU) No 1230/2012 of 12 December 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with regard to type-approval requirements for masses and dimensions of motor vehicles and their trailers and amending Directive 2007/46/EC of the European Parliament and of the Council (OJ L 353, 21.12.2012, p. 31).

3.4.1.6. Ground clearance (as measured in accordance with point 3 of Appendix 1 to Annex II)

3.4.1.6.1. Between the axles: …

3.4.1.6.2. Under the front axle(s): …

3.4.1.6.3. Under the rear axle(s): …

3.4.1.7. Ramp angle ([g14]): …… degrees.

3.4.1.8. Extreme permissible positions of the centre of gravity of the body and/or interior fittings and/or equipment and/or payload: …

3.4.2. For chassis with bodywork

3.4.2.1. Length ([g5]): …

3.4.2.1.1. Length of the loading area: …

3.4.2.1.2. In the case of trailers, maximum permissible drawbar length ([g6]): …

3.4.2.2. Width ([g7]): …

3.4.2.2.1. Thickness of the walls (in the case of vehicles designed for controlled-temperature carriage of goods): …

3.4.2.3. Height (in running order) ([g8]) (for suspensions adjustable for height, indicate normal running position): …

3.4.2.4. Front overhang ([g9]): …

3.4.2.4.1. Approach angle ([g10]): …… degrees.

3.4.2.5. Rear overhang ([g11]): …

3.4.2.5.1. Departure angle ([g12]): …… degrees.

3.4.2.5.2. Minimum and maximum permissible overhang of the coupling point ([g13]): …

3.4.2.6. Ground clearance (as measured in accordance with point 3 of Appendix 1 to Annex II)

3.4.2.6.1. Between the axles: …

3.4.2.6.2. Under the front axle(s): …

3.4.2.6.3. Under the rear axle(s): …

3.4.2.7. Ramp angle ([g14]): …… degrees.

3.4.2.8. Extreme permissible positions of the centre of gravity of the payload (in the case of non-uniform load): …

3.4.2.9. Position of centre of gravity of the vehicle (M_2 and M_3) at its technically permissible maximum laden mass in the longitudinal, transverse and vertical directions: …

3.4.3. For bodywork approved without chassis (vehicles M_2 and M_3)

3.4.3.1. Length ([g5]): …

3.4.3.2. Width ([g7]): …

3.4.3.3. Nominal height (in running order) ([g8]) on intended chassis type(s) (for suspensions adjustable for height, indicate normal running position): …

3.5. **Minimum mass on the steering axle(s) for incomplete vehicles:** …

3.6. **Mass in running order** ([h])

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix must be provided): …

3.6.1. Distribution of this mass among the axles and, in the case of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer, the mass on the coupling point: …

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix must be provided): …

3.6.2. Mass of the optional equipment (as provided for in points (4) and (5) of Article 2 of Regulation (EU) No 1230/2012): …

3.7. **Minimum mass of the completed vehicle** as stated by the manufacturer, in the case of an incomplete vehicle: …

3.7.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point: …

3.8. **Technically permissible maximum laden mass** stated by the manufacturer ([i]) ([3]): …

3.8.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([3]): …

3.9. **Technically permissible maximum mass on each axle:** …

3.10. **Technically permissible mass on each group of axles:** …

3.11. **Technically permissible maximum towable mass of the towing vehicle**

in case of:

3.11.1. Drawbar trailer: …

3.11.2. Semi-trailer: …

3.11.3. Centre-axle trailer: …

3.11.3.1. Maximum ratio of the coupling overhang ([j]) to the wheel base: …

3.11.3.2. Maximum V-value: …… kN.

3.11.4. Rigid drawbar trailer: …

3.11.5. Technically permissible maximum laden mass of the combination ([3]): …

3.11.6. Maximum mass of unbraked trailer: …

3.12. **Technically permissible maximum mass at the coupling point:**

3.12.1. Of a towing vehicle: …

3.12.2. Of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …

3.12.3. Maximum permissible mass of the coupling device (if not fitted by the manufacturer): …

3.13. **Rear swing-out** (Points 6 and 7 of Part C of Annex I to Regulation (EU) No 1230/2012): …

3.14. **Engine power/maximum mass ratio**: …… kW/kg.

3.14.1. Engine power/technically permissible maximum laden mass of the combination ratio (Point 5 of Part C of Annex I to Regulation (EU) No 1230/2012): ……kW/kg.

3.15. **Hill-starting ability** (solo vehicle) ([4]): …… %.

3.16. **Registration/in service maximum permissible masses (optional)**

3.16.1. Registration/in service maximum permissible laden mass: …

3.16.2. Registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point: …

3.16.3. Registration/in service maximum permissible mass on each group of axles: …

3.16.4. Registration/in service maximum permissible towable mass: …

3.16.5. Registration/in service maximum permissible mass of the combination: …

3.17. Vehicle submitted to multi-stage type-approval (only in the case of incomplete or completed vehicles of category N_1 within the scope of Regulation (EC) No 715/2007: yes/no ([1])

3.17.1. Mass of the base vehicle in running order: …kg.

3.17.2. Default added mass, calculated in accordance with Point 5 of Annex XII to Regulation (EC) No 692/2008: …kg.

4. **POWER PLANT** ([k])

4.1. **Manufacturer of the engine:** …

4.1.1. Manufacturer's engine code (as marked on the engine) or other means of identification: …

4.1.2. Approval number (if appropriate) including fuel identification marking: …

(heavy-duty vehicles only)

4.2. **Internal combustion engine**

4.2.1. *Specific engine information*

4.2.1.1. Working principle: positive ignition/compression ignition/dual-fuel ([1])

Cycle: four stroke/two stroke/rotary ([1])

4.2.1.1.1. Type of dual-fuel engine: Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1]) ([x1])

4.2.1.1.2. Gas energy ratio over the hot part of the WHTC test-cycle: … %

4.2.1.2. Number and arrangement of cylinders: …

4.2.1.2.1. Bore ([l]): …… mm

4.2.1.2.2. Stroke ([l]): …… mm

4.2.1.2.3. Firing order: …

4.2.1.3. Engine capacity ([m]): …… cm^3

4.2.1.4. Volumetric compression ratio ([2]): …

4.2.1.5. Drawings of combustion chamber, piston crown and, in the case of positive ignition engines, piston rings: …

4.2.1.6. Normal engine idling speed ([2]): …… min^{-1}

4.2.1.6.1. High engine idling speed ([2]): …… min^{-1}

4.2.1.6.2. Idle on diesel: yes/no ([1]) ([x1])

4.2.1.7. Carbon monoxide content by volume in the exhaust gas with the engine idling ([2]): …… % as stated by the manufacturer (positive ignition engines only)

4.2.1.8. Maximum net power ([n]): … kW at … min^{-1} (manufacturer's declared value)

4.2.1.9. Maximum permitted engine speed as prescribed by the manufacturer: … min^{-1}

4.2.1.10. Maximum net torque ([n]): … Nm at … min^{-1} (manufacturer's declared value)

4.2.1.11. (Euro VI only) Manufacturer references of the Documentation package required by Articles 5, 7 and 9 of Regulation (EU) No 582/2011 enabling the approval authority to evaluate the emission control strategies and the Systems on-board the engine to ensure the correct operation of NO_x control measures

4.2.2. *Fuel*

4.2.2.1. Light-duty vehicles: Diesel/Petrol/LPG/NG or Biomethane/Ethanol (E 85)/Biodiesel/Hydrogen/H_2NG ([1]) ([6])

4.2.2.2. Heavy duty vehicles Diesel/Petrol/LPG/NG-H/NG-L/NG-HL/Ethanol (ED95)/Ethanol (E85)/LNG/LNG_{20}/ ([1])([6])

4.2.2.2.1. (Euro VI only) Fuels compatible with use by the engine declared by the manufacturer in accordance with point 1.1.2 of Annex I to Regulation (EU) No 582/2011 (as applicable)

4.2.2.3. Fuel tank inlet: restricted orifice/label ([1])

4.2.2.4. Vehicle fuel type: Mono fuel, Bi fuel, Flex fuel ([1])

4.2.2.5. Maximum amount of biofuel acceptable in fuel (manufacturer's declared value): … % by volume

4.2.3. *Fuel tank(s)*

4.2.3.1. Service fuel tank(s)

4.2.3.1.1. Number and capacity of each tank: …

4.2.3.1.1.1. Material: …

4.2.3.1.2. Drawing and technical description of the tank(s) with all connections and all lines of the breathing and venting system, locks, valves, fastening devices: …

4.2.3.1.3. Drawing clearly showing the position of the tank(s) in the vehicle: …

4.2.3.2. Reserve fuel tank(s)

4.2.3.2.1. Number and capacity of each tank: …

4.2.3.2.1.1. Material: …

4.2.3.2.2. Drawing and technical description of the tank(s) with all connections and all lines of the breathing and venting system, locks, valves, fastening devices: …

4.2.3.2.3. Drawing clearly showing the position of the tank(s) in the vehicle: …

4.2.4. *Fuel feed*

4.2.4.1. By carburettor(s): yes/no ([1])

4.2.4.2. By fuel injection (compression ignition or dual-fuel only): yes/no ([1])

4.2.4.2.1. System description: …

4.2.4.2.2. Working principle: direct injection/pre-chamber/swirl chamber ([1])

4.2.4.2.3. Injection pump

4.2.4.2.3.1. Make(s): …

4.2.4.2.3.2. Type(s): …

4.2.4.2.3.3. Maximum fuel delivery ([1]) ([2]): …… mm^3 /stroke or cycle at an engine speed of: … min^{-1} or, alternatively, a characteristic diagram: …

(When boost control is supplied, state the characteristic fuel delivery and boost pressure versus engine speed)

4.2.4.2.3.4. Static injection timing ([2]): …

4.2.4.2.3.5. Injection advance curve ([2]): …

4.2.4.2.3.6. Calibration procedure: test bench/engine ([1])

4.2.4.2.4. Governor

4.2.4.2.4.1. Type: …

4.2.4.2.4.2. Cut-off point

4.2.4.2.4.2.1. Speed at which cut-off starts under load: …… min^{-1}

4.2.4.2.4.2.2. Maximum no-load speed: …… min^{-1}

4.2.4.2.4.2.3. Idling speed: ….. min^{-1}

4.2.4.2.5. Injection piping (heavy-duty vehicles only)

4.2.4.2.5.1. Length: …… mm

4.2.4.2.5.2. Internal diameter: …… mm

4.2.4.2.5.3. Common rail, make and type: …

4.2.4.2.6. Injector(s)

4.2.4.2.6.1. Make(s): …

4.2.4.2.6.2. Type(s): …

4.2.4.2.6.3. Opening pressure ([2]): … kPa or characteristic diagram ([é]): …

4.2.4.2.7. Cold start system

4.2.4.2.7.1. Make(s): …

4.2.4.2.7.2. Type(s): …

4.2.4.2.7.3. Description: …

4.2.4.2.8. Auxiliary starting aid

4.2.4.2.8.1. Make(s): …

4.2.4.2.8.2. Type(s): …

4.2.4.2.8.3. System description: …

4.2.4.2.9. Electronic controlled injection: yes/no ([1])

4.2.4.2.9.1. Make(s): …

4.2.4.2.9.2. Type(s):

4.2.4.2.9.3. Description of the system (in the case of systems other than continuous injection give equivalent details): …

4.2.4.2.9.3.1. Make and type of the electronic control unit (ECU): …

4.2.4.2.9.3.2. Make and type of the fuel regulator: …

4.2.4.2.9.3.3. Make and type of the air-flow sensor: …

4.2.4.2.9.3.4. Make and type of fuel distributor: …

4.2.4.2.9.3.5. Make and type of the throttle housing: …

4.2.4.2.9.3.6. Make and type of water temperature sensor: …

4.2.4.2.9.3.7. Make and type of air temperature sensor: …

4.2.4.2.9.3.8. Make and type of air pressure sensor: …

4.2.4.2.9.3.9. Software calibration number(s): …

4.2.4.3. By fuel injection (positive ignition only): yes/no ([1])

4.2.4.3.1. Working principle: intake manifold (single-/multi-point/direct injection ([1]) /other (specify): …

4.2.4.3.2. Make(s): …

4.2.4.3.3. Type(s): …

4.2.4.3.4. System description (In the case of systems other than continuous injection give equivalent details): …

4.2.4.3.4.1. Make and type of the electronic control unit (ECU): …

4.2.4.3.4.2. Make and type of fuel regulator: …

4.2.4.3.4.3. Make and type of air-flow sensor: …

4.2.4.3.4.4. Make and type of fuel distributor: …

4.2.4.3.4.5. Make and type of pressure regulator: …

4.2.4.3.4.6. Make and type of micro switch: …

4.2.4.3.4.7. Make and type of idling adjustment screw: …

4.2.4.3.4.8. Make and type of throttle housing: …

4.2.4.3.4.9. Make and type of water temperature sensor: …

4.2.4.3.4.10. Make and type of air temperature sensor: …

4.2.4.3.4.11. Make and type of air pressure sensor: …

4.2.4.3.4.12. Software calibration number(s): …

4.2.4.3.5. Injectors: opening pressure ([2]): …… kPa or characteristic diagram: …

4.2.4.3.5.1. Make: …

4.2.4.3.5.2. Type: …

4.2.4.3.6. Injection timing: …

4.2.4.3.7. Cold start system

4.2.4.3.7.1. Operating principle(s): …

4.2.4.3.7.2. Operating limits/settings ([1]) ([2]): …

4.2.4.4. Feed pump

4.2.4.4.1. Pressure ([2]): … kPa or characteristic diagram ([2]): …

4.2.5. *Electrical system*

4.2.5.1. Rated voltage: …… V, positive/negative ground ([1])

4.2.5.2. Generator

4.2.5.2.1. Type: …

4.2.5.2.2. Nominal output: …… VA

4.2.6. *Ignition system (spark ignition engines only)*

4.2.6.1. Make(s): …

4.2.6.2. Type(s): …

4.2.6.3. Working principle: …

4.2.6.4. Ignition advance curve or map ([2]): …

4.2.6.5. Static ignition timing ([2]): …… degrees before TDC

4.2.6.6. Spark plugs

4.2.6.6.1. Make: …

4.2.6.6.2. Type: …

4.2.6.6.3. Gap setting: ……mm

4.2.6.7. Ignition coil(s)

4.2.6.7.1. Make: …

4.2.6.7.2. Type: …

4.2.7. *Cooling system: liquid/air* ([1])

4.2.7.1. Nominal setting of the engine temperature control mechanism: …

4.2.7.2. Liquid

4.2.7.2.1. Nature of liquid: …

4.2.7.2.2. Circulating pump(s): yes/no ([1])

4.2.7.2.3. Characteristics: …….or

4.2.7.2.3.1. Make(s): …

4.2.7.2.3.2. Type(s): …

4.2.7.2.4. Drive ratio(s): …

4.2.7.2.5. Description of the fan and its drive mechanism: …

4.2.7.3. Air

4.2.7.3.1. Fan: yes/no ([1])

4.2.7.3.2. Characteristics: …….or

4.2.7.3.2.1. Make(s): …

4.2.7.3.2.2. Type(s): …

4.2.7.3.3. Drive ratio(s): …

4.2.8. *Intake system*

4.2.8.1. Pressure charger: yes/no ([1])

4.2.8.1.1. Make(s): …

4.2.8.1.2. Type(s): …

4.2.8.1.3. Description of the system (e.g. maximum charge pressure: …… kPa; wastegate where applicable): …

4.2.8.2. Intercooler: yes/no ([1])

4.2.8.2.1. Type: air-air/air-water ([1])

4.2.8.3. Intake depression at rated engine speed and at 100 % load (compression ignition engines only)

4.2.8.3.1. Minimum allowable: ……. kPa

4.2.8.3.2. Maximum allowable: …… kPa

4.2.8.3.3. (Euro VI only) Actual Intake system depression at rated engine speed and at 100 % load on the vehicle: … kPa

4.2.8.4. Description and drawings of inlet pipes and their accessories (plenum chamber, heating device, additional air intakes, etc.): …

4.2.8.4.1. Intake manifold description (include drawings and/or photos): …

4.2.8.4.2. Air filter, drawings: …or

4.2.8.4.2.1. Make(s): …

4.2.8.4.2.2. Type(s): …

4.2.8.4.3. Intake silencer, drawings: …or

4.2.8.4.3.1. Make(s): …

4.2.8.4.3.2. Type(s): …

4.2.9. *Exhaust system*

4.2.9.1. Description and/or drawing of the exhaust manifold: …

4.2.9.2. Description and/or drawing of the exhaust system: …

4.2.9.2.1. (Euro VI only) Description and/or drawing of the elements of the exhaust system that are part of the engine system

4.2.9.3. Maximum allowable exhaust back pressure at rated engine speed and at 100 % load (compression ignition engines only): …… kPa

4.2.9.3.1. (Euro VI only) Actual exhaust back pressure at rated engine speed and at 100 % load on the vehicle (compression-ignition engines only): … kPa

4.2.9.4. Type, marking of exhaust silencer(s): …

Where relevant for exterior noise, reducing measures in the engine compartment and on the engine: …

4.2.9.5. Location of the exhaust outlet: …

4.2.9.6. Exhaust silencer containing fibrous materials: …

4.2.9.7. Complete exhaust system volume: …… dm^3

4.2.9.7.1. (Euro VI only) Acceptable Exhaust system volume: … dm^3

4.2.9.7.2. (EURO VI only) Volume of the exhaust system that is part of the engine system: … dm^3

4.2.10. *Minimum cross-sectional areas of inlet and outlet ports:* …

4.2.11. *Valve timing or equivalent data*

4.2.11.1. Maximum lift of valves, angles of opening and closing, or timing details of alternative distribution systems, in relation to dead centres. For variable timing system, minimum and maximum timing: …

4.2.11.2. Reference and/or setting ranges ([1]): …

4.2.12. *Measures taken against air pollution*

4.2.12.1. Device for recycling crankcase gases (description and drawings): …

4.2.12.1.1. (Euro VI only) Device for recycling crankcase gases: yes/no ([2])

If yes, description and drawings:

If no, compliance with Annex V to Regulation (EU) No 582/2011 required

4.2.12.2. Additional pollution control devices (if any, and if not covered by another heading)

4.2.12.2.1. Catalytic converter: yes/no ([1])

4.2.12.2.1.1. Number of catalytic converters and elements (provide the information for each separate unit in the following] points): …

4.2.12.2.1.2. Dimensions, shape and volume of the catalytic converter(s): …

4.2.12.2.1.3. Type of catalytic action: …

4.2.12.2.1.4. Total charge of precious metals: …

4.2.12.2.1.5. Relative concentration: …

4.2.12.2.1.6. Substrate (structure and material): …

4.2.12.2.1.7. Cell density: …

4.2.12.2.1.8. Type of casing for the catalytic converter(s): …

4.2.12.2.1.9. Location of the catalytic converter(s) (place and reference distance in the exhaust line): …

4.2.12.2.1.10. Heat shield: yes/no ([1])

4.2.12.2.1.11. Regeneration systems/method of exhaust after-treatment systems, description: …

4.2.12.2.1.11.1. Number of Type I operating cycles (or equivalent engine bench cycles) between two cycles where regenerative phases occur under the conditions equivalent to Type I test (Distance 'D' in Figure 1 in Annex 13 to UNECE Regulation No 83): …

4.2.12.2.1.11.2. Description of method employed to determine the number of cycles between two cycles where regenerative phases occur: …

4.2.12.2.1.11.3. Parameters to determine the level of loading required before regeneration occurs (i.e. temperature, pressure etc.): …

4.2.12.2.1.11.4. Description of method used to load system in the test procedure described in paragraph 3.1 of Annex 13 to UNECE Regulation No 83): …

4.2.12.2.1.11.5. Normal operating temperature range: …… K

4.2.12.2.1.11.6. Consumable reagents: yes/no ([1])

4.2.12.2.1.11.7. Type and concentration of reagent needed for catalytic action: …

4.2.12.2.1.11.8. Normal operational temperature range of reagent: …… K

4.2.12.2.1.11.9. International standard: …

4.2.12.2.1.11.10. Frequency of reagent refill: continuous/maintenance ([1])

4.2.12.2.1.12. Make of catalytic converter: …

4.2.12.2.1.13. Identifying part number: …

4.2.12.2.2. Oxygen sensor: yes/no ([1])

4.2.12.2.2.1. Make: …

4.2.12.2.2.2. Location: …

4.2.12.2.2.3. Control range: …

4.2.12.2.2.4. Type: …

4.2.12.2.2.5. Identifying part number: …

4.2.12.2.3. Air injection: yes/no ([1])

4.2.12.2.3.1. Type (pulse air, air pump, etc.): …

4.2.12.2.4. Exhaust gas recirculation (EGR): yes/no ([1])

4.2.12.2.4.1. Characteristics (make, type, flow, etc.): …

4.2.12.2.4.2. Water-cooled system: yes/no ([1])

4.2.12.2.5. Evaporative emissions control system: yes/no ([1])

4.2.12.2.5.1. Detailed description of the devices and their state of tune: …

4.2.12.2.5.2. Drawing of the evaporative control system: …

4.2.12.2.5.3. Drawing of the carbon canister: …

4.2.12.2.5.4. Mass of dry charcoal: …… g

4.2.12.2.5.5. Schematic drawing of the fuel tank with indication of capacity and material: …

4.2.12.2.5.6. Drawing of the heat shield between tank and exhaust system: …

4.2.12.2.6. Particulate trap (PT): yes/no ([1])

4.2.12.2.6.1. Dimensions, shape and capacity of the particulate trap: …

4.2.12.2.6.2. Design of the particulate trap: …

4.2.12.2.6.3. Location (reference distance in the exhaust line): …

4.2.12.2.6.4. Method or system of regeneration, description and/or drawing: …

4.2.12.2.6.4.1. Number of Type I operating cycles (or equivalent engine bench cycles) between two cycles where regenerative phases occur under the conditions equivalent to Type I test (Distance 'D' in Figure 1 in Annex 13 to UNECE Regulation No 83): …

4.2.12.2.6.4.2. Description of method employed to determine the number of cycles between two cycles where regenerative phases occur: …

4.2.12.2.6.4.3. Parameters to determine the level of loading required before regeneration occurs (i.e. temperature, pressure etc.): …

4.2.12.2.6.4.4. Description of method used to load system in the test procedure described in paragraph 3.1 of Annex 13 to UNECE Regulation No 83): …

4.2.12.2.6.5. Make of particulate trap: …

4.2.12.2.6.6. Identifying part number: …

4.2.12.2.6.7. Normal operating temperature: … (K) and pressure range … (kPa)

(heavy-duty vehicles only)

4.2.12.2.6.8. In the case of periodic regeneration (heavy-duty vehicles only)

4.2.12.2.6.8.1. Number of ETC test cycles between 2 regenerations (n1): … (not applicable to Euro VI)

4.2.12.2.6.8.1.1. (Euro VI only) Number of WHTC test cycles without regeneration (n):

4.2.12.2.6.8.2. Number of ETC cycles during regeneration (n2): … (not applicable to Euro VI)

4.2.12.2.6.8.2.1. (Euro VI only) Number of WHTC test cycles with regeneration (n_R):

4.2.12.2.6.9. Other systems: yes/no ([1])

4.2.12.2.6.9.1. Description and operation

4.2.12.2.7.1. On-board-diagnostic (OBD) system: yes/no ([1]): …

4.2.12.2.7.1.1. (Euro VI only) Number of OBD engine families within the engine family

4.2.12.2.7.1.2. List of the OBD engine families (where applicable)

4.2.12.2.7.1.3. Number of the OBD engine family the parent engine / the engine member belongs to:

4.2.12.2.7.1.4. Manufacturer references of the OBD-Documentation required by Article 5(4)(c) and Article 9(4) of Regulation (EU) No 582/2011 and specified in Annex X to that Regulation for the purpose of approving the OBD system

4.2.12.2.7.1.5. When appropriate, manufacturer reference of the Documentation for installing in a vehicle an OBD equipped engine system

4.2.12.2.7.1.6. When appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the OBD system of an approved engine

4.2.12.2.7.2. Written description and/or drawing of the MI: …

4.2.12.2.7.3. List and purpose of all components monitored by the OBD system: …

4.2.12.2.7.4. Written description (general working principles) for

4.2.12.2.7.4.1. Positive-ignition engines

4.2.12.2.7.4.1.1. Catalyst monitoring: …

4.2.12.2.7.4.1.2. Misfire detection: …

4.2.12.2.7.4.1.3. Oxygen sensor monitoring: …

4.2.12.2.7.4.1.4. Other components monitored by the OBD system: …

4.2.12.2.7.4.2. Compression-ignition engines: …

4.2.12.2.7.4.2.1. Catalyst monitoring: …

4.2.12.2.7.4.2.2. Particulate trap monitoring: …

4.2.12.2.7.4.2.3. Electronic fuelling system monitoring: …

4.2.12.2.7.4.2.4. deNO_x system monitoring: …

4.2.12.2.7.4.2.5. Other components monitored by the OBD system: …

4.2.12.2.7.5. Criteria for MI activation (fixed number of driving cycles or statistical method): …

4.2.12.2.7.6. List of all OBD output codes and formats used (with explanation of each): …

4.2.12.2.7.7. The following additional information shall be provided by the vehicle manufacturer for the purposes of enabling the manufacture of OBD-compatible replacement or service parts and diagnostic tools and test equipment.

4.2.12.2.7.7.1. A description of the type and number of the preconditioning cycles used for the original type approval of the vehicle.

4.2.12.2.7.7.2. A description of the type of the OBD demonstration cycle used for the original type-approval of the vehicle for the component monitored by the OBD system.

4.2.12.2.7.7.3. A comprehensive document describing all sensed components with the strategy for fault detection and MI activation (fixed number of driving cycles or statistical method), including a list of relevant secondary sensed parameters for each component monitored by the OBD system. A list of all OBD output codes and format used (with an explanation of each) associated

with individual emission related power-train components and individual non-emission related components, where monitoring of the component is used to determine MI activation, including in particular a comprehensive explanation for the data given in service $05 Test ID $21 to FF and the data given in service $06.

In the case of types of vehicle that use a communication link in accordance with ISO 15765-4 'Road vehicles, diagnostics on controller area network (CAN) — Part 4: requirements for emissions-related systems', a comprehensive explanation for the data given in service $06 Test ID $00 to FF, for each OBD monitor ID supported, shall be provided.

4.2.12.2.7.7.4. The information required in point 4.2.12.2.7.7.3 may be provided by completing a table as described in points 4.2.12.2.7.7.4.1. and 4.2.12.2.7.7.4.2.

4.2.12.2.7.7.4.1. Low-duty vehicles

Component	Fault code	Monitoring strategy	Fault detection criteria	MI activation criteria	Secondary parameters	Preconditioning	Demonstration test
Catalyst	P0420	Oxygen sensor 1 and sensor 2 signals	Difference between sensor 1 and sensor 2 signals-	3rd cycle	Engine speed load, A/F mode, catalyst temperature	Two type I cycles	Type I

4.2.12.2.7.7.4.2. Heavy-duty vehicles

Component	Fault code	Monitoring strategy	Fault detection criteria	MI activation criteria	Secondary parameters	preconditioning	Demonstration test
SCR Catalyst	Pxxx	NO_x sensor 1 and sensor 2 signals	Difference between sensor 1 and sensor 2 signals-	3rd cycle	Engine speed load, catalyst temperature, reagent activity	Three OBD test cycles (3 short ESC cycles)	OBD test cycle (short ESC cycle)

4.2.12.2.7.7.5. (Euro VI only) OBD Communication protocol standard: ([7])

4.2.12.2.7.8. (Euro VI only) Manufacturer reference of the OBD-related information required by Article 5(4)(d) and Article 9(4) of Regulation (EU) No 582/2011 for the purpose of complying with the provisions on access to vehicle OBD and vehicle repair and maintenance information, or

4.2.12.2.7.8.1. As an alternative to a manufacturer reference provided in point 3.2.12.2.7.7 reference of the attachment to the information document set out in Appendix 4 of Annex I to Regulation (EU) No 582/2011 that contains the following table, once completed according to the given example:

Component — Fault code — Monitoring strategy — Fault detection criteria — MI activation criteria — Secondary parameters — Preconditioning — Demonstration test

Catalyst – P0420 — Oxygen sensor 1 and 2 signals — Difference between sensor 1 and sensor 2 signals — 3rd cycle — Engine speed, engine load, A/F mode, catalyst temperature — Two Type 1 cycles — Type 1

4.2.12.2.7.9. (EURO VI only) OBD components on-board the vehicle

4.2.12.2.7.9.1. Alternative approval as provided for in point 2.4.1 of Annex X to Regulation (EU) No 582/2011: yes/no ([1])

4.2.12.2.7.9.2. List of OBD components on-board the vehicle

4.2.12.2.7.9.3. Written description and/or drawing of the MI ([9])

4.2.12.2.7.9.4. Written description and/or drawing of the OBD off-board communication interface ([9])

4.2.12.2.8. Other system (description and operation): …

4.2.12.2.8.1. (Euro VI only) Systems to ensure the correct operation of NO_x control measures

4.2.12.2.8.2. Driver inducement system

4.2.12.2.8.2.1 (Euro VI only) Engine with permanent deactivation of the driver inducement, for use by the rescue services or in vehicles specified in point (b) of Article 2(3): yes/no ([1])

4.2.12.2.8.2.2. Activation of the creep mode

"disable after restart"/"disable after fuelling"/"disable after parking" ([1])([7])

4.2.12.2.8.3. (Euro VI only) Number of OBD engine families within the engine family considered when ensuring the correct operation of NO_x control measures

4.2.12.2.8.3.1. (Euro VI only) List of the OBD engine families within the engine family considered when ensuring the correct operation of NOx control measures (where applicable)

4.2.12.2.8.3.2. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to

4.2.12.2.8.4. (Euro VI only) Lowest concentration of the active ingredient present in the reagent that does not activate the warning system (CD_{min}): (% vol.)

4.2.12.2.8.5. (Euro VI only) When appropriate, manufacturer reference of the Documentation for installing in a vehicle the systems to ensure the correct operation of NO_x control measures

4.2.12.2.8.6. (EURO VI only) Components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

4.2.12.2.8.6.1. List of components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

4.2.12.2.8.6.2. When appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the system ensuring the correct operation of NO_x control measures of an approved engine

4.2.12.2.8.6.3. Written description and/or drawing of the warning signal ([9])

4.2.12.2.8.6.4. Alternative approval provided for in point 2.1 of Annex XIII to Regulation (EU) No 582/2011: yes/no ([1])

4.2.12.2.8.6.5. Heated/non-heated reagent tank and dosing system (see paragraph 2.4 of Annex 11 to UNECE Regulation No 49)

4.2.12.2.9. Torque limiter: yes/no ([1])

4.2.12.2.9.1. Description of the torque limiter activation (heavy-duty vehicles only): …

4.2.12.2.9.2. Description of the full load curve limitation (heavy-duty vehicles only): …

4.2.13. *Smoke opacity*

4.2.13.1. Location of the absorption coefficient symbol (compression ignition engines only): …

4.2.13.2. Power at six points of measurement (see UNECE Regulation No 24)

4.2.13.3. Engine power measured on test bench/on the vehicle ([1])

4.2.13.3.1. Declared speeds and powers

Measurement points	Engine speed (min^{-1})	Power (kW)
1……		
2……		
3……		
4……		
5……		
6……		

4.2.14. *Details of any devices designed to influence fuel economy* (if not covered by other items): …

4.2.15. *LPG fuelling system: yes/no* ([1])

4.2.15.1. Type-approval number according to UNECE Regulation No 34: …

4.2.15.2. Electronic engine management control unit for LPG fuelling

4.2.15.2.1. Make(s): …

4.2.15.2.2. Type(s): …

4.2.15.2.3. Emission-related adjustment possibilities: …

4.2.15.3. Further documentation

4.2.15.3.1. Description of the safeguarding of the catalyst at switch-over from petrol to LPG or back: …

4.2.15.3.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

4.2.15.3.3. Drawing of the symbol: …

4.2.16. *NG fuelling system: yes/no* ([1])

4.2.16.1. Type-approval number according to UNECE Regulation No 34: …

4.2.16.2. Electronic engine management control unit for NG fuelling

4.2.16.2.1. Make(s): …

4.2.16.2.2. Type(s): …

4.2.16.2.3. Emission-related adjustment possibilities: …

4.2.16.3. Further documentation

4.2.16.3.1. Description of the safeguarding of the catalyst at switch-over from petrol to NG or back: …

4.2.16.3.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

4.2.16.3.3. Drawing of the symbol: …

4.2.17. *Specific information related to gas fuelled engines for heavy-duty vehicles (in the case of systems laid out in a different manner, supply equivalent information)*

4.2.17.1. Fuel: LPG/NG-H/NG-L/NG-HL ([1])

4.2.17.2. Pressure regulator(s) or vaporiser/pressure regulator(s) ([1])

4.2.17.2.1. Make(s): …

4.2.17.2.2. Type(s): …

4.2.17.2.3. Number of pressure reduction stages: …

4.2.17.2.4. Pressure in final stage

minimum: ….. kPa — maximum: …. kPa

4.2.17.2.5. Number of main adjustment points: …

4.2.17.2.6. Number of idle adjustment points: …

4.2.17.2.7. Type-approval number: …

4.2.17.3. Fuelling system: mixing unit/gas injection/liquid injection/direct injection ([1])

4.2.17.3.1. Mixture strength regulation: …

4.2.17.3.2. System description and/or diagram and drawings: …

4.2.17.3.3. Type-approval number: …

4.2.17.4. Mixing unit

4.2.17.4.1. Number: …

4.2.17.4.2. Make(s): …

4.2.17.4.3. Type(s): …

4.2.17.4.4. Location: …

4.2.17.4.5. Adjustment possibilities: …

4.2.17.4.6. Type-approval number: …

4.2.17.5. Inlet manifold injection

4.2.17.5.1. Injection: single point/multipoint ([1])

4.2.17.5.2. Injection: continuous/simultaneously timed/sequentially timed ([1])

4.2.17.5.3. Injection equipment

4.2.17.5.3.1. Make(s): …

4.2.17.5.3.2. Type(s): …

4.2.17.5.3.3. Adjustment possibilities: …

4.2.17.5.3.4. Type-approval number: …

4.2.17.5.4. Supply pump (where applicable)

4.2.17.5.4.1. Make(s): …

4.2.17.5.4.2. Type(s): …

4.2.17.5.4.3. Type-approval number: …

4.2.17.5.5. Injector(s) …

4.2.17.5.5.1. Make(s): …

4.2.17.5.5.2. Type(s): …

4.2.17.5.5.3. Type-approval number: …

4.2.17.6. Direct injection

4.2.17.6.1. Injection pump/pressure regulator ([1])

4.2.17.6.1.1. Make(s): …

4.2.17.6.1.2. Type(s): …

4.2.17.6.1.3. Injection timing: …

4.2.17.6.1.4. Type-approval number: …

4.2.17.6.2. Injector(s) …

4.2.17.6.2.1. Make(s): …

4.2.17.6.2.2. Type(s): …

4.2.17.6.2.3. Opening pressure or characteristic diagram ([2]): …

4.2.17.6.2.4. Type-approval number: …

4.2.17.7. Electronic control unit (ECU)

4.2.17.7.1. Make(s): …

4.2.17.7.2. Type(s): …

4.2.17.7.3. Adjustment possibilities: …

4.2.17.7.4. Software calibration number(s): …

4.2.17.8. NG fuel-specific equipment

4.2.17.8.1. Variant 1 (only in the case of approvals of engines for several specific fuel compositions)

4.2.17.8.1.0.1. (Euro VI only) Self adaptive feature? Yes/No ([1])

4.2.17.8.1.0.2. (Euro VI only) Calibration for a specific gas composition NG-H/NG-L/NG-HL ([1])

Transformation for a specific gas composition NG-H_t/NG-L_t/NG-HL_t ([1])

4.2.17.8.1.1. Fuel composition:

methane (CH_4):	basis: ……. % mole	min. …. % mole	max. ….. % mole
ethane (C_2H_6):	basis: ……. % mole	min. …. % mole	max. ….. % mole
propane (C_3H_8):	basis: ……. % mole	min. …. % mole	max. ….. % mole
butane (C_4H_{10}):	basis: ……. % mole	min. …. % mole	max. ….. % mole
C_5/C_5+:	basis: ……. % mole	min. …. % mole	max. ….. % mole
oxygen (O_2):	basis: ……. % mole	min. …. % mole	max. ….. % mole
inert (N_2, He, etc.):	basis: ……. % mole	min. …. % mole	max. ….. % mole

4.2.17.8.1.2. Injector(s)

4.2.17.8.1.2.1. Make(s): …

4.2.17.8.1.2.2. Type(s): …

4.2.17.8.1.3. Others (where applicable): …

4.2.17.8.2. Variant 2 (only in the case of approvals for several specific fuel compositions)

4.2.17.9. When appropriate, manufacturer reference of the documentation for installing the dual-fuel engine in a vehicle ([x1])

4.2.18. Hydrogen fuelling system: yes/no ([1])

4.2.18.1. EU type-approval number in accordance with Regulation (EC) No 79/2009 of the European Parliament and of the Council[2]: …

4.2.18.2. Electronic engine management control unit for hydrogen fuelling

4.2.18.2.1. Make(s): …

4.2.18.2.2. Type(s): …

4.2.18.2.3. Emission-related adjustment possibilities: …

[2] Regulation (EC) No 79/2009 of the European Parliament and of the Council of 14 January 2009 on type-approval of hydrogen-powered motor vehicles, and amending Directive 2007/46/EC (OJ L 35, 4.2.2009, p. 32).

4.2.18.3. Further documentation

4.2.18.3.1. Description of the safeguarding of the catalyst at switch-over from petrol to hydrogen or back: …

4.2.18.3.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

4.2.18.3.3. Drawing of the symbol: …

4.2.19. H2NG fuelling system: yes/no ([1])

4.2.19.1. Percentage of hydrogen in the fuel (the maximum specified by the manufacturer): …

4.2.19.2. EU type-approval number in accordance with UNECE Regulation No 110 …

4.2.19.3. Electronic engine management control unit for H2NG fuelling

4.2.19.3.1. Make(s): …

4.2.19.3.2. Type(s): …

4.2.19.3.3. Emission-related adjustment possibilities: …

4.2.19.4. Further documentation

4.2.19.4.1. Description of the safeguarding of the catalyst at switch-over from petrol to H2NG or back: …

4.2.19.4.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

4.2.19.4.3. Drawing of the symbol: …

4.3. **Electric motor**

4.3.1. *Type* (winding, excitation): …

4.3.1.1. Maximum hourly output: …… kW

4.3.1.1.1. Maximum net power ([n]) … kW

(manufacturer's declared value)

4.3.1.1.2. Maximum 30 minutes power ([n]) … kW

(manufacturer's declared value)

4.3.1.2. Operating voltage: …… V

4.3.2. *Battery*

4.3.2.1. Number of cells: …

4.3.2.2. Mass: …… kg

4.3.2.3. Capacity: …… Ah (Amp-hours)

4.3.2.4. Position: …

4.4. **Engine or motor combination**

3.4.1. *Hybrid electric vehicle: yes/no* ([1])

4.4.2. *Category of hybrid electric vehicle:* off-vehicle charging/not off-vehicle charging: ([1])

4.4.3. *Operating mode switch: with/without* ([1])

4.4.3.1. Selectable modes

4.4.3.1.1. Pure electric: yes/no ([1])

4.4.3.1.2. Pure fuel consuming: yes/no ([1])

4.4.3.1.3. Hybrid modes: yes/no ([1])

(if yes, short description): …

4.4.4. *Description of the energy storage device: (battery, capacitor, flywheel/generator)*

4.4.4.1. Make(s): …

4.4.4.2. Type(s): …

4.4.4.3. Identification number: …

4.4.4.4. Kind of electrochemical couple: …

4.4.4.5. Energy: … (for battery: voltage and capacity Ah in 2 h, for capacitor: J,…)

4.4.4.6. Charger: on board/external/without ([1])

4.4.5. *Electric motor (describe each type of electric motor separately)*

4.4.5.1. Make: …

4.4.5.2. Type: …

4.4.5.3. Primary use: traction motor/generator ([1])

4.4.5.3.1. When used as traction motor: single-/multimotors (number) ([1]): …

4.4.5.4. Maximum power: …… kW

4.4.5.5. Working principle

4.4.5.5.5.1 Direct current/alternating current/number of phases: …

4.4.5.5.2. Separate excitation/series/compound ([1])

4.4.5.5.3. Synchronous/asynchronous ([1])

4.4.6. *Control unit*

4.4.6.1. Make(s): …

4.4.6.2. Type(s): …

4.4.6.3. Identification number: …

4.4.7. *Power controller*

4.4.7.1. Make: …

4.4.7.2. Type: …

4.4.7.3. Identification number: …

4.4.8. *Vehicle electric range ... km (in accordance with Annex 9 to UNECE Regulation No 101)*

4.4.9. *Manufacturer's recommendation for preconditioning*: …

4.5. **CO_2 emissions/fuel consumption ([o]) (manufacturer's declared value)**

4.5.1. *CO_2 mass emissions*

4.5.1.1. CO_2 mass emissions (urban conditions): …… g/km

4.5.1.2. CO_2 mass emissions (extra-urban conditions): …… g/km

4.5.1.3. CO_2 mass emissions (combined): …… g/km

4.5.2. *Fuel consumption (provide details for each reference fuel tested)*

4.5.2.1. Fuel consumption (urban conditions) … l/100 km or m^3/100 km or kg/100 km ([1])

4.5.2.2. Fuel consumption (extra-urban conditions) … l/100 km or m^3/100 km or kg/100 km ([1])

4.5.2.3. Fuel consumption (combined) … l/100 km or m^3/100 km or kg/100 km ([1])

4.5.3. *Electric energy consumption for electric vehicles*

4.5.3.1. Electric energy consumption for pure electric vehicles … Wh/km

4.5.3.2. Electric energy consumption for externally chargeable hybrid electric vehicles

4.5.3.2.1. Electric energy consumption (Condition A, combined) …Wh/km

4.5.3.2.2. Electric energy consumption (Condition B, combined) … Wh/km

4.5.3.2.3. Electric energy consumption (weighted combined) … Wh/km

4.5.4. *CO_2 emissions for heavy duty engines (Euro VI only)*

4.5.4.1. CO_2 mass emissions WHSC test ([x3]): … g/kWh

4.5.4.2. CO_2 mass emissions WHSC test in diesel mode ([x2]): … g/kWh

4.5.4.3. CO2 mass emissions WHSC test in dual-fuel mode ([x1]): … g/kWh

4.5.4.4. CO2 mass emissions WHTC test ([x3])([8]): … g/kWh

4.5.4.5. CO2 mass emissions WHTC test in diesel mode ([x2])([8]): … g/kWh

4.5.4.6. CO2 mass emissions WHTC test in dual-fuel mode ([x1])([8]): … g/kWh

4.5.5. *Fuel consumption for heavy duty engines (Euro VI only)*

4.5.5.1. Fuel consumption WHSC test ([x3]): … g/kWh

4.5.5.2. Fuel consumption WHSC test in diesel mode ([x2]): … g/kWh

4.5.5.3. Fuel consumption WHSC test in in dual-fuel mode ([x1]): … g/kWh

4.5.5.4. Fuel consumption WHTC test ([8])([x3]): … g/kWh

4.5.5.5. Fuel consumption WHTC test in diesel mode ([8])([x2]): … g/kWh

4.5.5.6. Fuel consumption WHTC test in dual-fuel mode ([8])([x1]): … g/kWh

4.5.6. Vehicle fitted with an eco-innovation within the meaning of Article 12 of Regulation (EC) No 443/2009 of the European Parliament and of the Council[3] for M_1 vehicles or Article 12 of Regulation (EU) No 510/2011 of the European Parliament and of the Council[4] for N_1 vehicles: yes/no ([1])

4.5.6.1. Type/Variant/Version of the baseline vehicle as referred to in Article 5 of Commission Implementing Regulation (EU) No 725/2011[5] for M_1 vehicles or Article 5 of Commission Implementing Regulation (EU) No 427/2014[6] for N_1 vehicles (where applicable)[: …

4.5.6.2. Existence of interactions between different eco-innovations: yes/no ([1])

4.5.6.3. Emissions data related to the use of eco-innovations (repeat the table for each reference fuel tested) ([w1])

Decision approving the eco-innovation ([w2])	Code of the eco-innovation ([w3])	1. CO_2 emissions of the baseline vehicle (g/km)	2. CO_2 emissions of the eco-innovation vehicle (g/km)	3. CO_2 emissions of the baseline vehicle under type 1 test-cycle ([w4])	4. CO_2 emissions of the eco-innovation vehicle under type 1 test-cycle (= 3.5.1.3)	5. Usage factor (UF), i.e. temporal share of technology usage in normal operation conditions	CO_2 emissions savings ((1 – 2) – (3 – 4)) * 5
xxxx/201x							
Total CO_2 emissions saving (g/km) ([w5])							

([w]) Eco-innovations.

([w2]) Number of the Commission Decision approving the eco-innovation.

([w3]) Assigned in the Commission Decision approving the eco-innovation.

([w4]) Under agreement of the approval authority, if a modelling methodology is applied instead of the type 1 test cycle, this value shall be the one provided by the modelling methodology.

([w5]) Sum of the CO_2 emissions savings of each individual eco-innovation.

3 Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO 2 emissions from light-duty vehicles (OJ L 140, 5.6.2009, p. 1)

4 Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO 2 emissions from light-duty vehicles (OJ L 145, 31.5.2011, p. 1)

5 Commission Implementing Regulation (EU) No 725/2011 of 25 July 2011 establishing a procedure for the approval and certification of innovative technologies for reducing CO 2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 194, 26.7.2011, p. 19)

6 Commission Implementing Regulation (EU) No 427/2014 of 25 April 2014 establishing a procedure for the approval and certification of innovative technologies for reducing CO 2 emissions from light commercial vehicles pursuant to Regulation (EU) No 510/2011 of the European Parliament and of the Council (OJ L 125, 26.4.2014, p. 57)

4.6. **Temperatures permitted by the manufacturer**

4.6.1. *Cooling system*

4.6.1.1. Liquid cooling

Maximum temperature at outlet: …… K

4.6.1.2. Air cooling

4.6.1.2.1. Reference point: …

4.6.1.2.2. Maximum temperature at reference point: …… K

4.6.2. *Maximum outlet temperature of the inlet intercooler: …….* K

4.6.3. *Maximum exhaust temperature at the point in the exhaust pipe(s) adjacent to the outer flange(s) of the exhaust manifold or turbocharger:* …… K

4.6.4. *Fuel temperature*

Minimum: …… K — maximum: …… K

For diesel engines at injection pump inlet, for gas fuelled engines at pressure regulator final stage

4.6.5. *Lubricant temperature*

Minimum: …. K — maximum: …… K

4.6.6. *Fuel pressure*

Minimum: …… kPa — maximum: …… kPa

At pressure regulator final stage, NG fuelled gas engines only.

4.7. **Power absorbed at engine speeds specific for emissions test**

Equipment	Idle	Low speed	High speed	Speed A (Preferred speed ([2])	Speed B (n95h)
P_a Auxiliaries needed for operating the engine (to be subtracted from measured engine power) according to Annex 4, Appendix 6 of UNECE Regulation No 49					
Auxiliaries needed for operating the engine (to be subtracted from measured engine power). P_b Auxiliaries/equipment not required according to Annex 4, Appendix 6 of No 49					

4.8. **Lubrication system**

4.8.1. *Description of the system*

4.8.1.1. Position of lubricant reservoir: …

4.8.1.2. Feed system (by pump/injection into intake/mixing with fuel, etc.) ([1])

4.8.2. *Lubricating pump*

4.8.2.1. Make(s): …

4.8.2.2. Type(s): …

4.8.3. *Mixture with fuel*

4.8.3.1. Percentage: …

4.8.4. *Oil cooler: yes/no* ([1])

4.8.4.1. Drawing(s): …… or

4.8.4.1.1. Make(s): …

4.8.4.1.2. Type(s): …

5. TRANSMISSION ([p])

5.1. **Drawing of the transmission:** …

5.2. **Type (mechanical, hydraulic, electric, etc.):** …

5.2.1. A brief description of the electrical/electronic components (if any): …

5.3. **Moment of inertia of engine flywheel:** …

5.3.1. Additional moment of inertia with no gear engaged: …

5.4. **Clutch**

5.4.1. Type: …

5.4.2. Maximum torque conversion: …

5.5. **Gearbox**

5.5.1. Type (manual/automatic/CVT (continuously variable transmission)) ([1])

5.5.2. Location relative to the engine: …

5.5.3. Method of control: …

5.6. **Gear ratios**

Gear	Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)	Final drive ratio(s) (ratio of gearbox output shaft to driven wheel revolutions)	Total gear ratios
Maximum for CVT (*)			
1			
2			
3			
…			
Minimum for CVT (*)			
Reverse			
(*) Continuously variable transmission.			

5.7. **Maximum vehicle design speed (in km/h)** ([q]): …

5.8. **Speedometer**

5.8.1. Method of operation and description of drive mechanism: …

5.8.2. Instrument constant: …

5.8.3. Tolerance of the measuring mechanism (pursuant to paragraph 2.5.1 of UNECE Regulation No 39): …

5.8.4. Overall transmission ratio (pursuant to paragraph 2.2.2 of UNECE Regulation No 39) or equivalent data: …

5.8.5. Diagram of the speedometer scale or other forms of display: …

5.9. **Tachograph: yes/no** ([1])

5.9.1 Approval mark: …

5.10. **Differential lock: yes/no/optional** ([1])

5.11. **Gear shift indicator (GSI)**

5.11.1. Acoustic indication available yes/no ([1]). If yes, description of sound and sound level at the driver's ear in dB(A). (Acoustic indication always switchable on/off)

5.11.2. Information according to point 4.6 of Annex I to Commission Regulation (EU) No 65/2012[7] (manufacturer's declared value)

5.11.3. Photographs and/or drawings of the gear shift indicator instrument and brief description of the system components and operation:

[7] Commission Regulation (EU) No 65/2012 of 24 January 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards gear shift indicators and amending Directive 2007/46/EC of the European Parliament and of the Council (OJ L 28, 31.1.2012, p. 24)

6. AXLES

6.1. Description of each axle: …

6.2. Make: …

6.3. Type: …

6.4. Position of retractable axle(s): …

6.5. Position of loadable axle(s): …

7. SUSPENSION

7.1. Drawing of the suspension arrangements: …

7.2. Type and design of the suspension of each axle or group of axles or wheel: …

7.2.1. Level adjustment: yes/no/optional ([1])

7.2.2. A brief description of the electrical/electronic components (if any): …

7.2.3. Air-suspension for driving axle(s): yes/no ([1])

7.2.3.1. Suspension of driving axle(s) equivalent to air-suspension: yes/no ([1])

7.2.3.2. Frequency and damping of the oscillation of the sprung mass: …

7.2.4. Air-suspension for non-driving axle(s): yes/no ([1])

7.2.4.1. Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([1])

7.2.4.2. Frequency and damping of the oscillation of the sprung mass: …

7.3. **Characteristics of the springing parts of the suspension** (design, characteristics of the materials and dimensions): …

7.4. **Stabilisers:** yes/no/optional ([1])

7.5. **Shock absorbers:** yes/no/optional ([1])

7.6. **Tyres and wheels**

7.6.1. *Tyre/wheel combination(s)*

(a) for tyres indicate size designation, load-capacity index, speed category symbol, rolling resistance in accordance with ISO 28580 (where applicable) ([r]);

(b) for wheels indicate rim size(s) and off-set(s)

7.6.1.1. Axles

7.6.1.1.1. Axle 1: …

7.6.1.1.2. Axle 2: …

etc.

7.6.1.2. Spare wheel, if any: …

7.6.2. *Upper and lower limits of rolling radii*

7.6.2.1. Axle 1: …

7.6.2.2. Axle 2: …

7.6.2.3. Axle 3: …

7.6.2.4. Axle 4: …

etc.

7.6.3. *Tyre pressure(s) as recommended by the vehicle manufacturer:* …… kPa

7.6.4. *Chain/tyre/wheel combination on the front and/or rear axle that is suitable for the type of vehicle, as recommended by the manufacturer:* …

7.6.5. *Brief description of temporary use spare unit (if any):* …

8. STEERING

8.1. **Schematic diagram of steered axle(s) showing steering geometry:** …

8.2. **Transmission and control**

8.2.1. Type of steering transmission (specify for front and rear, where applicable): …

8.2.2. Linkage to wheels (including other than mechanical means; specify for front and rear, where applicable): …

8.2.2.1. A brief description of the electrical/electronic components (if any): …

8.2.3. Method of assistance (if any): …

8.2.3.1. Method and diagram of operation, make(s) and type(s): …

8.2.4. Diagram of the steering equipment as a whole, showing the position on the vehicle of the various devices influencing its steering behaviour: …

8.2.5. Schematic diagram(s) of the steering control(s): …

8.2.6. Range and method of adjustment (if any), of the steering control: …

8.3. **Maximum steering angle of the wheels**

8.3.1. To the right: … degrees; number of turns of the steering wheel (or equivalent data): …

8.3.2. To the left: … degrees; number of turns of the steering wheel (or equivalent data): …

9. BRAKES

(The following particulars, including means of identification, where applicable, are to be given)

9.1. Type and characteristics of the brakes as defined in paragraph 2.6 of UNECE Regulation 13-H including details and drawings of the drums, discs, hoses make and type of shoe/pad assemblies and/or linings, effective braking areas, radius of drums, shoes or discs, mass of drums, adjustment devices, relevant parts of the axle(s) and suspension: …

9.2. Operating diagram, description and/or drawing of the braking equipment described in paragraph 2.3 of UNECE Regulation 13-H including details and drawings of the transmission and controls:

9.2.1. Service braking system: …

9.2.2. Secondary braking system: …

9.2.3. Parking braking system: …

9.2.4. Any additional braking system: …

9.2.5. Break-away braking system: …

9.3. Control and transmission of trailer braking systems in vehicles designed to tow a trailer: …

9.4. Vehicle is equipped to tow a trailer with electric/pneumatic/hydraulic ([1]) service brakes: yes/no ([1])

9.5. Anti-lock braking system: yes/no/optional ([1])

9.5.1. For vehicles with anti-lock systems, description of system operation (including any electronic parts), electric block diagram, hydraulic or pneumatic circuit plan: …

9.6. Calculation and curves according to Annex 5 to UNECE Regulation No 13-H: …

9.7. Description and/or drawing of the energy supply, also to be specified for power-assisted braking systems: …

9.7.1. In the case of compressed-air braking systems, working pressure p2 in the pressure reservoir(s): …

9.7.2. In the case of vacuum braking systems, the initial energy level in the reservoir(s): …

9.8. Calculation of the braking system: Determination of the ratio between the total braking forces at the circumference of the wheels and the force applied to the braking control: …

9.9. Brief description of the braking equipment according to paragraph 12 of Annex 2 to UNECE Regulation No 13: …

9.10. If claiming exemptions from the Type I and/or Type II or Type III tests, state the number of the report in accordance with Appendix 2 of Annex 11 to UNECE Regulation No 13: …

9.11. Particulars of the type(s) of endurance braking system(s): …

10. BODYWORK

10.1. Type of bodywork using the codes defined in Part C of Annex II: …

10.2. Materials used and methods of construction: …

10.3. **Occupant doors, latches and hinges**

10.3.1. Door configuration and number of doors: …

10.3.1.1. Dimensions, direction and maximum angle of opening: …

10.3.2. Drawing of latches and hinges and of their position in the doors: …

10.3.3. Technical description of latches and hinges: …

10.3.4. Details, including dimensions, of entrances, steps and necessary handles where applicable: …

10.4. **Field of vision**

10.4.1. Particulars of the primary reference marks in sufficient detail to enable them to be readily identified and the position of each in relation to the others and to the R-point to be verified: …

10.4.2. Drawing(s) or photograph(s) showing the location of component parts within the 180° forward field of vision: …

10.5. **Windscreen and other windows**

10.5.1. *Windscreen*

10.5.1.1. Materials used: …

10.5.1.2. Method of mounting: …

10.5.1.3. Angle of inclination: …

10.5.1.4. Type-approval number(s): …

10.5.1.5. Windscreen accessories and the position in which they are fitted together with a brief description of any electrical/electronic components involved: …

10.5.2. *Other windows*

10.5.2.1. Materials used: …

10.5.2.2. Type-approval number(s): …

10.5.2.3. A brief description of the electrical/electronic components (if any) of the window lifting mechanism: …

10.5.3. *Opening roof glazing*

10.5.3.1. Materials used: …

10.5.3.2. Type-approval number(s): …

10.5.4. *Other glass panes*

10.5.4.1. Materials used: …

10.5.4.2. Type-approval number(s): …

10.6. **Windscreen wiper(s)**

10.6.1. Detailed technical description (including photographs or drawings): …

10.7. **Windscreen washer**

10.7.1. Detailed technical description (including photographs or drawings) or, if approved as separate technical unit, type-approval number: …

10.8. **Defrosting and demisting**

10.8.1. Detailed technical description (including photographs or drawings): …

10.8.2. Maximum electrical consumption: … kW

10.9. **Devices for indirect vision**

10.9.1. Rear-view mirrors, stating for each mirror:

10.9.1.1. Make: …

10.9.1.2. Type-approval mark: …

10.9.1.3. Variant: …

10.9.1.4. Drawing(s) for the identification of the mirror showing the position of the mirror relative to the vehicle structure: …

10.9.1.5. Details of the method of attachment including that part of the vehicle structure to which it is attached: …

10.9.1.6. Optional equipment which may affect the rearward field of vision: …

10.9.1.7. A brief description of the electronic components (if any) of the adjustment system: …

10.9.2. Devices for indirect vision other than mirrors: …

10.9.2.1. Type and characteristics (such as a complete description of the device): …

10.9.2.1.1. In the case of a camera-monitor device, the detection distance (mm), contrast, luminance range, glare correction, display performance (black and white/colour), image repetition frequency, luminance reach of the monitor: …

10.9.2.1.2. Sufficiently detailed drawings to identify the complete device, including installation instructions; the position for the EU type-approval mark has to be indicated on the drawings.

10.10. **Interior arrangement**

10.10.1. *Interior protection for occupants*

10.10.1.1. Layout drawing or photographs showing the position of the attached sections or views: …

10.10.1.2. Photograph or drawing showing the reference zone including the exempted area referred to in paragraph 2.3.1 of UNECE Regulation No 21 : …

10.10.1.3. Photographs, drawings and/or an exploded view of the interior fittings, showing the parts in the passenger compartment and the materials used (with the exception of interior rear view mirrors), arrangement of controls, roof and opening roof, backrest, seats and the rear part of seats: …

10.10.2. *Arrangement and identification of controls, tell-tales and indicators*

10.10.2.1. Photographs and/or drawings of the arrangement of symbols and controls, tell-tales and indicators: …

10.10.2.2. Photographs and/or drawings of the identification of controls, tell-tales and indicators and of the vehicle parts referred to in Table 1 of UNECE Regulation No 121 where relevant: …

10.10.2.3. Summary table

The vehicle is equipped with the following controls, indicators and tell-tales pursuant to Table 1of UNECE Regulation No 121

Controls, tell-tales and indicators for which, when fitted, identification is mandatory, and symbols to be used for that purpose

Symbol No	Device	Control/ indicator available (*)	Identified by symbol (*)	Where (**)	Tell-tale available (*)	Identified by symbol (*)	Where (**)
1	Master light						
2	Dipped-beam headlamps						
3	Main-beam headlamps						
4	Position (side) lamps						
5	Front fog lamps						
6	Rear fog lamp						
7	Headlamp levelling device						
8	Parking lamps						
9	Direction indicators						
10	Hazard warning						
11	Windscreen wiper						
12	Windscreen washer						
13	Windscreen wiper and washer						
14	Headlamp cleaning device						
15	Windscreen demisting and defrosting						

16	Rear window demisting and defrosting						
17	Ventilating fan						
18	Diesel pre-heat						
19	Choke						
20	Brake failure						
21	Fuel level						
22	Battery charging condition						
23	Engine coolant temperature						
(*)	x = yes — = no or not separately available o = optional.						
(**)	d = directly on control, indicator or tell-tale c = in close vicinity.						

Controls, tell-tales and indicators for which, when fitted, identification is optional, and symbols which shall be used if they are to be identified

Symbol No	Device	Control/ indicator available (*)	Identified by symbol (*)	Where (**)	Tell-tale available (*)	Identified by symbol (*)	Where (**)
1	Parking brake						
2	Rear window wiper						
3	Rear window washer						
4	Rear window wiper and washer						
5	Intermittent windscreen wiper						

6	Audible warning device (horn)						
7	Front hood (bonnet)						
8	Rear hood (boot)						
9	Seat-belt						
10	Engine oil pressure						
11	Unleaded petrol						
…							
…							
…							
(*)	x = yes — = no or not separately available o = optional.						
(**)	d = directly on control, indicator or tell-tale c = in close vicinity.						

10.10.3. *Seats*

10.10.3.1. Number of seating positions ([s]): …

10.10.3.1.1. Location and arrangement: …

10.10.3.2. Seat(s) designated for use only when the vehicle is stationary: …

10.10.3.3. Mass: …

10.10.3.4. Characteristics: for seats not type-approved as components, description and drawings of

10.10.3.4.1. The seats and their anchorages: …

10.10.3.4.2. The adjustment system: …

10.10.3.4.3. The displacement and locking systems: …

10.10.3.4.4. The seat-belt anchorages (if incorporated in the seat structure): …

10.10.3.4.5. The parts of the vehicle used as anchorages: …

10.10.3.5. Coordinates or drawing of the R-point ([t])

10.10.3.5.1. Driver's seat: …

10.10.3.5.2. All other seating positions: …

10.10.3.6. Design torso angle

10.10.3.6.1. Driver's seat: …

10.10.3.6.2. All other seating positions: …

10.10.3.7. Range of seat adjustment

10.10.3.7.1. Driver's seat: …

10.10.3.7.2. All other seating positions: …

10.10.4. *Head restraints*

10.10.4.1. Type(s) of head restraints: integrated/detachable/separate ([1])

10.10.4.2. Type-approval number(s), where available: …

10.10.4.3. For head restraints not yet approved

10.10.4.3.1. A detailed description of the head restraint, specifying in particular the nature of the padding material or materials and, where applicable, the position and specifications of the braces and anchorage pieces for the type of seat for which approval is sought: …

10.10.4.3.2. In the case of a 'separate' head restraint

10.10.4.3.2.1. A detailed description of the structural zone to which the head restraint is intended to be fixed: …

10.10.4.3.2.2. Dimensional drawings of the characteristic parts of the structure and the head restraint: …

10.10.5. *Heating systems for the passenger compartment*

10.10.5.1. A brief description of the type of vehicle with regard to the heating system if the heating system uses the heat of the engine cooling fluid: …

10.10.5.2. A detailed description of the type of vehicle with regard to the heating if the cooling air or the exhaust gases of the engine are used as heat source, including:

10.10.5.2.1. Layout drawing of the heating system showing its position in the vehicle: …

10.10.5.2.2. Layout drawing of the heat exchanger for heating systems using the exhaust gases for heating, or of the parts where the heat exchange takes place (for heating systems using the engine cooling air for heating): …

10.10.5.2.3. Sectional drawing of the heat exchanger or the parts respectively where the heat exchange takes place indicating the thickness of the wall, used materials and characteristics of the surface: …

10.10.5.2.4. Specifications shall be given for further important components of the heating system such as, for example, the heater fan, with regard to their method of construction and technical data: …

10.10.5.3. A brief description of the type of vehicle with regard to the combustion heating system and the automatic control: …

10.10.5.3.1. Layout drawing of the combustion heater, the air inlet system, the exhaust system, the fuel tank, the fuel supply system (including the valves) and the electrical connections showing their positions in the vehicle.

10.10.5.4. Maximum electrical consumption: …… kW

10.10.6. *Components influencing the behaviour of the steering mechanism in the event of an impact*

10.10.6.1. A detailed description, including photograph(s) and/or drawing(s), of the type of vehicle with respect to the structure, the dimensions, the lines and the constituent materials of that part of the vehicle forward of the steering control, including those components designed to contribute to the absorption of energy in the event of an impact against the steering control: …

10.10.6.2. Photograph(s) and/or drawing(s) of vehicle components other than those described in point 10.10.6.1 as identified by the manufacturer in agreement with the technical service, as contributing to the behaviour of the steering mechanism in case of impact: …

10.10.7. *Burning behaviour of materials used in the interior construction of certain categories of motor vehicles*

10.10.7.1. Material(s) used for the interior lining of the roof

10.10.7.1.1. Component type-approval number(s), if available: …

10.10.7.1.2. For materials not approved

10.10.7.1.2.1. Base material(s)/designation: ……/……

10.10.7.1.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.1.2.3. Type of coating ([1]): …

10.10.7.1.2.4. Maximum/minimum thickness: ……/…… mm

10.10.7.2. Material(s) used for the rear and side walls

10.10.7.2.1. Component type-approval number(s), if available: …

10.10.7.2.2. For materials not approved

10.10.7.2.2.1. Base material(s)/designation: ……/……

10.10.7.2.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.2.2.3. Type of coating ([1]): …

10.10.7.2.2.4. Maximum/minimum thickness: ……/…… mm

10.10.7.3. Material(s) used for the floor

10.10.7.3.1. Component type-approval number(s), if available: …

10.10.7.3.2. For materials not approved

10.10.7.3.2.1. Base material(s)/designation: ……/……

10.10.7.3.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.3.2.3. Type of coating ([1]): …

10.10.7.3.2.4. Maximum/minimum thickness: ……/…… mm

10.10.7.4. Material(s) used for the upholstery of the seats

10.10.7.4.1. Component type-approval number(s), if available: …

10.10.7.4.2. For materials not approved

10.10.7.4.2.1. Base material(s)/designation: ……/……

10.10.7.4.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.4.2.3. Type of coating ([1]): …

10.10.7.4.2.4. Maximum/minimum thickness: ……/…… mm

10.10.7.5. Material(s) used for the heating and ventilation pipes

10.10.7.5.1. Component type-approval number(s), if available: …

10.10.7.5.2. For materials not approved

10.10.7.5.2.1. Base material(s)/designation: ……/…..

10.10.7.5.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.5.2.3. Type of coating ([1]): …

10.10.7.5.2.4. Maximum/minimum thickness: ……/…….mm

10.10.7.6. Material(s) used for luggage racks

10.10.7.6.1. Component type-approval number(s), if available: …

10.10.7.6.2. For materials not approved

10.10.7.6.2.1. Base material(s)/designation: ……/……

10.10.7.6.2.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.6.2.3. Type of coating ([1]): …

10.10.7.6.2.4. Maximum/minimum thickness: ……/…… mm

10.10.7.7. Material(s) used for other purposes

10.10.7.7.1. Intended purposes: …

10.10.7.7.2. Component type-approval number(s), if available: …

10.10.7.7.3. For materials not approved

10.10.7.7.3.1. Base material(s)/designation: ……/……

10.10.7.7.3.2. Composite/single ([1]) material, number of layers ([1]): …

10.10.7.7.3.3. Type of coating ([1]): …

10.10.7.7.3.4. Maximum/minimum thickness: …./…. mm

10.10.7.8. Components approved as complete devices (seats, separation walls, luggage racks, etc.)

10.10.7.8.1. Component type-approval number(s): …

10.10.7.8.2. For the complete device: seat, separation wall, luggage racks, etc. ([1])

10.10.8. *Gas used as refrigerant in the air-conditioning system*: …

10.10.8.1. The air-conditioning system is designed to contain fluorinated greenhouse gases with global warming potential higher than 150: yes/no ([1])

10.10.8.2. If yes, fill in the following points

10.10.8.2.1. Drawing and brief description of the air-conditioning system, including the reference or part number and material of the leak components;

10.10.8.2.2. Leakage of the air-conditioning system

10.10.8.2.4. Reference or part number and material of the components of the system and information about the test (e.g. test report number, approval number, etc.): …

10.10.8.3. Overall leakage in g/year of the entire system: …

10.11. **External projections**

10.11.1. General arrangement (drawing or photographs) indicating the position of the attached sections and views:

10.11.2. Drawings and/or photographs, for example, and where relevant, of the door and window pillars, air-intake grilles, radiator grille, windscreen wipers, rain gutter channels, handles, slide rails, flaps, door hinges and locks, hooks, eyes, decorative trim, badges, emblems and recesses and any other external projections and parts of the exterior surface which can be regarded as critical (e.g. lighting equipment). If the parts listed in the previous sentence are not critical, for documentation purposes they may be replaced by photographs, accompanied if necessary by dimensional details and/or text:

10.11.3. Drawings of parts of the external surface in accordance paragraph 6.9.1 to UNECE Regulation No 17: …

10.11.4. Drawing of bumpers: …

10.11.5. Drawing of the floor line: …

10.12. **Safety belts and/or other restraint systems**

10.12.1. Number and position of safety belts and restraint systems and seats on which they can be used

(L = left-hand side, R = right-hand side, C = centre)

		Complete EU type-approval mark	Variant, where applicable	Belt adjustment device for height (indicate yes/no/optional)
First row of seats	L			
	C			
	R			
Second row of seats(*)	L			
	C			
	R			

(*) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.

10.12.2. Nature and position of supplementary restraint systems (indicate yes/no/optional)

(L = left-hand side, R = right-hand side, C = centre)				
		Front airbag	Side airbag	Belt pre-loading device
First row of seats	L			
	C			
	R			
Second row of seats(*)	L			
	C			
	R			

(*) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.

10.12.3. Number and position of safety belt anchorages and proof of compliance with UNECE Regulation No 14, (i.e. type-approval number or test report): …

10.12.4. A brief description of the electrical/electronic components (if any): …

10.13. **Safety belt anchorages**

10.13.1. Photographs and/or drawings of the bodywork showing the position and dimensions of the actual and the effective anchorages including the R-points: …

10.13.2. Drawings of the belt anchorages and parts of the vehicle structure where they are attached (with the material indication): …

10.13.3. Designation of the types ([u]) of safety belt authorised for fitting to the anchorages with which the vehicle is equipped:

			Anchorage location	
			Vehicle structure	Seat structure
First row of seats				
Right-hand seat	Lower anchorages	outboard / inboard		
	Upper anchorages			
Centre seat	Lower anchorages	right / left		
	Upper anchorages			
Left-hand seat	Lower anchorages	outboard / inboard		
	Upper anchorages			
Second row of seats (*)				
Right-hand seat	Lower anchorages	outboard / inboard		
	Upper anchorages			
Centre seat	Lower anchorages	right / left		
	Upper anchorages			
Left-hand seat	Lower anchorages	outboard / inboard		
	Upper anchorages			
(*) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.				

10.13.4. Description of a particular type of safety belt where an anchorage is located in the seat backrest or incorporates an energy dissipating device: …

10.14. **Space for mounting rear registration plates (give range where appropriate, drawings may be used where applicable)**

10.14.1. Height above road surface, upper edge: …

10.14.2. Height above road surface, lower edge: …

10.14.3. Distance of the centre line from the longitudinal median plane of the vehicle: …

10.14.4. Distance from the left vehicle edge: …

10.14.5. Dimensions (length x width): …

10.14.6. Inclination of the plane to the vertical: …

10.14.7. Angle of visibility in the horizontal plane: …

10.15. **Rear under-run protection**

10.15.0. Presence: yes/no/incomplete ([1])

10.15.1. Drawing of the vehicle parts relevant to the rear under-run protection, i.e. drawing of the vehicle and/or chassis with position and mounting of the widest rear axle, drawing of the mounting and/or fitting of the rear under-run protection. If the under-run protection is not a special device, the drawing shall clearly show that the required dimensions are met: …

10.15.2. In case of a special device, full description and/or drawing of the rear under-run protection (including mountings and fittings), or, if approved as separate technical unit, type-approval number: …

10.16. **Wheel guards**

10.16.1. Brief description of the vehicle with regard to its wheel guards: …

10.16.2. Detailed drawings of the wheel guards and their position on the vehicle showing the dimensions specified in Figure 1 of Annex II to Commission Regulation (EU) No 1009/2010[8] and taking account of the extremes of tyre/wheel combinations: …

10.17. **Statutory plates**

10.17.1. Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the vehicle identification number: …

10.17.2. Photographs and/or drawings of the statutory plate and inscriptions (completed example with dimensions): …

10.17.3. Photographs and/or drawings of the vehicle identification number (completed example with dimensions): …

10.17.4. Manufacturer's declaration of compliance with the requirements set out in point 2 of Part B of Annex I to Commission Regulation (EU) No 19/2011[9]

10.17.4.1. The meaning of characters in the vehicle descriptor section of the VIN as referred to in point 2.1.(b) of Part B of Annex I to Commission Regulation (EU) No 19/2011 and, where applicable, in the vehicle indicator section of the VIN as referred to in point 2.1.(c) of Part B of Annex I to Commission

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8 Commission Regulation (EU) No 1009/2010 of 9 November 2010 concerning type-approval requirements for wheel guards of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 292, 10.11.2010, p. 21).

9 Commission Regulation (EU) No 19/2011 of 11 January 2011 concerning type-approval requirements for the manufacturer's statutory plate and for the vehicle identification number of motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 8, 12.1.2011, p. 1).

Regulation (EU) No 19/2011 used to comply with the requirements of paragraph 5.3 of ISO Standard 3779-2009 shall be explained: …

10.17.4.2. If characters in the vehicle descriptor section of the VIN are used to comply with the requirements of paragraph 5.4 of ISO Standard 3779-2009 these characters shall be indicated: …

10.18. **Radio interference/electromagnetic compatibility**

10.18.1. Description and drawings/photographs of the shapes and constituent materials of the part of the body forming the engine compartment and the part of the passenger compartment nearest to it: …

10.18.2. Drawings or photographs of the position of metal components housed in the engine compartment (e.g. heating appliances, spare wheel, air filter, steering mechanism, etc.): …

10.18.3. Table and drawing of radio-interference control equipment: …

10.18.4. Particulars of the nominal value of the direct current resistance, and, in the case of resistive ignition cables, of their nominal resistance per metre: …

10.19. **Lateral protection**

10.19.0. Presence: yes/no/incomplete ([1])

10.19.1. Drawing of the vehicle parts relevant to the lateral protection, i.e. drawing of the vehicle and/or chassis with position and mounting of the axle(s), drawing of the mountings and/or the fittings of lateral protection device(s). If the lateral protection is achieved without lateral protection device(s) the drawing shall clearly show that the required dimensions are met: …

10.19.2. In the case of lateral protection device(s), full description and/or drawing of such device(s) (including mountings and fittings) or its/their component type-approval number(s): …

10.20. **Spray-suppression system**

10.20.0. Presence: yes/no/incomplete ([1])

10.20.1. Brief description of the vehicle with regard to its spray-suppression system and the constituent components: …

10.20.2. Detailed drawings of the spray-suppression system and its position on the vehicle showing the dimensions specified in the figures in Annex VI to Regulation (EU) No 109/2011[10] and taking account of the extremes of tyre/wheel combinations: …

10.20.3. Type-approval number(s) of spray-suppression device(s), if available: …

10.21. **Side-impact resistance**

10.21.1. A detailed description, including photographs and/or drawings, of the vehicle with respect to the structure, the dimensions, the lines and the

[10] Commission Regulation (EU) No 109/2011 of 27 January 2011 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards type-approval requirements for certain categories of motor vehicles and their trailers as regards spray suppression systems (OJ L 34, 9.2.2011, p. 2).

constituent materials of the side walls of the passenger compartment (exterior and interior), including specific details of the protection system, where applicable: …

10.22. **Front under-run protection**

10.22.0. Presence: yes/no/incomplete ([1])

10.22.1. Drawing of the vehicle parts relevant to the front under-run protection, i.e. drawing of the vehicle and/or chassis with position and mounting and/or fitting of the front under-run protection. If the under-run protection is no special device, the drawing shall clearly show that the required dimensions are met: …

10.22.2. In the case of special device, full description and/or drawing of the front under-run protection (including mountings and fittings), or, if approved as a separate technical unit, type-approval number: …

10.23. **Pedestrian protection**

10.23.1. A detailed description, including photographs and/or drawings, of the vehicle with respect to the structure, the dimensions, the relevant reference lines and the constituent materials of the frontal part of the vehicle (interior and exterior), including detail of any active protection system installed.

10.24. **Frontal protection systems**

10.24.1. General arrangement (drawings or photographs) indicating the position and attachment of the frontal protection systems:

10.24.2. Drawings and/or photographs, where relevant, of air intake grilles, radiator grille, decorative trim, badges, emblems and recesses and any other external projections and parts of the exterior surface which can be regarded as critical (e.g. lighting equipment). If the parts listed in the first sentence are not critical, for documentation purposes they may be replaced by photographs, accompanied if necessary by dimensional details and/or text:

10.24.3. Complete details of fittings required and full instructions, including torque requirements, for fitting:

10.24.4. Drawing of bumpers:

10.24.5. Drawing of the floor line at the vehicle front end:

11. **LIGHTING AND LIGHT SIGNALLING DEVICES**

11.1. Table of all devices: number, make, model, type-approval mark, maximum intensity of main-beam headlamps, colour, tell-tale: …

11.2. Drawing of the position of lighting and light signalling devices: …

11.3. For every lamp and reflector specified in UNECE Regulation No 48 supply the following information (in writing and/or by diagram)

11.3.1. Drawing showing the extent of the illuminating surface: …

11.3.2. Method used for the definition of the apparent surface in accordance with paragraph 2.10 of UNECE Regulation No 48: …

11.3.3. Axis of reference and centre of reference: …

11.3.4. Method of operation of concealable lamps: …

11.3.5. Any specific mounting and wiring provisions: …

11.4. Dipped beam lamps: normal orientation in accordance to paragraph 6.2.6.1 of UNECE Regulation No 48:

11.4.1. Value of initial adjustment: …

11.4.2. Location of indication: …

11.4.3. Description/drawing ([1]) and type of headlamp levelling device (e.g. automatic, stepwise manually adjustable, continuously manually adjustable):

11.4.4. Control device:

11.4.5. Reference marks:

11.4.6. Marks assigned for loading conditions:

Applicable only for vehicles with headlamp levelling device

11.5. A brief description of electrical/electronic components other than lamps (if any): …

12. CONNECTIONS BETWEEN TOWING VEHICLES AND TRAILERS AND SEMI-TRAILERS

12.1. Class and type of the coupling device(s) fitted or to be fitted: …

12.2. Characteristics D, U, S and V of the coupling device(s) fitted or minimal characteristics D, U, S and V of the coupling device(s) to be fitted: … daN

12.3. Instructions for attachment of the coupling type to the vehicle and photographs or drawings of the fixing points at the vehicle as stated by the manufacturer; additional information, if the use of the coupling type is restricted to certain variants or versions of the type of vehicle: …

12.4. Information of the fitting of special towing brackets or mounting plates: …

12.5. Type-approval number(s): …

13. MISCELLANEOUS

13.1. Audible warning device(s)

13.1.1. Location, method of affixing, placement and orientation of the device(s), with dimensions: …

13.1.2. Number of device(s): …

13.1.3. Type-approval number(s): …

13.1.4. Electrical/pneumatic ([1]) circuit diagram: …

13.1.5. Rated voltage or pressure: …

13.1.6. Drawing of the mounting device: …

13.2. Devices to prevent unauthorised use of the vehicle

13.2.1. Protective device

13.2.1.1. A detailed description of the type of vehicle with regard to the arrangement and design of the control or of the unit on which the protective device acts: …

13.2.1.2. Drawings of the protective device and of its mounting on the vehicle: …

13.2.1.3. A technical description of the device: …

13.2.1.4. Details of the lock combinations used: …

13.2.1.5. Vehicle immobiliser

13.2.1.5.1. Type-approval number, if available: …

13.2.1.5.2. For immobilisers not yet approved

13.2.1.5.2.1. A detailed technical description of the vehicle immobiliser and of the measures taken against inadvertent activation: …

13.2.1.5.2.2. The system(s) on which the vehicle immobiliser acts: …

13.2.1.5.2.3. Number of effective interchangeable codes, where applicable: …

13.2.2. Alarm system (if any)

13.2.2.1. Type-approval number, if available: …

13.2.2.2. For alarm systems not yet approved

13.2.2.2.1. A detailed description of the alarm system and of the vehicle parts related to the alarm system installed: …

13.2.2.2.2. A list of the main components comprising the alarm system: …

13.2.3. A brief description of the electrical/electronic components (if any): …

13.3. Towing device(s)

13.3.1. Front: Hook/eye/other ([1])

13.3.2. Rear: Hook/eye/other/none ([1])

13.3.3. Drawing or photograph of the chassis/area of the vehicle body showing the position, construction and mounting of the towing device(s): …

13.4. Details of any non-engine related devices designed to influence fuel consumption (if not covered by other items): …

13.5. Details of any non-engine related devices designed to reduce noise (if not covered by other items): …

13.6. Speed limitation devices

13.6.1. Manufacturer(s): …

13.6.2. Type(s): …

13.6.3. Type-approval number(s), if available: …

13.6.4. Speed or range of speeds at which the speed limitation may be set: … km/h

13.7. Table of installation and use of RF transmitters in the vehicle(s), where applicable: …

Frequency bands (Hz)	Maximum output power (W)	Antenna position at vehicle, specific conditions for installation and/or use

1

The applicant for type-approval shall also supply, where appropriate:

Appendix 1

A list containing make and type of all electrical and/or electronic components concerned by UNECE Regulation No 10.

Appendix 2

Schematics or drawing of the general arrangement of electrical and/or electronic components concerned by UNECE Regulation No 10 and the general wiring harness arrangement.

Appendix 3

Description of vehicle chosen to represent the type

Body style:

Left- or right-hand drive ([1])

Wheelbase:

Appendix 4

Relevant test report(s) supplied by the manufacturer or approved/recognised laboratories for the purpose of drawing up the type-approval certificate

13.7.1. Vehicle equipped with a 24 GHz short-range radar equipment: yes/no ([1])

14. **SPECIAL PROVISIONS FOR BUSES AND COACHES**

14.1. Class of vehicle: Class I/Class II/Class III/Class A/Class B ([1])

14.1.1. Type-approval number of bodywork approved as a separate technical unit: …

14.1.2. Chassis types where the type-approved bodywork can be installed (manufacturer(s), and types of incomplete vehicle): …

14.2. **Area for passengers (m^2)**

14.2.1. Total (S_0): …

14.2.2. Upper deck (S_{0a}) ([1]): …

14.2.3. Lower deck (S_{0b}) ([1]): …

14.2.4. For standing passengers (S_1): …

14.3. **Number of passengers (seated and standing)**

14.3.1. Total (N): …

14.3.2. Upper deck (N_a) ([1]): …

14.3.3. Lower deck (N_b) ([1]): …

14.4. **Number of passengers seated**

14.4.1. Total (A): …

14.4.2. Upper deck (A_a) ([1]): …

14.4.3. Lower deck (A_b) ([1]): …

14.4.4. Number of wheelchair positions for category M_2 and M_3 vehicles: …

14.5. **Number of service doors:** …

14.6. **Number of emergency exits** (doors, windows, escape hatches, intercommunication staircase and half staircase): …

14.6.1. Total: …

14.6.2. Upper deck ([1]): …

14.6.3. Lower deck ([1]): …

14.7. **Volume of luggage compartments (m^3):** …

14.8. **Area of luggage transportation on the roof (m^2):** …

14.9. **Technical devices facilitating the access to vehicles** (e.g. ramp, lifting platform, kneeling system), if fitted: …

14.10. **Strength of superstructure**

14.10.1. Type-approval number, if available: …

14.10.2. For superstructures not yet approved

14.10.2.1. Detailed description of the superstructure of the type of vehicle including its dimensions, configuration and constituent materials and its attachment to any chassis frame: …

14.10.2.2. Drawings of the vehicle and those parts of its interior arrangement which have an influence on the strength of the superstructure or on the residual space: …

14.10.2.3. Position of centre of gravity of the vehicle in running order in the longitudinal, transverse and vertical directions: …

14.10.2.4. Maximum distance between the centre lines of the outboard passenger seats: …

14.11. **Paragraphs of UNECE Regulations No 66 and No 107 to be accomplished and demonstrated for this technical unit:** …

14.12. **Drawing with dimensions showing the interior arrangement as regards the seating positions, area for standees, wheelchair user(s), luggage compartments including racks and ski-box, if any**

15. **SPECIAL PROVISIONS FOR VEHICLES INTENDED FOR THE TRANSPORT OF DANGEROUS GOODS**

15.1. **Electrical equipment according to Directive 2008/68/EC of the European Parliament and of the Council**[11]

15.1.1. Protection against overheating of conductors: …

15.1.2. Type of circuit breaker: …

15.1.3. Type and operation of battery master switch: …

15.1.4. Description and location of safety barrier for tachograph: …

15.1.5. Description of permanently energised installations. Indicate the EN standard applied: …

15.1.6. Construction and protection of electrical installation situated to the rear of the driver's compartment: …

15.2. **Prevention of fire risks**

15.2.1. Type of not readily flammable material in the driver's compartment: …

15.2.2. Type of heat shield behind the driver's compartment (where applicable): …

15.2.3. Position and heat protection of engine: …

15.2.4. Position and heat protection of the exhaust system: …

15.2.5. Type and design of the endurance braking systems heat protection: …

15.2.6. Type, design and position of combustion heaters: …

15.3. **Special requirements for bodywork, if any, according to Directive 2008/68/EC of the European Parliament and of the Council**

15.3.1. Description of measures to comply with the requirements for Type EX/II and Type EX/III vehicles: …

15.3.2. In the case of Type EX/III vehicles, resistance against heat from the outside: …

16. REUSABILITY, RECYCLABILITY AND RECOVERABILITY

16.1. Version to which the reference vehicle belongs: …

16.2. Mass of the reference vehicle with bodywork or mass of the chassis with cab, without bodywork and/or coupling device if the manufacturer does not fit the bodywork and/or coupling device (including liquids, tools, spare wheel, if fitted) without driver: …

[11] Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (OJ L 260, 30.9.2008, p. 13)

16.3. Mass of materials of the reference vehicle: …

16.3.1. Mass of material taken into account at the pre-treatment step ([V]): …

16.3.2. Mass of the material taken into account at the dismantling step ([V]): …

16.3.3. Mass of material taken into account at the non-metallic residue treatment step, considered as recyclable ([V]): …

16.3.4. Mass of material taken into account at the non-metallic residue treatment step, considered as energy recoverable ([V]): …

16.3.5. Materials breakdown ([V]): …

16.3.6. Total mass of materials, which are reusable and/or recyclable: …

16.3.7. Total mass of materials, which are reusable and/or recoverable: …

16.4. Rates

16.4.1. Recyclability rate 'R_{cyc}' (%): …

16.4.2. Recoverability rate 'R_{cov}' (%): …

17. ACCESS TO VEHICLE REPAIR AND MAINTENANCE INFORMATION

17.1. Address of principal website for access to vehicle repair and maintenance information: …

17.1.1. Date from which it is available (no later than 6 months from the date of type-approval): …

17.2. Terms and conditions of access to website: …

17.3. Format of the vehicle repair and maintenance information accessible through website: …

Explanatory notes

([1]) Delete where not applicable (there are cases where nothing needs to be deleted when more than one entry is applicable).

([2]) Specify the tolerance.

([3]) Please fill in here the upper and lower values for each variant.

([4]) Only for the purpose of definition of off-road vehicles.

([5]) Vehicles can be fuelled with both petrol and a gaseous fuel but, where the petrol system is fitted for emergency purposes or starting only and of which the petrol tank cannot contain more than 15 litres of petrol, will be regarded for the test as vehicles which can only run a gaseous fuel.

([6]) Optional equipment that affects the dimensions of the vehicle shall be specified.

([7]) To be documented in case of a single OBD engine family and if not already included in the documentation package(s) referred to in point 3.2.12.2.7.0.4.

([8]) Value for the combined WHTC including cold and hot part in accordance with Annex VIII to Regulation (EU) No 582/2011

([9]) To be documented if not already included in the documentation referred to in point 4.2.12.2.7.1.5.

([a]) If a part has been type-approved, that part need not be described if reference is made to such approval. Similarly, a part need not be described if its construction is clearly apparent from the attached diagrams or drawings. For each item for which drawings or photographs shall be attached, give numbers of the corresponding attached documents.

([b]) If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the documentation by the symbol '?' (e.g. ABC??123??).

([c]) Classified according to the definitions set out in Part A of Annex II.

([d]) Designation according to EN 10027-1: 2005. If that is not possible, the following information shall be provided:
— description of the material,
— yield point,
— ultimate tensile stress,
— elongation (in %),
— Brinell hardness.

([f]) Where there is one version with a normal cab and another with a sleeper cab, both sets of masses and dimensions are to be stated.

([g]) Standard ISO 612: 1978 — Road vehicles — Dimensions of motor vehicles and towed vehicles — terms and definitions.

([g1]) Motor vehicle and drawbar trailer: term No 6.4.1.
Semi-trailer and centre-axle trailer: term No 6.4.2.
Note:
In the case of a centre-axle trailer, the axis of the coupling shall be considered as the foremost axle.

([g2]) Term No 6.19.2.

([g3]) Term No 6.20.

([g4]) Term No 6.5.

([g5]) Term No 6.1 and for vehicles other than those of category M1: Article 2(22) of Commission Regulation (EU) No 1230/2012

([g6]) Term No 6.17.

([g7]) Term No 6.2 and for vehicles other than those of category M_1: Article 2(23) of Regulation (EU) No 1230/2012.

([g8]) Term No 6.3 and for vehicles other than those of category M_1: Article 2(24) of Regulation (EU) No 1230/2012.

([g9]) Term No 6.6.

([g10]) Term No 6.10.

([g11]) Term No 6.7.

([g12]) Term No 6.11.

([g13]) Term No 6.18.1.

([g14]) Term No 6.9.

([h]) The mass of the driver is assessed at 75 kg.
The liquid containing systems (except those for used water that must remain empty) are filled to 100 % of the capacity specified by the manufacturer.
The information referred to in points 3.6(b) and 3.6.1(b) do not need to be provided for vehicle categories N_2, N_3, M_2, M_3, O_3, and O_4.

([i]) For trailers or semi-trailers, and for vehicles coupled with a trailer or a semi-trailer, which exert a significant vertical load on the coupling device or the fifth wheel, this load, divided by standard acceleration of gravity, is included in the maximum technically permissible mass.

([j]) 'Coupling overhang' is the horizontal distance between the coupling for centre-axle trailers and the centreline of the rear axle(s).

([k]) In the case of a vehicle that can run either on petrol, diesel, etc., or also in combination with another fuel, items shall be repeated.
In the case of non-conventional engines and systems, particulars equivalent to those referred to here shall be supplied by the manufacturer.

([l]) This figure shall be rounded off to the nearest tenth of a millimetre.

([m]) This value shall be calculated ($\pi = 3{,}1416$) and rounded off to the nearest cm^3.

([n]) Determined in accordance with the requirements of Regulation (EC) No 715/2007 or Regulation (EC) No 595/2009 as applicable.

([o]) Determined in accordance with the requirements of Regulation (EC) No 715/2007 of the European Parliament and of the Council[12] .

([p]) The specified particulars are to be given for any proposed variants.

([q]) With respect to trailers, maximum speed permitted by the manufacturer.

([r]) For tyres of category Z intended to be fitted on vehicles whose maximum speed exceeds 300 km/h equivalent information shall be provided.

([s]) The number of seating positions to be mentioned shall be the one when the vehicle is in motion. A range can be specified in case of modular arrangement.

([t]) 'R-point' or 'seating reference point' means a design point defined by the vehicle manufacturer for each seating position and established with respect to the three-dimensional reference system as specified in Annex III to UNECE Regulation No 125.

([u]) For symbols and marks to be used, see paragraph 5.3. of UNECE Regulation No 16. In the case of 'S' type belts, specify the nature of the type(s).

([v]) These terms are defined in the standard ISO 22628: 2002 — Road vehicles — recyclability and recoverability — calculation method.

([x]) Dual-fuel engines.

([x1]) In case of a dual-fuel engine or vehicle.

([x2]) In the case of Type 1B, Type 2B, and Type 3B of dual-fuel engines.

([x3]) Except for dual-fuel engines or vehicles.

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[12] 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)

PART II

Matrix showing the combinations of the entries listed in Part I within the versions and variants of the type of vehicle

Item No	All	Version 1	Version 2	Version 3	Version n

Explanatory notes

(a) A separate matrix shall be compiled for each variant within the type.

(b) Entries for which there are no restrictions on their combination within a variant shall be listed in the column headed ‘all’.

(c) The information specified in the matrix may be presented in an alternative layout or merged with the information provided in accordance with Part I.

(d) Each variant and each version shall be identified by an alphanumerical code consisting of a combination of letters and numbers, which shall also be indicated in the certificate of conformity (Annex IX) of the vehicle concerned.

(e) Variant(s) which fall(s) under Part III of Annex IV shall be identified by a specific alphanumerical code.

ANNEX II

GENERAL DEFINITIONS, CRITERIA FOR VEHICLE CATEGORISATION, TYPE OF VEHICLE AND TYPES OF BODYWORK

INTRODUCTORY PART

Definitions and general provisions

1. **Definitions**

1.1. '*Seating position*' means any location capable of accommodating one person seated who is at least as large as:

(a) the manikin of the 50th percentile adult male in the case of the driver;

(b) the manikin of the 5th percentile adult female in all other cases.

1.2. '*Seat*' means a complete structure with trim, integral or not with the vehicle body structure, which is intended to seat one person.

It includes both an individual seat and a bench seat, as well as folding seats and removable seats.

1.3. '*Goods*' means primarily any movable things.

It includes products in bulk, manufactured goods, liquids, living animals, crops, indivisible loads.

1.4. '*Maximum mass*' means the 'technically permissible maximum laden mass' as specified in point 2.8 of Annex I.

2. **General provisions**

2.1. Number of seating positions

2.1.1. The requirements regarding the number of seating positions apply to seats that are designed for use when the vehicle is travelling on the road.

2.1.2. They do not apply to seats that are designed for use when the vehicle is stationary and which are clearly identified to users either by means of a pictogram or a sign with an appropriate text.

2.1.3. The following requirements apply for the counting of the seating positions:

(a) each individual seat shall be counted as one seating position;

(b) in the case of a bench seat, any space having a width of at least 400 mm measured at the seat cushion level shall be counted as one seating position.

This condition shall not prevent the manufacturer from using the general provisions referred to in point 1.1;

(c) however, a space as referred to in point (b) shall not be counted as one seating position where:

(i) the bench seat includes features that prevent the bottom of the manikin from sitting in a natural way - for example: the presence of a fixed console box, an unpadded area or an interior trim interrupting the nominal seating surface;

(ii) the design of the floor pan located immediately in front of a presumed seating position (for example the presence of a tunnel) prevents the feet of the manikin from being positioned in a natural way.

2.1.4. With respect to vehicles covered by UNECE Regulations No 66 and No 107, the dimension referred to in point 2.1.3(b) shall be aligned with the minimum space required for one person in relation to the various classes of vehicles.

2.1.5. When seat anchors for a removable seat are present in a vehicle, the removable seat shall be counted in the determination of the number of the seating positions.

2.1.6. An area intended for an occupied wheelchair shall be regarded as one seating position.

2.1.6.1. This provision shall be without prejudice to the requirements of paragraphs 3.6.1 and 3.7 of Annex 8 to UNECE Regulation No 107.

2.2. Maximum mass

2.2.1. In the case of a tractor unit for semi-trailer, the maximum mass to be considered for classifying the vehicle shall include the maximum mass of the semi-trailer borne by the fifth wheel coupling.

2.2.2. In the case of a motor vehicle that can tow a centre-axle trailer or a rigid drawbar trailer, the maximum mass to be considered for classifying the motor vehicle shall include the maximum mass transferred to the towing vehicle by the coupling.

2.2.3. In the case of a semi-trailer, a centre-axle trailer and a rigid drawbar trailer, the maximum mass to be considered for classifying the vehicle shall correspond to the maximum mass transmitted to the ground by the wheels of an axle or group of axles when coupled to the towing vehicle.

2.2.4. In the case of a converter dolly, the maximum mass to be considered for classifying the vehicle shall include the maximum mass of the semi-trailer borne by the fifth wheel coupling.

2.3. Special equipment

2.3.1. Vehicles fitted primarily with fixed equipment such as machinery or apparatus shall be regarded as N or O category.

2.4. Units

2.4.1. Unless otherwise stated any unit of measurement and associated symbol shall conform to the provisions of Council Directive 80/181/EEC[13].

3. Categorisation into vehicle categories

3.1. The manufacturer is responsible for the categorisation of a type of vehicle into a specific category.

For such purposes, all the relevant criteria described in this Annex shall be met.

3.2. The approval authority may request from the manufacturer appropriate additional information with the aim of demonstrating that a type of vehicle needs to be categorised as special purpose vehicle in the special group ('SG Code').

[13] Council Directive 80/181/EEC of 20 December 1979 on the approximation of the laws of the Member States relating to units of measurement and on the repeal of Directive 71/354/EEC (OJ L 39, 15.2.1980, p. 40).

PART A

Criteria for vehicle categorisation

1. Vehicle categories

For the purposes of EU and national type-approval, as well as for EU and national individual vehicle approval, vehicles shall be categorised according to the classification referred to in Article 4.

Approval can only be granted for the categories referred to in Article 4(1).

2. Vehicle subcategories

2.1. Off-road vehicles

'*Off-road vehicle (ORV)*' means a vehicle that belongs to category M or N, having specific technical features which permit its use off the normal roads.

For those categories of vehicles, the letter 'G' shall be added as suffix to the letter and numeral identifying the vehicle category.

The criteria for the subcategorisation of vehicles as 'ORV' shall be specified in section 4 of Part A.

2.2. Special purpose vehicles (SPV)

2.2.1. For incomplete vehicles that are intended to fall into the SPV subcategory, the letter 'S' shall be added as suffix to the letter and numeral identifying the vehicle category.

The various types of special purpose vehicles are defined and listed in section 5.

2.3. Off road special purpose vehicle

2.3.1. '*Off road special purpose vehicle (ORV-SPV)*' means a vehicle that belongs either to category M or N having the specific technical features referred to in points 2.1 and 2.2.

For those categories of vehicles, the letter 'G' shall be added as suffix to the letter and numeral identifying the vehicle category.

Moreover, for incomplete vehicles that are intended to fall into the SPV subcategory, the letter 'S' shall be added as second suffix.

3. Criteria for the categorisation of vehicles in category N

3.1. The categorisation of a type of vehicle in category N shall be based on the technical features of the vehicle as referred to in points 3.2 to 3.6.

3.2. As a matter of principle, the compartment(s) where all the seating positions are located, shall be completely separated from the loading area.

3.3. By way of derogation from the requirements of point 3.2, persons and goods may be transported in the same compartment under the condition that the loading area is provided with securing devices designed to protect persons transported against the displacement of the load during driving, including severe braking and cornering.

3.4. Securing devices - lashing devices - intended for securing the load as required in point 3.3 as well as partitioning systems, intended for vehicles up to 7,5 tonnes shall be designed in accordance with the provisions of sections 3 and 4 of Standard ISO 27956:2009 'Road vehicles – Securing of cargo in delivery vans – Requirements and test methods'.

3.4.1. The requirements referred to in point 3.4 may be verified by a statement of compliance provided by the manufacturer.

3.4.2. As an alternative to the requirements of point 3.4, the manufacturer may demonstrate to the satisfaction of the approval authority that the securing devices fitted show an equivalent level of protection as provided in the referred standard.

3.5. The number of seating positions excluding the driver's seating position shall not exceed:

(a) 6 in the case of N_1 vehicles;

(b) 8 in the case of N_2 or N_3 vehicles.

3.6. Vehicles shall show a goods-carrying capacity equal or higher than the person-carrying capacity expressed in kg.

3.6.1. For such purposes, the following equations shall be satisfied in all configurations, in particular when all seating positions are occupied:

(a) when $N = 0$:

$P - M \geq 100$ kg

(b) when $0 < N \leq 2$:

$P - (M + N \times 68) \geq 150$ kg;

(c) when $N > 2$:

$P - (M + N \times 68) \geq N \times 68$;

where the letters have the following meaning:

'P' is the technically permissible maximum laden mass;

'M' is the mass in running order;

'N' is the number of seating positions excluding the driver's seating position.

3.6.2. The mass of equipment that is fitted to the vehicle in order to accommodate goods (e.g. tank, bodywork, etc.), to handle goods (e.g. crane, lift, etc.) and to secure goods (e.g. cargo securing devices) shall be included in M.

3.6.3. The mass of equipment that is not used for the purposes referred to in point 3.6.2 (such as a compressor, a winch, an electric power generator, broadcasting equipment, etc.) shall not be included in M for the purposes of the application of the formulae referred to in point 3.6.1.

3.7. The requirements referred to in points 3.2 to 3.6 shall be met for all variants and versions within the type of vehicle.

3.8. Criteria for the categorisation of vehicles as N_1.

3.8.1. A vehicle shall be categorised as N_1 when all the applicable criteria are met.

When one or more of the criteria are not met, the vehicle shall be categorised as M_1.

3.8.2. In addition to the general criteria referred to in points 3.2 to 3.6, the criteria specified in points 3.8.2.1 to 3.8.2.3.5 shall be met for the categorisation of vehicles for which the compartment where the driver is located and the load are within a single unit (i.e. bodywork 'BB').

3.8.2.1. The fact that a wall or a partition, complete or partial, is fitted between a seat row and the cargo area shall not rule out the obligation to meet the required criteria.

3.8.2.2. The criteria shall be as follows:

(a) the loading of the goods shall be possible by a rear door, a tailgate or a side-door designed and constructed for that purposes;

(b) in the case of a rear door or a tailgate, the loading aperture shall meet the following requirements:

(i) in the case the vehicle is fitted with only one row of seats or with only the driver seat, the minimum height of the loading aperture shall be at least 600 mm;

(ii) in the case the vehicle is fitted with two or more rows of seats, the minimum height of the loading aperture shall be at least 800 mm and the aperture shall show a surface of at least 12 800 cm2;

(c) The cargo area shall meet the following requirements:

'*cargo area*' means the part of the vehicle located behind the row(s) of seats or behind the driver seat when the vehicle is fitted with only one driver seat;

(i) the loading surface of the cargo area shall be generally flat;

(ii) where the vehicle is fitted with only one row of seats or with one seat, the minimum length of the cargo area shall be at least 40 % of the wheelbase;

(iii) where the vehicle is fitted with two or more rows of seats, the minimum length of the cargo area shall be at least 30 % of the wheelbase.

Where the seats of the last row of seats can be easily removed from the vehicle without the use of special tools, the requirements regarding the length of the cargo area shall be met with all the seats installed in the vehicle;

(iv) the requirements regarding the length of the cargo area shall be met when the seats of the first row or of the last row, as the case may be, are upright in their normal position for use by the vehicle occupants.

3.8.2.3. Specific conditions for measurement

3.8.2.3.1. Definitions

(a) '*Height of the loading aperture*', means the vertical distance between two horizontal planes tangent respectively to the highest point of the lower part of the doorway and the lowest point of the upper part of the doorway;

(b) '*Surface of the loading aperture*' means the greatest surface of the orthogonal projection on a vertical plane, perpendicular to the centreline of the vehicle,

of the maximum aperture permitted when the rear door(s) or tailgate is (are) wide open;

(c) '*Wheelbase*', for the purposes of application of the formulae in points 3.8.2.2 and 3.8.3.1, means the distance between:

(i) the centreline of the front axle and the centreline of the second axle in the case of a two axle vehicle; or

(ii) the centreline of the front axle and the centreline of a virtual axle equally distant from the second and third axle in the case of a three axle vehicle.

3.8.2.3.2. Seat adjustments

(a) The seats shall be adjusted at their rear outermost positions;

(b) The seat back, if adjustable, shall be adjusted as to accommodate the three-dimensional H-point machine at a torso angle of 25 degrees;

(c) The seat back, if not adjustable, shall be in the position designed by the vehicle manufacturer;

(d) When the seat is adjustable in height, it shall be adjusted to its lowest position.

3.8.2.3.3. Vehicle conditions

(a) The vehicle shall be in loaded conditions corresponding to its maximum mass;

(b) The vehicle shall be with its wheels straight ahead.

3.8.2.3.4. The requirements of point 3.8.2.3.2 shall not apply when the vehicle is fitted with a wall or a partition.

3.8.2.3.5. Measurement of the length of the cargo area

(a) When the vehicle is not fitted with a partition or a wall, the length shall be measured from a vertical plane tangent to the rear outermost point of the top of the seat back to the rear internal pane or door or tailgate, in closed position;

(b) When the vehicle is fitted with a partition or a wall, the length shall be measured from a vertical plane tangent to the rear outermost point of the partition or the wall to the rear internal pane or door or tailgate, as the case may be, in closed position;

(c) The requirements concerning the length shall be fulfilled at least along a horizontal line situated in the longitudinal vertical plane passing through the centreline of the vehicle, at the level of the load floor.

3.8.3. In addition to the general criteria referred to in points 3.2 to 3.6, the criteria specified in points 3.8.3.1 to 3.8.3.4 shall be met for the categorisation of vehicles for which the compartment where the driver is located and the load are not within a single unit (i.e. bodywork 'BE').

3.8.3.1. Where the vehicle is fitted with an enclosure type body, the following shall apply:

(a) the loading of the goods shall be possible by a rear door, a tailgate or a panel or other means;

(b) the minimum height of the loading aperture shall be at least 800 mm and the aperture shall show a surface of at least 12 800 cm^2;

(c) The minimum length of the cargo area shall be at least 40 % of the wheelbase.

3.8.3.2. Where the vehicle is fitted with an open type cargo area, only the provisions referred to in points 3.8.3.1(a) and (c) shall apply.

3.8.3.3. For the application of the provisions referred to in point 3.8.3, the definitions in point 3.8.2.3.1 shall apply.

3.8.3.4. However, the requirements concerning the length of the cargo area shall be fulfilled along a horizontal line situated in the longitudinal plane passing through the centreline of the vehicle at the level of the load floor.

4. Criteria for the sub-categorisation of vehicles as off-road vehicles

4.1. M_1 or N_1 vehicles shall be subcategorised as off-road vehicles if they satisfy at the same time the following conditions:

(a) at least one front and at least one rear axle designed to be driven simultaneously irrespective of whether one powered axle can be disengaged;

(b) at least one differential locking mechanism or a mechanism having similar effect is fitted;

(c) they are able to climb at least a 25 % gradient as solo vehicle;

(d) they satisfy five out of the following six requirements:

(i) the approach angle shall be at least 25 degrees;

(ii) the departure angle shall be at least 20 degrees;

(iii) the ramp angle shall be at least 20 degrees;

(iv) the ground clearance under the front axle shall be at least 180 mm;

(v) the ground clearance under the rear axle shall be at least 180 mm;

(vi) the ground clearance between the axles shall be at least 200 mm.

4.2. M_2, N_2 or M_3 vehicles the maximum mass of which does not exceed 12 tonnes shall be subcategorised as off-road vehicles if they satisfy the condition set out in point (a) or both conditions set out in points (b) and (c):

(a) all their axles are driven simultaneously, irrespective of whether one or more powered axles can be disengaged;

(b) (i) at least one front and at least one rear axle are designed to be driven simultaneously irrespective of whether one powered axle can be disengaged;

(ii) at least one differential locking mechanism or a mechanism having the same effect is fitted;

(iii) they are able to climb a 25 % gradient as a solo vehicle;

(c) they satisfy at least five out of the following six requirements if their maximum mass does not exceed 7,5 tonnes and at least four if their maximum mass exceeds 7,5 tonnes:

(i) the approach angle shall be at least 25 degrees;

(ii) the departure angle shall be at least 25 degrees;

(iii) the ramp angle shall be at least 25 degrees;

(iv) the ground clearance under the front axle shall be at least 250 mm;

(v) the ground clearance between axles shall be at least 300 mm;

(vi) the ground clearance under the rear axle shall be at least 250 mm.

4.3. M_3 or N_3 vehicles whose maximum mass exceeds 12 tonnes shall be subcategorised as off-road vehicles if they satisfy the condition set out in point (a) or both conditions set out in points (b) and (c):

(a) all their axles are driven simultaneously, irrespective of whether one or more powered axles can be disengaged;

(b) (i) at least half of the axles (or two axles out of the three in the case of a three axle vehicle and three axles in the case of a five axle vehicle) is designed to be driven simultaneously, irrespective of whether one powered axle can be disengaged;

(ii) there is at least one differential locking mechanism or a mechanism having similar effect;

(iii) they are able to climb a 25 % gradient as solo vehicle;

(c) they satisfy at least four out of the following six requirements:

(i) the approach angle shall be at least 25 degrees;

(ii) the departure angle shall be at least 25 degrees;

(iii) the ramp angle shall be at least 25 degrees;

(iv) the ground clearance under the front axle shall be at least 250 mm;

(v) the ground clearance between axles shall be at least 300 mm;

(vi) the ground clearance under the rear axle shall be at least 250 mm.

4.4. The procedure for checking compliance with the geometrical provisions referred to in this section shall be set out in Appendix 1.

5. **Special purpose vehicles**

	Name	Code	Definition
5.1.	Motor caravan	SA	A vehicle of category M with living accommodation space which contains the following equipment as a minimum: (a) seats and table; (b) sleeping accommodation which may be converted from the seats; (c) cooking facilities; (d) storage facilities. This equipment shall be rigidly fixed to the living compartment. However, the table may be designed to be easily removable.
5.2.	Armoured vehicle	SB	A vehicle intended for the protection of conveyed persons or goods with anti-bullet armour plating.
5.3.	Ambulance	SC	A vehicle of category M intended for the transport of sick or injured persons and having special equipment for such purpose.
5.4.	Hearse	SD	A vehicle of category M intended for the transport of deceased persons and having special equipment for such purpose.
5.5.	Wheelchair accessible vehicle	SH	A vehicle of category M_1 constructed or converted specifically so that they accommodate one or more persons seated in their wheelchairs when travelling on the road.
5.6.	Trailer caravan	SE	A vehicle of category O as defined in term 3.2.1.3 of Standard ISO 3833:1977.
5.7.	Mobile crane	SF	A vehicle of category N_3, not fitted for the carriage of goods, provided with a crane whose lifting moment is equal to or higher than 400 kNm.
5.8.	Special group	SG	A special purpose vehicle that does not enter in any of the definitions mentioned in this section.
5.9.	Converter dolly	SJ	A vehicle of category O equipped with a fifth-wheel coupling to support a semi-trailer with a view to converting the latter into a trailer.

5.10.	Exceptional load transport trailer	SK	A vehicle of category O_4 intended for the transport of indivisible loads that is subject to speed and traffic restrictions because of its dimensions. Under this term are also included hydraulic modular trailers irrespective of the number of modules.
5.11.	Exceptional load transport motor vehicle	SL	A road tractor or tractor unit for semi-trailer of category N_3 meeting all the following conditions: (a) having more than two axles and at least half of the axles (two axles out of three in the case of a three axle vehicle and three axles out of five in the case of a five axle vehicle) designed to be driven simultaneously, irrespective of whether one powered axle can be disengaged, (b) that is designed for towing and pushing exceptional load transport trailer of category O_4, (c) that has a minimum engine power of 350 kW, and (d) that can be equipped with an additional front coupling device for heavy towable masses
5.12.	Multi-equipment carrier	SM	An off-road vehicle of category N (as defined in point 2.3) designed and constructed for pulling, pushing, carrying and actuating certain inter-changeable equipment, (a) with not less than two mounting areas for this equipment, (b) with standardised, mechanical, hydraulic and/or electrical interfaces (e.g. Power take off) for powering and actuating the inter-changeable equipment and (c) that fulfils the definition of ISO 3833-1977, paragraph 3.1.4 (special vehicle). If the vehicle is equipped with an auxiliary load platform, its maximum length shall not exceed: (a) 1,4 times of the front or rear track width of the vehicle, whichever is the larger in the case of two axle vehicles, or (b) 2,0 times of the front or rear track width of the vehicle, whichever is the larger in the case of vehicles having more than two axles

6. **Remarks**

6.1. Type-approval shall not be granted:

(a) to converter dolly as defined in section 5 of Part A;

(b) to rigid drawbar trailers as defined in section 4 of Part C;

(c) to trailers in which persons may be carried when travelling on the road.

6.2. Point 6.1 is without prejudice to the provisions of Article 40 on national small series type-approval.

PART B

Criteria for types of vehicle, variants and versions

1. **Category M_1**

1.1. Type of vehicle

1.1.1. A ‘type of vehicle’ shall consist of vehicles that have the following features in common:

(a) the manufacturer’s company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the design and assembly of the essential parts of the body structure in the case of a self-supporting body.

The same shall apply to vehicles the bodywork of which is bolted on or welded to a separate frame;

1.1.2. By way of derogation from the requirements of point 1.1.1(b), when the manufacturer uses the floor portion of the body structure as well as the essential constituent elements forming the front part of the body structure located directly in front of the windscreen bay, in the construction of different kinds of bodywork (for example a saloon and a coupe), those vehicles may be considered as belonging to the same type. Evidence thereof shall be provided by the manufacturer.

1.1.3. A type shall consist of at least one variant and one version.

1.2. Variant

1.2.1. A ‘variant’ within a type of vehicle shall group the vehicles that have the following construction features in common:

(a) the number of lateral doors or the type of bodywork as defined in section 2 of Part C when the manufacturer uses the criterion of point 1.1.2;

(b) the power plant with regard to the following construction features:

(i) the type of energy supply (internal combustion engine, electric motor or other);

(ii) the working principle (positive ignition, compression ignition or other);

(iii) the number and arrangement of cylinders in the case of internal combustion engine (L4, V6 or other);

(c) the number of axles;

(d) the number, and interconnection of powered axles;

(e) the number of steered axles;

(f) the stage of completion (e.g. complete/incomplete).

(g) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

1.3. Version

1.3.1. A ‘version’ within a variant shall group the vehicles that have the following features in common:

(a) the technically permissible maximum laden mass;

(b) the engine capacity in the case of internal combustion engine;

(c) the maximum engine power output or the maximum continuous rated power (electric motor);

(d) the nature of the fuel (petrol, gas oil, LPG, bi-fuel or other);

(e) the maximum number of seating positions;

(f) drive-by sound level;

(g) exhaust emission level (for example Euro 5, Euro 6 or other);

(h) combined or weighted, combined CO_2 emissions;

(i) electric energy consumption (weighted, combined);

(j) combined or weighted, combined fuel consumption;

(k) the existence of a unique set of innovative technologies, as specified in Article 12 of Regulation (EC) No 443/2009.

2. **Categories M_2 and M_3**

2.1. Type of vehicle

2.1.1. A ‘type of vehicle’ shall consist of vehicles that have the following features in common:

(a) the manufacturer’s company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the category;

(c) the following aspects of construction and design:

(i) the design and construction of the essential constituent elements forming the chassis;

(ii) the design and construction of the essential constituent elements forming the body structure in the case of a self-supporting body;

(d) the number of decks (single or double);

(e) the number of sections (rigid/articulated);

(f) the number of axles;

(g) the mode of energy supply (on-board or off-board);

2.1.2. A type shall consist of at least one variant and one version.

2.2. Variant

2.2.1. A ‘variant’ within a type of vehicle shall group the vehicles that have all of the following construction features in common:

(a) the type of bodywork as defined in section 3 of Part C;

(b) the class or combination of classes of vehicles as defined in paragraph 2.1.1 of UNECE Regulation No 107 (only in the case of complete and completed vehicles);

(c) the stage of completion (e.g. complete/incomplete/completed);

(d) the power plant with regard to the following construction features:

(i) the type of energy supply (internal combustion engine, electric motor or other);

(ii) the working principle (positive ignition, compression ignition or other);

(iii) the number and arrangement of cylinders in the case of internal combustion engine (L6, V8 or other).

(e) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

2.3. Version

2.3.1. A ‘version’ within a variant shall group the vehicles that have all the following features in common:

(a) the technically permissible maximum laden mass;

(b) the ability of the vehicle to tow a trailer or not;

(c) the engine capacity in the case of internal combustion engine;

(d) the maximum engine power output or the maximum continuous rated power (electric motor);

(e) the nature of the fuel (petrol, gas oil, LPG, bi-fuel or other);

(f) drive-by sound level;

(g) exhaust emission level (for example Euro IV, Euro V or other).

3. **Category N_1**

3.1. Type of vehicle

3.1.1. A ‘type of vehicle’ shall consist of vehicles that have the following features in common:

(a) the manufacturer’s company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the design and assembly of the essential parts of the body structure in the case of a self-supporting body;

(c) the design and the construction of the essential constituent elements forming the chassis in the case of a non-self-supporting body;

3.1.2. By way of derogation from the requirements of point 3.1.1(b), when the manufacturer uses the floor portion of the body structure as well the essential constituent elements forming the front part of the body structure located directly in front of the windscreen bay, in the construction of different kinds of bodywork (for example a van and a chassis-cab, different wheelbases and different roof heights), those vehicles may be considered as belonging to the same type. Evidence thereof shall be provided by the manufacturer.

3.1.3. A type of vehicle shall consist of at least one variant and one version.

3.2. Variant

3.2.1. A 'variant' within a type of vehicle shall group the vehicles that have the following construction features in common:

(a) the number of lateral doors or the type of bodywork as defined in section 4 of Part C (for complete and completed vehicles) when the manufacturer uses the criterion of point 3.1.2;

(b) the stage of completion (e.g. complete/incomplete/completed);

(c) the power plant with regard to the following construction features:

(i) the type of energy supply (internal combustion engine, electric motor or other);

(ii) the working principle (positive ignition, compression ignition or other);

(iii) the number and arrangement of cylinders in the case of internal combustion engine (L6, V8 or other);

(d) the number of axles;

(e) the number and interconnection of powered axles;

(f) the number of steered axles.

(g) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

3.3. Version

3.3.1. A 'version' within a variant shall group the vehicles that have the following features in common:

(a) the technically permissible maximum laden mass;

(b) the engine capacity in the case of internal combustion engine;

(c) the maximum engine power output or maximum continuous rated power (electric motor);

(d) the nature of the fuel (petrol, gas oil, LPG, bi-fuel or other);

(e) the maximum number of seating positions;

(f) drive-by sound level;

(g) exhaust emission level (for example Euro 5, Euro 6 or other);

(h) combined or weighted, combined CO_2 emissions;

(i) electric energy consumption (weighted, combined);

(j) combined or weighted, combined fuel consumption.

4. **Categories N_2 and N_3**

4.1. Type of vehicle

4.1.1. A 'type of vehicle' shall consist of vehicles that have the following features in common:

(a) the manufacturer's company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the category;

(c) the design and construction of the chassis that are common to a single line of product;

(d) the number of axles;

4.1.2. A type of vehicle shall consist of at least one variant and one version.

4.2. Variant

4.2.1. A 'variant' within a type of vehicle shall group the vehicles that have the following construction features in common:

(a) the body structural concept or type of bodywork as defined in section 4 of Part C and in Appendix 2 (only for complete and completed vehicles);

(b) the stage of completion (e.g. complete/incomplete/completed);

(c) the power plant with regard to the following construction features:

(i) the type of energy supply (internal combustion engine, electric motor or other);

(ii) the working principle (positive ignition, compression ignition or other);

(iii) the number and arrangement of cylinders in the case of internal combustion engine (L6, V8 or other);

(d) the number and interconnection of powered axles;

(e) the number of steered axles;

(f) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

4.3. Version

4.3.1. A 'version' within a variant shall group the vehicles that have the following features in common:

(a) the technically permissible maximum laden mass;

(b) the ability or not to tow a trailer as follows:

(i) an unbraked trailer;

(ii) a trailer with an inertia (or overrun) braking system as defined in paragraph 2.12 of UNECE Regulation No 13;

(iii) a trailer with a continuous or semi-continuous braking system as defined in paragraphs 2.9 and 2.10 of UNECE Regulation No 13;

(iv) a trailer of category O_4 that results in a maximum mass of the combination not exceeding 44 tonnes;

(v) a trailer of category O_4 that results in a maximum mass of the combination exceeding 44 tonnes;

(c) the engine capacity;

(d) the maximum engine power output;

(e) the nature of the fuel (petrol, gas oil, LPG, bi-fuel or other);

(f) drive-by sound level;

(g) exhaust emission level (for example Euro IV, Euro V or other).

5. **Categories O_1 and O_2**

5.1. Type of vehicle

5.1.1. A 'type of vehicle' shall consist of vehicles that have the following features in common:

(a) the manufacturer's company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the category;

(c) the concept as defined in section 5 of Part C;

(d) the following aspects of construction and design:

(i) the design and construction of the essential constituent elements forming the chassis;

(ii) the design and construction of the essential constituent elements forming the body structure in the case of a self-supporting body;

(e) the number of axles.

5.1.2. A type of vehicle shall consist of at least one variant and one version.

5.2. Variant

5.2.1. A 'variant' within a type of vehicle shall group the vehicles that have the following construction features in common:

(a) the kind of bodywork as referred to in Appendix 2 (for complete and completed vehicles);

(b) the stage of completion (e.g. complete/incomplete/completed);

(c) the type of braking system (e.g. unbraked/inertia/power).

(d) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

5.3. Version

5.3.1. A ‘version’ within a variant shall group the vehicles that have the following features in common:

(a) the technically permissible maximum laden mass;

(b) the concept of the suspension (air, steel or rubber suspension, torsion bar or other);

(c) the concept of the drawbar (triangle, tube or other).

6. **Categories O_3 and O_4**

6.1. Type of vehicle

6.1.1. A ‘type of vehicle’ shall consist of vehicles that have the following features in common:

(a) the manufacturer’s company name.

A change in the legal form of ownership of the company does not require that a new approval has to be granted;

(b) the category;

(c) the concept of the trailer with relation to the definitions in section 5 of Part C;

(d) the following aspects of construction and design:

(i) the design and construction of the essential constituent elements forming the chassis;

(ii) the design and construction of the essential constituent elements forming the body structure in the case of trailers with a self-supporting body;

(e) the number of axles.

6.1.2. A type of vehicle shall consist of at least one variant and one version.

6.2. Variants

6.2.1. A ‘variant’ within a type of vehicle shall group the vehicles that have the following construction and design features in common:

(a) the kind of bodywork as referred to in Appendix 2 (for complete and completed vehicles);

(b) the stage of completion (e.g. complete/incomplete/completed);

(c) the concept of the suspensions (steel, air or hydraulic suspension);

(d) the following technical features:

(i) the capability or not for the chassis to be extendible;

(ii) the deck height (normal, low loader, semi-low loader etc.);

(e) in the case of multi-stage built vehicles, the manufacturer and the type of the previous stage vehicle.

6.3. Versions

6.3.1. A 'version' within a variant shall group the vehicles that have the following features in common:

(a) the technically permissible maximum laden mass;

(b) the subdivisions or combination of subdivisions referred to in points 3.2 and 3.3 of Annex I to Council Directive 96/53/EC[14] into which the axle spacing between two consecutive axles forming a group belongs;

(c) the definition of the axles in the following respects:

(i) lift axles (number and position);

(ii) loadable axles (number and position);

(iii) steered axle (number and position).

7. Common requirements for all vehicle categories

7.1. When a vehicle falls into several categories because of its maximum mass or the number of seating positions or both, the manufacturer may select to use the criteria of one or the other vehicle category for the definition of the variants and the versions.

7.1.1. Examples:

(a) a vehicle 'A' may be type-approved as N_1 (3,5 tonnes) and N2 (4,2 tonnes) in relation to its maximum mass. In such a case, the parameters mentioned in category N_1 may be used also for the vehicle that falls into category N_2 (or vice-versa);

(b) a vehicle 'B' may be type-approved as M_1 and M_2 in relation to the number of seating positions (7 + 1 or 10 + 1), the parameters mentioned in category M_1 may be used also for the vehicle that falls into category M_2 (or vice-versa).

7.2. A vehicle of category N may be type-approved against the provisions required for category M_1 or M_2, as the case may be, when it is intended to be converted into a vehicle of that category during the next step of a multi-stage type-approval procedure.

7.2.1. This option shall only be permitted for incomplete vehicles.

Such vehicles shall be identified by a specific variant code given by the manufacturer of the base vehicle.

7.3. Type-, variant- and version designations

7.3.1. The manufacturer shall allocate an alphanumeric code to each type of vehicle, variant and version, made up of Roman letters and/or Arabic numerals.

[14] Council Directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic (OJ L 235, 17.9.1996, p. 59).

The use of brackets and hyphens is permitted provided they do not replace a letter or a numeral.

7.3.2. The whole code shall be designated: Type-Variant-Version or 'TVV'.

7.3.3. The TVV shall clearly and unequivocally identify a unique combination of technical features in relation to the criteria defined in Part B of this Annex.

7.3.4. The same manufacturer may use the same code in order to define a type of vehicle when the latter falls in two or more categories.

7.3.5. The same manufacturer shall not use the same code in order to define a type of vehicle for more than one type-approval within the same vehicle category.

7.4. Number of characters for the TVV

7.4.1. The number of characters shall not exceed:

(a) 15 for the code of the type of vehicle;

(b) 25 for the code of one variant;

(c) 35 for the code of one version.

7.4.2. The complete alphanumeric 'TVV' shall not contain more than 75 characters.

7.4.3. When the TVV is used as a whole, a space shall be left between the type, the variant and the version.

Example of such TVV: 159AF[…*space*]0054[…*space*]977K(BE).

PART C

Definitions of types of bodywork

1. **General**

1.1. The type of bodywork referred to in section 9 of Annex I and Part 1 of Annex III as well as the code for bodywork referred to in item 38 of Annex IX shall be indicated by means of codes.

The list of codes shall apply primarily to complete and completed vehicles.

1.2. As regards vehicles of categories M, the type of bodywork shall consist of two letters as specified in sections 2 and 3.

1.3. As regards vehicles of categories N and O, the type of bodywork shall consist of two letters as referred to in sections 4 and 5.

1.4. Where necessary (especially for the types of bodywork referred to respectively in points 4.1 and 4.6 and in points 5.1 to 5.4), they shall be supplemented by two digits.

1.4.1. The list of digits shall be laid down in Appendix 2 to this Annex.

1.5. For special purpose vehicles, the type of bodywork to be used shall be linked to the category of the vehicle.

2. **Vehicles belonging to category M_1**

Ref.	Code	Name	Definition
2.1.	AA	Saloon	A vehicle defined in term 3.1.1.1 of Standard ISO 3833:1977, fitted with at least four side windows.
2.2.	AB	Hatchback	A saloon as defined in 2.1 with a hatch at the rear end of the vehicle.
2.3.	AC	Station wagon	A vehicle defined in term 3.1.1.4 of Standard ISO 3833:1977.
2.4.	AD	Coupé	A vehicle defined in term 3.1.1.5 of Standard ISO 3833:1977.
2.5.	AE	Convertible	A vehicle defined in terms No 3.1.1.6 of Standard ISO 3833:1977. However, a convertible may have no door.
2.6.	AF	Multi-purpose vehicle	A vehicle other than AG and those mentioned in AA to AE intended for carrying persons and their luggage or occasionally goods, in a single compartment.
2.7.	AG	Truck station wagon	A vehicle defined in term No 3.1.1.4.1 of Standard ISO 3833:1977. However, the luggage compartment must be completely separated from the passenger compartment. In addition, the reference point of the driver's seating position needs not to be at least at 750 mm above the surface supporting the vehicle.

3. **Vehicles belonging to category M_2 or M_3**

Ref.	Code	Name	Definition
3.1.	CA	Single-deck vehicle	A vehicle where the spaces provided for persons are arranged in a single level or in a way that they do not constitute two superimposed levels;
3.2.	CB	Double-deck vehicle	A vehicle defined in paragraph 2.1.6 of UNECE Regulation No 107;
3.3.	CC	Single-deck articulated vehicle	A vehicle defined in paragraph 2.1.3 of UNECE Regulation No 107 with a single deck;
3.4.	CD	Double-deck articulated vehicle	A vehicle defined in paragraph 2.1.3.1 of UNECE Regulation No 107;
3.5.	CE	Low-floor single-deck vehicle	A vehicle defined in paragraph 2.1.4 of UNECE Regulation No 107 with a single deck;
3.6.	CF	Low-floor double-deck vehicle	A vehicle defined in paragraph 2.1.4 of UNECE Regulation No 107 with a double deck;
3.7.	CG	Articulated low-floor single-deck vehicle	A vehicle that combines the technical features of points 3.3 and 3.5 of this table;
3.8.	CH	Articulated low-floor double-deck vehicle	A vehicle that combines the technical features of points 3.4 and 3.6 of this table;
3.9.	CI	Open top single deck vehicle	A vehicle with partial roof or without roof;
3.10.	CJ	Open top double deck vehicle	A vehicle without roof over all or part of its upper deck;
3.11.	CX	Bus chassis	An incomplete vehicle with just chassis rails or tube assembly, power train, axles, that is intended to be completed with bodywork, customised to the needs of the transport operator.

4. **Motor vehicles of category N_1, N_2 or N_3**

Ref.	Code	Name	Definition
4.1.	BA	Lorry	A vehicle that is designed and constructed exclusively or principally for conveying goods. It may also tow a trailer.
4.2.	BB	Van	A lorry with the compartment where the driver is located and cargo area within a single unit;
4.3.	BC	Tractor unit for semi-trailer	A towing vehicle that is designed and constructed exclusively or principally to tow semi-trailers;
4.4.	BD	Road tractor	A towing vehicle that is designed and constructed exclusively to tow trailers other than semi-trailers;
4.5.	BE	Pick-up truck	A vehicle of a maximum mass not exceeding 3 500 kg in which the seating positions and the cargo area are not located in a single compartment;
4.6.	BX	Chassis-cab or chassis-cowl	An incomplete vehicle with just a cabin (complete or partial), chassis rails, power train, axles, which is intended to be completed with bodywork, customised to the needs of the transport operator.

5. **Vehicles of category O**

Ref.	Code	Name	Definition
5.1.	DA	Semi-trailer	A trailer that is designed and constructed to be coupled to a tractor unit or to a converter dolly and to impose a substantial vertical load on the towing vehicle or on the converter dolly. The coupling to be used for a vehicle combination shall consist of a king pin and a fifth wheel.
5.2.	DB	Drawbar trailer	A trailer having at least two axles, of which at least one is a steered axle: (a) equipped with a towing device which can move vertically (in relation to the trailer) and (b) that transmits less than 100 daN as a static vertical load to the towing vehicle.
5.3.	DC	Centre-axle trailer	A trailer where the axle(s) is (are) positioned close to the centre of gravity of the vehicle (when uniformly loaded) so that only a small static vertical load, not exceeding 10 % of that corresponding to the maximum mass of the trailer or a load of 1 000 daN (whichever is the lesser) is transmitted to the towing vehicle.

5.4.	DE	Rigid drawbar trailer	A trailer with one axle or one group of axles fitted with a drawbar which transmits a static load not exceeding 4 000 daN to the towing vehicle due to its construction and that does not meet the definition of a centre-axle trailer. The coupling to be used for a vehicle combination shall not consist of a king pin and a fifth wheel.

Appendix 1

Procedure for checking whether a vehicle can be categorised as off-road vehicle

1. **General**

1.1. For the purposes of classification of a vehicle as off-road vehicle, the procedure described in this Appendix shall apply.

2. **Test conditions for geometric measurements**

2.1. Vehicles belonging to category M_1 or N_1 shall be in unloaded conditions with a manikin of the 50th percentile male installed on the driver's seat and fitted with coolant fluid, lubricants, fuel, tools, spare-wheel (if fitted as OEM equipment).

The manikin may be replaced by a similar device having the same mass.

2.2. Vehicles other than those referred to in point 2.1 shall be loaded to their technically permissible maximum laden mass.

The distribution of the mass on the axles shall be the one that represents the worst case with respect to compliance with the respective criteria.

2.3. A vehicle representative of the type shall be submitted to the technical service in the conditions specified in point 2.1 or 2.2. The vehicle shall be in a stationary position with its wheels set straight ahead.

The ground on which measurements are made shall be as flat and horizontal (maximum of inclination 0,5 %) as possible.

3. **Measurement of approach, departure and ramp angles**

3.1. The approach angle shall be measured in accordance with paragraph 6.10 of Standard ISO 612:1978.

3.2. The departure angle shall be measured in accordance with paragraph 6.11 of Standard ISO 612:1978.

3.3. The ramp angle shall be measured in accordance with paragraph 6.9 of Standard ISO 612:1978.

3.4. When measuring the departure angle rear underrun protection devices which are adjustable in height may be set in the upper position.

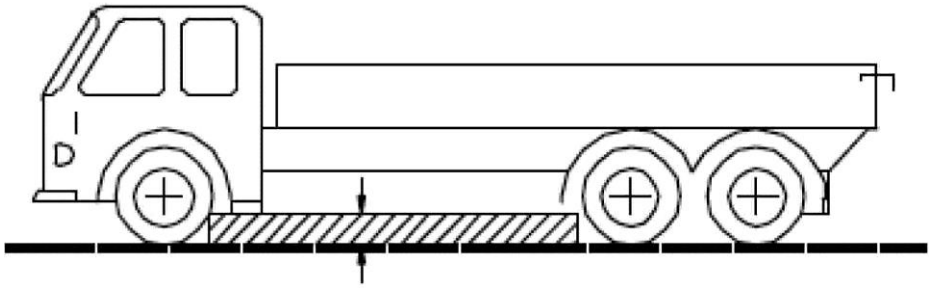
3.5. The prescription in point 3.4 shall not be construed as an obligation for the base vehicle to be fitted with a rear underrun protection as original equipment. However, the base vehicle manufacturer shall inform the next stage manufacturer that the vehicle has to comply with the requirements on departure angle when fitted with a rear underrun protection.

4. **Measurement of ground clearance**

4.1. Ground clearance between the axles

4.1.1. '*Ground clearance between the axles*' means the shortest distance between the ground plane and the lowest fixed point of the vehicle.

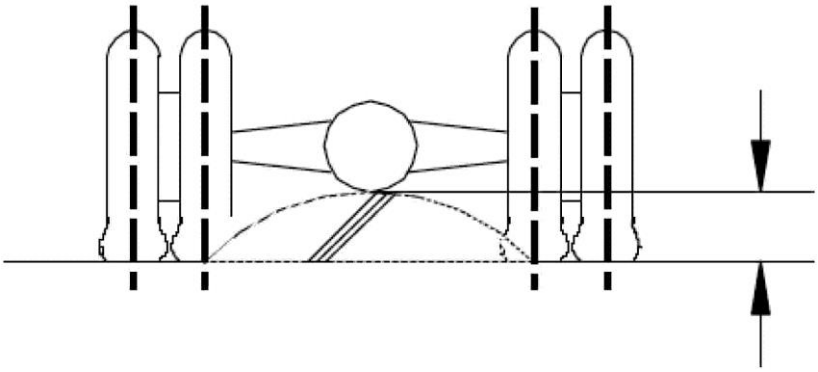
For the application of the definition, the distance between the last axle of a front group of axle and the first axle of a rear group of axle shall be considered.



4.1.2. No rigid part of the vehicle may project into the shaded area shown on the figure.

4.2. Ground clearance beneath one axle

4.2.1. '*Ground clearance beneath one axle*' means the distance beneath the highest point of the arc of a circle passing through the centre of the tyre footprint of the wheels on one axle (the inner wheels in the case of twin tyres) and touching the lowest fixed point of the vehicle between the wheels.



4.2.2. Where appropriate, the measurement of ground clearance shall be conducted on each of the several axles of a group of axles.

5. **Gradeability**

5.1. '*Gradeability*' means the ability of a vehicle to negotiate a gradient.

5.2. To the effect of checking the gradeability of an incomplete and a complete vehicle of category M_2, M_3, N_2 and N_3, a test shall be performed.

5.3. The test shall be conducted by the technical service on a vehicle representative of the type to be tested.

5.4. At the request of the manufacturer and under the conditions specified in Annex XVI, the gradeability of a type of vehicle may be demonstrated by virtual testing.

6. **Test conditions and pass-fail criterion**

6.1. The conditions set out in Annex II to Regulation (EU) No 1230/2012 shall apply.

6.2. The vehicle shall climb the gradient at a steady speed without any wheel slipping, longitudinally or laterally.

Appendix 2

Digits used to supplement the codes to be used for various kinds of bodywork

01 Flat bed;

02 Drop-side;

03 Box body;

04 Conditioned body with insulated walls and equipment to maintain the interior temperature;

05 Conditioned body with insulated walls but without equipment to maintain the interior temperature;

06 Curtain-sided;

07 Swap body (interchangeable superstructure);

08 Container carrier;

09 Vehicles fitted with hook lift;

10 Tipper;

11 Tank;

12 Tank intended for transport of dangerous goods;

13 Livestock carrier;

14 Vehicle transporter;

15 Concrete mixer;

16 Concrete pump vehicle;

17 Timber;

18 Refuse collection vehicle;

19 Street sweeper, cleansing and drain clearing;

20 Compressor;

21 Boat carrier;

22 Glider carrier;

23 Vehicles for retail or display purposes;

24 Recovery vehicle;

25 Ladder vehicle;

26 Crane lorry (other than a mobile crane as defined in section 5 of Part A of Annex II);

27 Aerial work platform vehicle;

28 Digger derrick vehicle;

29 Low floor trailer;

30 Glazing transporter;

31 Fire engine;

99 Bodywork that is not included in the present list.

ANNEX III

INFORMATION DOCUMENT FOR THE PURPOSE OF EU TYPE-APPROVAL OF VEHICLES

PART I

The following information shall be supplied in triplicate and include a list of contents.

Any drawings shall be supplied in an appropriate scale and in sufficient detail on size A4, or on a folder of A4 format.

Photographs, if any, shall show sufficient detail.

A. **Categories M and N**

1.	GENERAL
1.1.	Make (trade name of manufacturer): …
1.2.	Type: …
1.2.1.	Commercial name(s) (if available): …
1.2.2.	For multi-stage type-approved vehicles, type-approval information of the base/previous stage vehicle (list the information for each stage. This can be done with a matrix):
	Type: ……
	Variant(s): ……..
	Version(s): ……...
	Type-approval number, including extension number ……
1.3.	Means of identification of type, if marked on the vehicle ([b]): …
1.3.1.	Location of that marking: …
1.4.	Category of vehicle ([c]): …
1.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport: …
1.5.	Company name and address of manufacturer: …
1.5.1.	For multi-stage type-approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle……
1.8.	Name(s) and address(es) of assembly plant(s): …
1.9.	Name and address of the manufacturer's representative (if any): …
2.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
2.1.	Photographs and/or drawings of a representative vehicle: …
2.3.	Number of axles and wheels: …
2.3.1.	Number and position of axles with twin wheels: …

2.3.2. Number and position of steered axles: …

2.3.3. Powered axles (number, position, interconnection): …

2.4. Chassis (if any) (overall drawing): …

2.6. Position and arrangement of the engine: …

2.8. Hand of drive: left/right ([1])

2.8.1. Vehicle is equipped to be driven in right/left ([1]) hand traffic

2.9. Specify if the towing vehicle is intended to tow semi-trailers or other trailers and, if the trailer is a semi-, drawbar-, centre-axle- or rigid drawbar trailer: …

2.10. Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …

3. MASSES AND DIMENSIONS ([f])([g])([7])

(in kg and mm) (Refer to drawing where applicable)

3.1. **Wheelbase(s) (fully loaded) ([g1]):**

3.1.1. *Two-axle vehicles:* …

3.1.2. *Vehicles with three or more axles*

3.1.2.1. Axle spacing between consecutive axles going from the foremost to the rearmost axle: …

3.1.2.2. Total axle spacing: …

3.3.1. Track of each steered axle ([g4]): …

3.3.2. Track of all other axles ([g4]): …

3.4. **Range of vehicle dimensions** (overall)

3.4.1. *For chassis without bodywork*

3.4.1.1. Length ([g5]): …

3.4.1.1.1. Maximum permissible length: …

3.4.1.1.2. Minimum permissible length: …

3.4.1.2. Width ([g7]): …

3.4.1.2.1. Maximum permissible width: …

3.4.1.2.2. Minimum permissible width: …

3.4.1.3. Height (in running order) ([g8]) (for suspensions adjustable for height, indicate normal running position): …

3.4.2. *For chassis with bodywork*

3.4.2.1. Length ([g5]): …

3.4.2.1.1. Length of the loading area: …

3.4.2.2. Width ([g7]): …

3.4.2.2.1. Thickness of the walls (in the case of vehicles designed for controlled-temperature transport of goods): …

3.4.2.3. Height (in running order) ([g8]) (for suspensions adjustable for height, indicate normal running position): …

3.5. **Minimum mass on the steering axle(s) for incomplete vehicles:** …

3.6. **Mass in running order** ([h])

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix shall be provided where there are more than one versions within the same variant): …

3.6.1. Distribution of this mass among the axles and, in the case of a semi-trailer a rigid drawbar trailer or a centre-axle trailer, the mass on the coupling:

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix shall be provided where there are more than one versions within the same variant): …

3.6.2. Mass of the optional equipment (as defined in point (5) of Article 2 of Regulation (EU) No 1230/2012: …

3.7. **Minimum mass of the completed vehicle** as stated by the manufacturer, in the case of an incomplete vehicle: …

3.8. **Technically permissible maximum laden mass** stated by the manufacturer ([i])([3]): …

3.8.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([3]): …

3.9. **Technically permissible maximum mass on each axle**: …

3.10. **Technically permissible mass on each group of axles:** …

3.11. **Technically permissible maximum towable mass of the towing vehicle**

in case of:

3.11.1. Drawbar trailer: …

3.11.2. Semi-trailer: …

3.11.3. Centre-axle trailer: …

3.11.4. Rigid drawbar trailer: …

3.11.5. Technically permissible maximum laden mass of the combination ([3]): …

3.11.6. Maximum mass of unbraked trailer: …

3.12. **Technically permissible maximum mass at the coupling point:**

3.12.1. of a towing vehicle: …

3.12.2. of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …

3.16. **Registration/in service maximum permissible masses (optional)**

3.16.1. Registration/in service maximum permissible laden mass: …

3.16.2. Registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point: …

3.16.3. Registration/in service maximum permissible mass on each group of axles: …

3.16.4. Registration/in service maximum permissible towable mass: …

3.16.5. Registration/in service maximum permissible mass of the combination: …

3.17. Vehicle submitted to multi-stage type-approval (only in the case of incomplete or completed vehicles of category N_1, within the scope of Regulation (EC) No 715/2007: yes/no ([1])

3.17.1. Mass of the base vehicle in running order: ……..……kg.

3.17.2. Default added mass (DAM), calculated in accordance with section 5 of Annex XII to Regulation (EC) No 692/2008: ……kg.

4. POWER PLANT ([k])

4.1. **Manufacturer of the engine:** …

4.1.1. Manufacturer's engine code (as marked on the engine): …

4.1.2. Approval number (if appropriate) including fuel identification marking: …

(heavy-duty vehicles only)

4.2. **Internal combustion engine**

4.2.1.1. Working principle: positive ignition/compression ignition/dual-fuel ([1])

Cycle four stroke/two stroke/rotary ([1])

4.2.1.1.1. Type of dual-fuel engine: Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])([x1])

4.2.1.1.2. Gas Energy Ratio over the hot part of the WHTC test-cycle: … %

4.2.1.2. Number and arrangement of cylinders: …

4.2.1.3. Engine capacity ([m]): …… cm^3

4.2.1.6. Normal engine idling speed ([2]): …… min^{-1}

4.2.1.6.1. High engine idling speed ([2]): …… min^{-1}

4.2.1.6.2. Idle on diesel: yes/no ([1])([x1])

4.2.1.8. Maximum net power ([n]): …… kW at …… min^{-1} (manufacturer's declared value)

4.2.1.11. (Euro VI only) Manufacturer references of the Documentation package required by Articles 5, 7 and 9 of Regulation (EU) No 582/2011 enabling the approval authority to evaluate the emission control strategies and the systems on-board the engine to ensure the correct operation of NO_x control measures

4.2.2.1. Light-duty vehicles: Diesel/Petrol/LPG/NG or Biomethane/Ethanol (E 85)/Biodiesel/Hydrogen ([1]) ([6])

4.2.2.2 Heavy duty vehicles Diesel/Petrol/LPG/NG-H/NG-L/NG-HL/Ethanol (ED95)/Ethanol (E85)/LNG/LNG_{20} ([1])([6])

4.2.2.2.1. (Euro VI only) Fuels compatible with use by the engine declared by the manufacturer in accordance with point 1.1.3 of Annex I to Regulation (EU) No 582/2011 (as applicable)

4.2.2.4. Vehicle fuel type: Mono fuel, Bi fuel, Flex fuel ([1])

4.2.2.5. Maximum amount of biofuel acceptable in fuel (manufacturer's declared value): …… % by volume

4.2.3. *Fuel tank(s)*

4.2.3.1. Service fuel tank(s)

4.2.3.1.1. Number and capacity of each tank: …

4.2.3.2. Reserve fuel tank(s)

4.2.3.2.1. Number and capacity of each tank: …

4.2.4. *Fuel feed*

4.2.4.1. By carburettor(s): yes/no ([1])

4.2.4.2. By fuel injection (compression ignition or dual-fuel only): yes/no ([1])

4.2.4.2.2. Working principle: direct injection/pre-chamber/swirl chamber ([1])

4.2.4.3. By fuel injection (positive ignition only): yes/no ([1])

4.2.7. *Cooling system:* liquid/air ([1])

4.2.8. *Intake system*

4.2.8.1. Pressure charger: yes/no ([1])

4.2.8.2. Intercooler: yes/no ([1])

4.2.8.3.3. (Euro VI only) Actual Intake system depression at rated engine speed and at 100 % load on the vehicle: … kPa

4.2.9. *Exhaust system*

4.2.9.2.1. (Euro VI only) Description and/or drawing of the elements of the exhaust system that are not part of the engine system

4.2.9.3.1. (Euro VI only) Actual exhaust back pressure at rated engine speed and at 100 % load on the vehicle (compression-ignition engines only): … kPa

4.2.9.4. Type, marking of exhaust silencer(s): …

Where relevant for exterior noise, reducing measures in the engine compartment and on the engine: …

4.2.9.5. Location of the exhaust outlet: …

4.2.9.7.1. (Euro VI only) Acceptable Exhaust system volume: … dm^3

4.2.12. *Measures taken against air pollution*

4.2.12.1.1. (Euro VI only) Device for recycling crankcase gases: yes/no ([2])

If yes, description and drawings:

If no, compliance with Annex V to Regulation (EU) No 582/2011 required

4.2.12.2. Additional pollution control devices (if any, and if not covered by another heading)

4.2.12.2.1. Catalytic converter: yes/no ([1])

4.2.12.2.1.11. Regeneration systems/method of exhaust after-treatment systems, description: …

4.2.12.2.1.11.6. Consumable reagents: yes/no ([1])

4.2.12.2.1.11.7. Type and concentration of reagent needed for catalytic action: …

4.2.12.2.2. Oxygen sensor: yes/no ([1])

4.2.12.2.3. Air injection: yes/no ([1])

4.2.12.2.4. Exhaust gas recirculation: yes/no ([1])

4.2.12.2.5. Evaporative emissions control system: yes/no ([1])

4.2.12.2.6. Particulate trap: yes/no ([1])

4.2.12.2.6.9. Other systems: yes/no ([1])

4.2.12.2.6.9.1. Description and operation

4.2.12.2.7. On-board-diagnostic (OBD) system: yes/no ([1])

4.2.12.2.7.0.1. (Euro VI only) Number of OBD engine families within the engine family

4.2.12.2.7.0.2. (Euro VI only) List of the OBD engine families (where applicable)

4.2.12.2.7.0.3. (Euro VI only) Number of the OBD engine family the parent engine / the engine member belongs to:

4.2.12.2.7.0.4. (Euro VI only) Manufacturer references of the OBD-documentation required by Article 5(4)(c) and Article 9(4) of Regulation (EU) No 582/2011 and specified in Annex X to that Regulation for the purpose of approving the OBD system

4.2.12.2.7.0.5. (Euro VI only) Where appropriate, manufacturer reference of the Documentation for installing in a vehicle an OBD equipped engine system

4.2.12.2.7.0.6. (Euro VI only) Where appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the OBD system of an approved engine

4.2.12.2.7.6.5. (Euro VI only) OBD Communication protocol standard: ([7])

4.2.12.2.7.7. (Euro VI only) Manufacturer reference of the OBD-related information required by Article 5(4)(d) and Article 9(4) of Regulation (EU) No 582/2011 for the purpose of complying with the provisions on access to vehicle OBD and vehicle repair and maintenance information, or

4.2.12.2.7.7.1. As an alternative to a manufacturer reference provided in point 4.2.12.2.7.7 reference of the attachment to the information document set out in Appendix 4 of Annex III to Regulation (EU) No 582/2011 that contains the following table, once completed according to the given example:

Component — Fault code — Monitoring strategy — Fault detection criteria — MI activation criteria — Secondary parameters — Preconditioning — Demonstration test

Catalyst — P0420 — Oxygen sensor 1 and 2 signals — Difference between sensor 1 and sensor 2 signals — 3rd cycle — Engine speed, engine load, A/F mode, catalyst temperature — Two Type 1 cycles — Type 1

4.2.12.2.7.8. (EURO VI only) OBD components on-board the vehicle

4.2.12.2.7.8.1. List of OBD components on-board the vehicle

4.2.12.2.7.8.2. Written description and/or drawing of the MI ([10])

4.2.12.2.7.8.3. Written description and/or drawing of the OBD off-board communication interface ([10])

4.2.12.2.8. Other systems (description and operation): …

4.2.12.2.8.1. (Euro VI only) Systems to ensure the correct operation of NO_x control measures

4.2.12.2.8.2. Driver inducement system

4.2.12.2.8.2.1. (Euro VI only) Engine with permanent deactivation of the driver inducement, for use by the rescue services or in vehicles specified in Article 2(3)(b): yes/no ([1])

4.2.12.2.8.3. (Euro VI only) Number of OBD engine families within the engine family considered when ensuring the correct operation of NO_x control measures

4.2.12.2.8.4. (Euro VI only) List of the OBD engine families (where applicable)

4.2.12.2.8.5. (Euro VI only) Number of the OBD engine family the parent engine / the engine member belongs to

4.2.12.2.8.6. (Euro VI only) Lowest concentration of the active ingredient present in the reagent that does not activate the warning system (CD_{min}): (% vol.)

4.2.12.2.8.7. (Euro VI only) Where appropriate, manufacturer reference of the Documentation for installing in a vehicle the systems to ensure the correct operation of NO_x control measures

4.2.12.2.8.8. Components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

4.2.12.2.8.8.1. Activation of the creep mode:

'disable after restart' / 'disable after fuelling' / 'disable after parking' ([7])

4.2.12.2.8.8.2. Where appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the system ensuring the correct operation of NO_x control measures of an approved engine

4.2.12.2.8.8.3. Written description and/or drawing of the warning signal ([6])

4.2.12.2.9. Torque limiter: yes/no ([1])

4.2.13.1. Location of the absorption coefficient symbol (compression ignition engines only): …

4.2.15. LPG fuelling system: yes/no ([1])

4.2.16. NG fuelling system: yes/no ([1])

4.2.17.8.1.0.1. (Euro VI only) Self adaptive feature? Yes/No [(1)]

4.2.17.8.1.0.2. (Euro VI only) Calibration for a specific gas composition NG-H/NG-L/NG-HL ([1])

Transformation for a specific gas composition $NG\text{-}H_t/NG\text{-}L_t/NG\text{-}HL_t$ ([1])

4.3. **Electric motor**

4.3.1. Type (winding, excitation): …

4.3.1.1. Maximum hourly output: …… kW

4.3.1.1.1. Maximum net power ([n]) … kW

(manufacturer's declared value)

4.3.1.1.2. Maximum 30 minutes power ([n]) … kW

(manufacturer's declared value)

4.3.1.2. Operating voltage: …… V

4.3.2. Battery

4.3.2.4. Position: …

4.4. **Engine or motor combination**

4.4.1. Hybrid electric vehicle: yes/no ([1])

4.4.2. Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging: ([1])

4.5.4. *(Euro VI only) CO_2 emissions for heavy duty engines*

4.5.4.1. CO_2 mass emissions WHSC test ([x3]): … g/kWh

4.5.4.2. CO_2 mass emissions WHSC test in diesel mode ([x2]): … g/kWh

4.5.4.3. CO2 mass emissions WHSC test in dual-fuel mode ([x1]): … g/kWh

4.5.4.4. CO2 mass emissions WHTC test ([8])([x3]): … g/kWh

4.5.4.5. CO2 mass emissions WHTC test in diesel mode ([8])([x2]): … g/kWh

4.5.4.6. CO2 mass emissions WHTC test in dual-fuel mode ([8])([x1]): … g/kWh

4.5.5. *(Euro VI only) Fuel consumption for heavy duty engines*

4.5.5.1. Fuel consumption WHSC test ([x3]): … g/kWh

4.5.5.2. Fuel consumption WHSC test in diesel mode ([x2]): … g/kWh

4.5.5.3. Fuel consumption WHSC test in dual-fuel mode ([x1]): … g/kWh

4.5.5.4. Fuel consumption WHTC test ([8])([x3]): … g/kWh

4.5.5.5. Fuel consumption WHTC test in diesel mode ([8])([x2]): … g/kWh

4.5.5.6. Fuel consumption WHTC test in dual-fuel mode ([8])([x1]): … g/kWh

4.6.5. *Lubricant temperature*

Minimum: …… K

Maximum: …… K

5. TRANSMISSION ([p])

5.2. **Type** (mechanical, hydraulic, electric, etc.): …

5.5. **Gearbox**

5.5.1. *Type* (manual/automatic/CVT (continuously variable transmission)) ([1])

5.6. **Gear ratios**

Gear	Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)	Final drive ratio(s) (ratio of gearbox output shaft to driven wheel revolutions)	Total gear ratios
Maximum for CVT			
1			
2			
3			
…			
Minimum for CVT			
Reverse			

5.7. **Maximum vehicle design speed** (in km/h) ([q])

5.9. **Tachograph:** yes/no ([1])

5.9.1 *Approval mark:* …

5.11. **Gear shift indicator (GSI)**

5.11.1. Acoustic indication available yes/no ([1]). If yes, description of sound and sound level at the driver's ear in dB(A). (Acoustic indication always switchable on/off)

5.11.2. Information according to point 4.6 of Annex I to Regulation (EU) No 65/2012 (determined at type-approval)

6. AXLES

6.1. Description of each axle: …

6.2. Make: …

6.3. Type: …

6.4. Position of retractable axle(s): …

6.5. Position of loadable axle(s): …

6. SUSPENSION

6.2. Type and design of the suspension of each axle or wheel: …

6.2.1. Level adjustment: yes/no/optional ([1])

6.2.3. Air-suspension for driving axle(s): yes/no ([1])

6.2.3.1. Suspension of driving axle equivalent to air-suspension: yes/no ([1])

6.2.4. Air-suspension for non-driving axle(s): yes/no ([1])

6.2.4.1. Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([1])

6.6.1. *Tyre/wheel combination(s)*

(a) for tyres indicate size designation, load-capacity index, speed category symbol, rolling resistance in accordance with ISO 28580 (where applicable) ([r]);

(b) for wheels indicate rim size(s) and off-set(s)

7.6.1.1. Axles

7.6.1.1.1. Axle 1: …

7.6.1.1.2. Axle 2: …

etc.

7.6.1.2. Spare wheel, if any: …

7.6.2. *Upper and lower limits of rolling radii*

7.6.2.1. Axle 1: …

7.6.2.2. Axle 2: …

etc.

8. STEERING

8.2. **Transmission and control**

8.2.1. Type of steering transmission (specify for front and rear, where applicable): …

8.2.2. Linkage to wheels (including other than mechanical means; specify for front and rear, where applicable): …

8.2.3. Method of assistance, if any: …

9.	BRAKES
9.5.	Anti-lock braking system: yes/no/optional ([1])
9.9.	Brief description of the braking equipment according to paragraph 2.6 of UNECE Regulation No 13-H: …
9.11.	Particulars of the type(s) of endurance braking system(s): …
10.	BODYWORK
10.1.	Type of bodywork using the codes set out in Part C of Annex II: …
10.3.	**Occupant doors, latches and hinges**
10.3.1.	Door configuration and number of doors: …
10.9.	**Devices for indirect vision**
10.9.1.	Rear-view mirrors, stating, for each rear-view mirror:
10.9.1.1.	Make: …
10.9.1.2.	Type-approval mark: …
10.9.1.3.	Variant: …
10.9.1.6.	Optional equipment which may affect the rearward field of vision: …
10.9.2.	Devices for indirect vision other than mirrors: …
10.9.2.1.	Type and description of the device: …
10.10.	**Interior arrangement**
10.10.3.	*Seats*
10.10.3.1.	Number of seating positions ([s]): …
10.10.3.1.1.	Location and arrangement: …
10.10.3.2.	Seat(s) designated for use only when the vehicle is stationary: …
10.10.4.1.	Type(s) of head restraints: integrated/detachable/separate ([1])
10.10.4.2.	Type-approval number(s), if available: …
10.10.8	Gas used as refrigerant in the air-conditioning system: …
10.10.8.1.	The air-conditioning system is designed to contain fluorinated greenhouse gases with a global warming potential higher than 150: yes/no ([1])
10.12.2.	Nature and position of supplementary restraint systems (indicate yes/no/optional):

(L = left-hand side, R = right-hand side, C = centre)				
		Front airbag	Side airbag	Belt pre-loading device
First row of seats	L			
	C			
	R			
Second row of seats (*)	L			
	C			
	R			
(*) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.				

10.17. **Statutory plates**

10.17.1. Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the vehicle identification number: …

10.17.2. Photographs and/or drawings of the statutory plate and inscriptions (completed example with dimensions): …

10.17.3. Photographs and/or drawings of the vehicle identification number (completed example with dimensions): …

10.17.4.1. The meaning of characters in the vehicle descriptor section of the VIN and, where applicable, in the vehicle indicator section of the VIN used to comply with the requirements of paragraph 5.3 of ISO Standard 3779-1983 shall be explained: …

10.17.4.2. If characters in the vehicle descriptor section of the VIN are used to comply with the requirements of paragraph 5.4 of ISO Standard 3779-1983, these characters shall be indicated: …

10.22. **Front under-run protection**

10.22.0. Presence: yes/no/incomplete ([1])

10.23. **Pedestrian protection**

10.23.1. A detailed description, including photographs and/or drawings, of the vehicle with respect to the structure, the dimensions, the relevant reference lines and the constituent materials of the frontal part of the vehicle (interior and exterior), including detail of any active protection system installed

10.24. Frontal protection systems

10.24.1. General arrangement (drawings or photographs) indicating the position and attachment of the frontal protection systems:

10.24.3. Complete details of fittings required and full instructions, including torque requirements, for fitting:

11. CONNECTIONS BETWEEN TOWING VEHICLES AND TRAILERS AND SEMI-TRAILERS

11.1. Class and type of the coupling device(s) fitted or to be fitted: …

11.3. Instructions for attachment of the coupling type to the vehicle and photographs or drawings of the fixing points at the vehicle as stated by the manufacturer; additional information, if the use of the coupling type is restricted to certain variants or versions of the type of vehicle: …

11.4. Information of the fitting of special towing brackets or mounting plates: …

11.5. Type-approval number(s): …

12. MISCELLANEOUS

12.7.1. Vehicle equipped with a 24 GHz short-range radar equipment: yes/no ([1])

13. SPECIAL PROVISIONS FOR BUSES AND COACHES

13.1. **Class of vehicle:** Class I/Class II/Class III/Class A/Class B ([1])

13.1.2. Chassis types where the type-approved bodywork can be installed (manufacturer(s), and vehicle(s) types): …

13.3. **Number of passengers** (seated and standing)

13.3.1. Total (N): …

13.3.2. Upper deck (N_a) ([1]): …

13.3.3. Lower deck (N_b) ([1]): …

13.4. **Number of passengers** (seated)

13.4.1. Total (A): …

13.4.2. Upper deck (A_a) ([1]): …

13.4.3. Lower deck (A_b) ([1]): …

13.4.4. Number of wheelchair positions for category M_2 and M_3 vehicles: …

16. ACCESS TO VEHICLE REPAIR AND MAINTENANCE INFORMATION

16.1. Address of principal website for access to vehicle repair and maintenance information: …

B. **Category O**

1.	**GENERAL**
1.1.	Make (trade name of manufacturer): …
1.2.	Type: …
1.2.1.	Commercial name(s) (if available): …
1.3.	Means of identification of type, if marked on the vehicle ([b]): …
1.3.1.	Location of that marking: …
1.4.	Category of vehicle ([c]): …
1.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport: …
1.5.	Company name and address of manufacturer: …
1.8.	Name(s) and address(es) of assembly plant(s): …
1.9.	Name and address of the manufacturer's representative (if any): …
2.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
2.1.	Photographs and/or drawings of a representative vehicle: …
2.3.	Number of axles and wheels: …
2.3.1.	Number and position of axles with twin wheels: …
2.3.2.	Number and position of steered axles: …
2.4.	Chassis (if any) (overall drawing): …
2.9.	Specify if the towing vehicle is intended to tow semi-trailers or other trailers and, if the trailer is a semi-, drawbar-, centre-axle- or rigid drawbar trailer: …
2.10.	Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …
3.	MASSES AND DIMENSIONS ([f])([g])([7])
	(in kg and mm) (Refer to drawing where applicable)
3.1.	**Wheelbase(s) (fully loaded)** ([g1]):
3.1.1.	*Two-axle vehicles*: …
3.1.2.	*Vehicles with three or more axles*
3.1.2.1.	Axle spacing between consecutive axles going from the foremost to the rearmost axle: …
3.1.2.2.	Total axle spacing: …
3.3.1.	Track of each steered axle ([g4]): …
3.3.2.	Track of all other axles ([g4]): …

3.4. **Range of vehicle dimensions** (overall)

3.4.1. *For chassis without bodywork*

3.4.1.1. Length ([g5]): …

3.4.1.1.1. Maximum permissible length: …

3.4.1.1.2. Minimum permissible length: …

3.4.1.1.3. In the case of trailers, maximum permissible drawbar length ([g6]): …

3.4.1.2. Width ([g7]): …

3.4.1.2.1. Maximum permissible width: …

3.4.1.2.2. Minimum permissible width: …

3.4.2. *For chassis with bodywork*

3.4.2.1. Length ([g5]): …

3.4.2.1.1. Length of the loading area: …

3.4.2.1.2. In the case of trailers, maximum permissible drawbar length ([g6]): …

3.4.2.2. Width ([g7]): …

3.4.2.2.1. Thickness of the walls (in the case of vehicles designed for controlled-temperature transport of goods): …

3.4.2.3. Height (in running order) ([g8]) (for suspension adjustable for height, indicate normal running position): …

3.6. **Mass in running order ([h])**

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix must be provided): …

3.6.1. Distribution of this mass among the axles and, in the case of a semi-trailer a rigid drawbar trailer or a centre-axle trailer, the mass on the coupling: …

(a) minimum and maximum for each variant: …

(b) mass of each version (a matrix must be provided): …

3.6.2. Mass of the optional equipment (as defined in point (5) of Article 2 of Regulation (EU) No 1230/2012: …

3.7. **Minimum mass of the completed vehicle** as stated by the manufacturer, in the case of an incomplete vehicle: …

3.8. **Technically permissible maximum laden mass** stated by the manufacturer ([i])([3]): …

3.8.1. Distribution of this mass among the axles, and in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([3]): …

3.9. **Technically permissible maximum mass on each axle**: …

3.10. **Technically permissible mass on each group of axles:** …

3.12. **Technically permissible maximum mass at the coupling point:**

3.12.2. Of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …

3.16. **Registration/in service maximum permissible masses (optional)**

3.16.1. Registration/in service maximum permissible laden mass: …

3.16.2. Registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point: …

3.16.3. Registration/in service maximum permissible mass on each group of axles: …

3.16.4. Intended registration/in service maximum permissible towable mass (several entries possible for each technical configuration ([5])): …

4. TRANSMISSION

4.7. Maximum vehicle design speed (in km/h) ([q])

5. AXLES

5.1. Description of each axle: …

5.2. Make: …

5.3. Type: …

5.4. Position of retractable axle(s): …

5.5. Position of loadable axle(s): …

6. SUSPENSION

6.2. Type and design of the suspension of each axle or wheel: …

6.2.1. Level adjustment: yes/no/optional ([1])

6.2.4. Air-suspension for non-driving axle(s): yes/no ([1])

6.2.4.1. Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([1])

6.6.1. *Tyre/wheel combination(s)*

(a) for tyres indicate size designation, load-capacity index, speed category symbol, rolling resistance in accordance with ISO 28580 (where applicable) ([r]);

(b) for wheels indicate rim size(s) and off-set(s)

6.6.1.1. Axles

6.6.1.1.1. Axle 1: …

6.6.1.1.2. Axle 2: …

etc.

6.6.1.2. Spare wheel, if any: …

6.6.2. *Upper and lower limit of rolling radii*

6.6.2.1. Axle 1: …

6.6.2.2. Axle 2: …

etc.

7.	STEERING
7.2.	**Transmission and control**
7.2.1.	Type of steering transmission (specify for front and rear, where applicable): …
7.2.2.	Linkage to the wheels (including other than mechanical means; specify for front and rear, where applicable): …
7.2.3.	Method of assistance, if any: …
8.	BRAKES
8.5.	Antilock braking system: yes/no/optional ([1])
8.9.	Brief description of the braking equipment, according to paragraph 2.6 of UNECE Regulation 13-H: …
9.	BODYWORK
9.1.	Type of bodywork using the codes defined in Part C of Annex II: …
9.17.	**Statutory plates**
9.17.1.	Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the vehicle identification number: …
9.17.2.	Photographs and/or drawings of the statutory plate and inscriptions (completed example with dimensions): …
9.17.3.	Photographs and/or drawings of the vehicle identification number (completed example with dimensions): …
9.17.4.1.	The meaning of characters in the vehicle descriptor section of the VIN and, where applicable, in the vehicle indicator section of the VIN used to comply with the requirements of paragraph 5.3 of ISO Standard 3779-1983 shall be explained: …
9.17.4.2.	If characters in the vehicle descriptor section of the VIN are used to comply with the requirements of paragraph 5.4 of ISO Standard 3779-1983 these characters shall be indicated: …
11.	CONNECTIONS BETWEEN TOWING VEHICLES AND TRAILERS AND SEMI-TRAILERS
11.1.	Class and type of the coupling device(s) fitted or to be fitted: …
11.5.	Type-approval number(s): …

PART II

Matrix showing the combinations of the entries listed in Part I within the versions and variants of the type of vehicle

Item No	All	Version 1	Version 2	Version 3	Version n

Explanatory notes

(a) A separate matrix shall be compiled for each variant within the type.

(b) Entries for which there are no restrictions on their combination within a variant shall be listed in the column headed ‘all’.

(c) The information to be provided in accordance with Part II may be presented in an alternative layout or merged with the information provided in accordance with Part I.

(d) Each variant and each version shall be identified by an alphanumerical code consisting of a combination of letters and numbers, which shall also be indicated in the certificate of conformity (Annex IX) of the vehicle concerned.

(e) Variant(s) which fall(s) under Annex IV, Part III shall be identified by a specific alphanumerical code.

PART III

Type-approval numbers

Information required by Article 22 to be provided in the following table in respect of the type-approvals of systems, separate technical units and components for this vehicle granted in accordance with the regulatory acts in Annex IV. (All relevant approvals for each system, separate technical unit and component shall be included. However, information in respect of components need not be given here so long as such information is included in the approval certificate relating to the installation requirements).

Subject	Type-approval number or test report number (***)	Member State or Contracting Party (*) issuing the type-approval (**) or test report (***)	Extension date	Variant(s)/version(s)

(*)	Contracting Parties to the Revised 1958 Agreement.
(**)	To be indicated if not obtainable from the type-approval number.
(***)	To be indicated when the manufacturer applies the provisions of Article 40(1). In such a case, the relevant regulatory act shall be specified in the second column.

Signed: …

Position in company: …

Date: …

ANNEX IV

REQUIREMENTS FOR THE PURPOSE OF EU TYPE-APPROVAL OF VEHICLES, SYSTEMS, COMPONENTS OR SEPARATE TECHNICAL UNITS

PART I

Regulatory acts for EU type-approval of vehicles produced in unlimited series

Item	Subject	Regulatory act	Applicability										
			M_1	M_2	M_3	N_1	N_2	N_3	O_1	O_2	O_3	O_4	STU or component
1A	Sound level	Regulation (EU) No 540/2014 of the European Parliament and of the Council[15]	X	X	X	X	X	X					X
2A	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007	X(1)	X(1)		X(1)	X(1)						X
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	X	X	X	X	X	X	X	X	X	X	
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	X	X	X	X	X	X	X	X	X	X	X
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Commission Regulation (EU) No 1003/2010[16]	X	X	X	X	X	X	X	X	X	X	
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X	X	X	X	X	X	X	X	X	X	

[15] Regulation (EU) No 540/2014 of the European Parliament and of the Council of 16 April 2014 on the sound level of motor vehicles and of replacement silencing systems, and amending Directive 2007/46/EC and repealing Directive 70/157/EEC (OJ L 158, 27.5.2014, p. 131).

[16] Commission Regulation (EU) No 1003/2010 of 8 November 2010 concerning type-approval requirements for the space for mounting and the fixing of rear registration plates on motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 291, 9.11.2010, p. 22).

6A	Vehicle access and manoeuvrability (steps, running boards and handholds)	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012[17]	X			X	X	X					
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11	X			X							
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X	X	X	X	X	X					X
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X	X	X	X	X	X					X
9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13		X([3])	X([3])	X([3])	X([3])	X([3])	X([3])	X([3])	X([3])	X([3])	
9B	Braking of passenger cars	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	X([4])			X([4])							
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X	X	X	X	X	X	X	X	X	X	X
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21	X										
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18		X([4A])	X([4A])		X([4A])	X([4A])					X
13B	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116	X			X							X

[17] Commission Regulation (EU) No 130/2012 of 15 February 2012 concerning type-approval requirements for motor vehicles with regard to vehicle access and manoeuvrability and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 43, 16.2.2012, p. 6).

14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12	X			X							
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	X	X([4B])	X([4B])	X	X	X					
15B	Seats of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 80		X	X								
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26	X										X
17A	Vehicle access and manoeuvrability (reverse gear)	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	X	X	X	X					
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X	X	X	X	X	X					
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X	X	X	X	X	X	X	X	X	X	
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	X	X	X	X	X	X					
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	X	X	X	X	X	X	X	X	X	X	
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X	X	X	X	X	X	X	X	X	X	X

22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X	X	X	X	X	X	X	X	X	X	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X	X	X	X	X	X					X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X	X	X	X	X	X	X	X	X	X	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X	X	X	X	X	X	X	X	X	X	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X	X	X	X	X	X	X	X	X	X	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X	X	X	X	X	X					X
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X	X	X	X	X	X	X	X	X	X	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X	X	X	X	X	X					X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X	X	X	X	X	X					X

25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X	X	X	X	X	X					X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X	X	X	X	X	X					X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X	X	X	X	X	X					X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	X	X	X	X	X	X					
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X	X	X	X	X	X	X	X	X	X	X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X	X	X	X	X	X	X	X	X	X	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X	X	X	X	X	X					
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	X	X	X	X	X	X					X
32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125	X										
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X	X	X	X	X	X					

34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Commission Regulation (EU) No 672/2010[18]	X	([5])	([5])	([5])	([5])	([5])					
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Commission Regulation (EU) No 1008/2010[19]	X	([6])	([6])	([6])	([6])	([6])					X
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X	X	X	X	X	X	X	X	X	X	X
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010	X										
38A	Head restraints (headrests), whether or not incorporated in vehicle seats	Regulation (EC) No 661/2009 UNECE Regulation No 25	X										
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	X([9])	X([9])	X	X([9])	X([9])	X					X
42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73					X	X			X	X	X
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011				X	X	X	X	X	X	X	X
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	X										

[18] Commission Regulation (EU) No 672/2010 of 27 July 2010 concerning type-approval requirements for windscreen defrosting and demisting systems of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 196, 28.7.2010, p. 5).

[19] Commission Regulation (EU) No 1008/2010 of 9 November 2010 concerning type-approval requirements for windscreen wiper and washer systems of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 292, 10.11.2010, p. 2).

45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	X	X	X	X	X	X	X	X	X	X	X
46	Tyres	Directive 92/23/EEC[20]	X	X	X	X	X	X	X	X	X	X	X
46A	Installation of tyres	Regulation (EC) No 661/2009 Commission Regulation (EU) No 458/2011[21]	X	X	X	X	X	X	X	X	X	X	
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	X			X			X	X			X
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54		X	X	X	X	X			X	X	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X	X	X	X	X	X	X	X	X	X	X
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	X([9A])			X([9A])							X
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89		X	X		X	X					X
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012		X	X	X	X	X	X	X	X	X	

[20] Council directive 92/23/EEC of 31 March 1992 relating to tyres for motor vehicles and their trailers and to their fitting (OJ L 129, 14.5.1992, p. 95).

[21] Commission Regulation (EU) No 458/2011 of 12 May 2011 concerning type-approval requirements for motor vehicles and their trailers with regard to the installation of their tyres and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 124, 13.5.2011, p. 11).

49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61				X	X	X					
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X([10])	X([10])	X([10])	X([10])	X([10])	X([10])	X	X	X	X	X
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102					X([10])	X([10])			X([10])	X([10])	X
51A	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 118			X								
52A	M_2 and M_3 vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 107		X	X								
52B	Strength of the superstructure of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 66		X	X								
53A	Protection of occupants in the event of a frontal collision	Regulation (EC) No 661/2009 UNECE Regulation No 94	X([11])										
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95	X([12])			X([12])							
55	(empty)												
56A	Vehicles for the carriage of dangerous goods	Regulation (EC) No 661/2009 UNECE Regulation No 105				X([13])	X([13])	X([13])	X([13])	X([13])	X([13])	X([13])	

57A	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Regulation (EC) No 661/2009 UNECE Regulation No 93					X	X					X
58	Pedestrian protection	Regulation (EC) No 78/2009 of the European Parliament and of the Council[22]	X			X							X
59	Recyclability	Directive 2005/64/EC of the European Parliament and of the Council[23]	X			X		-					
60	(empty)												
61	Air-conditioning systems	Directive 2006/40/EC of the European Parliament and of the Council[24]	X			X([14])							
62	Hydrogen system	Regulation (EC) No 79/2009	X	X	X	X	X	X					
63	General Safety	Regulation (EC) No 661/2009	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	
64	Gear shift indicators	Regulation (EC) No 661/2009 Regulation (EU) No 65/2012	X										
65	Advanced emergency braking system	Regulation (EC) No 661/2009 Commission Regulation (EU) No 347/2012[25]		X	X		X	X					

[22] Regulation (EC) No 78/2009 of the European Parliament and of the Council of 14 January 2009 on the type-approval of motor vehicles with regard to the protection of pedestrians and other vulnerable road users, amending Directive 2007/46/EC and repealing Directives 2003/102/EC and 2005/66/EC (OJ L 035, 4.2.2009, p.1).

[23] Directive 2005/64/EC of the European Parliament and of the Council of 26 October 2005 on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability and amending Council Directive 70/156/EEC (OJ L 310, 25.11.2005, p. 10).

[24] Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air conditioning systems in motor vehicles and amending Council Directive 70/156/EEC (OJ L 161, 14.6.2006, p. 12).

[25] Commission Regulation (EU) No 347/2012 of 16 April 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with respect to type-approval requirements for certain categories of motor vehicles with regard to advanced emergency braking systems (OJ L 109, 21.4.2012, p. 1).

66	Lane departure warning system	Regulation (EC) No 661/2009 Commission Regulation (EU) No 351/2012[26]		X	X		X	X					
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X	X	X	X	X	X					X
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	X			X							X
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X	X	X	X	X	X					
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X	X	X	X	X	X					X
71	Cab strength	Regulation (EC) No 661/2009 UNECE Regulation No 29				X	X	X					

[26] Commission Regulation (EU) No 351/2012 of 23 April 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards type-approval requirements for the installation of lane departure warning systems in motor vehicles (OJ L 110, 24.4.2012, p. 18).

Explanatory notes X Relevant regulatory act. ([1]) For vehicles with a reference mass not exceeding 2 610 kg. At the manufacturer's request, Regulation (EC) No 715/2007 may apply to vehicles with a reference mass not exceeding 2 840 kg. ([2]) In case of vehicles equipped with a LPG or CNG installation, a vehicle type-approval in accordance with UNECE Regulation No 67 or UNECE Regulation No 110 is required. ([3]) The fitting of an electronic stability control ('ESC') system is required in accordance with Article 12 and Article 13 of Regulation (EC) No 661/2009. ([4]) The fitting of an ESC system is required in accordance with Article 12 and Article 13 of Regulation (EC) No 661/2009. ([4A]) If fitted, the protective device shall fulfil the requirements of UNECE Regulation No 18. ([4B]) This Regulation applies to seats not falling within the scope of UNECE Regulation No 80. ([9]) For vehicles with a reference mass exceeding 2 610 kg which are not type-approved (at the manufacturer's request and provided their reference mass does not exceed 2 840 kg) under Regulation (EC) No 715/2007. ([9A]) Applies only where such vehicles are fitted with equipment covered by UNECE Regulation No 64. Tyre pressure monitoring system for M1 vehicles applies on a compulsory basis in accordance with Article 9(2) of Regulation (EC) No 661/2009. ([10]) Applies only to vehicles equipped with coupling(s). ([11]) Applies to vehicles with a technically permissible maximum laden mass not exceeding 2,5 tonnes. ([12]) Only applicable to vehicles where the 'Seating Reference Point ("R" point)' of the lowest seat is not more than 700 mm above the ground level. ([13]) Applies only when the manufacturer applies for type-approval of vehicles intended for the transport of dangerous goods. ([14]) Applies only for vehicles of category N_1, class I as described in Annex I to Regulation (EC) No 715/2007. ([15]) Compliance with Regulation (EC) No 661/2009 is mandatory, however, type-approval under this item number is not foreseen as it represents the collection of individual items 3A, 3B, 4A, 5A, 6A, 6B, 7A, 8A, 9A, 9B, 10A, 12A, 13A, 13B, 14A, 15A, 15B, 16A, 17A, 17B, 18A, 19A, 20A, 21A, 22A, 22B, 22C, 23A, 24A, 25A, 25B, 25C, 25D, 25E, 25F, 26A, 27A, 28A, 29A, 30A, 31A, 32A, 33A, 34A, 35A, 36A, 37A, 38A, 42A, 43A, 44A, 45A, 46A, 46B, 46C, 46D, 46E, 47A, 48A, 49A, 50A, 50B, 51A, 52A, 52B, 53A, 54A, 56A, 57A and 64 to 71. The series of amendments of the UNECE regulations which apply on a compulsory basis are listed in Annex IV to Regulation (EC) No 661/2009. The series of amendments adopted subsequently are accepted as an alternative.	

Appendix 1

Regulatory acts for EU type-approval of vehicles produced in small series pursuant to Article 39

Table 1

M_1 vehicles

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
1	Sound level	Directive 70/157/EEC		A
1A	Sound level	Regulation (EU) No 540/2014		A
2	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007		A
			(a) On-board diagnostic (OBD)	The vehicle shall be fitted with an OBD system that fulfils the requirements of Article 4(1) and (2) of Regulation (EC) No 692/2008 (The OBD system shall be designed to record at least the malfunction of the engine management system). The OBD-interface shall be able to communicate with commonly available diagnostic tools.
			(b) In service conformity	N/A
			(c) Access to information	It is sufficient that the manufacturer provide access to repair and maintenance information in a readily accessible and prompt manner.
			(d) Power measurement	*(When the vehicle manufacturer uses an engine from another manufacturer)* Bench test data from the engine manufacturer are accepted provided that the engine management system is identical (i.e. having at least the same electronic control unit (ECU)). Power output test may be performed on a chassis dynamometer. It shall be taken into account of the power loss in the transmission.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	(a) Liquid fuel tanks	B
			(b) Installation in vehicle	B
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58		B
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010		B
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79		C
			(a) Mechanical systems	The provisions of paragraph 5 of UNECE Regulation No 79 shall apply. All tests prescribed in paragraph 6.2 of UNECE Regulation No 79 shall be performed and the requirements of paragraph 6.1 of UNECE Regulation No 79 shall apply.
			(b) Complex electronic vehicle control system	All the requirements of Annex 6 of UNECE Regulation No 79 shall apply. Compliance with these requirements may only be checked by a technical service.
6A	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11		C
			(a) General requirements (Paragraph 5 of UNECE Regulation No 11)	All the requirements shall apply.
			(b) Performance requirements (Paragraph 6 of UNECE Regulation No 11)	Only the requirements of paragraph 6.1.5.4 and paragraph 6.3 of UNECE Regulation No 11 shall apply.
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	(a) Components	X
			(b) Installation on vehicle	B

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	(a) Components	X
			(b) Installation on vehicle	B
9B	Braking	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	(a) Design and tests requirements	A
			(b) Electronic stability control (ESC) and brake assist systems(BAS)	The fitting of BAS and ESC shall not be required. If fitted, they shall comply with the requirements of UNECE Regulation No 13-H.
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10		B
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21		C
			(a) Interior arrangement	
			(i) Radii and protrusion requirements for switches, pull-knobs and the like, controls and general interior fittings	The requirements of paragraphs 5.1 to 5.6 of UNECE Regulation No 21 may be waived at the request of the manufacturer. The requirements of paragraph 5.2 of UNECE Regulation No 21 with the exception of paragraphs 5.2.3.1, 5.2.3.2 and 5.2.4 of that Regulation shall apply.
			(ii) Energy absorption tests on the upper dashboard	Energy absorption tests on the upper dashboard shall only be performed when the vehicle is not fitted with at least two front airbags or two static four-point harnesses.
			(iii) Energy absorption test on the rear part of the seats	N/A
			(b) Power-operation of windows, roof-panel systems and partition systems	All requirements of paragraph 5.8 of UNECE Regulation No 21 shall apply.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116		A The provisions of paragraph 8.3.1.1.1. of UNECE Regulation No 116 may be applied instead of paragraph 8.3.1.1.2. of that Regulation regardless of the type of powertrain
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12		C
				Tests are required when the vehicle has not been tested under UNECE Regulation No 94 (see item 53A)
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17		C
			(a) General requirements (i) Specifications	Requirements of paragraph 5.2 of UNECE Regulation No 17 shall apply with the exception of paragraph 5.2.3 of that Regulation.
			(ii) Strength tests for seat backrest and head restraints	The requirements of paragraph 6.2 UNECE Regulation No 17 shall apply.
			(iii) Unlocking and adjustment tests	The test shall be performed in accordance with the requirements of Annex 7 to UNECE Regulation No 17.
			(b) Head restraints (i) Specifications	Requirements of paragraphs 5.4, 5.5, 5.6, 5.10, 5.11 and 5.12 of UNECE Regulation No 17 shall apply with the exception of paragraph 5.5.2 of that Regulation.
			(ii) Strength tests on head restraints	The test prescribed in paragraph 6.4 of UNECE Regulation No 17 shall be performed.
			(c) Special requirements regarding the protection of occupants from displaced luggage	The requirements of Annex 9 to UNECE Regulation No 26 may be waived at the request of the manufacturer.
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26		C
			(a) General specifications	The requirements of paragraph 5 of UNECE Regulation No 26 shall apply.
			(b) Particular specifications	The requirements of paragraph 6 of UNECE Regulation No 26 shall apply.
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012		D

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39		B
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011		B
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14		B
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48		B Daytime Running Lights (DRL) shall be fitted to a new type of vehicle.
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3		X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7		X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87		X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91		X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6		X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4		X

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31		X
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37		X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98		X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99		X
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112		X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123		X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19		X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010		B
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38		X

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23		X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77		X
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	(a) Components	X
			(b) Installation requirements	B
32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125		A
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121		A
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010		C
			(a) Windscreen defrosting	Only point 1.1.1 of Annex II to Regulation (EU) No 672/2010 shall apply, provided that warm air flow is ducted to the whole surface of the windscreen or the latter is electrically heated on its whole surface.
			(b) Windscreen demisting	Only point 1.2.1 of Annex II to Regulation (EU) No 672/2010 shall apply, provided that warm air flow is ducted to the whole surface of the windscreen or the latter is electrically heated on its whole surface.
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010		C
			(a) Windscreen wiper system	Points 1.1 to 1.1.10 of Annex III to Regulation (EU) No 1008/2010 shall apply. Only the test described in point 2.1.10 of Annex III to Regulation (EU) No 1008/2010 shall be performed.
			(b) Windscreen washer system	Point 1.2 of Annex III to Regulation (EU) No 1008/2010 shall apply with the exception of points 1.2.2, 1.2.3 and 1.2.5.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
36A	Heating system	Regulation (EC) No 661/2009 UNECE Regulation No 122		C The fitting of a heating system shall not be required.
			(a) All heating systems	The requirements of paragraphs 5.3 and 6 of UNECE Regulation No 122 shall apply.
			(b) LPG heating systems	The requirements of Annex 8 to UNECE Regulation No 122 shall apply.
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010		B
38A	Head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 25		X
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009		A With the exception of the set of requirements relating to OBDs and access to information.
			Power measurement	*(When the vehicle manufacturer uses an engine from another manufacturer)* Bench test data from the engine manufacturer are accepted, provided that the engine management system is identical (i.e. having at least the same ECU). Power output test may be performed on a chassis dynamometer. It shall be taken into account of the power loss in the transmission.
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012		B The hill start test at maximum combination mass described in point 5.1 of Part A of Annex I to Regulation (EU) No 1230/2012 may be waived at the request of the manufacturer.
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	(a) Components	X
			(b) Installation	B
46	Tyres	Directive 92/23/EEC	Components	X

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011		B Dates for progressive application shall be those set out in Article 13 of Regulation (EC) No 661/2009.
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	Components	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	Components	X
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	Components	X
			Fitting of a tyre-pressure monitoring system (TPMS)	B The fitting of a TPMS shall not be required.
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	(a) Components	X
			(b) Installation	B
53A	Protection of occupants in the event of a frontal collision	Regulation (EC) No 661/2009 UNECE Regulation No 94		C The requirements of UNECE Regulation No 94 shall apply to vehicles fitted with front airbags. Vehicles not fitted with airbags shall fulfil the requirement of item 14A of this table.
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95		C
			Head form test	The manufacturer shall supply the technical service with suitable information concerning a possible impact of the head of the dummy against the structure of the vehicle or the side glazing if made up of laminated glazing. When it is proven that such impact is likely to happen, the partial test using the head form test described in paragraph 3.1 of Annex 8 to UNECE Regulation No 95 shall be conducted and the criterion specified in paragraph 5.2.1.1 of UNECE Regulation No 95 shall be met. In agreement with the technical service, the test procedure described in Annex 4 to UNECE Regulation No 21 may be used as an alternative to the test of UNECE Regulation No 95.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
58	Pedestrian protection	Regulation (EC) No 78/2009	(a) Technical requirements applicable to vehicle	N/A
			(b) Frontal protection systems	X
59	Recyclability	Directive 2005/64/EC		N/A - Only Article 7 on reuse of component parts shall apply.
61	Air-conditioning systems	Directive 2006/40/EC		A Fluorinated greenhouse gases with a global warming potential higher than 150 are permitted until 31 December 2016.
62	Hydrogen system	Regulation (EC) No 79/2009		X
63	General Safety	Regulation (EC) No 661/2009		See explanatory note ([15]) of the table in Part I of Annex IV with regulatory acts for EU type-approval of vehicles produced in unlimited series.
64	Gear shift indicators	Regulation (EC) No 661/2009 Regulation (EU) No 65/2012		N/A
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	(a) Components	X
			(b) Installation	A
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	(a) Components	X
			(b) Installation	B
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100		B
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	(a) Components	X
			(b) Installation	A

Explanatory notes	
X	Full application of the regulatory act as follows: (a) a type-approval certificate shall be issued; (b) tests and checks shall be conducted by the technical service or the manufacturer under the conditions laid down in Articles 71 to 85; (c) a test report shall be drafted in accordance with the provisions of Annex V; (d) Conformity of Production (COP) shall be ensured.
A	Application of the regulatory act as follows: (a) all requirements of the regulatory act shall be fulfilled unless otherwise stated; (b) no type-approval certificate shall be required; (c) tests and checks shall be conducted by the technical service or the manufacturer under the conditions laid down in Articles 71 to 85; (d) a test report shall be drafted in accordance with the provisions of Annex V; (e) COP shall be ensured.
B	Application of the regulatory act as follows: Same as for letter 'A' with the exception that the tests and checks may be performed by the manufacturer himself, subject to the agreement of the approval authority.
C	Application of the regulatory act as follows: (a) only the technical requirements from the regulatory shall be fulfilled, irrespective of any transitional provision; (b) no type-approval certificate shall be required; (c) tests and checks shall be conducted by the technical service or by the manufacturer (see decisions for letter 'B'); (d) a test report shall be drafted in accordance with the provisions of Annex V; (e) COP shall be ensured.
D	Same as for decisions in letters 'B' and 'C', with the exception that a statement of compliance submitted by the manufacturer is sufficient. No test report shall be required. The approval authority or technical service may require additional information of further evidence, if need be.
N/A	The regulatory act shall not apply. Compliance with one or more specific aspects included in the regulatory act may however be imposed.
The series of amendments of the UNECE Regulations to be used are listed in Annex IV to Regulation (EC) No 661/2009. The series of amendments adopted subsequently are accepted as an alternative.	

Table 2

N_1 vehicles [27]

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
1A	Sound level	Regulation (EU) No 540/2014		A
2	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007		A
			(a) OBD	The vehicle shall be fitted with an OBD system that fulfils the requirements of Article 4(1) and (2) of Regulation (EC) No 692/2008 (the OBD system shall be designed to record at least the malfunction of the engine management system). The OBD-interface shall be able to communicate with commonly available diagnostic tools.
			(b) In service conformity	N/A
			(c) Access to information	It is sufficient that the manufacturer provides access to vehicle repair and maintenance information in a readily accessible and prompt manner.
			(d) Power measurement	*(When the vehicle manufacturer uses an engine from another manufacturer)* Bench test data from the engine manufacturer are accepted provided that the engine management system is identical (i.e. having at least the same ECU). Power output test may be performed on a chassis dynamometer. It shall be taken into account of the power loss in the transmission.
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	(a) Liquid fuel tanks	B
			(b) Installation in vehicle	B
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58		B
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010		B

[27] The explanatory notes relating to Part I of Annex IV also apply to Table 2. The letters in table 2 have the same meaning as in Table 1.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79		C
			(a) Mechanical systems	The provisions of paragraph 5 of UNECE Regulation No 79.01 shall apply. All tests prescribed in paragraph 6.2 of UNECE Regulation No 79 shall be performed and the requirements of paragraph 6.1 of UNECE Regulation No 79 shall apply.
			(b) Complex electronic vehicle control system	All the requirements of Annex 6 of UNECE Regulation No 79 shall apply. Compliance with these requirements may only be checked by a technical service.
6A	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11		C
			(a) General requirements (Paragraph 5 of UNECE Regulation No 11)	All requirements shall apply.
			(b) Performance requirements (Paragraph 6 of UNECE Regulation No 11)	Only the requirements of paragraph 6.1.5.4 and paragraph 6.3 of UNECE Regulation No 11 shall apply.
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	(a) Components	X
			(b) Installation on vehicle	B
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	(a) Components	X
			(b) Installation on vehicle	B
9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13.	(a) design and test requirements	A
			(b) ESC	The fitting of ESC shall not be required. If fitted, it shall comply with the requirements of UNECE Regulation No 13.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
9B	Braking of passenger cars	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	(a) Design and test requirements	A
			(b) Electronic stability control (ESC) and brake assist systems(BAS)	The fitting of BAS and ESC shall not be required. If fitted, they shall comply with the requirements of UNECE Regulation No 13-H.
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10		B
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116		A The provisions of paragraph 8.3.1.1.1. of UNECE Regulation No 116 may be applied instead of paragraph 8.3.1.1.2. of that Regulation regardless of the type of powertrain
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12		C
			(a) Barrier impact test	A test shall be required.
			(b) Body block impact test against steering wheel	Not required if the steering wheel is fitted with an airbag.
			(c) Head form test	Not required if the steering wheel is fitted with an airbag.
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17		B
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012		D
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39		B
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011		B

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14		B
20A	Installation of lighting and light-signalling devices on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48		B DRLs shall be fitted to a new type of vehicle.
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3		X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7		X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87		X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91		X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6		X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4		X
25A	Power-driven vehicle’s sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31		X

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37		X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98		X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99		X
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112		X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123		X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19		X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010		B
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38		X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23		X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77		X

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	(a) Components	X
			(b) Installation requirements	B
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121		A
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010		N/A The vehicle shall be fitted with a suitable windscreen defrosting and demisting system.
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010		N/A The vehicle shall be fitted with a suitable windscreen wiper and washer system.
36A	Heating system	Regulation (EC) No 661/2009 UNECE Regulation No 122		C The fitting of a heating system shall not be required.
			(a) All heating systems	The requirements of paragraphs 5.3 and 6 of UNECE Regulation No 122 shall apply.
			(b) LPG heating systems	The requirements of Annex 8 to UNECE Regulation No 122 shall apply.
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009		A With the exception of the set of requirements relating to OBDs and access to information.
			Power measurement	*(When the vehicle manufacturer uses an engine from another manufacturer)* Bench test data from the engine manufacturer are accepted provided that the engine management system is identical (i.e. having at least the same ECU). Power output test may be performed on a chassis dynamometer. It shall be taken into account of the power loss in the transmission.
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011		B

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	(a) Components	X
			(b) Installation	B
46	Tyres	Directive 92/23/EEC	Components	X
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011		B Dates for progressive application shall be those set out in Article 13 of Regulation (EC) No 661/2009.
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	Components	X
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54	Components	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	Components	X
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	Components	X
			Fitting of a tyre-pressure monitoring system	B The fitting of a TPMS shall not be required
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012		B
			Hill start test at maximum combination mass	The hill start test at maximum combination mass described in point 5.1 of Part A of Annex 1 to Regulation (EU) No 1230/2012 may be waived at the request of the manufacturer.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
49A	Commercial vehicles with regards to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61		C
			(a) General specifications	The requirements of paragraph 5 of UNECE Regulation No 61 shall apply
			(b) Particular specifications	The requirements of paragraph 6 of UNECE Regulation No 61 shall apply.
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	(a) Components	X
			(b) Installation	B
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95	C	C
			Head form test	The manufacturer shall supply the technical service with suitable information concerning a possible impact of the head of the dummy against the structure of the vehicle or the side glazing, if made up of laminated glazing. When such impact is proven likely to happen, then the partial test using the head form test described in paragraph 3.1 of Annex 8 to UNECE Regulation No 95 shall be conducted and the criterion specified in paragraph 5.2.1.1 of UNECE Regulation No 95 shall be met. In agreement with the technical service, the test procedure described in Annex 4 to UNECE Regulation No 21 may be used as an alternative to the test of UNECE Regulation No 95 mentioned above.
56	Vehicles for the carriage of dangerous goods	Regulation (EC) No 661/2009 UNECE Regulation No 105		A
58	Pedestrian protection	Regulation (EC) No 78/2009	(a) Technical requirements applicable to a vehicle	N/A
			(b) Frontal protection systems	X
59	Recyclability	Directive 2005/64/EC		N/A Only Article 7 on reuse of component parts shall apply.

Item	Subject	Regulatory act	Specific issues	Applicability and specific requirements
61	Air-conditioning systems	Directive 2006/40/EC		B Fluorinated greenhouse gases with a global warming potential higher than 150 are permitted until 31 December 2016.
62	Hydrogen system	Regulation (EC) No 79/2009		X
63	General Safety	Regulation (EC) No 661/2009		See explanatory note ([15]) of the table in Part I of Annex IV with regulatory acts for EU type-approval of vehicles produced in unlimited series.
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	(a) Components	X
			(b) Installation	A
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	(a) Components	X
			(b) Installation	B
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100		B
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	(a) Components	X
			(b) Installation	A
71	Cab strength	Regulation (EC) No 661/2009 UNECE Regulation No 29		C

Appendix 2

Requirements for EU individual vehicle approval pursuant to Article 42

1. APPLICATION

For the purpose of application of this appendix, a vehicle is deemed to be new where:

(a) it has never been registered previously; or

(b) it has been registered for less than 6 months at the time of the application for individual vehicle approval.

A vehicle shall be considered registered where it has obtained a permanent, temporary or short-term administrative authorisation for entry into service in road traffic, involving its identification and the issuing of a registration number ([1]).

1. ADMINISTRATIVE PROVISIONS

1.1. **Categorisation of the vehicle**

Vehicles shall be categorised according to the criteria set out in Annex II as follows:

(a) the actual number of seating positions shall be taken into consideration; and

(b) the technically maximum permissible laden mass shall be the maximum mass stated by the manufacturer in the country of origin and available in his official documentation.

Where it is not possible to easily determine the vehicle category because of the design of the bodywork, the conditions set out in Annex II shall apply.

1.2. **Application for individual vehicle approval**

(a) The applicant shall submit an application to the approval authority accompanied by all relevant documentation necessary for the operation of the approval procedure.

Where the submitted documentation is incomplete, falsified or forged the application for approval shall be rejected.

(b) Only one application for a particular vehicle may be submitted in only one Member State. The approval authority may require from the applicant a written commitment that only one application will be submitted in the Member State of the approval authority.

By a particular vehicle, it shall be understood a physical vehicle the vehicle identification number of which is clearly identified.

However, any applicant may apply for EU individual vehicle approval in another Member State in respect of another particular vehicle with technical characteristics identical or similar to the one that has been granted an EU individual vehicle approval.

([1]) In the absence of a registration document, the competent authority may refer to available documented evidence of date of manufacture or documented evidence of first purchase.

(c) The model of the application form and the layout of the file shall be laid down by the approval authority.

The particulars of the vehicle requested may only consist in an appropriate selection of the information included in Annex I.

(d) The technical requirements to be complied with are those laid down in section 4.

The technical requirements shall be those applicable to new vehicles belonging to a type of vehicle currently in production, in relation to the date of the submission of the application.

(e) With respect to the tests required in the regulatory acts listed in this Annex, the applicant shall supply a statement of compliance with recognised international standards or regulations. The statement in question may only be issued by the vehicle manufacturer.

'Statement of compliance' shall mean a statement issued by the office or department within the manufacturer's organisation that is duly authorised by the management to fully engage the legal responsibility of the manufacturer with respect to the design and the construction of a vehicle.

The regulatory acts for which such a statement has to be supplied shall be those referred to in section 4.

Where a statement of compliance gives rise to uncertainty, the applicant may be required to obtain from the manufacturer a piece of evidence, including a test report, in order to corroborate the manufacturer's statement.

1.3. **Technical services entrusted with individual vehicle approvals**

(a) The technical services entrusted with individual vehicle approvals shall be of category A as referred to in Article 72(1).

(b) By way of derogation from the requirement to demonstrate their compliance with the standards listed in Appendix 1 to Annex V, technical services shall comply with the following standards:

(i) EN ISO/IEC 17025:2005 when they perform tests themselves;

(ii) EN ISO/IEC 17020:2012 when they check compliance of the vehicle with the requirements included in this Appendix.

(c) Where specific tests requiring specific skills have to be conducted at the request of the applicant, they shall be conducted by one of the technical services notified to the Commission at the choice of the applicant.

1.4. **Test reports**

(a) Test reports shall be drafted in accordance with paragraph 5.10.2 of Standard EN ISO/IEC 17025:2005.

(b) Test reports shall be drafted in one of the languages of the Union determined by the approval authority.

Where in application of point 1.3(c) a test report has been issued in a Member State other than the one entrusted with the individual vehicle approval, the approval authority may require that the applicant submits a true translation of the test report.

(c) Test reports shall include a description of the vehicle tested, including its identification. The parts that play a significant role with regard to the results of the tests shall be described and their identification number reported.

(d) At the request of an applicant, a test report delivered for a system related to a particular vehicle may be presented repeatedly either by the same or another applicant for the purposes of individual approval of another vehicle.

In such a case, the approval authority shall ensure that the technical characteristics of the vehicle are properly inspected against the test report.

Inspection of the vehicle and the documentation accompanying the test report shall demonstrate that the vehicle for which an individual approval is sought has the same characteristics as the vehicle described in the report.

(e) Only authenticated copies of a test report may be submitted.

(f) Test reports referred to in point 1.4(d) do not include the reports drawn up in order to grant the individual vehicle approval.

1.5. In the individual vehicle approval procedure each particular vehicle shall be inspected physically by the technical service.

No exemption to this principle shall be permitted.

1.6. Where the approval authority is satisfied that the vehicle meets the technical requirements specified in this Appendix and conforms to the description included in the application, it shall grant approval in accordance with Article 42.

1.7. The certificate of approval shall be drafted according to Model D as laid down in Annex VI.

1.8. The approval authority shall keep record of all approvals granted under Article 42.

2. REVIEW OF THE TECHNICAL REQUIREMENTS

The list of the technical requirements included in section 3 shall be regularly reviewed in order to take account of the results of the harmonisation work in progress at the World Forum for Harmonization of Vehicle Regulations (WP.29) in Geneva and legislative developments in the third countries.

3. TECHNICAL REQUIREMENTS

Part I: Vehicles belonging to category M_1

Item	Regulatory act reference	Alternative requirements
1	Council Directive 70/157/EEC[28] (Permissible sound level)	*Drive-by test* (a) A test shall be conducted in accordance with the 'Method A' referred to in Annex 3 to UNECE Regulation No 51. Limits are those specified in point 2.1 of Annex I to Directive 70/157/EEC. 1 decibel in addition to the permitted limits shall be allowed. (b) The test track shall comply with Annex 8 to UNECE Regulation No 51. A test track having different specifications may be used under the condition that correlation tests have been conducted by the technical service. A correction factor shall be applied if necessary. (c) Exhaust systems containing fibrous materials need not be conditioned as prescribed in Annex 5 to UNECE Regulation No 51. *Stationary test* A test shall be conducted in accordance with paragraph 3.2 of Annex 3 to UNECE Regulation No 51.
2a	Regulation (EC) No 715/2007 (Emissions Euro 5 and 6 light duty vehicles/access to information)	*Tailpipe emissions* (a) A type I test shall be conducted in accordance with Annex III to Regulation (EC) No 692/2008 using the deterioration factors set out in point 1.4 of Annex VII to Regulation (EC) No 692/2008. The limits to be applied shall be those specified in Table I and Table II in Annex I to Regulation (EC) No 715/2007. (b) The vehicle shall not be required to exhibit 3 000 km as mentioned in paragraph 3.1.1 of Annex 4 to UNECE Regulation No 83. (c) The fuel to be used for the test shall be the reference fuel as prescribed in Annex IX to Regulation (EC) No 692/2008. (d) The dynamometer shall be set up in accordance with the technical requirements set out in paragraph 3.2 of Annex 4 to UNECE Regulation No 83. (e) The test referred to in point (a) shall not be conducted where it can be shown that the vehicle complies with the California Code Regulations referred to in point 2.1.1 of Annex I to Regulation (EC) No 692/2008.

[28] Council Directive of 6 February 1970 on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles (OJ L 42, 23.2.1970, p. 16).

		Evaporative emissions For petrol-fuelled engines, the presence of an evaporate emissions control system shall be required (e.g. a charcoal canister). *Crankcase emissions* The presence of a device for recycling crankcase gases shall be required. *OBD* (a) The vehicle shall be fitted with an OBD system. (b) OBD-interface must be able to communicate with common diagnostic tools used for periodic technical inspections. *Smoke opacity* (a) Vehicles equipped with a diesel-fuelled engine shall be tested in accordance with the tests methods referred to in Appendix 2 to Annex IV to Regulation (EC) No 692/2008. (b) The corrected value of the absorption coefficient shall be affixed conspicuously and in a readily accessible place. *CO_2 emissions and fuel consumption* (a) A test shall be conducted in accordance with Annex XII to Regulation (EC) No 692/2008. (b) The vehicle shall not be required to exhibit 3 000 km as requested in paragraph 3.1.1 of Annex 4 to UNECE Regulation No 83. (c) Where the vehicle complies with the California Code Regulations referred to in point 2.1.1 of Annex I to Regulation (EC) No 692/2008 and therefore no test of tailpipe emissions is required to be performed, Member States shall calculate CO_2 emissions and fuel consumption with the formula laid down in the explanatory notes ([b]) and ([c]). *Access to information* The provisions regarding access to information shall not apply. *Power measurement* (a) The applicant shall submit a statement from the manufacturer stating the maximum engine power output in kW as well as the corresponding engine speed in revolutions per minute. (b) An engine power output curve providing the same information may alternatively be provided by the applicant.
3	UNECE Regulation No 34 (Fuel tanks — Rear protective devices)	*Fuel tanks* (a) Fuel tanks shall comply with paragraph 5 of UNECE Regulation No 34 with the exception of paragraphs 5.1, 5.2 and 5.12. In particular, they shall comply with paragraphs 5.9 and 5.9.1 but no dripping test shall be conducted. (b) LPG or CNG tanks shall be type-approved in accordance with UNECE Regulation No 67, series of amendments 01, or Regulation No 110 ([a]), respectively. *Specific provisions for fuel tanks made of a plastic material*

		The applicant shall submit a statement from the manufacturer establishing that the fuel tank on the particular vehicle, the Vehicle Identification Number (VIN) of which has to be specified, complies either with at least one of the following: — FMVSS No 301 (Fuel system integrity), or — Annex 5 to UNECE Regulation 34. *Rear protective device* The rear part of the vehicle shall be constructed in accordance with paragraphs 8 and 9 of UNECE Regulation No 34.
3B	UNECE Regulation No 58 (rear underrun protection)	The rear part of the vehicle shall be constructed in accordance with paragraph 2 UNECE Regulation No 58. It is sufficient that the requirements set out in paragraph 2.3 are fulfilled.
4	Regulation (EU) No 1003/2010 (Rear registration plate space)	Space, inclination, angles for visibility and position of the registration plate shall comply with Regulation (EU) No 1003/2010.
5	UNECE Regulation No 79 (Steering effort)	*Mechanical systems* (a) The steering mechanism shall be built as to self-centre. In order to check compliance with this provision, a test shall be conducted in accordance with paragraphs 6.1.2 and 6.2.1 of UNECE Regulation No 79. (b) The failure of the power steering equipment shall not lead to a complete loss of control of the vehicle. *Complex electronic vehicle control system ('Drive-by wire' devices)* Complex electronic control system shall be permitted only if they comply with Annex 6 to UNECE Regulation No 79.
6	UNECE Regulation No 11 (Door latches and hinges)	Compliance with paragraph 6.1.5.4 of UNECE Regulation No 11.
7	UNECE Regulation No 28 (Audible warning)	*Components* The audible warning devices are not required to be type-approved in accordance with UNECE Regulation No 28. However, they shall emit a continuous sound as required in paragraph 6.1.1 of UNECE Regulation No 28. *Installation on vehicle* (a) A test shall be conducted in accordance with paragraph 6.2 of UNECE Regulation No 28. (b) The maximum sound pressure level shall be in accordance with paragraph 6.2.7.
8	UNECE Regulation No 46 (Indirect vision devices)	*Components* (a) The vehicle shall be fitted with the rear-view mirrors prescribed in paragraph 15.2 of UNECE Regulation No 46. (b) They are not required to be type-approved in accordance with UNECE Regulation No 46. (c) The radii of curvature of the mirrors shall not cause significant image distortions. At the discretion of the technical service, the radii of curvature shall be checked in

		accordance with the method described in Annex 7 to UNECE Regulation No 46. The radii of curvature shall not be less than those required by paragraph 6.1.2.2.4. of UNECE Regulation No 46. *Installation on vehicle* Measurement shall be conducted in order to ensure that the fields of vision comply either with paragraph 15.2.4. of UNECE Regulation No 46 or with section 5 of Annex III to Directive 71/127/EEC.
9	UNECE Regulation No 13-H (Braking)	*General provisions* (a) The braking system shall be built in accordance with paragraph 5 of UNECE Regulation No 13-H. (b) Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. (c) The performances of the braking system shall comply with Annex III to UNECE Regulation No 13-H. (d) For those purposes, road tests shall be conducted on a track the surface of which possesses high adhesion. The test on the parking brake shall be conducted on a 18 % gradient (up and down). Only those tests mentioned under the headings "Service brake" and "Parking brake" below shall be conducted. In each case, the vehicle shall be in fully laden conditions. (e) The road test referred to in point (d) shall not be conducted where the applicant can submit a statement from the manufacturer establishing that the vehicle complies either with UNECE Regulation No 13-H, including supplement 5, or with FMVSS No 135. *Service brake* (a) A 'Type 0' test as prescribed in paragraphs 1.4.2 and 1.4.3 of Annex 3 to UNECE Regulation No 13-H shall be conducted. (b) In addition, a 'Type I' test as prescribed in paragraph 1.5 of Annex 3 to UNECE Regulation No 13-H shall be conducted. *Parking brake* A test shall be conducted in accordance with paragraph 2.3 of Annex 3 to UNECE Regulation No 13-H.
10	UNECE Regulation No 10 (Radio interference (electromagnetic compatibility))	*Components* (a) Electrical/electronic sub-assemblies are not required to be type-approved in accordance with UNECE Regulation No 10. (b) However, electric/electronic devices retrofitted shall comply with UNECE Regulation No 10. *Emitted electromagnetic radiations* The applicant shall submit a statement from the manufacturer establishing that the vehicle complies with UNECE Regulation No 10 or with the following alternative standards: — Broadband electromagnetic radiation: CISPR 12 or SAE J551-2, or — Narrowband electromagnetic radiation: CISPR 12 (off-board) or 25 (in-board) or SAE J551-4 and SAE J1113-41. *Immunity tests*

		Immunity test shall be waived.
12	UNECE Regulation No 21 (Interior fittings)	*Interior arrangement* (a) With respect to the requirements on energy absorption, the vehicle shall be deemed to comply with UNECE Regulation No 21 if the vehicle is fitted with at least two front airbags, one inserted into the steering wheel and the other into the dashboard. (b) Where the vehicle is fitted with only one front air bag inserted in the steering wheel, the dashboard shall be made up of energy absorbing materials. (c) The technical service shall check that there are no sharp edges in the zones defined in paragraphs 5.1 to 5.7 of UNECE Regulation No 21. *Electrical controls* (a) Power-operated windows, roof–panel systems and partitioning systems shall be tested in accordance with paragraph 5.8 of UNECE Regulation No 21. The sensitivity of auto-reverse systems referred to in paragraph 5.8.3 may diverge from the requirements set out in paragraph 5.8.3.1.1 of UNECE Regulation No 21. (b) Electric windows which cannot be closed when the ignition is off shall be exempt from the requirements concerning auto-reverse systems.
13	UNECE Regulation No 18 (Anti-theft and immobiliser)	(a) In order to prevent unauthorised use, the vehicle shall be fitted with: — a locking device as defined in paragraph 2.3 of UNECE Regulation No 18, and — an immobiliser which meets the technical requirements of paragraph 5 of UNECE Regulation No 18; (b) If, in accordance with point (a), an immobiliser has to be retrofitted, it shall be of an approved type in accordance with UNECE Regulations No 18, No 97, or No 116.
14	UNECE Regulation No 12 (Protective steering)	(a) The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, the VIN of which has to be specified, complies with at least one of the following: — UNECE Regulation No 12, — FMVSS No 203 (Impact protection for the driver from the steering control system) including FMVSS No 204 (Steering control rearward displacement), — Article 11 of JSRRV. (b) A test in accordance with Annex 3 to UNECE Regulation No 12 may be conducted on a production vehicle at the request of the applicant. The test shall be conducted by a technical service that has been designated for carrying out this test. A detailed report shall be issued by that technical service to the applicant.

15	UNECE Regulation No 17 (Seat strength — head restraints)	*Seats, seat anchorages and adjustment systems* The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, the VIN of which has to be specified, complies with at least one of the following: — UNECE Regulation No 17; or — FMVSS No 207 (Seating systems). *Head restraints* (a) Where the statement is based on FMVSS No 207, the head restraints shall fulfil, in addition, the requirements of paragraph 5 and Annex 4 to UNECE Regulation No 17. (b) Only the tests described in paragraphs 5.12, 6.5, 6.6 and 6.7 of UNECE Regulation No 17 shall be conducted. (c) In the other event, the applicant shall submit a statement from the manufacturer establishing that the particular vehicle, the VIN of which has to be specified, complies with FMVSS No 202a (Head restraints).
16	UNECE Regulation No 17 (Exterior projections)	(a) The external surface of the bodywork shall comply with the general requirements included in paragraph 5 of UNECE Regulation No 17. (b) At the discretion of the technical service the provisions referred to in paragraphs 6.1, 6.5, 6.6, 6.7, 6.8 and 6.11 of UNECE Regulation No 17 shall be checked.
17	UNECE Regulation No 39 (Speedometer — reverse gear)	*Speedometer equipment* (a) The dial shall comply with paragraphs 5.1 to 5.1.4 of UNECE Regulation No 39. (b) Where the technical service wants to verify that the speedometer is calibrated with sufficient accuracy, it may require the tests prescribed in paragraph 5.2 of UNECE Regulation No 39 to be conducted. *Reverse gear* The gear mechanism shall include a reverse gear.
18	Regulation (EU) No 19/2011 (Statutory plates)	*Vehicle identification number* (a) The vehicle shall be fitted with a vehicle identification number comprising a minimum of 8 and a maximum of 17 characters. Vehicle identification number comprising 17 characters shall fulfil the requirements set out in Standards ISO 3779:1983 and 3780:1983. (b) The vehicle identification number shall be located in a clearly visible and accessible position in such a way as it cannot be obliterated or deteriorate. (c) Where no vehicle identification number is stamped in the chassis or in the body, a Member State may require the applicant that the VIN is retrofitted in application of its national law. In such a case, the competent authority of that Member State shall supervise the operation. *Statutory plate* The vehicle shall be fitted with an identification plate affixed by the vehicle manufacturer. No additional plate shall be requested after the approval by the approval authority has been granted.
19	UNECE Regulation No 14 (Seat belt anchorages)	The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, the VIN of which has to be

		specified, complies with at least one of the following: — UNECE Regulation No 14; — FMVSS No 210 (Seat belt assembly anchorages), or — Article 22-3 of JSRRV.
20	UNECE Regulation No 48 (Installation of lighting and light signalling devices)	(a) The lighting installation shall meet the requirements of UNECE Regulation No 48, series of amendments 03, with the exception of the requirements of Annexes 5 and 6 to that Regulation. (b) No exemption shall be permitted in respect of the number, the essential design characteristics, the electrical connections, and the colour of light emitted or retro-reflected of the lights and signalling devices referred to in items 21 to 26 and in items 28 to 30. (c) Lights and signalling devices that, for the purpose of fulfilling the requirements of point (a) must be retrofitted shall bear an 'EU' type-approval mark. (d) Lamps fitted with gas-discharged light source are only permitted in conjunction with the installation of headlamp cleaning device and an automatic headlamp-levelling device where appropriate. (e) Headlamp dipped-beams shall be adapted to the direction of traffic legally in force in the country where the vehicle is granted approval.
21	UNECE Regulation No 3 (Retro reflectors)	Where necessary, two additional retro reflectors bearing an 'EC' approval mark shall be added at the rear, the position of which shall comply with UNECE Regulation No 48.
22	UNECE Regulations No 7, No 87 and No 91 (End-outline, front position (side), rear-position (side), stop, side marker, daytime running lamps)	The requirements set out in the UNECE Regulations No 7, No 87 and No 91 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
23	UNECE Regulation No 6 (Direction indicators)	The requirements set out in UNECE Regulation No 6 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
24	UNECE Regulation No 4 (Rear registration plate lamps)	The requirements set out in UNECE Regulation No 4 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
25	UNECE Regulations No 98, No 112 and No 123 (Headlamps (including bulbs))	(a) The illumination produced by the passing beam of the headlamps fitted to the vehicle shall be checked under paragraph 6 of UNECE Regulation No 112 concerning headlamps emitting an asymmetrical passing beam. The tolerances included in Annex 5 to that Regulation may be referred to for that purpose. (b) The same requirement shall be fulfilled for the passing beam of headlamps covered by UNECE Regulation No 98 or No 123.
26	UNECE Regulation No 19 (Front fog lamps)	The requirements set out in UNECE Regulation No 19 shall not apply. However, the correct functioning of the lights if fitted shall be checked by the technical service.
27	Regulation (EU)	The requirements set out in Regulation (EU) No 1005/2010 shall

	No 1005/2010 (Towing hooks)	not apply.
28	UNECE Regulation No 38 (Rear fog lamps)	The requirements set out in UNECE Regulation No 38 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
29	UNECE Regulation No 23 (Reversing lamps)	The requirements set out in UNECE Regulation No 23 shall not apply. However, the correct functioning of the lights if fitted shall be checked by the technical service.
30	UNECE Regulation No 77 (Parking lamps)	The requirements set out in UNECE Regulation No 77 shall not apply. However, the correct functioning of the lights if fitted shall be checked by the technical service.
31	UNECE Regulation No 16 (Seat belts and restraint systems)	*Components* (a) Seat belts shall not be required to be type-approved in accordance with UNECE Regulation No 16. (b) However, each seat belt shall bear an identification label. (c) The indications on the label shall be consistent with the decision concerning seat belt anchorages (Re: entry 19). *Installation requirements* (a) The vehicle shall be fitted with seat belts in accordance with the requirements set out in Annex XVI to UNECE Regulation No 16. (b) Where a number of seat belts have to be retrofitted in accordance with point (a), they shall be of an approved type in accordance with UNECE Regulation No 16.
32	UNECE Regulation No 125 (Forward vision)	(a) No obstruction in the 180° forward field of vision of the driver as defined in paragraph 5.1.3 of UNECE Regulation No 125 shall be permitted. (b) By derogation from point (a), the 'A pillars' and the equipment listed in paragraph 5.1.3 of UNECE Regulation No 125 shall not be considered as obstruction. (c) The number of 'A pillars' shall not exceed 2.
33	UNECE Regulation No 121 (Identification of controls, tell-tales and indicators)	(a) The symbols including the colour of their corresponding tell-tales the presence of which is mandatory by virtue of UNECE Regulation No 121 shall comply with that UNECE Regulation. (b) Where this is not the case, the technical service shall verify that the symbols, tell-tales and indicators fitted to the vehicle provide the driver with comprehensible information about the operation of the controls in question.
34	Regulation (EU) No 672/2010 (Defrost/Demist)	The vehicle shall be equipped with adequate windscreen defrosting and windscreen demisting devices. A windscreen defrosting device which complies as a minimum with point 1.1.1 of Annex II to Regulation (EU) No 672/2010 shall be deemed 'adequate'. A windscreen demisting device which complies as a minimum with point 1.2.1 of Annex II to Regulation (EU) No 672/2010 shall be deemed 'adequate'.

35	Regulation (EU) No 1008/2010 (Wash/Wipe)	The vehicle shall be equipped with adequate windscreen washing and windscreen wiping devices. A windscreen washing and wiping device that complies as a minimum with the conditions set out in point 1.1.5 of Annex III to Regulation (EU) No 1008/2010 shall be deemed 'adequate'.
36	UNECE Regulation No 122 (Heating systems)	(a) The passenger compartment shall be fitted with a heating system. (b) Combustion heaters and their installation shall comply with Annex 7 to UNECE Regulation No 122. In addition, LPG combustion heaters and LPG heating systems shall fulfil the requirements set out in Annex 8 to UNECE Regulation No 122. (c) Additional heating systems which are retrofitted shall comply with the requirements set out in that UNECE Regulation No 122.
37	Regulation (EU) No 1009/2010 (Wheel guards)	(a) The vehicle shall be designed as to protect other road users against thrown-up stones, mud, ice, snow and water and to reduce the dangers due to contact with the moving wheels. (b) The technical service may check that the technical requirements set out in Annex II to Regulation (EU) No 1009/2010 are complied with. (c) The provisions of section 3 of Annex I to that Regulation shall not apply.
38	UNECE Regulation No 25 (Head restraints)	The requirements of UNECE Regulation No 25 shall not apply.
44	Regulation (EU) No 1230/2012 (Masses and dimensions)	(a) The requirements of section 1 of Part A of Annex I to Regulation (EU) No 1230/2012 shall be fulfilled. (b) For the purposes of point (a), the masses to be considered are the following: — the mass in running order defined in point 2.6 of Annex I to Regulation (EU) No 1230/2012 as measured by the technical service, and — the laden masses either stated by the vehicle manufacturer or shown on the manufacturer's plate including stickers or information available in the owner's manual. Those masses shall be deemed the technically permissible maximum laden masses. (c) No exemption shall be permitted in respect of the maximum permissible dimensions.
45	Regulation (EU) No 1230/2012 (Safety glazing)	*Components* (a) The glazing shall be made either of tempered or laminated safety glass. (b) Fitting of plastic glazing shall be permitted only on locations situated behind the 'B' pillar. (c) Glazing shall not be required to be approved under Regulation (EU) No 1230/2012. *Installation* (a) The installation requirements set out in Annex 21 to UNECE Regulation No 43 shall apply.

		(b) No tinted films that would reduce the regular light transmission under the required minimum shall be permitted on the windscreen and on the glazing located in front of the 'B' pillar.
46	Directive 92/23/EEC (Tyres)	*Components* Tyres shall bear an 'EC' type-approval mark including the symbol 's' (for sound). *Installation* (a) The dimensions, load-capacity index and speed category of the tyres shall fulfil the requirements of Annex IV to Directive 92/23/EEC. (b) The speed category symbol of the tyre shall be compatible with the maximum design speed of the vehicle. This requirement shall apply notwithstanding the presence of a speed limiter. (c) The maximum speed of the vehicle shall be stated by the vehicle manufacturer. However, the technical service may assess the maximum design speed of the vehicle by using the engine maximum power output, the maximum number of revolutions per minute and the data concerning the kinematic chain.
50	UNECE Regulation No 55 (Couplings)	*Separate technical units* (a) OEM couplings intended for towing a trailer whose maximum mass does not exceed 1 500 kg shall not be required to be type-approved under UNECE Regulation No 55. A coupling is deemed OEM equipment where it is described in the owner's manual or an equivalent supporting document provided to the buyer by the vehicle manufacturer. Where such coupling is approved with the vehicle, an appropriate text shall be included in the approval certificate stating that the owner is responsible for ensuring compatibility with the coupling device fitted to the trailer. (b) Couplings other than those referred to in point (a), as well as couplings that are retrofitted, shall be type-approved in accordance with UNECE Regulation No 55. *Installation on the vehicle* The technical service shall check that the installation of the coupling devices comply with paragraph 6 of UNECE Regulation No 55.
53	UNECE Regulation No 94 (Frontal impact) ([e])	(a) The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, of which the VIN has to be specified, complies with at least one of the following: — UNECE Regulation No 94, — FMVSS No 208 (Occupant crash protection), — Article 18 of JSRRV. (b) A test in accordance with paragraph 5 of UNECE Regulation No 94 may be conducted on a production vehicle at the request of the applicant. The test shall be conducted by a technical service that has been designated for carrying out this test. A detailed report

		shall be issued by that technical service to the applicant
54	UNECE Regulation No 95 (Side impact)	(a) The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, of which the VIN has to be specified complies with at least one of the following: — UNECE Regulation No 95, — FMVSS No 214 (Side impact protection), — Article 18 of JSRRV. (b) A test in accordance with section 5 of UNECE Regulation No 95 may be conducted on a production vehicle at the request of the applicant. The test shall be conducted by a technical service that has been designated for carrying out this test. A detailed report shall be issued by that technical service to the applicant.
58	Regulation (EC) No 78/2009 (Pedestrian protection)	*Brake assist* Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. *Pedestrian protection* The requirements of Regulation (EC) No 78/2009 shall apply. *Frontal protection systems* Frontal protection systems installed on the vehicle shall be type-approved in accordance with Regulation (EC) No 78/2009 and their installation shall comply with the requirements set out in section 6 of Annex I to that Regulation.
59	Directive 2005/64/EC (Recyclability)	The requirements of that Directive shall not apply.
61	Directive 2006/40/EC (Air-conditioning system)	The requirements of that Directive shall apply.

Part II: Vehicles belonging to category N_1

Item	Regulatory act reference	Alternative requirements
2a	Regulation (EC) No 715/2007 Emissions (Euro 5 and 6) light duty vehicles/access to information	*Tailpipe emissions* (a) A type I test shall be conducted in accordance with Annex III to Regulation (EC) No 692/2008 using the deterioration factors set out in point 1.4 of Annex VII to Regulation (EC) No 692/2008. The limits to be applied shall be those specified in Table I and Table II in Annex I to Regulation (EC) No 715/2007. (b) The vehicle shall not be required to exhibit 3 000 km as mentioned in paragraph 3.1.1 of Annex 4 to UNECE Regulation No 83. (c) The fuel to be used for the test shall be the reference fuel as prescribed in Annex IX to Regulation (EC) No 692/2008. (d) The dynamometer shall be set up in accordance with the technical requirements of paragraph 3.2 of Annex 4 to UNECE Regulation No 83. (e) The test referred to in point (a) shall not be conducted where it can be shown that the vehicle complies with the California Code Regulations referred to in point 2 of Annex I to Regulation (EC) No 692/2008. *Evaporative emissions* For petrol-fuelled engines, the presence of an evaporate emissions control system (e.g. a charcoal canister) shall be required. *Crankcase emissions* The presence of a device for recycling crankcase gases shall be required. *OBD* The vehicle shall be fitted with an OBD system. OBD-interface must be able to communicate with common diagnostic tools used for periodic technical inspections. *Smoke opacity* (a) Vehicles equipped with a diesel-fuelled engine shall be tested in accordance with the tests methods referred to in Appendix 2 to Annex IV to Regulation (EC) No 692/2008. (b) The corrected value of the absorption coefficient shall be affixed, conspicuously and in a readily accessible place. *CO_2 emissions and fuel consumption* (a) A test shall be conducted in accordance with Annex XII to Regulation (EC) No 692/2008. (b) The vehicle shall not be required to exhibit 3 000 km as requested in paragraph 3.1.1 of Annex 4 to UNECE Regulation No 83. (c) Where the vehicle complies with the California Code Regulations referred to in point 2 of Annex I to Commission Regulation (EC) No 692/2008 and therefore no test of tailpipe emissions is required to be performed, Member States shall calculate CO_2 emissions and fuel consumption with the formula laid down in the explanatory notes ([b]) and ([c]).

		Access to information The provisions regarding access to information shall not apply. *Power measurement* (a) The applicant shall submit a statement from the manufacturer stating the maximum engine power output in kW as well as the corresponding regime in revolutions per minute. (b) An engine power output curve providing the same information may alternatively be provided by the applicant.
3	UNECE Regulation No 34 (Fuel tanks — Rear protective devices)	*Fuel tanks* (a) Fuel tanks shall comply with paragraph 5 of UNECE Regulation No 34 with the exception of paragraphs 5.1, 5.2 and 5.12. In particular, they shall comply with paragraph 5.9 and 5.9.1 but no dripping test shall be conducted. (b) LPG or CNG tanks shall be type-approved in accordance with, respectively UNECE Regulations No 67, series of amendments 01, or Regulation No 110 ([a]). *Specific provisions for fuel tanks made of a plastic material* The applicant shall submit a statement from the manufacturer establishing that the fuel tank on the particular vehicle, of which the VIN has to be specified, complies either with at least one of the following: — FMVSS No 301 (Fuel system integrity), — Annex 5 to UNECE Regulation No 34. *Rear protective device* (a) The rear part of the vehicle shall be constructed in accordance with paragraphs 8 and 9 of UNECE Regulation No 34.
4	Regulation (EU) No 1003/2010 (Rear registration plate space)	Space, inclination, angles for visibility and position of the registration plate shall comply with Regulation (EU) No 1003/2010.
5	UNECE Regulation No 79 (Steering effort)	*Mechanical systems* (a) The steering mechanism shall be built as to self-centre. In order to check compliance with this provision, a test shall be conducted in accordance with paragraphs 6.1.2 and 6.2.1 of UNECE Regulation No 79. (b) The failure of the power steering equipment shall not lead to a complete loss of control of the vehicle. *Complex electronic vehicle control system ('Drive-by wire' devices)* Complex electronic control system shall be permitted only if they comply with Annex 6 to UNECE Regulation No 79.
6	UNECE Regulation No 11 (Door latches and hinges)	Compliance with paragraph 6.1.5.4 of UNECE Regulation No 11

7	UNECE Regulation No 28 (Audible warning)	*Components* The audible warning devices are not required to be type-approved in accordance with UNECE Regulation No 28. However, they shall emit a continuous sound as required in paragraph 6.1.1 of UNECE Regulation No 28. *Installation on vehicle* (a) A test shall be conducted in accordance with paragraph 6.2 of UNECE Regulation No 28. (b) The maximum sound pressure level shall be in accordance with paragraph 6.2.7.
8	UNECE Regulation No 46 (Indirect vision devices)	*Components* (a) The vehicle shall be fitted with the rear-view mirrors prescribed in paragraph 15.2 of UNECE Regulation No 46. (b) They are not required to be type-approved in accordance with UNECE Regulation No 46. (c) The radii of curvature of the mirrors shall not cause significant image distortions. At the discretion of the technical service, the radii of curvature shall be checked in accordance with the method described in Appendix 1 to Annex 7 to UNECE Regulation No 46. The radii of curvature shall not be less than those required by paragraph 6.1.2.2.4 of UNECE Regulation No 46. *Installation on vehicle* Measurement shall be conducted in order to ensure that the fields of vision comply with paragraph 15.2.4. of UNECE Regulation No 46.
9	UNECE Regulation No 13-H (Braking)	*General provisions* (a) The braking system shall be built in accordance with paragraph 5 of UNECE Regulation No 13-H. (b) Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. (c) The performances of the braking system shall comply with Annex III to UNECE Regulation No 13-H. (d) For these purposes, road tests shall be conducted on a track the surface of which possesses high adhesion. The test on the parking brake shall be conducted on a 18 % gradient (up and down). Only those tests mentioned under the headings "Service brake" and "Parking brake" below shall be conducted. In each case, the vehicle shall be in fully laden conditions. (e) The road test referred to in point (c) shall not be conducted where the applicant can submit a statement from the manufacturer establishing that the vehicle complies either with UNECE Regulation No 13-H including supplement 5 or with FMVSS No 135. *Service brake* (a) A 'Type 0' test as prescribed in paragraphs 1.4.2 and 1.4.3 of Annex 3 to UNECE Regulation No 13-H shall be conducted. (b) In addition, a 'Type I' test as prescribed in paragraph 1.5 of Annex 3 to UNECE Regulation No 13-H shall be conducted.

		Parking brake A test shall be conducted in accordance with paragraph 2. 3 of Annex 3 to UNECE Regulation No 13-H.
10	UNECE Regulation No 10 (Radio interference (electromagnetic compatibility))	*Components* (a) Electrical/electronic sub-assemblies are not required to be type-approved in accordance with UNECE Regulation No 10. (b) However, electric/electronic devices retrofitted shall comply with UNECE Regulation No 10. *Emitted electromagnetic radiations* The applicant shall submit a statement from the manufacturer establishing that the vehicle complies with UNECE Regulation No 10 or with the following alternative standards: — Broadband electromagnetic radiation: CISPR 12 or SAE J551-2, — Narrowband electromagnetic radiation: CISPR 12 (off-board) or 25 (in-board) or SAE J551-4 and SAE J1113-41. *Immunity tests* Immunity test shall be waived.
13	UNECE Regulation No 116 (Anti-theft and immobiliser)	(a) In order to prevent unauthorised use, the vehicle shall be fitted with a locking device as defined in paragraph 5.1.2 of UNECE Regulation No 116. (b) If an immobiliser is fitted, it shall comply with the technical requirements of paragraph 8.1.1 of UNECE Regulation No 116.
14	UNECE Regulation No 12 (Protective steering)	(a) The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, the VIN of which has to be specified, complies with at least one of the following: — UNECE Regulation No 12, — FMVSS No 203 (Impact protection for the driver from the steering control system) including FMVSS No 204 (Steering control rearward displacement), — Article 11 of JSRRV. (b) A test in accordance with Annex 3 to UNECE Regulation No 12 may be conducted on a production vehicle at the request of the applicant. The test shall be conducted by a technical service that has been designated for carrying out this test. A detailed report shall be issued by that technical service to the applicant.
15	UNECE Regulation No 17 (Seats strength — head restraints)	*Seats, seat anchorages and adjustment systems* Seats and their adjustable systems shall comply with paragraph 5.3 of UNECE Regulation No 17. *Head restraints* (a) Head restraints shall fulfil the requirements of section 5 of UNECE Regulation No 17 and Annex 4 to UNECE Regulation No 17. (b) Only the tests described in paragraphs 5.12, 6.5, 6.6 and 6.7 of UNECE Regulation No 17shall be conducted.
17	UNECE Regulation No 39	*Speedometer equipment*

	(Speedometer — reverse gear)	(a) The dial shall comply with paragraphs 5.1 to 5.14 of UNECE Regulation No 39. (b) When the technical service has reasonable grounds to believe that the speedometer is not calibrated with a sufficient accuracy, it may require that the tests prescribed in paragraph 5.2 of UNECE Regulation No 39 be conducted. *Reverse gear* The gear mechanism shall include a reverse gear.
18	Regulation (EU) No 19/2011 (Statutory plates)	*Vehicle identification number* (a) The vehicle shall be fitted with a vehicle identification number comprising a minimum of 8 and a maximum of 17 characters. Vehicle identification number comprising 17 characters shall fulfil the requirements set out in Standards ISO 3779:1983 and 3780:1983. (b) The vehicle identification number shall be located in a clearly visible and accessible position in such a way as it cannot be obliterated or deteriorate. (c) Where no vehicle identification number is stamped in the chassis or in the body, a Member State may require that it is retrofitted in application of its national law. In such a case, the competent authority of that Member State shall supervise the operation. *Statutory plate* The vehicle shall be fitted with an identification plate affixed by the vehicle manufacturer. No additional plate shall be requested after the approval has been granted.
19	UNECE Regulation No 14 (Seat belt anchorages)	The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, of which the VIN has to be specified, complies with at least one of the following: — UNECE Regulation No 14, — FMVSS No 210 (Seat belt assembly anchorages), — Article 22-3 of JSRRV.
20	UNECE Regulation No 48 (Installation of lighting and light signalling devices)	(a) The lighting installation shall meet the essential requirements of UNECE Regulation No 48 series of amendments 03 with the exception of those of Annexes 5 and 6 to UNECE Regulation No 48. (b) No exemption shall be permitted in respect of the number, the essential design characteristics, the electrical connections, and the colour of light emitted or retro-reflected of the lights and signalling devices referred to in items 21 to 26 and in items 28 to 30. (c) Lights and signalling devices that, for the purpose of fulfilling with the requirements of point (a) must be retrofitted shall bear an 'EU' type-approval mark. (d) Lamps fitted with gas-discharged light source are only permitted in conjunction with the installation of headlamp cleaning device and an automatic headlamp-levelling device where appropriate. (e) Headlamp dipped-beams shall be adapted to the direction of traffic legally in force in the country where the vehicle is granted approval.

21	UNECE Regulation No 3 (Retro reflectors)	Where necessary, two additional retro reflectors bearing an 'EC' approval mark shall be added at the rear, the position of which shall comply with UNECE Regulation No 48.
22	UNECE Regulations No 7, No 87 and No 91 (End-outline, front position (side), rear-position (side), stop, side marker, daytime running lamps)	The requirements set out in UNECE Regulations No 7, No 87 and No 91 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
23	UNECE Regulation No 6 (Direction indicators)	The requirements set out in UNECE Regulation No 6 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
24	UNECE Regulation No 4 (Rear registration plate lamps)	The requirements set out in UNECE Regulation No 4 shall not apply. However, the correct functioning of the lights shall be checked by the technical service.
25	UNECE Regulations No 98, No 112 and No 123 (Headlamps (including bulbs))	(a) The illumination produced by the passing beam of the headlamps fitted to the vehicle shall be checked under the provisions of paragraph 6 of UNECE Regulation No 112 concerning headlamps emitting an asymmetrical passing beam. The tolerances included in Annex 5 to that Regulation may be referred to for that purpose. (b) The same requirement shall apply to the passing beam of headlamps covered by UNECE Regulation No 98 or No 123.
26	UNECE Regulation No 19 (Front fog lamps)	The provisions of UNECE Regulation No 19 shall be waived. However, the correct functioning of the lights if fitted shall be checked by the technical service.
27	Regulation (EU) No 1005/2010 (Towing hooks)	The requirements of Regulation (EU) No 1005/2010 shall be waived.
28	UNECE Regulation No 38 (Rear fog lamps)	The provisions of UNECE Regulation No 38 shall be waived. However, the correct functioning of the lights shall be checked by the technical service.
29	UNECE Regulation No 23 (Reversing lamps)	The provisions of UNECE Regulation No 23 shall be waived. However, the correct functioning of the lights if fitted shall be checked by the technical service.
30	UNECE Regulation No 77 (Parking lamps)	The provisions of UNECE Regulation No 77 shall be waived. However, the correct functioning of the lights if fitted shall be checked by the technical service.

31	UNECE Regulation No 16 (Seat belts and restraint systems)	*Components* (a) Seat belts shall not be required to be type-approved in accordance with UNECE Regulation No 16. (b) However, each seat belt shall bear an identification label. (c) The indications on the label shall be consistent with the decision concerning seat belt anchorages (Re: entry 19). *Installation requirements* (a) The vehicle shall be fitted with seat belts in accordance with the requirements set out in Annex XVI to UNECE Regulation No 16. (b) Where a number of seat belts have to be retrofitted in accordance with point (a), they shall be of an approved type in accordance with UNECE Regulation No 16.
33	UNECE Regulation No 121 (Identification of controls, tell-tales and indicators)	(a) The symbols including the colour of their corresponding tell-tales the presence of which is mandatory by virtue of UNECE Regulation No 121 shall comply with that UNECE Regulation. (b) Where this is not the case, the technical service shall verify that the symbols, tell-tales and indicators fitted to the vehicle provide the driver with comprehensible information about the operation of the controls in question.
34	Regulation (EU) No 672/2010 (Defrost/Demist)	The vehicle shall be equipped with adequate windscreen defrosting and windscreen demisting devices.
35	Regulation (EU) No 1008/2010 (Wash/Wipe)	The vehicle shall be equipped with adequate windscreen washing and windscreen wiping devices.
36	UNECE Regulation No 122 (Heating systems)	(a) The passenger compartment shall be fitted with a heating system. (b) Combustion heaters and their installation shall comply with Annex 7 to UNECE Regulation No 122. In addition, LPG combustion heaters and LPG heating systems shall fulfil the requirements set out in Annex 8 to UNECE Regulation No 122. (c) Additional heating systems that are retrofitted shall comply with the requirements set out in UNECE Regulation No 122.

41a	Regulation (EC) No 595/2009 Emissions (Euro VI) heavy-duty vehicles – OBD	*Tailpipe emissions* (a) A test shall be conducted in accordance with Annex III to Regulation (EU) No 582/2011 using the deterioration factors set out in point 3.6.1. of Annex VI to Regulation (EU) No 582/2011. (b) The limits to be applied shall be those set out in the table of Annex I to Regulation (EC) No 595/2009. (c) The fuel to be used for the test shall be the reference fuel as prescribed in Annex IX to Regulation (EU) No 582/2011. *CO_2 emissions* The CO_2 emissions and fuel consumption shall be determined in accordance with Annex VIII to Regulation (EU) No 582/2011. *OBD* (a) The vehicle shall be fitted with an OBD system. (b) The OBD-interface must be able to communicate with an external OBD scan-tool as described in Annex X to Regulation (EU) No 582/2011. *Requirements to ensure the correct operation of NO_x control measures* The vehicle shall be fitted with a system ensuring the correct operation of NO_x control measures in accordance with Annex XIII to Regulation (EU) No 582/2011. *Power measurement* (a) The applicant shall submit a statement from the manufacturer stating the maximum engine power output in Kw as well as the corresponding regime (b) An engine power output curve providing the same information may alternatively be provided by the applicant.
45	UNECE Regulation No 43	*Components* (a) The glazing shall be made either of tempered or laminated safety glass. (b) Fitting of plastic glazing shall be permitted only on locations situated behind the 'B' pillar. (c) Glazing shall not be required to be approved under UNECE Regulation No 43. *Installation* (a) The installation requirements set out in Annex 21 to UNECE Regulation No 43 shall apply. (b) No tinted films that reduce the regular light transmission under the required minimum shall be permitted on the windscreen and on the glazing located in front of the 'B' pillar.
46	Commission Regulation (EU) 458/2011 (Installation of tyres)	*Installation* (a) The dimensions, load-capacity index and speed category of the tyres shall fulfil the requirements of Commission Regulation (EU) 458/2011. (b) The speed category symbol of the tyre shall be compatible

		with the maximum design speed of the vehicle. (c) This requirement shall apply notwithstanding the presence of a speed limiter. (d) The maximum speed of the vehicle shall be stated by the vehicle manufacturer. However, the technical service may assess the maximum design speed of the vehicle by using the engine maximum power output, the maximum number of revolutions per minute and the data concerning the kinematic chain.
46B	UNECE Regulation No 30 (C1 tyres)	*Components* Tyres shall bear an 'E' type-approval mark.
46D	UNECE Regulation No 117 (tyre rolling sound emissions, adhesion on wet surface and rolling resistance)	*Components* Tyres shall bear an 'E' type-approval mark.
46D	Regulation (EC) No 661/2009 UNECE Regulation No 64 (temporary use spare unit, run-flat tyres, tyre rolling sound emissions, adhesion on wet surface and rolling resistance)	*Components* Tyres shall bear an 'E' type-approval mark. The fitting of TPMS shall not be required
48	Regulation (EU) No 1230/2012 (Masses and dimensions)	(a) The requirements of Annex I, Part A to Regulation (EU) No 1230/2012 shall be fulfilled. However, the requirements set out in point 5 of Part A of Annex I do not need to be fulfilled. (b) For the purposes of point (a) the masses to be considered are the following: — the mass in running order as defined in Article 2(4) of Regulation (EU) No 1230/2012 as measured by the technical service, and — the maximum laden masses either stated by the vehicle manufacturer or shown on the manufacturer's plate, including stickers or information available in the owner's manual. Those masses shall be regarded as the technically permissible maximum laden masses. (c) Technical changes made by the applicant in order to decrease the maximum technically permissible laden mass of the vehicle to 3,5 tonnes or less, so that the vehicle may be granted individual vehicle approval shall not be permitted. (d) No exemption shall be permitted in respect of the maximum permissible dimensions.
49	UNECE Regulation No 61 (External projections of cabs)	(a) The general requirements set out in section 5 of UNECE Regulation No 17 shall be fulfilled. (b) At the discretion of the technical service, the requirements set out in paragraphs 6.1, 6.5, 6.6, 6.7, 6.8 and 6.11 of UNECE Regulation No 17 shall be fulfilled.
50	UNECE Regulation No 55 (Couplings)	*Separate technical units* (a) OEM couplings intended for towing a trailer of which the

		maximum mass does not exceed 1 500 kg shall not be required to be type-approved under UNECE Regulation No 55. (b) A coupling is deemed OEM equipment where it is described in the owner's manual or in an equivalent supporting document provided to the buyer by the vehicle manufacturer. (c) Where such coupling is approved with the vehicle, an appropriate text shall be included in the approval certificate stating that the owner is responsible for ensuring compatibility with the coupling device fitted to the trailer. (d) Couplings other than those referred to in point (a), as well as couplings that are retrofitted, shall be type-approved in accordance with UNECE Regulation No 55. *Installation on the vehicle* The technical service shall check that the installation of the coupling devices comply with paragraph 6 to UNECE Regulation No 55.
54	UNECE Regulation No 95 (Side impact)	(a) The applicant shall submit a statement from the manufacturer establishing that the particular vehicle, of which the VIN has to be specified, complies with at least one of the following: — UNECE Regulation No 95, — FMVSS No 214 (Side impact protection), — Article 18 of JSRRV. (b) A test in accordance with section 5 of UNECE Regulation No 95 may be conducted on a production vehicle at the request of the applicant. (c) The test shall be conducted by a technical service that been designated for carrying out this test. A detailed report shall be issued by that technical service to the applicant.
56	UNECE Regulation No 105 Vehicles intended for the transport of dangerous goods	Vehicles intended for the transport of dangerous goods shall comply with UNECE Regulation No 105.
58	Regulation (EC) No 78/2009 (Pedestrian protection)	*Brake assist* Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. *Pedestrian protection* Until 24 February 2018, the requirements of Regulation (EC) No 78/2009 shall not apply to vehicles of which the maximum mass does not exceed 2 500 kg and until 24 August 2019 to vehicles of which the maximum mass exceeds 2 500 kg. *Frontal protection systems* However, frontal protection systems installed on the vehicle shall be type-approved in accordance with Regulation (EC) No 78/2009 and their installation shall comply with the requirements set out in section 6 of Annex I to that Regulation.
59	Directive 2005/64/EC (Recyclability)	The requirements of that Directive shall not apply.
61	Directive 2006/40/EC (Air-conditioning system)	The requirements of that Directive shall apply.

Explanatory notes to Appendix 2

1. Abbreviations used in this Appendix:
'OEM': original equipment provided by the manufacturer
'FMVSS': Federal Motor Vehicle Safety Standard of the U.S Department of Transportation
'JSRRV': Japan Safety Regulations for Road Vehicles
'SAE': Society of Automotive Engineers
'CISPR': Comité international spécial des perturbations radioélectriques.

2. Remarks:

(a) the complete LPG or CNG installation shall be checked against the provisions of UNECE Regulations No 67, No 110 or No 115, as appropriate;

(b) the formula to be used for the assessment of CO_2 emissions shall be as follows:

Petrol engine and manual gearbox:
CO 2 = 0,047 m + 0,561 p + 56,621

Petrol engine and automatic gearbox:
CO 2 = 0,102 m + 0,328 p + 9,481

Petrol engine and hybrid electric:
CO 2 = 0,116 m – 57,147

Diesel engine and manual gearbox:
CO 2 = 0,108 m – 11,371

Diesel engine and automatic gearbox:
CO 2 = 0,116 m – 6,432

Where: CO 2 is the combined mass of CO 2 emissions in g/km, 'm' is the mass of the vehicle in running order in kg and 'p' the maximum engine power output in kW.

Combined mass of CO 2 shall be calculated with one decimal place, then rounded to the nearest whole number as follows:
(i) if the figure following the decimal point is below 5, the total is rounded down;
(ii) if the figure following the decimal point is equal to 5 or above 5, the total is rounded up;

(c) the formulæ to be used for the assessment of fuel consumption shall be as follows:

$CFC = CO\ 2 \times k^{-1}$

Where: CFC is the combined fuel consumption in l/100 km, CO 2 is the combined mass of CO 2 emissions in g/km after it has been rounded in accordance with the rule referred to in Remark (2 b), 'k' a coefficient equal to:

23,81 in the case of a petrol engine;

26,49 in the case of a diesel engine.

Combined fuel consumption shall be calculated with two decimal places, then rounded as follows:

(i) if the figure following the first decimal is below 5, the total is rounded down;

(ii) if the figure following the first decimal is equal to 5 or above 5, the total is rounded up.

PART II

List of UNECE regulations recognised as an alternative to the Directives or Regulations referred to in Part I

Where reference is made to a separate Directive or Regulation in the table of Part I, an approval granted under the following UNECE regulations which the Community has accepted as a Contracting Party to the United Nations Economic Commission for Europe 'Revised 1958 Agreement' by virtue of Council Decision 97/836/EC[29], or subsequent Council Decisions as referred to in Article 3(3) of that Decision, shall be considered as equivalent to an EU type-approval granted under the relevant separate Directive or Regulation.

Any further amendment to the UNECE regulations listed in the following table [30] shall also be deemed to be equivalent to an EU type-approval, subject to the Decision referred to in Article 4(2) of Decision 97/836/EC.

	Subject	Basic UNECE Regulation number	Series of amendments
1 (*)	Permissible sound level	51	02
	Replacement silencing systems	59	00
58.	Pedestrian protection	127	00
	Braking (brake assist)	13-H	00 (Supplement 9 and above)
65	Advanced emergency braking system	131	01
66	Lane departure warning system	130	00
Where the separate Directive or Regulation contains installation requirements, these apply also to components and separate technical units approved in accordance with UNECE regulations. (*) The numbering of the entries in this table refers to the numbering used in the table of Part I.			

29 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).

30 For subsequent amendments, see UNECE TRANS/WP.29/343.

PART III

List of regulatory acts setting out the requirements for the purpose of EU type-approval of special purpose vehicles

Appendix 1

Motor-caravans, ambulances and hearses

Item	Subject	Regulatory act reference	$M_1 \leq 2500$ kg(*)	$M_1 > 2500$ kg(*)	M_2	M_3
1	Sound level	Directive 70/157/EEC	H	G+H	G+H	G+H
1A	Sound level	Regulation (EU) No 540/2014	H	G+H	G+H	G+H
2	Emissions (Euro 5 and 6) light duty vehicles / access to information	Directive 70/220/EEC	Q([1])	G + Q([1])	G + Q([1])	
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	F ([2])	F ([2])	F ([2])	F ([2])
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	X	X	X	X
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	X	X	X	X
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X	G	G	G
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X		
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11	B	G+B		
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X	X	X	X

Item	Subject	Regulatory act reference	$M_1 \leq 2500$ kg(*)	$M_1 > 2500$ kg(*)	M2	M3
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X	G	G	G
9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	X ([4])	G+A_1		
9B	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13			G([3])	G([3])
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X	X	X	X
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21	C	G+C		
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18			G ([4A])	G ([4A])
13B	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116	X	G		
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12	X	G		
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	D	G+D	G+D ([4B])	G+D ([4B])
15B	Seats of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 80			X	X
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26	X for the cab; A+Z for the remaining part	G for the cab; A+Z for the remaining part		

Item	Subject	Regulatory act reference	$M_1 \leq 2500$ kg(*)	$M_1 > 2500$ kg(*)	M2	M3
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	X	X
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X	X	X	X
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X	X	X	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	D	G+L	G+L	G+L
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	A+N	A+G+N for the cab; A+N for the remaining part	A+G+N for the cab; A+N for the remaining part	A+G+N for the cab; A+N for the remaining part
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X	X	X	X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X	X	X	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X	X	X	X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X	X	X	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X	X	X	X

Item	Subject	Regulatory act reference	$M_1 \leq 2500$ kg(*)	$M_1 > 2500$ kg(*)	M2	M3
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X	X	X	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X	X	X	X
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X	X	X	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X	X	X	X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X	X	X	X
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X	X	X	X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X	X	X	X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X	X	X	X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	E	E	E	E
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X	X	X	X

Item	Subject	Regulatory act reference	$M_1 \leq 2500$ kg(*)	$M_1 > 2500$ kg(*)	M2	M3
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X	X	X	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X	X	X	X
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	D	G+M	G+M	G+M
32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125	X	G		
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X	X	X	X
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	X	G ([5])	([5])	([5])
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	X	G ([6])	([6])	([6])
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X	X	X	X
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010	X	G		
38A	Head restraints (headrests), whether or not incorporated in vehicle seats	Regulation (EC) No 661/2009 UNECE Regulation No 25	D	G + D		
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	X	X		

Item	Subject	Regulatory act reference	M1 ≤ 2500 kg(*)	M1 > 2500 kg(*)	M2	M3
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	J	G+J	G+J	G+J
46	Tyres	Directive 92/23/EEC	X	G	G	G
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	X	G	G	G
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	X	G		
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54	—	G	G	G
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X	G	G	G
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	X	G		
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89			X	X

Item	Subject	Regulatory act reference	M1 ≤ 2500 kg(*)	M1 > 2500 kg(*)	M2	M3
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012			X	X
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X ([10])	G ([10])	G ([10])	G ([10])
51A	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 118				G for the cab; X for the remaining part
52A	M_2 and M_3 vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 107			A	A
52B	Strength of the superstructure of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 66			A	A
53A	Protection of occupants in the event of a frontal collision	Regulation (EC) No 661/2009 UNECE Regulation No 94	N/A	N/A		
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95	N/A	N/A		
58	Pedestrian protection	Regulation (EC) No 78/2009	X	N/A However, any frontal protection systems supplied with the vehicle shall comply and shall be marked		
59	Recyclability	Directive 2005/64/EC	N/A	N/A		
61	Air-conditioning system	Directive 2006/40/EC	X	G ([14])		
62	Hydrogen system	Regulation (EC) No 79/2009	Q	G + Q	G + Q	G + Q
Item	Subject	Regulatory act reference	M1 ≤ 2500 kg(*)	M1 > 2500 kg(*)	M2	M3

63	General safety	Regulation (EC) No 661/2009	X ([15])	X ([15])	X ([15])	X ([15])
64	Gear shift indicators	Regulation (EC) No 661/2009 Regulation (EU) No 65/2012	X	G		
65	Advanced emergency braking system	Regulation (EC) No 661/2009 Regulation (EU) No 347/2012			N/A ([16])	N/A ([16])
66	Lane departure warning system	Regulation (EC) No 661/2009 Regulation (EU) No 351/2012			N/A ([17])	N/A ([17])
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X	X	X	X
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	X	G		
69	Electrical safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X	X	X	X
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X	X	X	X

([*]) Technically permissible maximum laden mass.

Additional requirements for ambulances

The patient compartment of ambulances shall comply with the requirements of EN 1789:2007 +A1: 2010 +A2:2014 on Medical vehicles and their equipment – Road ambulances with the exception of section 6.5, list of equipment. Proof of compliance shall be provided with a test report of a technical service. If a wheelchair space is foreseen, the requirements of Appendix 3 relating to the wheelchair tie down and occupant restraint systems shall apply.

Appendix 2

Armoured vehicles

Item	Subject	Regulatory act reference	M_1	M_2	M_3	N_1	N_2	N_3	O_1	O_2	O_3	O_4
1A	Sound level	Regulation (EU) No 540/2014	X	X	X	X	X	X				
2	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007	A([1])	A([1])		A([1])	A([1])					
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	X ([2])	X ([2])	X ([2])	X ([2])	X ([2])	X ([2])	X	X	X	X
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	X	X	X	X	A	A	X	X	X	X
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	X	X	X	X	X	X	X	X	X	X
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X	X	X	X	X	X	X	X	X	X
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	X	X	X	X				
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11	X			X						
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	A+K	A+K	A+K	A+K	A+K	A+K				
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	A	A	A	A	A	A				

9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13		X ([3])	X ([3])	X ([3])	X ([3])	X ([3])	X ([3])	X ([3])	X ([3])	X ([3])
9B	Braking of passenger cars	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	X ([4])			X ([4])						
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X	X	X	X	X	X	X	X	X	X
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21	A									
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18		X([4A])	X([4A])		X([4A])	X([4A])				
13B	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116	X			X						
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12	N/A			N/A						
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	X	D([4B])	D([4B])	D	D	D				
15B	Seats of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 80		D	D							
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26	A									
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	X	X	X	X				

17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X	X	X	X	X	X				
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X	X	X	X	X	X	X	X	X	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	A	A	A	A	A	A				
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	A+N	A+N	A+N	A+N	A+N	A+N	A+N	A+N	A+N	A+N
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X	X	X	X	X	X	X	X	X	X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X	X	X	X	X	X	X	X	X	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X	X	X	X	X	X				
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X	X	X	X	X	X	X	X	X	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X	X	X	X	X	X	X	X	X	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X	X	X	X	X	X	X	X	X	X
25A	Power-driven vehicle's sealed-beam headlamps	Regulation (EC) No 661/2009 UNECE	X	X	X	X	X	X				

	(SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation No 31										
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X	X	X	X	X	X	X	X	X	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X	X	X	X	X	X				
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X	X	X	X	X	X				
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X	X	X	X	X	X				
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X	X	X	X	X	X				
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X	X	X	X	X	X				
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	A	A	A	A	A	A				
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X	X	X	X	X	X	X	X	X	X
29A	Reversing lights for power-driven	Regulation (EC) No 661/2009	X	X	X	X	X	X	X	X	X	X

	vehicles and their trailers	UNECE Regulation No 23										
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X	X	X	X	X	X				
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	A	A	A	A	A	A				
32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125	S									
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X	X	X	X	X	X				
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	A	([5])	([5])	([5])	([5])	([5])				
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	A	([6])	([6])	([6])	([6])	([6])				
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X	X	X	X	X	X	X	X	X	X
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010	X									
38A	Head restraints (headrests), whether or not incorporated in vehicle seats	Regulation (EC) No 661/2009 UNECE Regulation No 25	X									
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	X ([9])	X ([9])	X	X ([9])	X ([9])	X				

42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73					X	X			X	X
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011				X	X	X	X	X	X	X
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	X									
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46	Tyres	Directive 92/23/EEC	A	A	A	A	A	A	A	A	A	A
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	A	A	A	A	A	A	A	A	A	A
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	A			A			A	A		
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54		A	A	A	A	A			A	A
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	A	A	A	A	A	A	A	A	A	A
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	A([9A])			A([9A])						
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89		X	X		X	X				
48A	Masses and dimensions	Regulation (EC) No 661/2009		X	X	X	X	X	X	X	X	X

		Regulation (EU) No 1230/2012										
49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61				A	A	A				
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X([10])	X([10])	X([10])	X([10])	X([10])	X([10])	X	X	X	X
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102					X([10])	X([10])			X([10])	X([10])
51A	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 118			X							
52A	M_2 and M_3 vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 107		A	A							
52B	Strength of the superstructure of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 66		A	A							
53A	Protection of occupants in the event of a frontal collision	Regulation (EC) No 661/2009 UNECE Regulation No 94	N/A									
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95	N/A			N/A						
55	(empty)											
56A	Vehicles for the carriage of dangerous goods	Regulation (EC) No 661/2009 UNECE Regulation No 105				X([13])	X([13])	X([13])	X([13])	X([13])	X([13])	X([13])
57A	Front underrun protective devices	Regulation (EC)					X	X				

	(FUPDs) and their installation; front underrun protection (FUP)	No 661/2009 UNECE Regulation No 93										
58	Pedestrian protection	Regulation (EC) No 78/2009	N/A			N/A						
59	Recyclability	Directive 2005/64/EC	N/A			N/A						
60	(empty)											
61	Air-conditioning system	Directive 2006/40/EC	X			X([14])						
62	Hydrogen system	Regulation (EC) No 79/2009	A	A	A	A	A	A				
63	General Safety	Regulation (EC) No 661/2009	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])
64	Gear shift indicators	Regulation (EC) No 661/2009 Regulation (EU) No 65/2012	X									
65	Advanced emergency braking system	Regulation (EC) No 661/2009 Regulation (EU) No 347/2012		([16])	([16])		([16])	([16])				
66	Lane departure warning system	Regulation (EC) No 661/2009 Regulation (EU) No 351/2012		([17])	([17])		([17])	([17])				
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X	X	X	X	X	X				
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	X			X						
69	Electrical safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X	X	X	X	X	X				
70	Specific components for CNG and their installation on	Regulation (EC) No 661/2009 UNECE	X	X	X	X	X	X				

	motor vehicles	Regulation No 110										

Appendix 3

Wheelchair accessible vehicles

Item	Subject	Regulatory act	M_1
1A	Sound level	Regulation (EU) No 540/2014	$G+W_9$
2	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007	$G+W_1$
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	$X+W_2$
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	X
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	X
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	G
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11	X
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X
9B	Braking of passenger cars	Regulation (EC) No 661/2009 UNECE Regulation No 13-H	$G+A_1$
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21	G+C
13B	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116	X
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12	G
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	$G+W_3$
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26	$G+W_4$
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X

18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	$X+W_5$
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	X
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	E
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X

31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	X+W_6
32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125	G
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	G([5])
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	G([6])
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010	G
38A	Head restraints (headrests), whether or not incorporated in vehicle seats	Regulation (EC) No 661/2009 UNECE Regulation No 25	X
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	X+W_1 ([9])
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	X+W_8
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	G
46	Tyres	Directive 92/23/EEC	X
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	X
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64	G([9A])
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X([10])
53A	Protection of occupants in the event of a frontal collision	Regulation (EC) No 661/2009 UNECE Regulation No 94	N/A
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95	N/A
58	Pedestrian protection	Regulation (EC) No 78/2009	G
59	Recyclability	Directive 2005/64/EC	N/A
61	Air-conditioning systems	Directive 2006/40/EC	G
62	Hydrogen system	Regulation (EC) No 79/2009	X

63	General Safety	Regulation (EC) No 661/2009	X([15])
64	Gear shift indicators	Regulation (EC) No 661/2009 Regulation (EU) No 65/2012	G
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97	X
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X

Additional requirements for testing the wheelchair tie down and occupant restraint system

The following section 1 and either section 2 or 3 shall apply.

1. Definitions

1.1. Surrogate wheelchair (SWC) means a rigid, re-usable test wheelchair, as defined in section 3 of ISO 10542-1:2012.

1.2. Point P means a representation of the position of the wheelchair occupant's hip when seated in the SWC, as defined in section 3 of ISO 10542-1:2012.

2. General requirements

2.1. Each wheelchair location shall be provided with anchorages to which a wheelchair tie-down and occupant restraint system (WTORS) shall be fitted.

2.2. The wheelchair occupant’s lower belt anchorages shall be located in accordance with UNECE Regulation No 14-07, paragraph 5.4.2.2, relative to Point P on the SWC, when placed in the travelling position designated by the manufacturer. The upper actual anchorage(s) shall be located at least 1 100 mm above the horizontal plane passing through the points of contact between the rear tyres of the SWC and the vehicle floor. This condition shall still be satisfied after the test carried out according to point 3 of this Appendix.

2.3. An assessment shall be made of the WTORS occupant belt to ensure compliance with the provisions of UNECE Regulation No 16-06, paragraphs 8.2.2 to 8.2.2.4 and 8.3.1 to 8.3.4.

2.4. The minimum number of ISOFIX child seat anchorages need not to be provided. In the case of a multi-stage type-approval where an ISOFIX anchorage system has been affected by the conversion, either the system shall be re-tested or the anchorages shall be rendered unusable. In the latter case the ISOFIX labels shall be removed and appropriate information shall be given to the vehicle purchaser.

3. Static in-vehicle testing

3.1. Wheelchair occupant restraint anchorages

3.1.1. The wheelchair occupant restraint anchorages shall resist the static forces prescribed for occupant restraint anchorages in UNECE Regulation No 14-07, simultaneously with the static forces applied to the wheelchair tie-down anchorages as specified in point 3.2 of this Appendix.

3.2. Wheelchair tie-down anchorages

The wheelchair tie-down anchorages shall resist the following forces, for at least 0.2 seconds, applied via the SWC (or a suitable surrogate wheelchair having a wheelbase, seat height and tie-down attachment points in accordance with the specification for the SWC), at a height of 300 +/– 100 mm from the surface on which the SWC rests:

3.2.1. In the case of a forward-facing wheelchair, a simultaneous force, coincident with the force applied to the occupant restraint anchorages, of 24,5 kN, and

3.2.2. a second test applying a static force of 8,2 kN directed towards the rear of the vehicle.

3.2.3. In the case of a rearward-facing wheelchair, a simultaneous force, coincident with the force applied to the occupant restraint anchorages, of 8,2 kN, and

3.2.4. a second test applying a static force of 24,5 kN directed towards the front of the vehicle.

3.3. Components of the system

3.3.1. All components of the WTORS shall meet the relevant requirements of ISO 10542-1:2012. However, the dynamic test specified in Annex A and paragraphs 5.2.2 and 5.2.3 of ISO 10542-1:2012 shall be carried out on the complete WTORS using the vehicle anchorage geometry instead of the test geometry specified in Annex A of ISO 10542-1:2012. This may be carried out within the vehicle structure or on a surrogate structure representative of the vehicle's WTORS anchorage geometry. The location of each anchorage shall lie within the tolerance provided for in paragraph 7.7.1 of UNECE Regulation No 16-06.

3.3.2. Where the occupant restraint part of the WTORS is approved according to UNECE Regulation No 16-06, it shall be subject to the dynamic test of the complete WTORS specified in paragraph 3.3.1 of this appendix but the requirements of paragraphs 5.1, 5.3 and 5.4 of ISO10542-1:2012 shall be considered to have been met.

4. Dynamic in-vehicle testing

4.1. The full assembly of the WTORS system shall be tested by an in-vehicle dynamic test in accordance with paragraphs 5.2.2 and 5.2.3 and Annex A of ISO 10542-1:2012, testing all components/anchorages simultaneously, using a vehicle body-in-white or representative structure.

4.2. The component parts of the WTORS shall meet the relevant requirements of ISO10542-1:2012, paragraphs 5.1, 5.3 and 5.4. These requirements shall be deemed to have been met in respect of the occupant restraint if it is approved according to UNECE Regulation No 16-06.

Appendix 4

Other special purpose vehicles
(including special group, multi-equipment carrier and trailer caravans)

The exemptions provided for in this appendix are only permitted if the manufacturer demonstrates to the satisfaction of the approval authority that the vehicle, due to the special function, cannot meet all the requirements set out in Part I of Annex IV.

Item	Subject	Reference to regulatory act	M_2	M_3	N_1	N_2	N_3	O_1	O_2	O_3	O_4
1A	Sound level	Regulation (EU) No 540/2014		H	H	H	H	H			
2	Emissions (Euro 5 and 6) light duty vehicles/access to information	Regulation (EC) No 715/2007	Q([1])		$Q+V_1$ ([1])	$Q+V_1$ ([1])					
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	F	F	F	F	F	X	X	X	X
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	X	X	A	A	A	X	X	X	X
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	A+R	A+R	A+R	A+R	A+R	A+R	A+R	A+R	A+R
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X	X	X	X	X	X	X	X	X
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	B	B	B				
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11			B						
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X	X	X	X	X				
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X	X	X	X	X				

9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13	X ([3])	X ([3])	X ([3])	X+U_1 ([3])	X+U_1 ([3])	X	X	X ([3])	X ([3])
9B	Braking of passenger cars	Regulation (EC) No 661/2009 UNECE Regulation No 13-H			X ([4])						
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X	X	X	X	X	X	X	X	X
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18	X([4A])	X([4A])		X([4A])	X([4A])				
13B	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 116			X						
14A	Protection of the driver against the steering mechanism in the event of impact	Regulation (EC) No 661/2009 UNECE Regulation No 12			X						
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	D([4B])	D([4B])	D	D	D				
15B	Seats of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 80	D	D							
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	X	X	X	X				
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X	X	X	X	X				
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X	X	X	X	X	X	X	X	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	D	D	D	D	D				

20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	A+N	A+N	A+N	A+N	A+N	A+N	A+N	A+N	A+N
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X	X	X	X	X	X	X	X	X
22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X	X	X	X	X	X	X	X	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X	X	X	X	X				
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X	X	X	X	X	X	X	X	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X	X	X	X	X	X	X	X	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X	X	X	X	X	X	X	X	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X	X	X	X	X				
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X	X	X	X	X	X	X	X	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X	X	X	X	X				
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X	X	X	X	X				

25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X	X	X	X	X				
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X	X	X	X	X				
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X	X	X	X	X				
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	A	A	A	A	A				
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X	X	X	X	X	X	X	X	X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X	X	X	X	X	X	X	X	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X	X	X	X	X				
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	D	D	D	D	D				
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X	X	X	X	X				
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	([5])	([5])	([5])	([5])	([5])				
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	([6])	([6])	([6])	([6])	([6])				
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X	X	X	X	X	X	X	X	X

38A	Head restraints (headrests), whether or not incorporated in vehicle seats	Regulation (EC) No 661/2009 UNECE Regulation No 25	X								
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	H ([9])	H	H ([9])	H ([9])	H				
42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73				X	X			X	X
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011			X	X	X	X	X	X	X
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	J	J	J	J	J	J	J	J	J
46	Tyres	Directive 92/23/EEC	X	X	X	X	X	X	X	X	X
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	X	X	X	X	X	X	X	X	X
46B	Pneumatic tyres for motor vehicles and their trailers (Class C1)	Regulation (EC) No 661/2009 UNECE Regulation No 30			X			X	X		
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54	X	X	X	X	X			X	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X	X	X	X	X	X	X	X	X
46E	Temporary-use spare unit, run-flat tyres/system and tyre pressure monitoring system	Regulation (EC) No 661/2009 UNECE Regulation No 64			X ([9A])						
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89	X	X		X	X				
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	X	X	X	X	X	X	X	X	X

49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61			X	X	X				
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X([10])	X([10])	X([10])	X([10])	X([10])	X	X	X	X
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102				X([10])	X([10])			X([10])	X([10])
51A	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 118		X							
52A	M_2 and M_3 vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 107	X	X							
52B	Strength of the superstructure of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 66	X	X							
54A	Protection of occupants in the event of lateral collision	Regulation (EC) No 661/2009 UNECE Regulation No 95			A						
56A	Vehicles for the carriage of dangerous goods	Regulation (EC) No 661/2009 UNECE Regulation No 105			X ([13])	X ([13])	X ([13])	X([13])	X([13])	X([13])	X([13])
57A	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Regulation (EC) No 661/2009 UNECE Regulation No 93				X	X				
58	Pedestrian protection	Regulation (EC) No 78/2009			N/A ([2])						
59	Recyclability	Directive 2005/64/EC			N/A						
61	Air-conditioning systems	Directive 2006/40/EC			X ([14])						
62	Hydrogen system	Regulation (EC) No 79/2009	X	X	X	X	X				
63	General Safety	Regulation (EC) No 661/2009	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])	X([15])

65	Advanced emergency braking system	Regulation (EC) No 661/2009 Regulation (EU) No 347/2012	N/A	N/A		N/A	N/A				
66	Lane departure warning system	Regulation (EC) No 661/2009 Regulation (EU) No 351/2012	N/A	N/A		N/A	N/A				
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X	X	X	X	X				
68	Vehicle alarm systems (VAS)	Regulation (EC) No 661/2009 UNECE Regulation No 97			X						
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X	X	X	X	X				
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X	X	X	X	X				

Appendix 5

Mobile cranes

Item	Subject	Reference to regulatory act	N_3
1A	Sound level	Regulation (EU) No 540/2014	$T + Z_1$
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	X
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	A
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	X
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X Crab steering allowed
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	A
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X
9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13	U ([3])
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18	X ([4A])
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	X
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	X
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	A+Y
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X

22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	A
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	X
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	([5])
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	([6])

36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	V
42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73	A
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011	Z_1
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	J
46	Tyres	Directive 92/23/EEC	X
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	X
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54	X
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89	X
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	A
49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61	A
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X ([10])
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102	X ([10])
57A	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Regulation (EC) No 661/2009 UNECE Regulation No 93	X
62	Hydrogen system	Regulation (EC) No 79/2009	X
63	General Safety	Regulation (EC) No 661/2009	X ([15])
65	Advanced emergency braking system	Regulation (EC) No 661/2009 Regulation (EU) No 347/2012	N/A ([16])
66	Lane departure warning system	Regulation (EC) No 661/2009 Regulation (EU) No 351/2012	N/A ([17])
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X

Appendix 6

Exceptional load transport trailers

Item	Subject	Reference to regulatory act	N_3	O_4
1	Permissible sound level	Directive 70/157/EEC	T	
3A	Prevention of fire risks (liquid fuel tanks)	Regulation (EC) No 661/2009 UNECE Regulation No 34	X	X
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58	A	A
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010	X	A+R
5A	Steering equipment	Regulation (EC) No 661/2009 UNECE Regulation No 79	X Crab steering allowed	X
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28	X	
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46	X	
9A	Braking of vehicles and trailers	Regulation (EC) No 661/2009 UNECE Regulation No 13	U ([3])	X ([3])
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10	X	X
13A	Protection of motor vehicles against unauthorised use	Regulation (EC) No 661/2009 UNECE Regulation No 18	X ([4A])	
15A	Seats, their anchorages and any head restraints	Regulation (EC) No 661/2009 UNECE Regulation No 17	X	
17A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	X	
17B	Speedometer equipment including its installation	Regulation (EC) No 661/2009 UNECE Regulation No 39	X	
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011	X	X
19A	Safety-belt anchorages, Isofix anchorages systems and Isofix top tether anchorages	Regulation (EC) No 661/2009 UNECE Regulation No 14	X	
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48	X	A+N
21A	Retro-reflecting devices for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 3	X	X

22A	Front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 7	X	X
22B	Daytime running lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 87	X	
22C	Side-marker lamps for motor vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 91	X	X
23A	Direction indicators for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 6	X	X
24A	Illumination of rear-registration plates of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 4	X	X
25A	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	Regulation (EC) No 661/2009 UNECE Regulation No 31	X	
25B	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 37	X	X
25C	Motor vehicle headlamps equipped with gas-discharge light sources	Regulation (EC) No 661/2009 UNECE Regulation No 98	X	
25D	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 99	X	
25E	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	Regulation (EC) No 661/2009 UNECE Regulation No 112	X	
25F	Adaptive front-lighting systems (AFS) for motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 123	X	
26A	Power-driven vehicle front fog lamps	Regulation (EC) No 661/2009 UNECE Regulation No 19	X	
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010	A	
28A	Rear fog lamps for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 38	X	X
29A	Reversing lights for power-driven vehicles and their trailers	Regulation (EC) No 661/2009 UNECE Regulation No 23	X	X
30A	Parking lamps for power-driven vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 77	X	
31A	Safety-belts, restraint systems, child restraint systems and Isofix child restraint systems	Regulation (EC) No 661/2009 UNECE Regulation No 16	X	
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121	X	

34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010	([5])	
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	([6])	
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122	X	
41A	Emissions (Euro VI) heavy duty vehicles/access to information	Regulation (EC) No 595/2009	X ([9])	
42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73	X	A
43A	Spray suppression systems	Regulation (EC) No 661/2009 Regulation (EU) No 109/2011	X	A
45	Safety glazing	Directive 92/22/EEC	X	
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43	X	
46	Tyres	Directive 92/23/EEC	X	I
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011	X	I
46C	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 54	X	I
46D	Tyre rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	Regulation (EC) No 661/2009 UNECE Regulation No 117	X	I
47A	Speed limitation of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 89	X	
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	A	A
49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61	A	
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55	X([10])	X
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102	X([10])	X([10])
56A	Vehicles for the carriage of dangerous goods	Regulation (EC) No 661/2009 UNECE Regulation No 105	X([13])	X([13])
57A	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Regulation (EC) No 661/2009 UNECE Regulation No 93	A	
62	Hydrogen system	Regulation (EC) No 79/2009	X	
63	General Safety	Regulation (EC) No 661/2009	X ([15])	X([15])
65	Advanced emergency braking system	Regulation (EC) No 661/2009 Regulation (EU) No 347/2012	N/A ([16])	

66	Lane departure warning system	Regulation (EC) No 661/2009 Regulation (EU) No 351/2012	N/A ([17])	
67	Specific components for liquefied petroleum gases (LPG) and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 67	X	
69	Electric safety	Regulation (EC) No 661/2009 UNECE Regulation No 100	X	
70	Specific components for CNG and their installation on motor vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 110	X	

Explanatory Notes on the applicability of the requirements

X The requirements set out in the relevant regulatory act are applicable. The series of amendments of the UNECE regulations that apply on a compulsory basis are listed in Annex IV to Regulation (EC) No 661/2009. The series of amendments adopted subsequently are accepted as an alternative. Member States may grant extensions to existing type-approvals granted in accordance with the Directives repealed by Regulation (EC) 661/2009 under the conditions laid down in Article 13(14) of that Regulation.

N/A This regulatory act is not applicable to this vehicle (no requirements).

([1]) For vehicles with a reference mass not exceeding 2 610 kg. At the manufacturer's request, Regulation (EC) No 715/2007 may apply to vehicles with a reference mass not exceeding 2 840 kg.

With regard to access to information, for other parts (e.g. living compartment) than the base vehicle, it is sufficient that the manufacturer provides access to vehicle repair and maintenance information in a readily accessible and prompt manner.

([2]) In case of vehicles equipped with a LPG or CNG installation, a vehicle type-approval in accordance with UNECE Regulation No 67 or UNECE Regulation No 110 is required.

([3]) The fitting of an electronic stability control ('ESC') system is required by Article 12 and Article 13 of Regulation (EC) No 661/2009. However, in accordance with UNECE Regulation No 13, the fitting of an ESC system is not required for special purpose vehicles of categories M_2, M_3, N_2 and N_3 and for vehicles for exceptional load transport and trailers with areas for standing passengers. N_1 vehicles may be approved in accordance with UNECE Regulations No 13 or No 13-H.

([4]) The fitting of an ESC system is required by Article 12 and Article 13 of Regulation (EC) No 661/2009. Therefore, the requirements set out in Part A of Annex 9 to UNECE Regulation No 13-H shall be fulfilled. N_1 vehicles may be approved in accordance with UNECE Regulation No 13 or UNECE Regulation No 13-H.

([4A]) If fitted, the protective device shall fulfil the requirements set out in UNECE Regulation No 18.

([4B]) This Regulation applies to seats not falling within the scope of UNECE Regulation No 80. For other options, see Article 2 of Regulation (EC) No 595/2009.

([5]) Vehicles of categories other than M_1 do not need to fully comply with Regulation (EU) No 672/2010 but shall be fitted with a windscreen defrosting and demisting device.

([6]) Vehicles of categories other than M_1 do not need to fully comply with Regulation (EU) No 1008/2010 but shall be fitted with a windscreen washing and wiping devices.

([8]) For vehicles with a reference mass exceeding 2 610 kg and that did not benefit from the possibility offered in note ([1]).

([9]) For vehicles with a reference mass exceeding 2 610 kg that are not type-approved (at the manufacturer's request and provided their reference mass does not exceed 2 840 kg) under Regulation (EC) No 715/2007. For other parts than the base vehicle, it is sufficient that the manufacturer provides access to vehicle repair and maintenance information in a readily accessible and prompt manner

([9A]) Applies only where such vehicles are fitted with equipment covered by UNECE Regulation No 64. Tyre pressure monitoring system for M1 vehicles applies on a

compulsory basis in accordance with Article 9(2) of Regulation (EC) No 661/2009.

([10]) Applies only to vehicles equipped with coupling(s).

([11]) Applies to vehicles with a technically permissible maximum laden mass not exceeding 2,5 tonnes.

([12]) Only applicable to vehicles where the 'Seating Reference Point ("R" point)' of the lowest seat is not more than 700 mm above the ground level.

([13]) Applies only where the manufacturer applies for type-approval of vehicles intended for the transport of dangerous goods.

([14]) Applies only for vehicles of category N_1, class I (reference mass ≤ 1 305 kg)

([15]) At the request of the manufacturer, a type-approval may be granted under this item, as an alternative to obtaining type-approvals under each individual item covered by Regulation (EC) No 661/2009.

([16]) The fitting of an advanced emergency braking system is not required for special purpose vehicles in accordance with Article 1 of Regulation (EU) No 347/2012.

([17]) The fitting of a lane departure warning system is not required for special purpose vehicles in accordance with Article 1 of Regulation (EU) No 351/2012.

A The approval authority may only grant exemption(s) if the manufacturer demonstrates that the vehicle cannot meet the requirements due to its special purpose. The exemptions granted are to be described on the vehicle type-approval certificate and the certificate of conformity (remark –item 52 of the CoC).

A_1 The fitting of ESC is not mandatory. In the case of multi-stage type-approvals, where the modifications made at a particular stage are likely to affect the function of the base vehicle's ESC system, the manufacturer may either disable the system or demonstrate that the vehicle has not been rendered unsafe or unstable. This may be demonstrated, e.g., by performing rapid double lane-change manoeuvres in each direction at 80 km/h with sufficient severity to cause intervention by the ESC system. These interventions are to be well-controlled and should improve the stability of the vehicle. The technical service has the right to request further testing if deemed necessary.

B Application limited to doors giving access to the seats designated for normal use where the vehicle is used on a public road and where the distance between the R point of the seat and the average plane of the door surface, measured perpendicular to the longitudinal medium plane of the vehicle, does not exceed 500 mm.

C Application limited to that part of the vehicle in front of the rearmost seat designated for normal use where the vehicle is used on a public road and also limited to the head impact zone as defined in the relevant regulatory act.

D Application limited to seats designated for normal use where the vehicle is used on a public road. Seats that are not designated for use where the vehicle is used on the public road are to be clearly identified to users either by means of a pictogram or a sign with an appropriate text. The luggage retention requirements of UNECE Regulation No 17 do not apply.

E Front only.

F Modification to the routing and length of the refuelling duct and re-positioning of the tank inboard is permissible.

G In case of multi-stage type-approval, requirements according to the category of the

base/incomplete vehicle (e.g. the chassis of which was used to build the special purpose vehicle) may also be used.

H Modification of exhaust system length after the last silencer not exceeding 2 m is permissible without any further test.

I Tyres are to be type-approved in accordance with the requirements set out in UNECE Regulation No 54 even if the design speed of the vehicle is less than 80 km/h. The load capacity may be adjusted in relation to the maximum design speed of the trailer in agreement with the tyre manufacturer.

J For all window glazing other than driver's cab glazing (windshield and side glasses), the material may be either of safety glass or rigid plastic glazing.

K Additional panic alarm devices are permitted.

L Application limited to seats designated for normal use where the vehicle is used on a public road. At least anchorages for lap belts are required in the rear seating positions. Seats that are not designated for use where the vehicle is used on a public road are to be clearly identified to users either by means of a pictogram or a sign with an appropriate text. ISOFIX is not required on ambulances and hearses.

M Application limited to seats designated for normal use where the vehicle is used on a public road. At least lap belts are required in all rear seating positions. Seats that are not designated for use when the vehicle is used on a public road are to be clearly identified to users either by means of a pictogram or a sign with an appropriate text. ISOFIX is not required on ambulances and hearses.

N Provided that all mandatory lighting devices are installed and that the geometric visibility is not affected.

Q Modification of exhaust system length after the last silencer not exceeding 2 m is permissible without any further test. An EU type-approval issued to the most representative base vehicle remains valid irrespective of change in the reference weight.

R Provided that the registration plates of all Member States can be mounted and remain visible.

S The light transmission factor is at least 60 % and the “A” pillar obstruction angle is not more than 10 degrees.

T Test to be performed only with the complete/completed vehicle. The vehicle can be tested in accordance with Directive 70/157/EEC. Concerning point 5.2.2.1 of Annex I to Directive 70/157/EEC, the following limit values are applicable:

(a) 81 dB(A) for vehicles with an engine power of less than 75 kW;

(b) 83 dB(A) for vehicles with an engine power of not less than 75 kW but less than 150 kW;

(c) 84 dB(A) for vehicles with an engine power of not less than 150 kW.

U Test to be performed only with the complete/completed vehicle. Vehicles up to 4 axles are to comply with all the requirements laid down in the relevant regulatory acts Derogations are admitted for vehicles having more than 4 axles, provided that

(a) they are justified by the particular construction;

(b) all the braking performances, related to parking, service and secondary braking laid down in the relevant regulatory act are fulfilled.

U_1 ABS is not mandatory for vehicles with hydrostatic drive.

V Alternatively, Directive 97/68/EC may also apply.

V_1 Alternatively, Directive 97/68/EC may also apply to vehicles with hydrostatic drive.

W_0 Modification of exhaust system length is permitted without any further test, provided that the back pressure is similar. If a new test is required, an extra 2dB(A) above the applicable limit is allowed.

W_1 Modification in the exhaust system is permitted without any further test of tailpipe emissions and CO_2/fuel consumption provided that the emission control devices, including particulate filters (if any), are not affected. If the evaporative control devices are kept as fitted by the manufacturer of the base vehicle, no new evaporative test is required on the modified vehicle.

An EU type approval issued to the most representative base vehicle remains valid irrespective of change in the reference mass.

W_2 Modification of the routing, length of the refuelling duct, fuel hoses and fuel vapour pipes is permitted without further test. Re-location of the original fuel tank is permitted provided all requirements are met. However, further testing in accordance with Annex 5 to UNECE Regulation No 34 are not required.

W_3 The longitudinal plane of the intended wheelchair-travelling position should be parallel to the longitudinal plane of the vehicle.

Appropriate information is to be made available to the vehicle owner that, in order to withstand the forces transmitted by the tie-down mechanism during the various driving conditions, a wheelchair with a structure meeting the relevant part of ISO 7176-19:2008 is recommended.

The seats of the vehicle may be adapted without further testing, provided it can be demonstrated to the technical service that their anchorages, mechanisms and head restraints provide the same level of performance.

The luggage retention requirements set out in UNECE Regulation No 17 do not apply.

W_4 Compliance with the relevant regulatory act(s) is required for the boarding aids when in the resting position.

W_5 Each wheelchair location is to be provided with anchorages to which a wheelchair tie-down and occupant restraint system (WTORS) is to be fitted, and that complies with the additional provisions for testing the wheelchair tie down and occupant restraint system set out in Appendix 3.

W_6 Each wheelchair location is to be provided with an occupant restraint belt that complies with the additional provisions for testing the wheelchair tie down and occupant restraint system of set out in Appendix 3.

When, due to the conversion, anchorage points for the safety belts need to be moved outside the tolerance provided for in paragraph 7.7.1 of UNECE Regulation No 16-06, the technical service is to check whether the alteration constitutes a worst case or not. If that is the case, the test provided for in paragraph 7.7.1. of UNECE Regulation No 16-06 is to be performed. Extension to the EU type-approval does not need to be issued. The test may be performed using components that have not undergone the conditioning test prescribed by UNECE Regulation No 16-06.

W_8 For the purposes of calculations, the mass of the wheel-chair including the user is

assumed to be 160 kg. The mass is to be concentrated at the P point of the surrogate wheelchair in its travelling position declared by the manufacturer.

Any limitation in the passenger capacity resulting from the use of wheelchair(s) is to be recorded in the owner's handbook, on side 2 of the EU type-approval certificate and in the certificate of conformity (remark section).

W_9 Modification of the exhaust system length is permitted without the need for retesting, provided that the exhaust back pressure remains similar.

Y Provided that all mandatory lighting devices are installed.

Z The requirements on the protrusion of open windows do not apply to the living compartment.

Z_1 Mobile cranes with more than six axles are considered to be off-road vehicles (N3G) when at least three axles are driven and provided they meet the provisions of Annex II, point 4.3(b)(ii) and (iii), as well as point 4.3(c).

ANNEX V

PROCEDURES TO BE FOLLOWED WITH RESPECT TO EU TYPE-APPROVAL

1. Objectives and scope

1.1. This Annex establishes the procedures for the proper operation of the vehicle type-approval in accordance with Articles 24, 25 and 26.

1.2. It also includes:

(a) the list of international standards which are of relevance for the designation of the technical services in accordance with Articles 72 and 74;

(b) the description of the procedure to be followed for the assessment of the skills of technical services in accordance with Article 77;

(c) the general requirements for the drafting of test reports by technical services.

2. Type-approval procedure

When receiving an application for vehicle type-approval, the approval authority shall:

(a) verify that all EU type-approval certificates issued pursuant to the regulatory acts which are applicable for vehicle type-approval cover the type of vehicle and correspond to the prescribed requirements;

(b) make sure that the vehicle specifications and data contained in Part I of the vehicle information document are included in the data in the information packages and in the EU type-approval certificates issued in accordance with the relevant regulatory acts;

(c) when an item number in Part I of the information document is not included in the information package as provided for in any of the regulatory acts, confirm that the relevant part or characteristic conforms to the particulars in the information folder;

(d) on a selected sample of vehicles from the type to be approved carry out or arrange to be carried out inspections of vehicle parts and systems to verify that the vehicle or vehicles are built in accordance with the relevant data contained in the authenticated information package in respect of the relevant EU type-approval certificates;

(e) carry out or arrange to be carried out relevant installation checks in respect of separate technical units, where applicable;

(f) carry out or arrange to be carried out necessary checks in respect of the presence of the devices provided for in notes 1 and 2 of Part I of Annex IV, where applicable;

(g) carry out or arrange to be carried out necessary checks in order to ensure that the requirements set out in note 5 of Part I of Annex IV are fulfilled.

3. Combination of technical specifications

The number of vehicles to be submitted shall be sufficient to permit the proper check of the various combinations to be type-approved according to the following criteria:

Technical specifications	Vehicle category									
	M_1	M_2	M_3	N_1	N_2	N_3	O_1	O_2	O_3	O_4
Engine	X	X	X	X	X	X	—	—	—	—
Gear box	X	X	X	X	X	X	—	—	—	—
Number of axles	—	X	X	X	X	X	X	X	X	X
Powered axles (number, position and interconnection)	X	X	X	X	X	X	—	—	—	—
Steered axles (number and position)	X	X	X	X	X	X	X	X	X	X
Body styles	X	X	X	X	X	X	X	X	X	X
Number of doors	X	X	X	X	X	X	X	X	X	X
Hand of drive	X	X	X	X	X	X	—	—	—	—
Number of seats	X	X	X	X	X	X	—	—	—	—
Level of equipment	X	X	X	X	X	X	—	—	—	—

4. **Specific provisions**

Where no approval certificates as provided for in the relevant regulatory acts are available, the approval authority shall:

(a) arrange for the necessary tests and checks as required by each of the relevant regulatory acts;

(b) verify that the vehicle conforms to the particulars in the vehicle information folder and that it meets the technical requirements of each of the relevant regulatory acts;

(c) carry out or arrange to be carried out relevant installation checks in respect of separate technical units, where applicable;

(d) carry out or arrange to be carried out necessary checks in respect of the presence of the devices provided for in notes 1 and 2 of Part I of Annex IV where applicable;

(e) carry out or arrange to be carried out necessary checks in order to ensure that the requirements set out in note 5 of Part I of Annex IV are fulfilled.

Appendix 1

Standards with which the entities referred to in Article 72 have to comply

1. Activities related to testing for type-approval to be carried out in accordance with the regulatory acts listed in Annex IV:

1.1. Category A (tests performed in own facilities):

EN ISO/IEC 17025:2005 on the general requirements for the competence of testing and calibration laboratories.

A technical service designated for category A activities may carry out or supervise the tests provided for in the regulatory acts for which it has been designated, in the facilities of a manufacturer or of its representative.

1.2. Category B (supervising of tests performed in the manufacturer's facilities or in the facilities of its representative):

EN ISO/IEC 17020:2012 on the general criteria for the operation of various types of bodies performing inspection.

Before performing or supervising any test in the facilities of a manufacturer or of its representative, the technical service shall verify that the tests facilities and measurement devices comply with the appropriate requirements of the standard referred to in point 1.1.

2. Activities related to Conformity of Production

2.1. Category C (procedure for the initial assessment and surveillance audits of the manufacturer's quality management system):

EN ISO/IEC 17021:2011 on the requirements for bodies providing audit and certification of management systems.

2.2. Category D (inspection or testing of production samples or supervision thereof):

EN ISO/IEC 17020:2012 on the general criteria for the operation of various types of bodies performing inspection.

Appendix 2

Procedure for the assessment of the technical services

1. **Objective and scope**

1.1. This Appendix establishes the conditions according to which the assessment procedure of the technical services shall be conducted by the competent authority referred to in Article 77.

1.2. Those requirements shall apply to all technical services, irrespective of their legal status (independent organisation, manufacturer or approval authority acting as technical service).

2. **Assessments**

The carrying out of an assessment shall be governed by the following:

(i) principle of independence, which is the basis for the impartiality and objectivity of the conclusions,

(ii) an evidence-based approach, which guarantees reliable and reproducible conclusions.

Auditors shall show trust and integrity. They shall respect confidentiality and discretion.

They shall report truthfully and accurately findings and conclusions.

3. **Skills required of the auditors**

3.1. The assessments may only be conducted by auditors having the technical and administrative knowledge necessary for such purposes.

3.2. The auditors shall have been trained specifically for assessment activities. In addition, they shall have the specific knowledge of the technical area in which the technical service will exercise its activities.

3.3. Without prejudice to points 3.1 and 3.2, the assessment referred to in Article 77 shall be conducted by auditors independent of the activities for which the assessment is conducted.

4. **Application for designation**

4.1. A duly authorised representative of the applicant technical service shall make a formal application to the competent authority that includes the following information:

(a) general features of the technical service, including corporate entity, name, addresses, legal status and technical resources;

(b) a detailed description, including curriculum vitae, of the personnel in charge of testing and of the managerial staff as evidenced by the skills both educational and professional;

(c) technical services which use virtual testing methods shall provide evidence of their ability to work in a Computer-Aided-x environment;

(d) general information concerning the technical service, including its activities, its relationship in a larger corporate entity, if any, and addresses of all its physical location(s) to be covered by the scope of designation;

(e) an agreement to fulfil the requirements for designation and the other obligations of the technical service as provided for in the relevant regulatory acts for which it is designated;

(f) a description of the conformity assessment services that the technical service undertakes in the framework of the relevant regulatory acts and a list of the regulatory acts for which the technical service applies for designation, including limits of capability, where applicable;

(g) a copy of the quality assurance manual of the technical service.

4.2. The competent authority shall review the adequacy of the information provided by the technical service.

4.3. The technical service shall notify to the approval authority any modifications to the information provided in accordance with point 4.1.

5. **Resource review**

The competent authority shall review its ability to carry out the assessment of the technical service, in terms of its own policy, its competence and the availability of suitable auditors and experts.

6. **Subcontracting the assessment**

6.1. The competent authority may subcontract parts of the assessment to another designation authority or ask for support from technical experts provided by other competent authorities. The subcontractors and experts have to be accepted by the applicant technical service.

6.2. The competent authority shall take into account accreditation certificates with adequate scope in order to complete its global assessment of the technical service.

7. **Preparation for assessment**

7.1. The competent authority shall formally appoint an assessment team. The competent authority shall ensure that the expertise brought to each assignment is appropriate. In particular, the team as a whole shall have both:

(a) appropriate knowledge of the specific scope for which designation is sought;

(b) sufficient understanding to reliably assess the competence of the technical service to operate within its scope of designation.

7.2. The competent authority shall clearly define the assignment given to the assessment team. The task of the assessment team is to review the documents collected from the applicant technical service and to conduct the on-site assessment.

7.3. The competent authority shall agree, together with the technical service and the assigned assessment team, to the date and timetable for the assessment. However, it remains the responsibility of the competent authority to pursue a date that is in accordance with the surveillance and reassessment plan.

7.4. The competent authority shall ensure that the assessment team is provided with the appropriate criteria documents, previous assessment records, and the relevant documents and records of the technical service.

8. **On-site assessment**

The assessment team shall conduct the assessment of the technical service at the premises of the technical service from which one or more key activities are performed and, where relevant, shall perform eyewitness assessment at other selected locations where the technical service operates.

9. **Analysis of findings and assessment report**

9.1. The assessment team shall analyse all relevant information and evidence gathered during the document and record review and the on-site assessment. This analysis shall be sufficient to allow the team to determine the extent of competence and conformity of the technical service with the requirements for designation.

9.2. The competent authority's reporting procedures shall ensure that the following requirements are fulfilled.

9.2.1. A meeting shall take place between the assessment team and the technical service prior to leaving the site. At this meeting, the assessment team shall provide a written and/or oral report on its findings obtained from the analysis. An opportunity shall be provided for the technical service to ask questions about the findings, including non-conformities, if any, and their basis.

9.2.2. A written report on the outcome of the assessment shall be promptly brought to the attention of the technical service. This assessment report shall contain comments on competence and conformity, and shall identify non-conformities, if any, to be resolved in order to conform to all of the requirements for designation.

9.2.3. The technical service shall be invited to respond to the assessment report and to describe the specific actions taken or planned to be taken, within a specific period of time, to resolve any identified non-conformities.

9.3. The competent authority shall ensure that the responses of the technical service are sufficient and effective to resolve non-conformities. If the technical service responses are found to be insufficient, further information shall be requested. Additionally, evidence of effective implementation of actions taken may be requested, or a follow-up assessment may be carried out, to verify effective implementation of corrective actions.

9.4. The assessment report shall include at least the following:

(a) unique identification of the technical service;

(b) date(s) of the on-site assessment;

(c) name(s) of the auditors(s) and/or experts involved in the assessment;

(d) unique identification of all premises assessed;

(e) proposed scope of designation that was assessed;

(f) a statement on the adequacy of the internal organisation and procedures adopted by the technical service supporting its competence, as determined through its fulfilment of the requirements for designation;

(g) information on resolving all non-conformities;

(h) a recommendation of whether the applicant should be designated or confirmed as technical service and, if so, the scope of designation.

10. **Granting or confirming a designation**

10.1. The approval authority shall, without undue delay, make the decision on whether to grant, confirm or extend a designation on the basis of the assessment report(s) and any other relevant information.

10.2. The approval authority shall provide a certificate to the technical service. This certificate shall identify the following:

(a) the identity and logo of the approval authority;

(b) the unique identity of the designated technical service;

(c) the effective date of granting of designation and the expiry date;

(d) a brief indication of or a reference to the scope of designation (relevant regulatory acts or part of them);

(e) a statement of conformity and a reference to this Regulation.

11. **Reassessment and surveillance**

11.1. Reassessment is similar to an initial assessment except that experience gained during previous assessments shall be taken into account. Surveillance on-site assessments are less comprehensive than reassessments.

11.2. The competent authority shall design its plan for reassessment and surveillance of each designated technical service so that representative samples of the scope of designation are assessed on a regular basis.

The interval between on-site assessments, whether reassessment or surveillance, depends on the proven stability that the technical service has reached.

11.3. Where, during surveillance or reassessments, non-conformities are identified, the competent authority shall define strict time limits for corrective actions to be implemented.

11.4. Where the corrective or improvement actions have not been taken within the agreed timeframe or are not deemed to be sufficient, the competent authority shall adopt appropriate measures, such as conducting a further assessment, or suspending or withdrawing the designation for one or more of the activities for which the technical service has been designated.

11.5. Where the competent authority decides to suspend or withdraw the designation of a technical service, it shall inform the technical service of its decision by registered mail. In any case, the competent authority shall adopt all the necessary measures to ensure the continuity of the activities already undertaken by the technical service.

12. **Records on designated technical services**

12.1. The competent authority shall maintain records on technical services to demonstrate that the requirements for designation, including competence, have been effectively fulfilled.

12.2. The competent authority shall keep the records on technical services secure to ensure confidentiality.

12.3. Records on technical services shall include at least the following:

(a) relevant correspondence;

(b) assessment records and reports;

(c) copies of designation certificates.

Appendix 3

General requirements concerning the format of the test reports

1. For each of the regulatory acts listed in Part I of Annex IV, the test report shall comply with Standard EN ISO/IEC 17025:2005. In particular, it shall include the information referred to in point 5.10.2, including note 1 of that Standard.

2. The template of the test reports shall be laid down by the approval authority in accordance with its rules of good practice.

3. The test report shall be drafted in the official language of the Union determined by the approval authority.

4. The test report shall include at least the following information:

   (a) the identification of the vehicle, component or separate technical unit tested;

   (b) a detailed description of the vehicle, component or separate technical unit characteristics in connection with the regulatory act;

   (c) the results of the measurements specified in the relevant regulatory acts and, where required, the limits or thresholds which are to be met;

   (d) regarding each measurement referred to in point (c), the relevant decision of passed or failed;

   (e) a detailed statement of compliance with the various provisions which are to be met, i.e. those provisions that do not require measurements.

   As an example, the test report should include a statement that reflects the fulfilment of the requirements set out in Part B of Annex II to Regulation (EU) No 19/2011 as follows: 'The place of stamping the vehicle identification number fulfils the requirements of Part B of Annex II';

   (f) where test methods other than those prescribed in the regulatory acts are permitted, the report shall include a description of the test method used for performing the test.

   (g) pictures taken during testing, the number of which shall be decided by the approval authority.

   In the case of virtual testing, screen prints or other suitable evidence may replace pictures;

   (h) conclusions drawn up;

   (i) where opinions and interpretations have been made, they shall be documented properly and marked as such in the test report.

5. Where the tests are conducted on a vehicle, component or technical unit that combines a number of most unfavourable features with regard to the required level of performance to be achieved, i.e. the worst-case, the test report shall include a reference stating how the selection has been made by the manufacturer in agreement with the approval authority.

ANNEX VI

MODELS OF THE EU TYPE-APPROVAL CERTIFICATE

MODEL A

(to be used for EU type-approval of a vehicle)

Maximum format: A4 (210 × 297 mm)

EU TYPE-APPROVAL CERTIFICATE

Stamp of approval authority

Date of expiry of this certificate: dd/mm/yyyy([4])

Communication concerning:	Of a type of:
— EU type-approval ([1]) — extension of EU type-approval ([1]) — refusal of EU type-approval ([1]) — withdrawal of EU type-approval ([1])	— complete vehicle ([1]) — completed vehicle ([1]) — incomplete vehicle ([1]) — vehicle with complete and incomplete variants ([1]) — vehicle with completed and incomplete variants ([1])

issued in accordance with Regulation (EU) No XXX/201X, as last amended by Regulation (EC) No. …/… ([1]).

EU type-approval number:

Reason for extension:

SECTION I

1.1. Make (trade name of manufacturer):

1.2. Type:

1.2.1. Commercial name(s) ([2]):

01.3. Means of identification of type, if marked on the vehicle:

1.3.1. Location of that marking:

1.4. Category of vehicle ([3]):

([1]) Delete where not applicable.

([2]) If not available at the time of granting the type-approval, this item shall be completed at the latest when the vehicle is introduced on the market.

([3]) As defined in Annex II, Part A, of Regulation (EU) …/….

([4]) To be indicated in accordance with Article 33(1) of Regulation (EU) …/….

1.5. Company name and address of manufacturer of the complete/completed vehicle ([1]):

1.5.1 For multi-stage type-approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle:

1.8. Name(s) and address(es) of assembly plant(s):

1.9. Name and address of the manufacturer's representative (if any):

SECTION II

The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the type of vehicle ((a) sample(s) having been selected by the approval authority and submitted by the manufacturer as prototype(s) of the type of vehicle) and that the attached test results are applicable to the type of vehicle.

1. For complete and completed vehicles/variants ([1]):

   The type of vehicle meets/does not meet ([1]) the technical requirements of all the relevant regulatory acts as prescribed in Annex IV ([2]) to Regulation (EU) No XXX/201X.

1.1. Restrictions of validity ([1])([3]):…….

1.2. Waivers applied ([1])([3])([4]): …….

1.2.1. Reasons for the waivers ([1])([4]): ……

1.2.2. Alternative requirements ([1])([4]): ……

2. For incomplete vehicles/variants ([1]):

   The type of vehicle meets/does not meet ([1]) the technical requirements of the regulatory acts listed in the table on side 2.

3. The approval is granted/refused/withdrawn ([1]).

4. The approval is granted in accordance with Article 37 of Regulation (EU) No XXX/201X and the validity of the approval is thus limited to dd/mm/yy.

(Place)	(Signature)	(Date)

([1]) Delete where not applicable.
([2]) See side 2.
([3]) Applicable only for type-approval of a vehicle as an exemption for new technology or new concept, pursuant to Article 37 of Regulation (EU) No XXX/201X.
([4]) Applicable only for vehicle type-approval of a national small series, pursuant to Article 40 of Regulation (EU) No XXX/201X.

Attachments: Information package

Test results (see Annex VIII to Regulation (EU) No XXX/201X)

Name(s) and specimen(s) of the signature(s) of the person(s) authorised to sign certificates of conformity and a statement of their position in the company

NB:

– If this model is used for type-approval of a vehicle as an exemption for new technology or new concept, pursuant to Article 37 of Regulation (EU) No XXX/201X, the heading of the certificate shall read 'PROVISIONAL CERTIFICATE OF CONFORMITY VALID ONLY ON THE TERRITORY OF …(MS)'.

  The provisional certificate of conformity shall also display in its title, instead of 'COMPLETE VEHICLES', the following: 'FOR COMPLETE VEHICLES, TYPE-APPROVED IN ACCORDANCE WITH ARTICLE 37 OF REGULATION (EU) NO XXX/201X OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF [DD OF MONTH OF YEAR] ON THE APPROVAL AND MARKET SURVEILLANCE OF MOTOR VEHICLES AND THEIR TRAILERS, AND OF SYSTEMS, COMPONENTS AND SEPARATE TECHNICAL UNITS INTENDED FOR SUCH VEHICLES (PROVISIONAL APPROVAL)', in accordance with Article 37 of Regulation (EU) No XXX/201X.

– If this model is used for vehicle type-approval for a national small series, pursuant to Article 40 of Regulation (EU) No XXX/201X, the heading of the certificate shall read 'NATIONAL SMALL SERIES VEHICLE TYPE-APPROVAL CERTIFICATE'. The text shall specify the nature of the exemptions, the reasons which support them and the alternative requirements referred to in Article 40(2) of Regulation (EU) No XXX/201X.

EU TYPE-APPROVAL CERTIFICATE

Side 2

This EU type-approval is, where incomplete and completed vehicles, variants or versions are concerned, based on the approval(s) for incomplete vehicles listed as follows:

Stage 1: Manufacturer of the base vehicle:

EU type-approval number:

Dated:

Applicable to variants or versions (as appropriate):

Stage 2: Manufacturer:

EU type-approval number:

Dated:

Applicable to variants or versions (as appropriate):

Stage 3: Manufacturer:

EU type-approval number:

Dated:

Applicable to variants or versions (as appropriate):

In the case where the approval includes one or more incomplete variants or versions (as appropriate), list those variants or versions (as appropriate) which are complete or completed.

Complete/completed variant(s):

List of requirements applicable to the approved incomplete type of vehicle, variant or version (as appropriate, taking account of the scope and latest amendment to each of the regulatory acts listed in the following table).

Item	Subject	Regulatory act reference	Last amended	Applicable to variant or, if need be, to version
(List only subjects for which an EU type-approval exists.)				

In the case of special purpose vehicles, exemptions granted or special provisions applied pursuant to Annex IV, Part III, and exemptions granted pursuant to Article 37:

Regulatory act reference	Item number	Kind of approval and nature of exemption	Applicable to variant or, if need be, to version

Appendix

List of regulatory acts with which the type of vehicle complies

(to be filled in only in the case of type-approval in accordance with Article 26(6))

Subject ([1])	**Regulatory act reference ([1])**	**As amended by**	**Applicable to variants**
1A Sound Level			
2. Emissions			
3. Fuel tanks/Rear protective devices			
…			

([1]) In accordance with Annex IV to this Regulation.

MODEL B

(To be used for type-approval of a vehicle with regard to a system)

Maximum format: A4 (210 × 297 mm)

EU TYPE-APPROVAL CERTIFICATE

Stamp of approval authority

Communication concerning:

— EU type-approval ([1])	}	of a type of system/type of a vehicle with regard to a system ([1])
— extension of EU type-approval ([1])		
— refusal of EU type-approval ([1])		
— withdrawal of EU type-approval ([1])		

issued in accordance with Regulation (EU) No XXX/201X / Regulation (EC) No …/… ([1]), as last amended by Regulation (EC) No …/… ([1]).

EU type-approval number:

Reason for extension:

SECTION I

1.1. Make (trade name of manufacturer):

1.2. Type:

1.2.1. Commercial name(s) (if available):

1.3. Means of identification of type, if marked on the vehicle ([2]):

1.3.1. Location of that marking:

1.4. Category of vehicle ([3]):

1.5. Company name and address of manufacturer:

1.8. Name(s) and address(es) of assembly plant(s):

1.9. Name and address of the manufacturer's representative (if any):

([1]) Delete where not applicable.

([2]) If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the documentation by the symbol '?' (e.g. ABC??123??).

([3]) As defined in Annex II, A, of Regulation (EU) …/…..

SECTION II

1. Additional information (where applicable): see Addendum.
2. Technical service responsible for carrying out the tests:
3. Date of test report:
4. Number of test report:
5. Remarks (if any): see Addendum.
6. Place:
7. Date:
8. Signature:

Attachments: Information package

Test report

Addendum

to EU type-approval certificate No …

1. Additional information

1.1. […]:

1.1.1. […]:

[…]

2. Type-approval number of each component or separate technical unit installed on the type of vehicle to comply with Regulation (EU) …/….

2.1. […]:

3. Remarks

3.1. […]:

MODEL C

(to be used for component/separate technical unit type-approval)

Maximum format: A4 (210 × 297 mm)

EU TYPE-APPROVAL CERTIFICATE

Stamp of approval authority

Communication concerning:

— EU type-approval ([1])	} of a type of component/separate technical unit([1])
— extension of EU type-approval ([1])	
— refusal of EU type-approval ([1])	
— withdrawal of EU type-approval ([1])	

issued in accordance with Regulation (EU) No XXX/201X / Regulation (EC) No …/… ([1]), as last amended by Regulation (EC) No …/… ([1]).

EU type-approval number:

Reason for extension:

SECTION I

1.1. Make (trade name of manufacturer):

1.2. Type:

1.3. Means of identification of type, if marked on the component/separate technical unit ([1]) ([2]):

1.3.1. Location of that marking:

1.5. Company name and address of manufacturer:

1.7. In the case of components and separate technical units, location and method of affixing of the EC approval mark:

1.8. Name(s) and address(es) of assembly plant(s):

1.9. Name and address of the manufacturer's representative (if any):

([1]) Delete where not applicable.

([2]) If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the communication by the symbol '?' (e.g. ABC??123??).

SECTION II

1. Additional information (where applicable): see Addendum.
2. Technical service responsible for carrying out the tests:
3. Date of test report:
4. Number of test report:
5. Remarks (if any): see Addendum.
6. Place:
7. Date:
8. Signature:

Attachments: Information package
Test report

Addendum

to EU type-approval certificate No …

1. Additional information

1.1. […]:

1.1.1. […]:

[…]

2. Restriction of use of the device (if any)

2.1. […]:

3. Remarks

3.1. […]:

MODEL D

(to be used for harmonised individual vehicle approval pursuant to Article 42)

Maximum format: A4 (210 × 297 mm)

EU INDIVIDUAL APPROVAL CERTIFICATE

e(4)	Name, address, phone number and e-mail-address of the approval authority

Communication concerning EU individual approval of a vehicle in accordance with Article 42 of Regulation (EU) No XXX/201X

SECTION I

1.1. Make (trade name of manufacturer): …

1.2.	Type:	Variant:	Version:

1.2.1. Commercial name: …

1.4. Category of vehicle ([2]): …

1.5. Company name and address of the manufacturer: …

1.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

1.9. Name and address of the manufacturer's representative (if any): …

1.10. Vehicle identification number: …

The undersigned [... ...*name and position*] hereby certifies that the vehicle submitted for approval on […… *date of application*] by […… *Name and address of the applicant]* is granted approval in accordance with Article 42 of Regulation (EU) No XXX/201X. In witness whereof, the following approval number has been allocated: …

The vehicle complies with Appendix 2 of Annex IV to Regulation (EU) No XXX/201X. It can be permanently registered without further approval in Member States having right/left hand traffic ([1]) and using metric/imperial ([1]) units for the speedometer.

([1]) Delete where not applicable.
([2]) As defined in Annex II, A, of Regulation (EU) No XXX/201X.
([4]) Distinguishing number of the Member State issuing the individual vehicle approval certificate: (see section 1 of point 1 of Annex VII to Regulation (EU) No XXX/201X).

(Place) (Date)	(Signature ([3]))	(Stamp of the approval authority)

[…]	[…]	[…]
		Two photos ([5]) of the vehicle (min resolution 640 x 480 pixels, ~7 x 10 cm)

([3]) Or visual representation of an 'advanced electronic signature' in accordance with Directive 1999/93/EC, including data for verification.
([5]) One ¾ front, one ¾ rear.

SECTION II

General construction characteristics

1. Number of axles: …and wheels: …
1.1. Number and position of axles with twin wheels: …
3. Powered axles (number, position, interconnection): …

Main dimensions

4. Wheelbase ([a]): … mm
4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm
5. Length: … mm
6. Width: … mm
7. Height: … mm

Masses

13. Mass of the vehicle in running order: …kg ([b])
16. Technically permissible maximum masses
16.1. Technically permissible maximum laden mass: … kg
16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.
16.4. Technically permissible maximum mass of the combination: … kg
18. Technically permissible maximum towable mass in case of:
18.1. Drawbar trailer: … kg
18.2. Semi-trailer: …kg
18.3. Centre-axle trailer: …kg
18.4. Unbraked trailer: … kg
19. Technically permissible maximum static vertical mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …
21. Engine code as marked on the engine: …
22. Working principle: …
23. Pure electric: yes/no ([1])
23.1. Hybrid [electric] vehicle: yes/no ([1])
24. Number and arrangement of cylinders
25. Engine capacity: …cm^3
26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([1])
26.1. Mono fuel/Bi fuel/Flex fuel ([1])
27. Maximum net power ([c]): … kW at … min^{-1} or maximum continuous rated power (electric motor) … kW ([1])

Maximum speed

29. Maximum speed: …km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm
35. Tyre/wheel combination: …

Bodywork

38. Code for bodywork ([d]): …

40. Colour of vehicle ([e]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([f]): …

42.1. Seat(s) designated for use only when the vehicle is stationary: …

42.3. Number of wheelchair user accessible position: …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

Environmental performances

46. Sound level

Stationary: …dB(A) at engine speed: …min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([g]): Euro …

Other legislation: …

49. CO_2 emissions/fuel consumption/electric energy consumption ([h]):

1. all power train, except pure electric vehicles

	CO_2 emissions	**Fuel consumption**
Combined:	… g/km	… l/100 km/m^3/100 km ([1])
Weighted, combined	… g/km	… l/100 km

2. pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([1])) …Wh/km

52. Remarks: …

53. Additional information: mileage ([2]), …

Explanatory notes to model D

([1]) Delete where not applicable.
([2]) Not compulsory.
([a]) This entry shall be completed only where the vehicle has two axles.
([b]) This mass is the actual mass of the vehicle in the conditions referred to in point 2.6 of Annex I to Regulation (EU) No XXX/201X.
([c]) For hybrid electric vehicles, indicate both power outputs.
([d]) The codes described in section C of Annex II shall be used.
([e]) Indicate only the basic colour(s): white, yellow, orange, red, violet, blue, green, grey, brown or black.
([f]) Excluding seats designated for use only when the vehicle is stationary and the number of wheelchair positions.
([g]) Add the number of the Euro level and, if appropriate, the character corresponding to the provisions used for type-approval.
([h]) Repeat for the various fuels which can be used.

ANNEX VII

EU TYPE-APPROVAL CERTIFICATE NUMBERING SYSTEM ([1])

1. The EU type-approval number shall consist of four sections for whole-vehicle type-approvals and five sections for system, component, and separate technical unit type-approvals as follows. In all cases, the sections shall be separated by the '*' character.

Section 1: The lower case letter 'e' followed by the distinguishing number of the Member State granting the EU type-approval:

1	for Germany;	19	for Romania;
2	for France;	20	for Poland;
3	for Italy;	21	for Portugal;
4	for the Netherlands;	23	for Greece;
5	for Sweden;	24	for Ireland;
6	for Belgium;	25	for Croatia;
7	for Hungary;	26	for Slovenia;
8	for the Czech Republic;	27	for Slovakia;
9	for Spain;	29	for Estonia;
11	for the United Kingdom;	32	for Latvia;
12	for Austria;	34	for Bulgaria;
13	for Luxembourg;	36	for Lithuania;
17	for Finland;	49	for Cyprus;
18	for Denmark;	50	for Malta.

Section 2: The number of the base directive or regulation

In the case of EU type-approval for systems, components or separate technical units covered by the implementing measures referred to in Regulation (EC) No 661/2009, the base regulation reference shall be the regulation number of the implementing act adopted pursuant to Article 14(1)(a) to (e) of Regulation (EC) No 661/2009.

Section 3: The number of the latest amending directive or regulation, including implementing acts applicable to the type-approval in accordance with the following indents. However, in case such amending directive or regulation or relevant implementing act does not yet exist, the number referred to in section 2 is repeated in section 3:

— in the case of whole-vehicle type-approvals, this means the latest directive or regulation amending an Article (or Articles) of Regulation (EU) No XXX/201X,

([1]) Components and separate technical units shall be marked in accordance with the provisions of the relevant regulatory acts.

— in the case of whole-vehicle type-approvals granted in accordance with the procedure described in Article 39, this means the latest directive or regulation amending an Article or Articles of Regulation (EU) No XXX/201X, except that the two first digits (e.g. 20) are replaced by the letters KS in block capitals,

— this means the latest directive or regulation containing the actual provisions with which the system, component or technical unit conforms,

— this means the latest regulation, containing amendments to implementing measures of Regulation (EC) No 661/2009, with which a system, component or technical unit complies,

— should a directive or regulation, including their implementing acts, contain different technical requirements to be applied from specific dates, section 3 shall be followed with an alphabetical character to clearly identify against which technical requirements the approval was granted. Where different vehicle categories are concerned, the character may also refer to a specific vehicle category.

Section 4: A four-digit sequential number (with leading zeros where applicable) for EU whole-vehicle type-approvals, or four or five digits for type-approval pursuant to a separate directive or regulation to denote the base type-approval number. The sequence shall start from 0001 for each basic directive or regulation.

Section 5: A two-digit sequential number (with leading zeros where applicable) to denote the extension. The sequence shall start from 00 for each base approval number.

2. In the case of a whole-vehicle type-approval, section 2 shall be omitted.

However, in the case of a national type-approval granted for vehicles produced in small series pursuant to Article 40, section 2 shall be replaced by the letters NKS in block capitals

3. On the vehicle's statutory plate(s) only, section 5 shall be omitted.

4. Layouts of the type-approval numbers.

4.1. Example of a third type-approval (where no extension has yet been granted) granted by France

(i) pursuant to Commission Regulation (EU) No 1008/2010[(2)] (windscreen wiper and washer systems):

e2*1008/2010*1008/2010*00003*00

(ii) pursuant to Commission Regulation (EU) No 19/2011[(3)] as amended by Commission Regulation (EU) No 249/2012[(4)] (statutory markings):

e2*19/2011*249/2012*0003*00

4.2. Example of the second extension to the fourth vehicle type-approval granted by the United Kingdom:

e11*2007/2046*0004*02

4.3. Example of a EU whole-vehicle type-approval granted to a vehicle produced in small series by Luxembourg, pursuant to Article 39:

e13*KS07/46*0001*00.

4.4. Example of a national type-approval granted to a vehicle produced in small series by the Netherlands, pursuant to Article 40:

e4*NKS*0001*00.

4.5. Example of the type-approval number to be stamped on the vehicle's statutory plate(s):

e11*2007/2046*0004.

5. Annex VII does not apply to type-approvals granted in accordance with UNECE regulations listed in Annex IV, as the relevant numbering system is provided for in the respective UNECE regulations. However, Annex VII applies to EU type-approvals granted under Regulation (EC) No 661/2009 which are based on UNECE regulations (i.e. incorporating new technologies, EU type-approved components and STUs, virtual testing and self-testing). In this case, the following numbering system applies:

Section 1: as in point 1 above

Section 2: '661/2009' (Regulation (EC) No 661/2009)

Section 3: First portion is the UNECE Regulation No, followed by 'R-', the second portion is the series of amendments or '00' if it is the original series, followed by '-' and the third portion is the supplement level (with leading zeros where applicable) or '00' when there is no supplement to the relevant series.

Section 4: as in point 1 above

Section 5: as in point 1 above

Examples:

e1*661/2009*13-HR-10-05*00001*00
(type-approval granted by Germany, according to UNECE Regulation No 13-H, 10 series of amendments, supplement level 5, first approval issued, no extensions)

e25*661/2009*28R-00-03*0123*05
(granted by Croatia, according to UNECE Regulation No 28, original series of amendments, supplement 3, 123rd approval issued, 5th extension)

---

(2) Commission Regulation (EU) No 1008/2010 of 9 November 2010 concerning type-approval requirements for windscreen wiper and washer systems of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 292, 10.11.2010, p. 2).

(3) Commission Regulation (EU) No 19/2011 of 11 January 2011 concerning type-approval requirements for the manufacturer's statutory plate and for the vehicle identification number of motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 8, 12.1.2011, p. 1).

(4) Commission Regulation (EU) No 249/2012 of 21 March 2012 amending Regulation (EU) No 19/2011 as regards type-approval requirements for the manufacturer's statutory plate of motor vehicles and their trailers (OJ L 82, 22.3.2012, p. 1).

Appendix

EU type-approval mark of a component or a separate technical unit

1. The EU type-approval mark of a component or a separate technical unit shall consist of the following:

1.1. A rectangle surrounding the lower-case letter ‘e’ followed by the distinguishing letter(s) or number of the Member State which has granted the EU type-approval to a component or a separate technical unit:

1	for Germany;	19	for Romania;
2	for France;	20	for Poland;
3	for Italy;	21	for Portugal;
4	for the Netherlands;	23	for Greece;
5	for Sweden;	24	for Ireland;
6	for Belgium;	25	for Croatia;
7	for Hungary;	26	for Slovenia;
8	for the Czech Republic;	27	for Slovakia;
9	for Spain;	29	for Estonia;
11	for the United Kingdom;	32	for Latvia;
12	for Austria;	34	for Bulgaria;
13	for Luxembourg;	36	for Lithuania;
17	for Finland;	49	for Cyprus;
18	for Denmark;	50	for Malta.

1.2. In the vicinity of the rectangle the ‘base approval number’ contained in section 4 of the type-approval number preceded by the two figures indicating the sequence number assigned to the latest amendment to the relevant separate directive or regulation.

1.3. An additional symbol or symbols located above the rectangle, enabling certain characteristics to be identified, where specified in the relevant separate directives or regulations.

2. The component or separate technical unit type-approval mark is affixed to the separate technical unit or component in such a way as to be indelible and clearly legible.

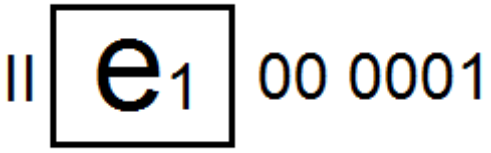
3. An example of a component or separate technical unit type-approval mark is contained in the Addendum.

4. This Appendix does not apply to type-approvals granted in accordance with the UNECE regulations listed in Annex IV, as the relevant arrangements of approval marks are provided for in the respective UNECE regulations. However, this Appendix applies to EU type-approvals for components and separate technical units granted under Regulation (EC) No 661/2009 that are based on UNECE regulations (i.e. components or separate technical units incorporating new technologies). In this case, the following arrangement of markings applies:

The distinguishing type-approval marking shall be as prescribed in the relevant UNECE regulation taking the following into account:

When a circle surrounding the letter ‘E’ is prescribed, this shall be not a circle, but a rectangle. Its height (a) shall at least correspond to the prescribed diameter size and its width shall exceed that value (i.e. > a). Instead of the upper-case letter ‘E’, the lower-case letter ‘e’ shall be used, followed by the distinguishing number of the Member State that has granted the EU type-approval of the component or separate technical unit.

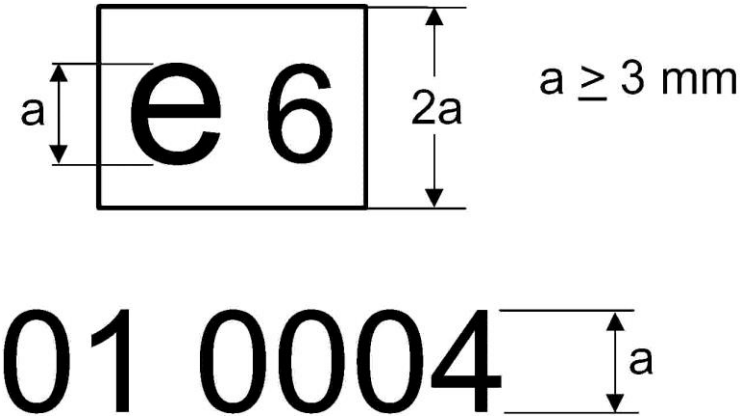
Example:



(granted by Germany, based on UNECE Regulation No 28, original series, first approval granted, for a Class II audible warning device incorporating new technologies)”

Addendum to the Appendix

Example of an EU type-approval mark of a component or separate technical unit



Legend: the above EU type-approval mark of a component is for a EU type-approval granted by Belgium under number 0004. 01 is a sequential number denoting the level of technical requirements to which this component fulfils. The sequential number is attributed in accordance with the relevant separate directive or regulation.

NB: The additional symbols are not shown on this example.

ANNEX VIII

TEST RESULTS

(To be completed by the approval authority and appended to the vehicle EU type-approval certificate)

In each case, the information must make clear to which variant and version it is applicable. One version may not have more than one result. However, a combination of several results per version indicating the worst case is permissible. In that case, a note shall state that for items marked (*) only worst case results are given.

1. Results of the sound level tests

Number of the base regulatory act and latest amending regulatory act applicable to the approval. In case of a regulatory act with two or more implementation stages, indicate also the implementation stage:

Variant/Version:	…	…	…
Moving (dB(A)/E):	…	…	…
Stationary (dB(A)/E):	…	…	…
at (min^{-1}):	…	…	…

2. Results of the exhaust emission tests

2.1. Emissions from motor vehicles tested under the test procedure for light-duty vehicles

Indicate the latest amending regulatory act applicable to the approval. In case the regulatory act has two or more implementation stages, indicate also the implementation stage:

Fuel(s) ([a]) … (diesel, petrol, LPG, NG, Bi-fuel: petrol/NG, LPG, Flex-fuel: petrol/ethanol, NG/H2NG…)

2.1.1. Type 1 test ([b]) ([c]) (vehicle emissions in the test cycle after a cold start)

Variant/Version:	…	…	…
CO (mg/km)	…	…	…
THC (mg/km)	…	…	…
NMHC (mg/km)	…	…	…
NO_x (mg/km)	…	…	…
THC + NO_x (mg/km)	…	…	…
Mass of particulate matter (PM) (mg/km)	…	…	…
Number of particles (P) (#/km) ([1])	…	…	…

2.1.2. Type 2 test ([b]) ([c]) (emissions data required at type-approval for roadworthiness purposes)

Type 2, low idle test:

Variant/Version:	…	…	…
CO (% vol.)	…	…	…
Engine speed (min^{-1})	…	…	…
Engine oil temperature (°C)	…	…	…

Type 2, high idle test:

Variant/Version:	…	…	…
CO (% vol.)	…	…	…
Lambda value	…	…	…
Engine speed (min^{-1})	…	…	…
Engine oil temperature (°C)	…	…	…

2.1.3. Type 3 test (emissions of crankcase gases): …

2.1.4. Type 4 test (evaporative emissions): …g/test

2.1.5. Type 5 test (durability of anti-pollution control devices):

— Ageing distance covered (km)(e.g. 160 000 km): …

— Deterioration factor DF: calculated/fixed ([2])

— Values:

Variant/Version:	…	…	…
CO	…	…	…
THC	…	…	…
NMHC	…	…	…
NO_x	…	…	…
THC + NO_x	…	…	…
Mass of particulate matter (PM)	…	…	…
Number of particles (P) ([1])	…	…	…

2.1.6. Type 6 test (average emissions at low ambient temperatures):

Variant/Version:	…	…	…
CO (g/km)	…	…	…
THC (g/km)	…	…	…

2.1.7. OBD: yes/no ([2])

2.2. Emissions from engines tested under the test procedure for heavy-duty vehicles.

Indicate the latest amending regulatory act applicable to the approval. In case the regulatory act has two or more implementation stages, indicate also the implementation stage: …

Fuel(s) ([a]) … (diesel, petrol, LPG, NG, ethanol …)

2.2.1. Results of the ESC test ([1]) ([e]) ([f])

Variant/Version:	…	…	…
CO (mg/kWh)	…	…	…
THC (mg/kWh)	…	…	…
NO_x (mg/kWh)	…	…	…
NH_3 (ppm) ([1])	…	…	…
PM mass (mg/kWh)	…	…	…
PM number (#/kWh) ([1])	…	…	…

2.2.2. Result of the ELR test ([1])

Variant/Version:	…	…	…
Smoke value:…m^{-1}	…	…	…

2.2.3. Result of the ETC test ([e]) ([f])

Variant/Version:	…	…	…
CO (mg/kWh)	…	…	…
THC (mg/kWh)	…	…	…
NMHC (mg/kWh) ([1])	…	…	…
CH_4 (mg/kWh) ([1])	…	…	…
NO_x (mg/kWh)	…	…	…
NH_3 (ppm) ([1])	…	…	…
PM mass (mg/kWh)	…	…	…
PM number (#/kWh) ([1])	…	…	…

2.2.4. Idle test ([1])

Variant/Version:	…	…	…
CO (% vol.)	…	…	…
Lambda Value ([1])	…	…	…
Engine speed (min^{-1})	…	…	…
Engine oil temperature (°C)	…	…	…

2.3. Diesel smoke

Indicate the latest amending regulatory act applicable to the approval. In case the regulatory act has two or more implementation stages, indicate also the implementation stage:

2.3.1. Results of the test under free acceleration

Variant/Version:	…	…	…
Corrected value of the absorption coefficient (m^{-1})	…	…	…
Normal engine idling speed	…	…	…
Maximum engine speed	…	…	…
Oil temperature (min./max.)	…	…	…

3. Results of the CO_2 emission, fuel/electric energy consumption, and electric range tests

Number of the base regulatory act and the latest amending regulatory act applicable to the approval:

3.1. Internal combustion engines, including not externally chargeable hybrid electric vehicles (NOVC) ([1]) ([d])

Variant/Version:	…	…	…
CO_2 mass emission (urban conditions) (g/km)	…	…	…
CO_2 mass emission (extra-urban conditions) (g/km)	…	…	…
CO_2 mass emission (combined) (g/km)	…	…	…
Fuel consumption (urban conditions) (l/100 km) ([g])	…	…	…
Fuel consumption (extra-urban conditions) (l/100 km) ([g])	…	…	…
Fuel consumption (combined) (l/100 km) ([g])	…	…	…

3.2. Externally chargeable hybrid electric vehicles (OVC) ([1])

Variant/Version:	…	…	…
CO_2 mass emission (Condition A, combined) (g/km)	…	…	…
CO_2 mass emission (Condition B, combined) (g/km)	…	…	…
CO_2 mass emission (weighted, combined) (g/km)	…	…	…
Fuel consumption (Condition A, combined) (l/100 km) ([g])	…	…	…
Fuel consumption (Condition B, combined) (l/100 km) ([g])	…	…	…
Fuel consumption (weighted, combined) (l/100 km) ([g])	…	…	…
Electric energy consumption (Condition A, combined) (Wh/km)	…	…	…
Electric energy consumption (Condition B, combined) (Wh/km)	…	…	…
Electric energy consumption (weighted and combined) (Wh/km)	…	…	…
Pure electric range (km)	…	…	…

3.3. Pure electric vehicles ([1])

Variant/Version:	…	…	…
Electric energy consumption (Wh/km)	…	…	…
Range (km)	…	…	…

3.4. Hydrogen fuel cell vehicles ([1])

Variant/Version:	…	…	…
Fuel consumption (kg/100 km)	…	…	…

4. Results of the tests for vehicles fitted with eco-innovation(s) ([h1]) ([h2]) ([h3])

Variant/Version …							
Decision approving the eco-innovation ([h4])	Code of the eco-innovation ([h5])	1. CO_2 emissions of the baseline vehicle (g/km)	2. CO_2 emissions of the eco-innovation vehicle (g/km)	3. CO_2 emissions of the baseline vehicle under Type 1 test-cycle ([h6])	4. CO_2 emissions of the eco-innovation vehicle under Type 1 test-cycle (= 3.5.1.3)	5. Usage factor (UF) i.e. temporal share of technology usage in normal operation conditions	CO_2 emissions savings ((1 – 2) – (3 – 4))*5
xxxx/201x	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…
Total CO_2 emissions savings (g/km) ([h7])							…

4.1. General code of the eco-innovation(s) ([h8])

Explanatory notes

([1]) Where applicable.
([2]) Delete where not applicable.
([a]) Where restrictions for the fuel are applicable, indicate these restrictions (e.g. for natural gas the L range or the H range).
([b]) For bi-fuel vehicles, the table shall be repeated for both fuels.
([c]) For flex fuel vehicles, where the test is to be performed on both fuels, according to Figure I.2.4 of Annex I to Regulation (EC) No 692/2008, and for vehicles running on LPG or NG/Bio methane, either bi-fuel or mono-fuel, the table shall be repeated for the different reference gases used in the test, and an additional table shall display the worst results obtained. Where applicable, in accordance with points 1.1.2.4 and 1.1.2.5 of Annex I to Regulation (EC) No 692/2008, it shall be shown if the results are measured or calculated.
([d]) Repeat the table for each reference fuel tested.
([e]) For Euro VI, ESC shall be understood as WHSC and ETC as WHTC.
([f]) For Euro VI, if CNG and LPG fuelled engines are tested on different reference fuels, the table shall be reproduced for each reference fuel tested.
([g]) The unit "l/100 km" is replaced by "m 3 /100 km" for vehicles fuelled with NG and H2NG, and by "kg/100 km" for vehicles fuelled with hydrogen.
([h]) Eco-innovations.
([h1]) Repeat the table for each variant/version.
([h2]) Repeat the table for each reference fuel tested.
([h3]) Expand the table if necessary, using one extra row per eco-innovation.
([h4]) Number of the Commission decision approving the eco-innovation.
([h5]) Assigned in the Commission decision approving the eco-innovation.
([h6]) If a modelling methodology is applied instead of the type 1 test cycle, this value shall be the one provided by the modelling methodology.
([h7]) Sum of the CO_2 emissions savings of each individual eco-innovation.
([h8]) The general code of the eco-innovation(s) shall consist of the following elements, each separated by a blank space:
— Code of the approval authority as set out in Annex VII;
— Individual code of each eco-innovation fitted in the vehicle, indicated in chronological order of the Commission approval decisions.
E.g. the general code of three eco-innovations approved chronologically as 10, 15 and 16 and fitted to a vehicle certified by the German approval authority should be: "e1 10 15 16".

ANNEX IX

CERTIFICATE OF CONFORMITY

1. OBJECTIVES

The certificate of conformity is a statement delivered by the vehicle manufacturer to the buyer in order to assure him that the vehicle acquired complies with the legislation in force in the Union at the time it was produced.

The certificate of conformity also serves the purpose of enabling the competent authorities of the Member States to register vehicles without having to require the applicant to supply additional technical documentation.

2. GENERAL DESCRIPTION

2.1. The certificate of conformity shall include the following information:
(a) the Vehicle Identification Number;
(b) the date of manufacture of the vehicle;
(c) the exact technical characteristics of the vehicle (i.e. it is not permitted to mention any range of values in the various entries).

2.2. The certificate of conformity shall consist of two parts:

(a) SIDE 1, which consists of a statement of compliance by the manufacturer. The template for this statement shall be identical for all vehicle categories.

(b) SIDE 2, which is a technical description of the exact technical characteristics of the vehicle. Side 2 shall be adapted to each specific vehicle category.

2.3. The certificate of conformity shall be established in a maximum format A4 (210 × 297 mm) or a folder of maximum format A4.

2.4. Without prejudice to point 2.2.(b), the values and units provided in side 2 of the certificate of conformity shall be identical to those given in the type-approval documentation that the relevant regulatory acts require. In case of conformity of production checks, the values shall be verified according to the methods laid down in the relevant regulatory acts. The tolerances allowed in those regulatory acts shall be taken into account.

3. SPECIAL PROVISIONS

3.1. Model A of the certificate of conformity (complete vehicle) shall cover vehicles that can be used on the road without requiring any further stage of completion for their type-approval.

3.2. Model B of the certificate of conformity (completed vehicles) shall cover vehicles that have undergone a further stage of completion for their type-approval.

This is the normal result of the multi-stage type-approval (e.g. a bus built by a second stage manufacturer on a chassis built by a vehicle manufacturer).

The additional features that have been added during the multi-stage procedure shall be described briefly.

3.3. Model C of the certificate of conformity (incomplete vehicles) shall cover vehicles that need a further stage of completion for their approval (e.g. truck chassis).

Except for tractors for semi-trailers, certificates of conformity covering chassis-cab vehicles belonging to category N shall be of Model C.

PART I

COMPLETE AND COMPLETED VEHICLES

MODEL A1 — SIDE 1

COMPLETE VEHICLES

CERTIFICATE OF CONFORMITY

Side 1

The undersigned [… (*Full name and position*)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([a]): …

Version ([a]): …

0.2.1. Commercial name: …

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

0.9. Name and address of the manufacturer's representative (if any): …

0.10. Vehicle identification number: …

0.11 Date of manufacture: ……

conforms in all respects to the type described in approval (… *type-approval number including extension number*) issued on (… *date of issue*) and

can be permanently registered in Member States having right/left ([b]) hand traffic and using metric/imperial ([c]) units for the speedometer.([d])

(Place) (Date): …	(Signature): …

NB:

- If this model is used for type-approval of a vehicle as an exemption for new technology or new concept, pursuant to Article 37 of Regulation (EU) No XXX/201X, the heading of the certificate of conformity shall read 'PROVISIONAL CERTIFICATE OF CONFORMITY VALID ONLY ON THE TERRITORY OF …(MS)'.

  The provisional certificate of conformity shall also display in its title, instead of 'COMPLETE VEHICLES', the following: 'FOR COMPLETE VEHICLES, TYPE-APPROVED IN ACCORDANCE WITH ARTICLE 37 OF REGULATION (EU) NO XXX/201X OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF [DD OF MONTH OF YEAR] ON THE APPROVAL AND MARKET SURVEILLANCE OF MOTOR VEHICLES AND THEIR TRAILERS, AND OF SYSTEMS,

COMPONENTS AND SEPARATE TECHNICAL UNITS INTENDED FOR SUCH VEHICLES (PROVISIONAL APPROVAL)', in accordance with Article 37 of Regulation (EU) No XXX/201X.

MODEL A2 — SIDE 1

COMPLETE VEHICLES TYPE-APPROVED IN SMALL SERIES

[Year]	[Sequential number]

CERTIFICATE OF CONFORMITY

Side 1

The undersigned [… (*Full name and position*)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([a]): …

Version ([a]): …

0.2.1. Commercial name: …

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

0.9. Name and address of the manufacturer's representative (if any): …

0.10. Vehicle identification number: …

0.11. Date of manufacture: …….

conforms in all respects to the type described in approval (… *type-approval number including extension number*) issued on (… *date of issue*) and

can be permanently registered in Member States having right/left ([b]) hand traffic and using metric/imperial ([c]) units for the speedometer.([d])

(Place) (Date): …	(Signature): …

MODEL B — SIDE 1

COMPLETED VEHICLES

CERTIFICATE OF CONFORMITY

Side 1

The undersigned [… (*Full name and position*)] hereby certifies that the vehicle:

0.1. Make (Trade name of the manufacturer): …

0.2. Type: …

Variant ([a]): …

Version ([a]): …

0.2.1. Commercial name: …

0.2.2. For multi-stage type-approved vehicles, type-approval information of the base/previous stages vehicle (list the information for each stage):

Type: ……

Variant ([a]): ……..

Version ([a]): ……...

Type-approval number, extension number ……

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.5.1. For multi-stage type-approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle……

0.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

0.9. Name and address of the manufacturer's representative (if any): …

0.10. Vehicle identification number: …

0.11. Date of manufacture: …….

(a) has been completed and altered ([1]) as follows: … and

(b) conforms in all respects to the type described in approval (… *type-approval number, including extension number*) issued on (… *date of issue*) and

(c) can be permanently registered in Member States having right/left ([b]) hand traffic and using metric/imperial ([c]) units for the speedometer.([d])

(Place) (Date): …	(Signature): …

Attachments: Certificate of conformity delivered at each previous stage.

NB:

- If this model is used for type-approval of a vehicle as an exemption for new technology or new concept, pursuant to Article 37 of Regulation (EU) No XXX/2014, the heading of the certificate shall read 'PROVISIONAL CERTIFICATE OF CONFORMITY VALID ONLY ON THE TERRITORY OF …(MS)'.

The provisional certificate of conformity shall also display in its title, instead of 'COMPLETE VEHICLES', the following: 'FOR COMPLETE VEHICLES, TYPE-APPROVED IN ACCORDANCE WITH ARTICLE 37 OF REGULATION (EU) NO XXX/201X OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF [DD OF MONTH OF YEAR] ON THE APPROVAL AND MARKET SURVEILLANCE OF MOTOR VEHICLES AND THEIR TRAILERS, AND OF SYSTEMS, COMPONENTS AND SEPARATE TECHNICAL UNITS INTENDED FOR SUCH VEHICLES (PROVISIONAL APPROVAL)', in accordance with Article 37 of Regulation (EU) No XXX/201X.

SIDE 2

VEHICLE CATEGORY M_1

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

Masses

13. Mass in running order: … kg

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static vertical mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

Bodywork

38. Code for bodywork ([i]): …

40. Colour of vehicle ([j]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

42.1. Seat(s) designated for use only when the vehicle is stationary: …

42.3. Number of wheelchair user accessible position: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act : …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6(1)) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: … Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([m]):

1. All power train, except pure electric vehicles

	CO_2 emissions	Fuel consumption
Urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Extra-urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Combined:	… g/km	… l/100 km/m^3/100 km ([1])
Weighted, combined	… g/km	… l/100 km

2. Pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([1])) … Wh/km

Electric range … km

3. Vehicle fitted with eco-innovation(s): yes/no ([1])

3.1. General code of the eco-innovation(s) ([p1]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([p2]) (repeat for each reference fuel tested): …

Miscellaneous

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY M_2

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg etc.

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:
1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:
1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Bodywork

38. Code for bodywork ([i]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([1])

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

42.1. Seat(s) designated for use only when the vehicle is stationary: …

42.3. Number of wheelchair user accessible position: …

43. Number of standing places: …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: …

Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY M_3

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg etc.

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:
1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:
1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

30.2. Track of all other axles: … mm

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Bodywork

38. Code for bodywork ([i]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([1])

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

42.1. Seat(s) designated for use only when the vehicle is stationary: …

42.2. Number of passenger seating positions: … (lower deck) … (upper deck) (including the driver)

42.3. Number of wheelchair user accessible position: …

43. Number of standing places: …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: ESC

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …
Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_1

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

11. Length of the loading area: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

13.2. Actual mass of the vehicle: … kg

14. Mass of the base vehicle in running order: …kg ([1])([q])

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.2. Semi-trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Bodywork

38. Code for bodywork ([i]): …

40. Colour of vehicle ([j]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: …

Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([m]):

1. All power train except pure electric vehicles

	CO_2 emissions	Fuel consumption
Urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Extra-urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Combined:	… g/km	… l/100 km/m^3/100 km ([1])
Weighted, combined	… g/km	… l/100 km

2. Pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([1])) … Wh/km

Electric range … km

3. Vehicle fitted with eco-innovation(s): yes/no ([1])

3.1. General code of the eco-innovation(s) ([p1]): ……..

3.2. Total CO_2 emissions saving due to the eco-innovation(s) ([p2]) (repeat for each reference fuel tested): …….

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([l]):

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_2

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

11. Length of the loading area: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:

1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.2. Semi-trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Bodywork

38. Code for bodywork ([i]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …
Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: …

Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1 smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([l]):

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_3

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

11. Length of the loading area: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:

1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg etc.

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.2. Semi-trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Bodywork

38. Code for bodywork ([i]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: ESC

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([l]):

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORIES O_1 AND O_2

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

10. Distance between the centre of the coupling device and the rear end of the vehicle: … mm

11. Length of the loading area: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

13.2. Actual mass of the vehicle: … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc

19. Technically permissible maximum static mass on the coupling point of a semi-trailer or centre-axle trailer: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

30.2. Track of all other axles: … mm

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

34. Axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

Bodywork

38. Code for bodywork ([i]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([l]):

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORIES O_3 AND O_4

(complete and completed vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

10. Distance between the centre of the coupling device and the rear end of the vehicle: … mm

11. Length of the loading area: … mm

12. Rear overhang: … mm

Masses

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

13.2. Actual mass of the vehicle: …..kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:

1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg etc.

19. Technically permissible maximum static mass on the coupling point of a semi-trailer or centre-axle trailer: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

34. Axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

Bodywork

38. Code for bodywork ([i]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([l]):

51. For special purpose vehicles: designation in accordance with Annex II, section 5: …

52. Remarks ([n]): …

PART II

INCOMPLETE VEHICLES

MODEL C1 — SIDE 1

INCOMPLETE VEHICLES

CERTIFICATE OF CONFORMITY

Side 1

The undersigned [… (*Full name and position*)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([a]): …

Version ([a]): …

0.2.1. Commercial name: …

0.2.2. For multi-stage type-approved vehicles, type-approval information of the base/previous stages vehicle (list the information for each stage):

Type: ……

Variant ([a]): ……..

Version ([a]): ……...

Type-approval number, extension number ……..

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.5.1. For multi-stage type-approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle……

0.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

0.9. Name and address of the manufacturer's representative (if any): …

0.10. Vehicle identification number: …

0.11. Date of manufacture: ……

conforms in all respects to the type described in approval (… *type-approval number including extension number*) issued on (… *date of issue*) and

cannot be permanently registered without further approvals

(Place) (Date): …	(Signature): …

MODEL C2 — SIDE 1

INCOMPLETE VEHICLES TYPE-APPROVED IN SMALL SERIES

[Year]	[Sequential number]

CERTIFICATE OF CONFORMITY

Side 1

The undersigned [… (*Full name and position*)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([a]): …

Version ([a]): …

0.2.1. Commercial name: …

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.6. Location and method of attachment of the statutory plates: …

Location of the vehicle identification number: …

0.9. Name and address of the manufacturer's representative (if any): …

0.10. Vehicle identification number: …

0.11. Date of manufacture: ……

conforms in all respects to the type described in approval (… *type-approval number including extension number*) issued on (… *date of issue*) and

cannot be permanently registered without further approvals

(Place) (Date): …	(Signature): …

SIDE 2

VEHICLE CATEGORY M_1

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the vehicle of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static vertical mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/NG — Biomethane/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

Bodywork

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([k]): …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: …

Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …

Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([m]):

1. All power train, except pure electric vehicles

	CO_2 emissions	Fuel consumption
Urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Extra-urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Combined:	… g/km	… l/100 km/m^3/100 km ([1])
Weighted, combined	… g/km	… l/100 km

2. Pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([1])) … Wh/km

Electric range … km

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY M_2

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:
1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:
1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Type or classes of coupling devices which can be fitted: ….

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: …

NH_3: … Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY M_3

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle: 1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

30.2. Track of all other axles: … mm

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Type or classes of coupling devices which can be fitted: ….

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: ESC

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_1

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static vertical mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: …

Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: …

THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number):…

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([m]):

1. All power train except pure electric vehicles

	CO_2 emissions	Fuel consumption
Urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Extra-urban conditions:	… g/km	… l/100 km/m^3/100 km ([1])
Combined:	… g/km	… l/100 km/m^3/100 km ([1])
Weighted, combined	… g/km	… l/100 km

2. Pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([1])) … Wh/km

Electric range … km

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_2

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle: 1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:
1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Type or classes of coupling devices which can be fitted: ….

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1. test procedure: Type I or ESC ([1])

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: Type I (Euro 5 or 6 ([1])) or WHSC (EURO VI) ([1])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: …

NH_3: … Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: … Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORY N_3

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

8. Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([1])([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle: 1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg

17.4. Intended registration/in service maximum permissible mass of the combination: … kg

18. Technically permissible maximum towable mass in case of:

18.1. Drawbar trailer: … kg

18.3. Centre-axle trailer: … kg

18.4. Unbraked trailer: … kg

19. Technically permissible maximum static mass at the coupling point: … kg

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([1])

23.1. Hybrid [electric] vehicle: yes/no ([1])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/Petrol/LPG/CNG-Biomethane/LNG/Ethanol/Biodiesel/Hydrogen ([1])

26.1. Mono-fuel/Bi-fuel/Flex-fuel/Dual-fuel ([1])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([1])

27. Maximum power

27.1. Maximum net power ([g]): … kW at … min^{-1} (internal combustion engine) ([1])

27.2. Maximum hourly output: … kW (electric motor) ([1])

27.3. Maximum net power: … kW (electric motor) ([1])

27.4. Maximum 30 minutes power: … kW (electric motor) ([1])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

30.2. Track of all other axles: … mm

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([1])

37. Pressure in feed line for trailer braking system: … bar

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Type or classes of coupling devices which can be fitted: ….

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([l]): Euro …

48. Exhaust emissions ([m])([m1])([m2]):

Number of the base regulatory act and latest amending regulatory act: …

1.1 test procedure: ESC

CO: … HC: … NO_x: … HC + NO_x: … Particulates: …

Smoke opacity (ELR): … (m^{-1})

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: …
Particulates (mass): … Particles (number): …

2.1. test procedure: ETC (where applicable)

CO: … NO_x: … NMHC: … THC: … CH_4: …

Particulates: …

2.2. test procedure: WHTC (EURO VI)

CO: … NO_x: … NMHC: … THC: … CH_4: … NH_3: …
Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORIES O_1 AND O_2

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

Main dimensions

4. Wheelbase ([e]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5.1. Maximum permissible length: … mm

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

10. Distance between the centre of the coupling device and the rear end of the vehicle: … mm

12.1. Maximum permissible rear overhang: … mm

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

19.1. Technically permissible maximum static mass on the coupling point of a semi-trailer or centre-axle trailer: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

30.2. Track of all other axles: … mm

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

34. Axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Miscellaneous

52. Remarks ([n]): …

SIDE 2

VEHICLE CATEGORIES O_3 AND O_4

(incomplete vehicles)

Side 2

General construction characteristics

1. Number of axles: … and wheels: …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

Masses

14. Mass in running order of the incomplete vehicle: …..kg

14.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

14.2. Actual mass of the incomplete vehicle: …..kg

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles: 1. … kg 2. … kg 3. … kg

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

16.2. Technically permissible mass on each axle: 1. … kg 2. … kg 3. … kg etc.

16.3. Technically permissible mass on each axle group: 1. … kg 2. … kg 3. … kg etc.

17. Intended registration/in service maximum permissible masses in national/international traffic ([1]) ([o])

17.1. Intended registration/in service maximum permissible laden mass: … kg

17.2. Intended registration/in service maximum permissible laden mass on each axle:

1. … kg 2. … kg 3. … kg

17.3. Intended registration/in service maximum permissible laden mass on each axle group:

1. … kg 2. … kg 3. … kg

19.1. Technically permissible maximum static mass on the coupling point of a semi-trailer or centre-axle trailer: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

34. Axle(s) fitted with air suspension or equivalent: yes/no ([1])

35. Tyre/wheel combination ([h]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([1]): D: …/ V: …/ S: …/ U: …

Miscellaneous

52. Remarks ([n]): …

Explanatory notes

([1]) Delete where not applicable.

([a]) Indicate the identification code.

([b]) Indicate whether the vehicle is suitable for use in either right or left-hand traffic or both right and left-hand traffic.

([c]) Indicate whether the speedometer fitted has metric or both metric and imperial units.

([d]) This statement shall not restrict the right of a Member State to require technical adaptations for the registration of a vehicle in a Member State other than the one for which it was intended when the direction of the traffic is on the opposite side of the road.

([e]) Entries 4. and 4.1 shall be completed in accordance with the definitions of wheelbase and axle spacing in Article 2 (25) and (26) of Regulation (EU) No 1230/2012, respectively.

([g]) For hybrid electric vehicles, indicate both power outputs.

([h]) Optional equipment can be added under point 52, 'Remarks'.

([i]) The codes described in Annex II, section C, shall be used.

([j]) Indicate only the basic colour(s) as follows: white, yellow, orange, red, violet, blue, green, grey, brown or black.

([k]) Excluding seats that are designated to be used only when the vehicle is stationary and excluding the number of wheelchair positions.

For coaches belonging to the vehicle category M_3, the number of crew members shall be included in the passenger number.

([l]) Add the number of the Euro level and the character corresponding to the provisions used for type-approval.

([m]) Repeat for the various fuels that can be used. Vehicles that can run on both petrol and gaseous fuel, but in which the petrol system is fitted for emergency or starting purposes only, and vehicles of which the petrol tank cannot contain more than 15 litres of petrol, will be regarded as vehicles that only can run on a gaseous fuel.

([m1]) In case of EURO VI dual-fuel engines and vehicles, repeat as appropriate.

([m2]) Only emissions that have been assessed in accordance with the relevant regulatory act or acts shall be stated.

([n]) Where the vehicle is equipped with 24 GHz short-range radar equipment in accordance with Commission Decision 2005/50/EC[31], the manufacturer shall indicate the following: 'Vehicle equipped with 24 GHz short-range radar equipment'.

([o]) The manufacturer may complete these entries for international traffic, for national traffic or for both.

For national traffic, the entry shall mention the code of the country where the vehicle is intended to be registered. The code shall be in accordance with standard ISO 3166-1:2006.

For international traffic, the entry shall mention the directive number (e.g. '96/53/EC' for Council Directive 96/53/EC).

([p]) Eco-innovations.

([p1]) The general code of the eco-innovation(s) shall consist of the following elements, each separated by a blank space:

— Code of the approval authority as set out in Annex VII;

— Individual code of each eco-innovation fitted in the vehicle, indicated in chronological order of the Commission approval decisions.

[31] Commission Decision 2005/50/EC on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community (OJ L 21, 25.1.2005, p. 15).

— (E.g. the general code of three eco-innovations approved chronologically as 10, 15 and 16 and fitted to a vehicle certified by the German approval authority should be: ‘e1 10 15 16’.)

([p2]) Sum of the CO_2 emissions savings of each individual eco-innovation.

([q]) In the case of completed vehicles of category N_1 within the scope of Regulation (EC) No 715/2007.

ANNEX X

CONFORMITY OF PRODUCTION PROCEDURES

1. **Objectives**

1.1. The conformity of production procedure aims to ensure that each vehicle, system, component and technical separate unit, part or equipment produced is in conformity with the approved type.

1.2. The conformity of production procedure shall always include the assessment of quality-assurance management systems, referred to in point 2 as the 'initial assessment', and the verification of the type-approval subject and product-related controls, referred to in point 3 as 'product conformity arrangements'.

2. **Initial assessment**

2.1. Before granting type-approval, the approval authority shall verify that the manufacturer has established satisfactory arrangements and procedures for ensuring that vehicles, systems, components, separate technical units or parts and equipment are produced in conformity with the approved type.

2.2. Guidance for conducting those assessments may be found in Standard EN ISO 19011:2011 — Guidelines for quality and/or environmental management systems auditing.

2.3. Compliance with the requirements of point 2.1 shall be verified to the satisfaction of the approval authority, as follows:

The approval authority shall be satisfied with the initial assessment and the product conformity arrangements referred to in point 3, taking into account one of the arrangements referred to in points 2.3.1 to 2.3.3, or a combination of those arrangements in full or in part as appropriate.

2.3.1. The initial assessment and verification of product conformity arrangements shall be carried out by the approval authority or a body appointed for this purpose by the approval authority.

2.3.1.1. When considering the extent of the initial assessment to be carried out, the approval authority may take into account the following information:

(a) whether the manufacturer has a certification similar to the one referred to in point 2.3.3, but which has not been qualified or recognised under that point;

(b) in the case of a type-approval of a system, component or separate technical unit, quality system assessments that have been performed by vehicle manufacturer(s) in the premises of the manufacturer of the system, component or separate technical unit, in accordance with one or more of the industry sector specifications satisfying the requirements in the EN ISO 9001:2008 or ISO/TS16949:2009 standards.

(c) whether in one of the Member States one or more of the manufacturer's type approvals recently have been withdrawn, due to unsatisfactory control of conformity of production. In that case, the initial assessment by the approval authority shall not be limited to accepting the manufacturer's quality system

certification, but shall include a verification whether all necessary improvements for ensuring effective control have been implemented, so that vehicles, components, systems or separate technical units are produced in conformity with the approved type.

2.3.2. The initial assessment and verification of product conformity arrangements may be carried out by the approval authority of another Member State or by the body appointed for this purpose by the approval authority.

2.3.2.1. The approval authority of that other Member State shall in that case prepare a statement of compliance, which outlines the areas and production facilities that that approval authority has covered as relevant to the product(s) to be type-approved and to the regulatory acts in accordance with which these products are to be type-approved.

2.3.2.2. On receiving a request for a statement of compliance from the approval authority of a Member State granting type-approval, the approval authority of another Member State shall immediately send that statement of compliance or inform that approval authority that is unable to provide such a statement.

2.3.2.3. The statement of compliance shall include at least the following:

(a) Group or company	(e.g. XYZ Automotive)
(b) Particular organisation	(e.g. regional Division)
(c) Plants/Sites	(e.g. Engine Plant 1 (in country A) — Vehicle Plant 2 (in country B))
(d) Vehicle/Component range	(e.g. All Category M_1 models)
(e) Areas assessed	(e.g. Engine assembly, body pressing and assembly, vehicle assembly)
(f) Documents examined	(e.g. Company and site quality manual and procedures)
(g) Date of the assessment	(e.g. Audit conducted from dd/mm/yyyy to dd/mm/yyyy)
(h) Planned monitoring visit	(e.g. mm/yyyy)

2.3.3. An approval authority may also accept the manufacturer's certification to standards EN ISO 9001:2008 or ISO/TS16949:2009 (the scope of this certification shall in that case cover the product(s) to be approved), or an equivalent certification standard as satisfying the initial assessment requirements of point 2.3., provided that conformity of production is indeed covered by the quality management system and that the manufacturer's type-approval has not been withdrawn as referred to in point 2.3.1.1.(c). The manufacturer shall provide details of the certification and inform the approval authority of any revisions to its validity or scope.

2.4. For the purpose of vehicle type-approval, the initial assessments carried out for the granting of type-approvals for systems, components and separate technical units of the vehicle need not be repeated, but shall be completed by an assessment of the locations and activities relating to the assembly of the whole vehicle that have not been covered by the former assessments.

3. **Product conformity arrangements**

3.1. Every vehicle, system, component or separate technical unit, part or item of equipment approved pursuant to a UNECE Regulation annexed to the Revised 1958 Agreement and to this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements of this Annex, the said UNECE Regulation and this Regulation.

3.2. Before granting a type-approval pursuant to this Regulation and to a UNECE Regulation annexed to the Revised 1958 Agreement, the approval authority shall verify the existence of adequate arrangements and documented control plans, to be agreed with the manufacturer for each approval, to carry out at specified intervals the tests or associated checks that are necessary to verify continued conformity with the approved type, including, where applicable, tests specified in this Regulation and the said UNECE Regulation.

3.3. The holder of the type-approval shall, in particular:

3.3.1. ensure the existence and application of procedures for effective control of the conformity of products (vehicles, systems, components, separate technical units, parts or equipment to the approved type;

3.3.2. have access to the testing or other appropriate equipment necessary for checking the conformity to each approved type;

3.3.3. ensure that the data resulting from tests or checks are recorded and that annexed documents remain available for a period of up to 10 years to be determined in agreement with the approval authority;

3.3.4. analyse the results of each type of test or check, in order to verify and ensure the stability of the product characteristics, making allowance for variation of an industrial production;

3.3.5. ensure that for each type of product, at least the checks prescribed in this Regulation and the tests prescribed in the relevant regulatory acts listed in Annex IV are carried out;

3.3.6. ensure that any set of samples or test pieces that gives evidence of non-conformity in the type of test in question, gives rise to a further sampling and testing. All the necessary steps shall be taken to restore the production process to ensure conformity with the approved type;

3.4. In the case of step-by-step, mixed or multi-stage type-approvals, the approval authority that is granting a whole-vehicle type-approval may request from any approval authority that has granted type-approval of any relevant system, component or separate technical unit specific details regarding compliance with the conformity of production requirements set out in this Annex.

3.5. The approval authority that is granting a whole-vehicle type-approval and is not satisfied with the reported information referred to in point 3.4., and that has communicated this in writing to the relevant manufacturer and to the approval authority granting the type-approval for the system, component or separate technical unit, shall demand the performance of additional conformity of production audits or checks, which shall be performed at the site of the manufacturer(s) of those systems, components or separate technical units. The

results of this additional conformity of production audits or checks shall immediately be made available to that approval authority.

3.6. Where points 3.4. and 3.5. apply and the approval authority granting the whole-vehicle type-approval has not been satisfied with the additional audit or check results, the manufacturer shall ensure that conformity of production is restored as soon as possible to the satisfaction of that approval authority and of the approval authority granting type-approval of the system, component or separate technical unit.

4. **Continued verification arrangements**

4.1. The authority that has granted type-approval may at any time verify the conformity control methods applied in each production facility by means of periodic audits. The manufacturer shall for that purpose allow access to that authority to the manufacturing, inspection, testing, storage and distribution sites and shall provide all necessary information with regard to the quality management system documentation and records.

4.1.1. The normal arrangements for such periodic audits shall be to monitor the continued effectiveness of the procedures laid down in sections 1 and 2 (initial assessment and product conformity arrangements).

4.1.1.1. Surveillance activities carried out by the technical services (qualified or recognised as required in point 2.3.3) shall be accepted as satisfying the requirement of point 4.1.1 with regard to the procedures established at initial assessment.

4.1.1.2. The normal frequency of verifications by the approval authority (other than those referred to in point 4.1.1.1) shall be such as to ensure that the relevant controls applied in accordance with sections 1 and 2 are reviewed at intervals based on a risk assessment methodology that complies with the international standard ISO 31000:2009 – Risk Management – Principles and Guidelines and such verification shall in any case be conducted at least once every three years. This methodology shall in particular take into account any non-conformity raised by other Member States in the context of Article 54(1).

4.2. At every review, records of tests or checks and records of production, in particular records of those tests or checks documented as required in point 2.2., shall be made available to the inspector.

4.3. The inspector may select samples at random to be tested in the manufacturer's laboratory or in the facilities of the technical service. In such a case only physical test shall be carried out. The minimum number of samples may be determined on the basis of the results of the manufacturer's own verification.

4.4. The inspector who is of the opinion that the level of control is unsatisfactory, or who deems it necessary to verify the validity of the tests carried out in accordance with point 4.2, shall select samples to be sent to a technical service to perform physical tests in accordance with the requirements on conformity of production, set out in the regulatory acts referred to in Annex IV.

4.5. Where unsatisfactory results are found during an inspection or a monitoring review, the approval authority shall take all necessary steps to ensure that the manufacturer restores the conformity of production as rapidly as possible.

4.6. In cases where compliance with UNECE regulations is required by this Regulation, the manufacturer may choose to apply the provisions of this Annex as an equivalent alternative to the conformity of production requirements in the respective UNECE regulations. However, if points 4.4. or 4.5. apply, all separate conformity of production requirements in the UNECE regulations have to be complied with to the satisfaction of the approval authority until it decides that conformity of production has been restored.

ANNEX XI

TEMPLATE AND NUMBERING SYSTEM FOR THE CERTIFICATE AUTHORISING THE PLACING ON THE MARKET AND ENTRY INTO SERVICE OF PARTS AND EQUIPMENT THAT MAY POSE A SERIOUS RISK TO THE CORRECT FUNCTIONING OF ESSENTIAL SYSTEMS

1. **General requirements**

1.1. The placing on the market of parts or equipment that may pose a serious risk to the correct functioning of systems that are essential for the safety of the vehicle or for its environmental performance shall be subject to authorisation in accordance with Article 55(1) of Regulation (EU) No xxx/201X.

1.2. Such authorisation shall take the form of a certificate, a model of which is contained in the Appendix to this Annex, and shall be numbered in accordance with the provisions of point 2.

1.3. The certificate referred to in point 1.2. shall include requirements for constructional and functional safety, as well as for environmental protection and, where needed, for testing standards. Those requirements may be based on the regulatory acts listed in Annex IV to Regulation (EU) XXX/201X, may be developed according to the relevant state of safety, environmental and testing technology, or, if this is an appropriate way of achieving the required safety or environmental objectives, may consist of a comparison of the part or equipment with the environmental or safety performance of the original vehicle, or of any of its parts, as appropriate.

1.4. This Annex shall not apply to a part or piece of equipment that is not listed in Annex XIII. For any entry or group of entries in Annex XIII, a reasonable transitional period shall be fixed to allow the manufacturer of the part or equipment to apply for and obtain an authorisation. At the same time, a date may be fixed, where appropriate, to exclude from the application of this Annex parts and equipment designed for vehicles that have been type-approved before that date.

2. **Numbering system**

2.1. The number of the certificate for the placing on the market and entry into service of parts or equipment that may pose a serious risk to the correct functioning of essential systems shall consist of a total of five sections as specified in points 2.1.1. to 2.1.5. The sections shall be separated by an asterisk (‘*’).

2.1.1. Section 1: The lower-case letter ‘e’ followed by the distinguishing number of the Member State (provided in the Appendix of Annex VII) issuing the certificate.

2.1.2. Section 2: The number of Regulation (EU) XXX/201X: ‘XXX/201X’ shall be indicated.

2.1.3. Section 3: The identification of the part or equipment, according to the list in Annex XIII.

– for parts or equipment having a significant impact on the vehicle’s constructional safety and/or functional safety, this means the symbol ‘I’ followed by the ‘/’character and the correspondent ‘Item No’ from the list in point I of Annex XIII. The ‘Item No’ shall have three digits and start from ‘001’.

– for parts or equipment having a significant impact on the environmental performance of the vehicle, this means the symbol ‘II’ followed by the ‘/’character and the correspondent ‘Item No’ from the list in point II of Annex XIII. The ‘Item No’ shall have three digits and start from ‘001’.

2.1.4. Section 4: Sequential number for the certificate.

– a sequential number with leading zeros (as applicable), to denote the certificate number. The sequential number shall have three digits and start from ‘001’.

2.1.5. Section 5: Sequential number to denote the extension level of the certificate.

– a two-digit sequential number, with leading zero as applicable, starting from ‘00’ for each certificate number issued.

2.2. Format of the numbering of a certificate (with fictive sequential numbers for explanation purposes).

Example of the number of a certificate issued by Bulgaria for parts or equipment integrated in a vehicle type-approved according to Regulation (EU) No XXX/201X:

– e34*XXX/201X*II/002*148*00

  – e34 = Bulgaria (section 1)

  – XXX/201X = Regulation (EU) XXX/201X (section 2)

  – II/002 = Item 002 on the list of parts or equipment having a significant impact on the environmental performance of the vehicle (section 3)

  – 148 = certificate sequential number (section 4)

  – 00 = extension level number (section 5)

Example of the number of a certificate issued by Austria for parts or equipment integrated in a vehicle type-approved according to Regulation (EU) No XXX/201X, which has been extended once:

  – e12*168/2013*I/034*225*01

    – e12 = Austria (section 1)

    – XXX/201X = Regulation (EU) XXX/201X (section 2)

    – I/034 = Item 034 on the list of parts or equipment having a significant impact on the vehicle’s construction safety and/or functional safety (section 3)

    – 225 = certificate sequential number (section 4)

    – 01 = extension level number (section 5)

Appendix

MODEL OF THE EU AUTHORISATION CERTIFICATE

MODEL

Maximum format: A4 (210 × 297 mm)

EU AUTHORISATION CERTIFICATE

Stamp of approval authority

Communication concerning:		for the placing on the market of parts or equipment that may pose a serious risk to the correct functioning of systems that are essential for the safety of the vehicle or for its environmental performance
— authorisation certificate ([1]) — extension of authorisation certificate ([1]) — refusal of authorisation certificate ([1]) — withdrawal of authorisation certificate ([1])		

SECTION I

Kind of part/equipment: …….

Part/equipment([1]) numbers: …….

EU authorisation certificate number: …….

Reason for extension: …….

Name and address of manufacturer: …….

Name(s) and address(es) of manufacture plant(s): …….

Name and address of the manufacturer's representative (if any): ……..

SECTION II

The part/equipment([1]) is specifically intended for installation on the following vehicle(s):

Make (trade name of manufacturer): …….

Type(s)([2]): …….

Variant(s)([2]): …….

Version(s)([2]): …….

SECTION III

Requirements for:

(a) vehicle construction safety([1]): …….

(b) vehicle functional safety([1]): …….

(c) vehicle environmental protection([1]): …….

(d) testing standards([1]): …….

SECTION IV

Requirements based on:

(a) Annex(es)([3]) … to Commission Delegated Regulation (EU) No …/…, (and Annex(es)([3]) …(a) to Commission Delegated Regulation (EU) No …/…)([1]), as last amended by (Commission Delegated)([1]) Regulation (EU) No …/…([1])([4])

(b) a comparison of the part/equipment([1]) with the safety/environmental([1]) performance of the original vehicle/parts of the original vehicle([1]) (explain)([1])…….……
……..……

SECTION V

Technical service responsible for carrying out the tests: …….

Date of test report: …….

Number of test report: …….

SECTION VI

The part/equipment([1]) does not/does([1]) impair the functioning of those systems that are essential for the safety of the vehicle or its environmental performance.

The authorisation certificate is granted/extended/refused/withdrawn([1])

Place: ……..……

Date: ……..……

Name and signature (or visual representation of an 'advanced electronic signature' according to Directive 1999/93/EC, including data for verification): ……..…

Attachments:

Test report

_____

Explanatory notes

(These explanatory notes are not to be included in the certificate)

([1]) Delete where not applicable.

([2]) Indicate type, variant and version in accordance with the categorisation criteria set out in Annex II.

([3]) The Roman numeral of the relevant Annex to the Commission Delegated Regulation or multiple Roman numerals of the relevant Annexes to the same Commission Delegated Regulation.

([4]) Indicate the latest amendment of the Commission Delegated Regulation according to the amendment applied for the EU type-approval.

ANNEX XII

SMALL SERIES LIMITS

1. The number of units of one type of vehicle to be registered, sold or put into service annually in the Union shall not exceed, pursuant to Article 39, the figures shown in the following table for the vehicle category in question:

Category	Units
M_1	1 000
M_2, M_3	0
N_1	1000
N_2, N_3	0
O_1, O_2	0
O_3, O_4	0

2. The number of units of one type of vehicle to be registered, sold or put into service annually in a Member State, shall be determined by that Member State but shall not exceed, pursuant to Article 40, the figures shown in the following table for the vehicle category in question:

Category	Units
M_1	100
M_2, M_3	250
N_1	500 until 31October 2016 250 from 1 November 2016
N_2, N_3	250
O_1, O_2	500
O_3, O_4	250

3. The number of units of one type of vehicle to be registered, sold or put into service annually in a Member State shall be determined by that Member State but shall not exceed, pursuant to Article 6(2) of Regulation (EU) No 1230/2012, the figures shown in the following table for the vehicle category in question:

Category	Units
M_2, M_3	1 000
N_2, N_3	1 200
O_3, O_4	2 000

ANNEX XIII

LIST OF PARTS OR EQUIPMENT THAT ARE CAPABLE OF POSING A SIGNIFICANT RISK TO THE CORRECT FUNCTIONING OF SYSTEMS THAT ARE ESSENTIAL FOR THE SAFETY OF THE VEHICLE OR ITS ENVIRONMENTAL PERFORMANCE, THE PERFORMANCE REQUIREMENTS OF SUCH PARTS AND EQUIPMENT, THE APPROPRIATE TEST PROCEDURES, AND MARKING AND PACKAGING PROVISIONS

I. Parts or equipment having a significant impact on vehicle safety

Item No	Item description	Performance requirement	Test procedure	Marking requirement	Packaging requirements
1	[…]				
2					
3					

II. Parts or equipment having a significant impact on the environmental performance of the vehicle

Item No	Item description	Performance requirement	Test procedure	Marking requirement	Packaging requirements
1	[…]				
2					
3					

ANNEX XIV

LIST OF EU TYPE-APPROVALS GRANTED, REFUSED OR WITHDRAWN IN ACCORDANCE WITH THE RELEVANT REGULATORY ACTS

Stamp of approval authority

List number:

Covering the period: … to …

The following information shall be provided regarding each EU type-approval that has been granted, extended, refused or withdrawn in the above mentioned period:

Manufacturer:

EU type-approval number:

Reason for extension (where applicable):

Make:

Type:

Date of issue:

First date of issue (in the case of extensions):

Reason for refusal (where applicable):

Reason for withdrawal (where applicable):

ANNEX XV

REGULATORY ACTS FOR WHICH A MANUFACTURER MAY BE DESIGNATED AS A TECHNICAL SERVICE

1. **Objectives and scope**

1.1. This Annex lays down the list of the regulatory acts for which a manufacturer may be designated as a technical service in accordance with Article 76(1).

1.2. It also includes appropriate provisions concerning the designation of a manufacturer as technical service, to be applied in the framework of the type-approval of vehicles, components and separate technical units concerned by Part I of Annex IV.

1.3. This Annex however does not apply to manufacturers who apply for the EU type-approval of vehicles produced in small series, as referred to in Article 39.

2. **Designation of a manufacturer as a technical service**

2.1. A manufacturer designated as a technical service is a manufacturer who has been designated by the approval authority as a testing laboratory to carry out on its behalf the approval tests.

The expression 'to carry out tests' is not restricted to the measurement of performances, but also covers the registration of test results and the submission to the approval authority of a report, including the relevant conclusions.

It also covers the checking of compliance with those provisions that do not necessarily require measurement. This is the case for the assessment whether the design complies with the legislative requirements.

3. **List of regulatory acts and restrictions**

	Subject	Regulatory act reference
4A	Space for mounting and fixing rear registration plates	Regulation (EC) No 661/2009 Regulation (EU) No 1003/2010
7A	Audible warning devices and signals	Regulation (EC) No 661/2009 UNECE Regulation No 28
10A	Electromagnetic compatibility	Regulation (EC) No 661/2009 UNECE Regulation No 10
18A	Manufacturer's statutory plate and vehicle identification number	Regulation (EC) No 661/2009 Regulation (EU) No 19/2011
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48
27A	Towing device	Regulation (EC) No 661/2009

		Regulation (EU) No 1005/2010[32]
33A	Location and identification of hand controls, tell-tales and indicators	Regulation (EC) No 661/2009 UNECE Regulation No 121
34A	Windscreen defrosting and demisting systems	Regulation (EC) No 661/2009 Regulation (EU) No 672/2010
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010
36A	Heating systems	Regulation (EC) No 661/2009 UNECE Regulation No 122 Except the provisions in Annex 8 relating to LPG combustion heaters and LPG heating systems
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010
44A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012
45A	Safety glazing materials and their installation on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 43 Restricted to the provisions included in Annex 21
46	Tyres	Directive 92/23/EEC
46A	Installation of tyres	Regulation (EC) No 661/2009 Regulation (EU) No 458/2011
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012
49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55 Restricted to the provisions included in Annex 5 (up to

[32] Commission Regulation (EU) No 1005/2010 of 8 November 2010 concerning type-approval requirements for motor vehicle towing devices and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 291, 9.11.2010, p. 36).

		and including paragraph 8) and Annex 7
61	Air-conditioning system	Directive 2006/40/EC

Appendix

Designation of a manufacturer as technical service and subcontracting

1. **General**

1.1. The designation and notification of a manufacturer as a technical service shall be made in accordance with Articles 72 to 86 and any subcontracting shall be done in accordance with the provisions of this Appendix.

2. **Subcontracting**

2.1. In accordance with Article 75(1), a technical service may nominate a subcontractor for performing tests on his behalf.

2.2. For the purposes of this Appendix, the following definition shall apply:

– 'Subcontractor' means either a subsidiary of the technical service that has been entrusted by that technical service with testing activities inside its own organisation or a third party under contract with that technical service to perform test activities.

2.3. The use of the services of a subcontractor does not liberate the technical service from its obligation to comply with Articles 73, 74, 84 and 85, and in particular with those concerning the skills of the technical services and compliance with Standard EN ISO/IEC 17025:2005.

2.4. Section 2 of Annex XV shall apply to the subcontractor.

3. **Test report**

Test reports shall be drafted in accordance with the general requirements set out in Appendix 3 of Annex V to Regulation (EU) No XXX/201X.

ANNEX XVI

CONDITIONS FOR THE USE OF VIRTUAL TESTING METHODS BY A MANUFACTURER OR A TECHNICAL SERVICE

1. Objectives and scope

This Annex lays down provisions concerning virtual testing in accordance with Article 28(4).

.

2. List of regulatory acts

	Subject	**Regulatory act reference**
3B	Rear underrun protective devices (RUPDs) and their installation; rear underrun protection (RUP)	Regulation (EC) No 661/2009 UNECE Regulation No 58
6A	Vehicle access and manoeuvrability	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012
6B	Door latches and door retention components	Regulation (EC) No 661/2009 UNECE Regulation No 11
8A	Devices for indirect vision and their installation	Regulation (EC) No 661/2009 UNECE Regulation No 46
12A	Interior fittings	Regulation (EC) No 661/2009 UNECE Regulation No 21
16A	External projections	Regulation (EC) No 661/2009 UNECE Regulation No 26
20A	Installation of lighting and light-signalling devices on vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 48
27A	Towing device	Regulation (EC) No 661/2009 Regulation (EU) No 1005/2010

32A	Forward field of vision	Regulation (EC) No 661/2009 UNECE Regulation No 125
35A	Windscreen wiper and washer systems	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010
37A	Wheel guards	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010
42A	Lateral protection of goods vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 73
48A	Masses and dimensions	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012
49A	Commercial vehicles with regard to their external projections forward of the cab's rear panel	Regulation (EC) No 661/2009 UNECE Regulation No 61
50A	Mechanical coupling components of combinations of vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 55
50B	Close-coupling device (CCD); fitting of an approved type of CCD	Regulation (EC) No 661/2009 UNECE Regulation No 102
52A	M2 and M3 vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 107
52B	Strength of the superstructure of large passenger vehicles	Regulation (EC) No 661/2009 UNECE Regulation No 66
57A	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Regulation (EC) No 661/2009 UNECE Regulation No 93

Appendix 1

General conditions for the use of virtual testing methods

1. **Virtual test pattern**

The following scheme shall be used as basis structure for describing and conducting virtual testing:

(a) purpose;

(b) structure model;

(c) boundary conditions;

(d) load assumptions;

(e) calculation;

(f) assessment;

(g) documentation.

2. **Fundamentals of computer simulation and calculation**

2.1. *Mathematical model*

The mathematical model shall be supplied by the manufacturer. It shall reflect the complexity of the structure of the vehicle, system, component or separate technical unit to be tested in relation to the requirements of the relevant regulatory act and its boundary conditions.

The same provisions shall apply for testing components or separate technical units independently from the vehicle.

2.2. *Validation process of the mathematical model*

The mathematical model shall be validated against the actual test conditions.

To that effect a physical test shall be conducted to compare the results obtained when using the mathematical model with the results of a physical test. Comparability of the test results shall be proven. The manufacturer or the technical service shall draft a validation report and submit it to the approval authority.

Any change to the mathematical model or to the software that is likely to invalidate the validation report shall be brought to the attention of the approval authority, which may require that a new validation process is conducted.

The flow chart of the validation process is shown in Appendix 3.

2.3. *Documentation*

The manufacturer shall make available to the technical service and document the data and auxiliary tools used for simulation and calculation.

3. **Tools and support**

The manufacturer shall supply the technical service at its request with the necessary tools to conduct the virtual testing, including appropriate software, or provide that technical service access to these tools.

The manufacturer shall also provide appropriate support to the technical service.

The access and support provided by the manufacturer to a technical service does not exempt the technical service from its obligations regarding the skills of its personnel, the payment of licence rights and confidentiality.

Appendix 2

Specific conditions for the use of virtual testing methods

1. List of regulatory acts

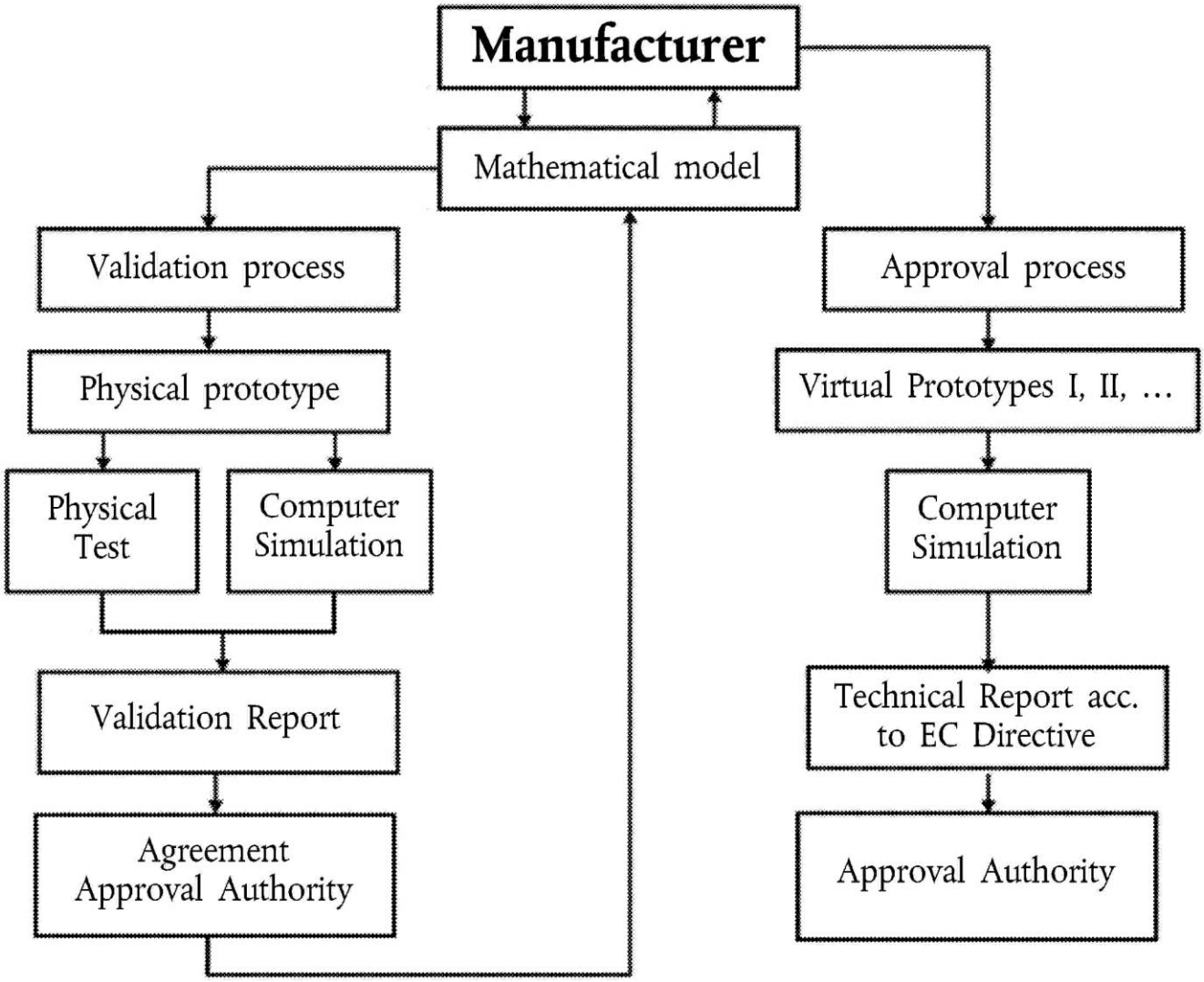
	Regulatory act reference	Annex and paragraphs	Specific conditions
3B	Regulation (EC) No 661/2009 UNECE Regulation No 58	Paragraphs 2.3, 7.3. and 25.6 of UNECE Regulation No 58.	Dimensions and resistance to forces.
6A	Regulation (EC) No 661/2009 Regulation (EU) No 130/2012	Annex II, Part I and 2 of Regulation (EU) No 130/2012.	Dimensions of steps, running boards and handholds.
6B	Regulation (EC) No 661/2009 UNECE Regulation No 11	Annex 3 of UNECE Regulation No 11. Annex 4, paragraph 2.1. of UNECE Regulation No 11. Annex 5 of UNECE Regulation No 11.	Tensile strength tests and resistance of latches to acceleration.
8A	Regulation (EC) No 661/2009 UNECE Regulation No 46	Paragraph 15.2.4. of UNECE Regulation No 46.	Prescribed fields of vision of rear-view mirrors.
12A	Regulation (EC) No 661/2009 UNECE Regulation No 21	(a) Paragraphs 5. to 5.7. of UNECE Regulation No 21. (b) Paragraph 2.3. of UNECE Regulation No 21.	(a) Measurement of all radii of curvature and of all projections except for those requirements where a force has to be applied in order to check compliance with the provisions. (b) Determination of the head-impact zone.
16A	Regulation (EC) No 661/2009 UNECE Regulation No 26	Paragraph 5.2.4. of UNECE Regulation No 26 All provisions in paragraphs 5 (General requirements) and 6 (Particular requirements) of UNECE Regulation No 26.	Measurement of all radii of curvature and of all projections except for those requirements where a force has to be applied in order to check compliance with the provisions.
20A.	Regulation (EC) No 661/2009 UNECE Regulation No 48	Paragraph 6. (Individual specifications), and Annexes 4, 5 and 6 to UNECE Regulation No 48.	The test drive provided for in paragraph 6.22.9.2.2 shall be performed on a real vehicle.
27A	Regulation (EC)	Annex II, point 1.2. of	Tractive and compressive static

	No 661/2009 Regulation (EU) No 1005/2010	Regulation (EU) No 1005/2010.	force.
32A	Regulation (EC) No 661/2009 UNECE Regulation No 125	Paragraph 5 (Specifications) of UNECE Regulation No 125.	Obstructions and field of vision.
35A	Regulation (EC) No 661/2009 Regulation (EU) No 1008/2010	Annex III, points 1.1.2. and 1.1.3. of Regulation (EU) No 1008/2010.	Determination of the swept area only.
37A	Regulation (EC) No 661/2009 Regulation (EU) No 1009/2010	Annex II, point 2. of Regulation (EU) No 1009/2010.	Verification of the dimensional requirements.
42A	Regulation (EC) No 661/2009 UNECE Regulation No 73	Paragraph 12.10 of UNECE Regulation No 73.	Resistance under a horizontal force and deflection measurement.
48A.	Regulation (EC) No 661/2009 Regulation (EU) No 1230/2012	(a) Annex I, Part B, points 7 and 8 of Regulation (EU) No 1230/2012. (b) Annex I, Part C, points 6 and 7 of Regulation (EU) No 1230/2012.	(a) Check of compliance with the manoeuvrability requirements including manoeuvrability of vehicles fitted with lift- or loadable axles. (b) Measurement of the maximum rear swing-out.
49A	Regulation (EC) No 661/2009 UNECE Regulation No 61	Paragraphs 5 and 6 of UNECE Regulation No 61.	Measurement of all radii of curvature and of all projections except for those requirements where a force has to be applied in order to check compliance with the provisions.
50A	Regulation (EC) No 661/2009 UNECE Regulation No 55	(a) Annex 5 'Requirements for mechanical coupling devices' of UNECE Regulation No 55. (b) Annex 6, paragraph 1.1. of UNECE Regulation No 55. (c) Annex 6, paragraph 3 of UNECE Regulation No 55.	(a) All provisions of paragraphs 1 to 8 included. (b) Strength tests on mechanicals couplings of simple design may be replaced by virtual tests. (c) Paragraphs 3.6.1. (Strength test), 3.6.2. (Resistance to buckling) and 3.6.3. (Resistance to bending moment) only.
52A	Regulation (EC) No 661/2009	Annex 3 of UNECE Regulation No 107.	Paragraph 7.4.5. (calculation method).

	UNECE Regulation No 107		
52B	Regulation (EC) No 661/2009 UNECE Regulation No 66	Annex 9 of UNECE Regulation No 66.	Computer simulation of rollover test on complete vehicle as an equivalent approval method.
57A	Regulation (EC) No 661/2009 UNECE Regulation No 93	Annex 5, paragraph 3 of UNECE Regulation No 93.	Resistance under a horizontal force and deflection measurement.

Appendix 3

Validation process



ANNEX XVII

PROCEDURES TO BE FOLLOWED DURING EU MULTI-STAGE TYPE-APPROVAL

1. Obligations of manufacturers

1.1. The satisfactory operation of the EU multi-stage type-approval requires joint action by all the manufacturers concerned. To this end approval authorities must ensure, before granting first and subsequent stage approvals, that suitable arrangements exist between the relevant manufacturers for the supply and interchange of documents and information, so that the completed type of vehicle meets the technical requirements of all the relevant regulatory acts referred to in Annex IV. Such information must include details of relevant system, component and separate technical unit type-approvals and of vehicle parts that form part of the incomplete vehicle but have not yet been approved.

1.2. Each manufacturer involved in a EU multi-stage type-approval shall be responsible for the approval and conformity of production of all systems, components or separate technical units manufactured by him or added by him to the previously built stage. The manufacturer of the subsequent stage shall not be responsible for objects that have been approved in an earlier stage, except where he modifies relevant parts to such an extent that the previously granted approval becomes invalid.

2. Obligations of approval authorities

2.1. The approval authority shall:

(a) verify that all EU type-approval certificates issued pursuant to the regulatory acts that are applicable for vehicle type-approval cover the type of vehicle at its state of completion and correspond to the prescribed requirements;

(b) ensure that all the relevant data, taking account of the state of completion of the vehicle, is included in the information folder;

(c) by reference to the documentation ensure that the vehicle specification(s) and data contained in Part I of the vehicle information folder are included in the data in the information packages and in the EU type-approval certificates issued in accordance with the relevant regulatory acts; and in the case of a completed vehicle, where an item number in Part I of the information folder is not included in the information package of any of the regulatory acts, confirm that the relevant part or characteristic conforms to the particulars in the information folder;

(d) on a selected sample of vehicles from the type to be approved carry out or arrange to be carried out inspections of vehicle parts and systems to verify that the vehicle(s) is/are built in accordance with the relevant data contained in the authenticated information package in accordance with all relevant regulatory acts;

(e) where required carry out, or arrange to be carried out, relevant installation checks for separate technical units.

2.2. The number of vehicles to be inspected for the purposes of paragraph 2.1 (d) shall be sufficient to permit the proper control of the various combinations to be EU type-approved according to the state of completion of the vehicle and the following criteria:

– engine,

– gearbox,

– powered axles (number, position, interconnection),

– steered axles (number and position),

– body styles,

– number of doors,

– hand of drive,

– number of seats,

– level of equipment

3. Applicable requirements

3.1. EU multi-stage type-approvals shall be granted on the basis of the state of completion of the type of vehicle and shall incorporate all approvals granted at earlier stages.

3.2. For the whole-vehicle type-approval, this Regulation (in particular the requirements of Annex II and the particular acts listed in Annex IV) shall apply in the same manner as if the approval would have been granted (or extended) to the manufacturer of the base vehicle.

3.2.1 Where a type of system, component or separate technical unit has not been modified, the system, component or separate technical unit type-approval granted in the previous stage shall remain valid until the expiration date for the first registration, as specified in the particular regulatory act.

3.2.2. Where a type of system has been modified at the subsequent stage of completion of the vehicle, to the extent that the system has to be retested for type-approval purposes, that retesting shall be limited to only those parts of the system that have been modified or affected by the changes.

3.2.3 Where a type of vehicle or a type of system has been modified by another manufacturer at the subsequent stage of completion of the vehicle, to the extent that, apart from the manufacturers name, the vehicle or system may still be considered as the same type, the requirement applying to existing types may still be applied as long as the date for first registration in the relevant regulatory act has not been reached.

3.2.4. The change of category of a vehicle shall lead to the application of the relevant requirements to the new category of vehicle. The type-approval certificates from the previous category shall be accepted provided that the vehicle complies with the same requirements as, or more stringent than, those applying to the new category.

3.3. Subject to the agreement of the approval authority, a whole-vehicle type-approval granted to the manufacturer of the subsequent stage of completion of the vehicle does not need to be extended or revised where an extension given at the previous stage vehicle does not affect the subsequent stage or the technical data of the vehicle. However, the type-approval number including the extension of the previous stage(s) vehicle shall be copied in point 1.2.2 of the certificate of conformity of the subsequent stage vehicle.

3.4. Where the cargo area of a complete or completed vehicle of category N or O is modified by another manufacturer for the addition of removable fittings to store and secure the cargo (for example, load space lining, storage racks and roof racks), such items can be treated as part of the pay-mass and an approval is not needed, provided both of the following conditions are met:

(a) the modifications do not affect the vehicle's type-approval in any way, other than an increase of the actual mass of the vehicle;

(b) the added fittings can be removed without using special tools.

4. Identification of the vehicle

4.1. The VIN, prescribed by Regulation (EU) No 19/2011, shall be retained during all the subsequent stages of the type-approval to ensure the "traceability" of the process.

4.2. At the second and subsequent stages, in addition to the statutory plate prescribed by Regulation (EU) No 19/2011, each manufacturer shall affix to the vehicle an additional plate the model of which is shown in the appendix to this Annex. This plate shall be firmly attached, in a conspicuous and readily accessible position on a part not subject to replacement in use. It shall clearly and indelibly show the following information in the order listed:

– the name of the manufacturer,

– sections 1, 3 and 4 of the EU type-approval number,

– the stage of approval,

– the VIN of the base vehicle,

– the technically permissible maximum laden mass of the vehicle where the value has changed during the current stage of approval,

– the technically permissible maximum laden mass of the combination (where the value has changed during the current stage of approval and where the vehicle is permitted to tow a trailer). "0" shall be used if the vehicle is not permitted to tow a trailer.

– the technically permissible maximum mass on each axle, listed in order from front to rear where the value has changed during the current stage of approval,

– in the case of a semi-trailer or centre axle trailer, the technically permissible maximum mass at the coupling point where the value has changed during the current stage of approval.

Unless otherwise provided for in points 4.1 and 4.2 the plate shall comply with the requirements set out in Annex I and Annex II to Regulation (EU) No 19/2011.

Appendix

MODEL OF THE MANUFACTURER'S ADDITIONAL PLATE

The example below is given as a guide only.

MANUFACTURER'S NAME (stage 3)
e2*201X/XX*2609
Stage 3
WD9VD58D98D234560
1 500 kg
2 500 kg
1 – 700 kg
2 – 810 kg

ANNEX XVIII
ACCESS TO VEHICLE OBD AND VEHICLE REPAIR AND MAINTENANCE INFORMATION

1. Introduction

This Annex lays down technical requirements for the accessibility of vehicle OBD and vehicle repair and maintenance information.

2. Access to vehicle OBD and vehicle repair and maintenance

2.1. A manufacturer shall put in place the necessary arrangements and procedures, in accordance with Article 65, to ensure that vehicle OBD and vehicle repair and maintenance information is accessible through websites using a standardised format in a readily accessible and prompt manner, and in a manner which is non-discriminatory compared to the provisions given or access granted to authorised dealers and repairers.

2.2. An approval authority shall only grant type-approval after receiving from the manufacturer a Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information.

2.3. The Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information shall serve as the proof of compliance with Article 68.

2.4. The Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information shall be drawn up in accordance with the model set out in Appendix 1 to this Annex.

2.5. The vehicle OBD and vehicle repair and maintenance information shall include the following:

2.5.1. an unequivocal identification of the vehicle, system, component or separate technical unit for which the manufacturer is responsible;

2.5.2. service handbooks, including service and maintenance records;

2.5.3. technical manuals;

2.5.4. component and diagnosis information (such as minimum and maximum theoretical values for measurements);

2.5.5. wiring diagrams;

2.5.6. diagnostic trouble codes, including manufacturer specific codes;

2.5.7. the software calibration identification number applicable to a type of vehicle;

2.5.8. information provided concerning, and delivered by means of, proprietary tools and equipment;

2.5.9. data record information and two-directional monitoring and test data;

2.5.10. standard work units or time periods for repair and maintenance tasks if they are made available to authorised dealers and repairers of the manufacturer either directly or through a third party;

2.5.11. in case of multi-stage type-approval, the information required under section 3, and all other information necessary to comply with the requirements set out in Article 65.

2.6. The manufacturer shall make available to interested parties the following information:

2.6.1. relevant information to enable the development of replacement components that are critical to the correct functioning of the OBD system;

2.6.2. information to enable the development of generic diagnostic tools.

2.7. For the purposes of point 2.6.1., the development of replacement components shall not be restricted by any of the following:

2.7.1. the unavailability of pertinent information;

2.7.2. the technical requirements relating to malfunction indication strategies if the OBD thresholds are exceeded or if the OBD system is unable to fulfil the basic OBD monitoring requirements of this Regulation;

2.7.3. specific modifications to the handling of OBD information to deal independently with vehicle operation on petrol or on gas;

2.7.4. the type-approval of gas-fuelled vehicles that contain a limited number of minor deficiencies.

2.8. With regard to vehicles of categories falling within the scope of Regulation No 595/2009/EC, for the purposes of point 2.6.2., where manufacturers use diagnostic and test tools in accordance with ISO 22900 – Modular vehicle communication interface (MVCI) – and ISO 22901 – Open diagnostic data exchange (ODX) in their franchised networks –, the ODX files shall be accessible to independent operators via the website of the manufacturer.

3. Multi-stage type-approval

3.1. In the case of a multi-stage type-approval, the final manufacturer shall be responsible for providing access to vehicle OBD and vehicle repair and maintenance information regarding its own manufacturing stage(s) and the link to the previous stage(s).

3.2. In addition, the final manufacturer shall on its website provide independent operators with the following information:

3.2.1. the website address of the manufacturer(s) responsible for the previous stage(s);

3.2.2. the name and address of all the manufacturers responsible for the previous stage(s);

3.2.3. the type-approval number(s) of the previous stage(s);

3.2.4. the engine number.

3.3. Each manufacturer responsible for a particular stage or stages of type-approval shall be responsible for providing through his website access to vehicle OBD and vehicle repair and maintenance information regarding the stage(s) of type-approval for which he is responsible and the link to the previous stage(s).

3.4. The manufacturer responsible for a particular stage or stages of type-approval shall provide the following information to the manufacturer responsible for the next stage:

3.4.1. the certificate of conformity relating to the stage(s) for which he is responsible;

3.4.2. the Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information, including its appendices;

3.4.3. the type-approval number corresponding to the stage(s) for which he is responsible;

3.4.4. the documents referred to in points 3.4.1., 3.4.2. and 3.4.3. as provided by the manufacturer(s) involved in the previous stage(s).

3.5 Each manufacturer shall authorise the manufacturer responsible for the next stage to pass the documents to the manufacturers responsible for any subsequent stages and the final stage.

3.6. In addition, on a contractual basis, the manufacturer responsible for a particular stage or stages of type-approval shall:

3.6.1. provide the manufacturer responsible for the next stage with access to vehicle OBD and vehicle repair and maintenance information and interface information corresponding to the particular stage(s) for which he is responsible;

3.6.2. provide, at the request of a manufacturer responsible for a subsequent stage of type-approval, with access to vehicle OBD and vehicle repair and maintenance information and interface information corresponding to the particular stage(s) for which he is responsible.

3.7. A manufacturer, including a final manufacturer, may only charge fees in accordance with Article 67 concerning the particular stage(s) for which he is responsible.

A manufacturer, including a final manufacturer, shall not charge fees for providing information relating to the website address or contact details of any other manufacturer.

4. Customer adaptations

4.1. By derogation from section 2, if the number of systems, components or separate technical units subject to a specific customer adaptation is lower than 250 units produced worldwide, repair and maintenance information for the customer adaptation shall be provided in a readily accessible and prompt manner, and in a manner which is non-discriminatory compared to the provisions given or access granted to authorised dealers and repairers.

For the servicing and reprogramming of the electronic control units relating to the customer adaptation, the manufacturer shall make the respective proprietary specialist diagnostic tool or test equipment available to independent operators as provided to authorised repairers.

The customer adaptations shall be listed on the manufacturer's repair and maintenance information website and mentioned in the Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information at the time of type-approval.

4.2. Manufacturers shall make the proprietary specialist diagnostic tool or test equipment to service the customer-adapted systems, components or technical units available to independent operators via sale and rent.

4.3. The manufacturer shall mention in the Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information, at the time of type-approval, the customer adaptations for which the obligation under section 2 to provide access to vehicle OBD and vehicle repair and maintenance information in a standardised format is derogated from and any electronic control unit related to them.

Those customer adaptations and any electronic control unit related to them shall also be listed on the manufacturer's repair and maintenance information website.

5. Small volume manufacturers

5.1. By derogation from section 2, manufacturers whose worldwide annual production of a type of vehicle, system, component or separate technical unit subject to this Regulation is for vehicles of category M1 and N1 less than 1000 vehicles or for vehicles of category M2, M3, N2, N3 and O less than 250 units, shall provide access to repair and maintenance information in a readily accessible and prompt manner, and in a manner that is non-discriminatory compared to the provisions given or access granted to authorised dealers and repairers.

5.2. The vehicle, system, component and separate technical unit subject to point 5.1. shall be listed on the manufacturer's repair and maintenance information website.

5.3. The approval authority shall inform the Commission of each type-approval granted to small volume manufacturers.

6. Requirements

6.1. Vehicle OBD and vehicle repair and maintenance information available through websites shall follow the common standard referred to in Article 65.

Those requiring the right to duplicate or republish the information shall negotiate directly with the manufacturer concerned. Information for training material shall also be available, but may be presented through other media than websites.

Information on all parts of the vehicle, with which the vehicle, as identified by the VIN and any additional criteria such as wheelbase, engine output, trim level or options, is equipped by the vehicle manufacturer and that can be replaced by spare parts offered by the vehicle manufacturer to its authorised repairers or dealers or third parties by means of reference to original equipment (OE) parts number, shall be made available in a database that is easily accessible to independent operators.

This database shall comprise the VIN, OE parts numbers, OE naming of the parts, validity attributes (valid-from and valid-to dates), fitting attributes and, where applicable, structuring characteristics.

The information on the database shall be updated regularly. If this information is available to authorised dealers, the updates shall include in particular all modifications to individual vehicles after their production.

6.2. Access to vehicle security features used by authorised dealers and repair shops shall be made available to independent operators under protection of security technology in accordance with the following requirements:

6.2.1. data shall be exchanged ensuring confidentiality, integrity and protection against replay;

6.2.2. the standard https//ssl-tls (RFC4346) shall be used;

6.2.3. security certificates in accordance with ISO 20828 shall be used for mutual authentication of independent operators and manufacturers;

6.2.4. the independent operator's private key shall be protected by secure hardware.

6.3. The Forum on Access to Vehicle Information referred to in Article 70 shall specify the parameters for fulfilling these requirements in accordance with the state of the art. The independent operator shall be approved and authorised for this purpose on the basis of documents demonstrating that he pursues a legitimate business activity and has not been convicted of any criminal activity.

6.4. With regard to vehicles falling in the scope of Regulation (EC) No 595/2009, reprogramming of control units shall be conducted in accordance with either ISO 22900-2 or SAE J2534 or TMC RP1210B using non-proprietary hardware. Ethernet, serial cable or local area network (LAN) interface and alternative media like compact disc (CD), digital versatile disc (DVD) or solid state memory device for infotainment systems (e.g. navigation systems, telephone) may also be used, but on the condition that no proprietary communication software (e.g. drivers or plug-ins) or hardware is required. For the validation of the compatibility of the manufacturer-specific application and the vehicle communication interfaces (VCI) complying to ISO 22900-2 or SAE J2534 or TMC RP1210B, the manufacturer shall offer either a validation of independently developed VCIs or the information, and loan of any special hardware, required for a VCI manufacturer to conduct such validation himself. The conditions of Article 67(1) shall apply to fees for such validation or information and hardware.

6.5. The requirements of point 6.4. shall not apply in the case of reprogramming of speed limitation devices and recording equipment.

6.6. All emission-related DTCs shall be consistent with Annex XI to Commission Regulation (EC) No 692/2008[33] and Annex X to Commission Regulation (EU) No 582/2011/EC[34].

6.7. For access to any vehicle OBD and vehicle repair and maintenance information other than that relating to secure areas of the vehicle, registration requirements for use of the manufacturer's website by an independent operator shall require only such information as is necessary to confirm how payment for the information is to be made. For information concerning access to secure areas of the vehicle, the independent operator shall present a certificate in accordance with ISO 20828 to identify himself and the organisation to which he belongs and the manufacturer shall respond with his own certificate in accordance with ISO 20828 to confirm to the independent operator that he is accessing a legitimate site of the intended manufacturer. Both parties shall keep a log of any such transactions indicating the vehicles and changes made to them under this provision.

6.8. Manufacturers shall indicate in their repair information websites the type-approval number by model.

7. Requirements for type-approval

7.1. In order to receive a type-approval, the manufacturer shall submit the filled in certificate, the template of which is provided in Appendix I.

7.2. Where the vehicle OBD and vehicle repair and maintenance information is not available, or does not conform to the requirements of this Annex, the manufacturer shall provide that information within six months of the date of the type-approval.

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[33] Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council 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 199, 28.7.2008, p. 1).

[34] 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).

7.3. The obligation to provide information within the dates referred to in point 7.2. shall apply only if, following the type-approval, the vehicle is placed on the market.

Where the vehicle is placed on the market more than six months after the type-approval has been granted the information shall be provided on the date on which the vehicle is placed on the market.

7.4. On the basis of a completed Certificate on Access to Vehicle OBD and Vehicle Repair and Maintenance Information, the approval authority may presume that the manufacturer has put in place satisfactory arrangements and procedures with regard to access to vehicle OBD and vehicle repair and maintenance information, provided that no complaint has been made and that the manufacturer provides that certificate within the periods referred to in point 7.2.

If that certificate of compliance is not provided within that period, the approval authority shall take appropriate measures to ensure compliance.

Appendix 1

Manufacturer's certificate on access to vehicle OBD and vehicle repair and maintenance information

(Manufacturer): …

(Address of the manufacturer): …

Certifies that

it provides access to vehicle OBD and vehicle repair and maintenance information in compliance with the provisions of:

Article 65 of Regulation (EU) No [……] and Annex XVIII to that Regulation

with respect to the types of vehicle, system, component or separate technical unit listed in attachment to this Certificate.

The following derogations are applied: Customer adaptations ([13]) — Small volume ([13]) —.

The principal website address through which the relevant information may be accessed and which is hereby certified to be in compliance with those provisions are listed in an attachment to this Certificate along with the contact details of the responsible manufacturer's representative who has signed this Certificate.

Where applicable: The manufacturer hereby also certifies that he has complied with the obligation of Article 66 of Regulation (EU) No …/201.. to provide the relevant information concerning previous approvals of these types of vehicle no later than six months after the date of type-approval.

Done at …[Place]

On …[Date]

[Signature] [Position]

Annexes:

— Annex A: Website addresses,

— Annex B: Contact details.

ANNEX A

Website addresses referred to in this Certificate:

ANNEX B

Contact details of the manufacturer's representative referred to in this Certificate:

Appendix 2

Vehicle OBD information

1. The vehicle manufacturer shall provide the information required in this appendix for the purposes of enabling the manufacture of OBD-compatible replacement or service parts and diagnostic tools and test equipment.

2. Upon request, the following information shall be made available, on a non-discriminatory basis, to any interested manufacturer of components, diagnostic tools or test equipment:

   2.1. a description of the type and number of the preconditioning cycles used for the original type-approval of the vehicle;

   2.2. a description of the type of the OBD demonstration cycle used for the original type-approval of the vehicle for the component monitored by the OBD system;

   2.3. a comprehensive document describing all sensed components with the strategy for fault detection and MI activation (fixed number of driving cycles or statistical method), including a list of relevant secondary sensed parameters for each component monitored by the OBD system and a list of all OBD output codes and format used (with an explanation of each code and format) associated with individual emission-related power-train components and individual non-emission related components, where monitoring of the component is used to determine MI activation. In particular, in the case of types of vehicles that use a communication link in accordance with ISO 15765-4 'Road vehicles — Diagnostics on controller area network (CAN) — Part 4: Requirements for emissions-related systems', a comprehensive explanation for the data given in service $ 05 Test ID $ 21 to FF and the data given in service $ 06, and a comprehensive explanation for the data given in service $ 06 Test ID $ 00 to FF, for each OBD monitor ID supported, shall be provided.

   In case other communication protocols standards are used, equivalent comprehensive explanation shall be provided.

   This information may be provided in the form of a table, with the following column and row headings:

   Component Fault code; Monitoring strategy; Fault detection criteria; MI activation criteria; Secondary parameters; Preconditioning Demonstration test.

   Catalyst P0420 Oxygen sensor; 1 and 2 signals; Difference between sensor 1 and sensor 2 signals; 3rd cycle Engine speed; engine load; A/F mode; catalyst temperature; Two Type 1 cycles Type 1.

3. Information required for the manufacturing of diagnostic tools

   In order to facilitate the provision of generic diagnostic tools for multi-make repairers, vehicle manufacturers shall make available the information referred to in points 3.1, 3.2 and 3.3 through their repair information websites. That information shall include all diagnostic tool functions and all the links to repair information and troubleshooting instructions. The access to the information may be subject to the payment of a reasonable fee.

   3.1. *Communication protocol information*

      The following information shall be required indexed against vehicle make, model and variant, or another workable definition such as the VIN or the vehicle and

systems identification:

3.1.1.any additional protocol information system necessary to enable complete diagnostics in addition to the standards prescribed in paragraph 4.7.3 of Annex 9B to UNECE Regulation No 49, including any additional hardware or software protocol information, parameter identification, transfer functions, 'keep alive' requirements, or error conditions;

3.1.2. details of how to obtain and interpret all the fault codes that do not comply with the standards prescribed in paragraph 4.7.3 of Annex 9B to UNECE Regulation No 49;

3.1.3. a list of all available live data parameters, including scaling and access information;

3.1.4. a list of all available functional tests, including device activation or control and the means to implement them;

3.1.5. details of how to obtain all component and status information, time stamps, pending DTC and freeze frames;

3.1.6. resetting adaptive learning parameters, variant coding and replacement component setup, and customer preferences;

3.1.7. Electronic control unit (ECU) identification and variant coding;

3.1.8. details of how to reset service lights;

3.1.9. location of diagnostic connector and connector details;

3.1.10. engine code identification.

3.2. *Test and diagnosis of OBD monitored components*

The following information shall be required:

3.2.1. a description of tests to confirm the functionality, at the component or in the harness;

3.2.2. information concerning the test procedure, including test parameters and component information;

3.2.3. connection details, including minimum and maximum input and output and driving and loading values;

3.2.4. values to be expected under certain driving conditions, including idling;

3.2.5. electrical values for the component in its static and dynamic states;

3.2.6. failure mode values for each of the scenarios;

3.2.7. failure mode diagnostic sequences, including fault trees and guided diagnostics elimination.

3.3. *Data required to perform the repair*

The following information shall be required:

3.3.1. ECU and component initialisation (in the event of replacements being fitted);

3.3.2. initialisation of new or replacement ECU's where relevant using pass-through (re-) programming techniques.

ANNEX XIX

CORRELATION TABLE

1. Regulation (EC) No 715/2007

Regulation (EC) No 715/2007	This Regulation
Article 1(2)	Article 94(1)(1)
Article 3, points (14) and (15)	Article 3, points (48) and (49)
Article 6	Article 65
Article 7	Article 67
Article 8	-
Article 9	-
Article 13(2)(e)	Article 92(2)(e)

2. Regulation (EC) No 595/2009

Regulation (EC) No 595/2009	This Regulation
Article 1, second paragraph	Article 95(1)(1)
Article 3, points (11) and (13)	Article 3, points (48) and (49)
Article 6	Article 65
Article 11(2), point (e)	Article 92(2)(e)

3. Regulation (EU) No 692/2008

Regulation (EU) No 692/2008	This Regulation
Annex XIV	Annex XVIII

4. Regulation (EU) No 582/2011

Regulation (EU) No 582/2011	This Regulation
Articles 2a to 2d	Annex XVIII
Article 2e	-
Article 2f	Article 67
Article 2g	Article 69
Article 2h	Article 70
Annex XVII	Annex XVIII

5. Directive 2007/46/EC

Directive 2007/46/EC	This Regulation
Article 1	Article 1(1)
-	Article 1(2)
-	Article 1(3)
Article 2	Article 2
Article 3	Article 3
Article 3, point (1)	-
Article 3, point (2)	-
Article 3, point (3)	Article 3, point (1)
Article 3, point (4)	Article 3, point (27)
Article 3, point (5)	Article 3, point (23)
Article 3, point (6)	Article 3, point (43)
Article 3, point (7)	Article 3, point (21)
Article 3, point (8)	Article 3, point (31)
Article 3, point (9)	Article 3, point (32)
Article 3, point (10)	Article 3, point (33)
Article 3, point (11)	Article 3, point (11)
Article 3, point (12)	Article 3, point (12)
Article 3, point (13)	Article 3, point (3)
Article 3, point (14)	-
Article 3, point (15)	-
Article 3, point (16)	Article 3, point (10)
Article 3, point (17)	Article 3, point (36)
Article 3, point (18)	Article 3, point (38)
Article 3, point (19)	Article 3, point (22)
Article 3, point (20)	Article 3, point (34)
Article 3, point (21)	Article 3, point (35)
Article 3, point (22)	Article 3, point (44)
Article 3, point (23)	Article 3, point (4)
Article 3, point (24)	Article 3, point (5)
Article 3, point (25)	Article 3, point (6)
Article 3, point (26)	Article 3, point (46)
Article 3, point (27)	Article 3, point (9)
Article 3, point (28)	Article 3, point (25)

Article 3, point (29)	Article 3, point (13)
Article 3, point (30)	-
Article 3, point (31)	Article 3, point (37)
Article 3, point (32)	Article 3, point (42)
Article 3, point (33)	Article 3, point (24)
Article 3, point (34)	-
Article 3, point (35)	-
Article 3, point (36)	Article 3, point (28)
Article 3, points (37) to (40)	-
-	Article 3, point (2)
	Article 3, point (7)
	Article 3, point (8)
	Article 3, points (14) to 3(20)
	Article 3, point (26)
	Article 3, points (29) to 3(30)
	Article 3, points (39) to 3(41)
	Article 3, point (45)
	Article 3, points (47) to 3(56)
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	Article 5
Article 4	Article 6
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Article 4(1)	Article 7(1)
Article 4(2)	Article 7(2)
Article 4(3), first subparagraph	Article 6(2)
Article 4(3), second subparagraph	Article 6(3)
Article 4(4)	Article 6(1)
-	Article 6(4)
-	Article 8
-	Article 9
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-	Article 11(1)
-	Article 11(3)
-	Article 11(5)

Article 5(1)	Article 11(6)
Article 5(2)	Article 11(2)
Article 5(3)	Article 11(4)
-	Article 11(7) to (8)
-	Article 12
-	Article 13
-	Article 14
-	Article 15
-	Article 16
-	Article 17
-	Article 18
-	Article 19
Article 6	Article 20
Article 6(1)	Article 20(1)
Article 6(2)	Article 20(2) and Article 23(1)
Article 6(3)	Article 20(3) and Article 23(2)
Article 6(4)	Article 20(4) and Article 23(3)
Article 6(5)	Article 20(5) and (6), and Article 23(4)
Article 6(6) and 7(1)	Article 21
Article 6(7) and (8)	Article 23(5) and Article 27(2)
Article 7 (2)	Article 22
Article 7(3) and (4)	Article 23(5) and Article 27(2)
-	Article 23
Article 8(1) and (2)	Article 24(1) and (2)
Article 8(3)	Article 24(3)
Article 8(4)	Article 24(4)
	Article 25
Article 8(5) and (6)	Article 25(1) and (2)
Article 8(7) and (8)	Article 25(3) and (4)
	Article 26
Article 9(1)	Article 24(2)
Article 9(2)	Article 24(2)
Article 9(3)	Article 26(3)
Article 9(4)	Article 26(4)
Article 9(5)	-

Article 9(6) and (7)	Article 26(5) and (6)
Article 10(1)	Article 27(1)
Article 10(2)	Article 27(1)
Article 10(3)	Article 27(2)
Article 10(4)	Article 27(3)
Article 11	Article 28
Article 12(1)	Article 29(1)
-	Article 29(2)
Article 12(2), first subparagraph,	Article 29(3)
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Article 12(3)	Article 29(5)
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Article 13(1)	Article 31(1)
Article 13(2)	Article 31(2)
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Article 14(1)	Article 32(1)
Article 14(2)	Article 32(2)
Articles 14(3)	Article 32(3)
Article 14(4)	Article 32(4)
Article 15(1)	Article 32(1)
Article 15(2)	Article 32(2)
Article 15(3)	Article 32(3)
Article 16(1)	Article 25(1)
Article 16(2)	Article 25(1)
Article 16(3)	Article 25(2)
-	Article 31(1)
Article 17(1) to (3)	Article 33(2) to (4)
Article 17(4)	Article 33(5)
Article 18(1)	Article 34(1)
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Article 18(2)	Article 34(3)
Article 18(3)	-
-	Article 34(4)
Article 18(4)	Article 34(5)
-	Article 35(1)

Article 18(5)	Article 35(2)
Article 18(6)	Article 35(3)
Article 18(7)	Article 34(6)
Article 18(8)	Article 34(1) third subparagraph
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Article 19(1) and (2)	Article 36(2)
Article 19(3)	Article 36(3)
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