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COMMISSION IMPLEMENTING REGULATION (EU) 2020/683

of 15 April 2020

implementing Regulation (EU) 2018/858 of the European Parliament and of the Council with regards to the administrative requirements for the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles

(OJ L 163, 26.5.2020, p. 1)

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Article 1

Templates for the information document

1. The template laid down in Annex I to this Regulation shall be used for the information document referred to in Article 24(1)(a) of Regulation (EU) 2018/858 for the purposes of the following EU type-approvals:

(a) the whole-vehicle single-step type-approval;

(b) the whole-vehicle mixed type-approval;

(c) the whole-vehicle multi-stage type-approval;

(d) the type-approval of systems, components or separate technical units.

2. The template laid down in Annex II to this Regulation shall be used for the information document referred to in Article 24(1)(a) of Regulation (EU) 2018/858 for the purposes of the EU whole-vehicle step-by-step type-approval.

Article 2

Templates for EU type-approval certificates, including EU type-approval certificates for vehicles produced in small series, and EU individual vehicle approval certificates

1. Model A of Annex III to this Regulation shall be used for the type-approval certificate referred to in Article 28(1) of Regulation (EU) 2018/858, where that certificate concerns an EU whole-vehicle type-approval, and for the type-approval certificate referred to in Article 41(3) of Regulation (EU) 2018/858.

2. Model B of Annex III to this Regulation shall be used for the type-approval certificate referred to in Article 28(1) of Regulation (EU) 2018/858 where that certificate concerns an EU system type-approval.

3. Model C of Annex III to this Regulation shall be used for the type-approval certificate referred to in Article 28(1) of Regulation (EU) 2018/858 where that certificate concerns an EU component type-approval or an EU separate technical unit type-approval.

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4. Model D of Annex III to this Regulation shall be used for the EU individual vehicle approval certificate referred to in Article 44(4) of Regulation (EU) 2018/858.

Article 3

Templates for national type-approval certificates for vehicles produced in small series and national individual vehicle approval certificates

1. Model A of Annex III to this Regulation shall be used for the type-approval certificate referred to in Article 42(4) of Regulation (EU) 2018/858.

2. Model E of Annex III to this Regulation shall be used for the national individual vehicle approval certificate referred to in Article 45(5) of Regulation (EU) 2018/858.

Article 4

Numbering system for approval certificates

The approval certificates referred to in Articles 28(2), 41(3), 42(4), 44(4) and 45(6) of Regulation (EU) 2018/858 shall be numbered in accordance with the method set out in Annex IV to this Regulation.

Article 5

Model for the EU type-approval mark for components and separate technical units

The model laid down in Annex V to this Regulation shall be used for the EU type-approval mark for components and separate technical units referred to in Article 38(2) of Regulation (EU) 2018/858.

Article 6

Template for the test results sheet

The template laid down in Annex VI to this Regulation shall be used for the test results sheet referred to in Article 28(1)(b) of Regulation (EU) 2018/858.

Article 7

Format of test reports

The test reports referred to in Article 30(2) of Regulation (EU) 2018/858 shall be laid down in accordance with the provisions on the format of test reports set out in Annex VII to this Regulation.

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Article 8

Templates and other requirements for certificates of conformity

The templates and requirements laid down in Annex VIII to this Regulation shall be used for the paper format of the certificate of conformity referred to in Article 36(1) of Regulation (EU) 2018/858.

Article 9

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 5 July 2020.

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

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ANNEX I

EXPLANATORY NOTES

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

([2]) If the means of identification of type contains characters not relevant to describe the vehicle, system, 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]) Classified according to the definitions set out in Part A of Annex I to Regulation (EU) 2018/858.

([4]) Delete where not applicable (there are cases where nothing needs to be deleted when more than one entry is applicable).

([5]) In the case of axles fitted with wheels in dual(twin) formation the number of wheels shall be counted as four.

([6]) Designation according to EN 10027-1: 2016. If that is not possible, the following information shall be provided:

— description of the material;

— yield point;

— ultimate tensile stress;

— elongation (in %);

— Brinell hardness.

([7]) 'Forward control' means a configuration in which more than half of the engine length is rearward of the foremost point of the windshield base and the steering wheel hub in the forward quarter of the vehicle length as defined in the explanatory note (z) of Appendix 1 of PART 1 of ANNEX 1 to Regulation 107 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of category M2 or M3 vehicles with regard to their general construction (OJ L 52, 23.2.2018, p. 1),

([8]) As defined in Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166 (OJ L 325, 16.12.2019, p. 1).

([9]) 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.

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([10]) Standard ISO 612:1978 – Road vehicles – Dimensions of motor vehicles and towed vehicles – terms and definitions.

([11]) Optional equipment that affects the dimensions of the vehicle shall be specified.

([12]) In accordance with definitions 25 (Wheelbase) and 26 (Axle spacing) of Regulation (EU) No 1230/2012 respectively. Note: In the case of a centre-axle trailer, the axis of the coupling shall be considered as the foremost axle.

([13]) The total axle spacing is the sum of each axle spacing from the foremost to the rearmost axle.

([14]) 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).

([15]) Term No 6.19.2.

([16]) Term No 6.20.

([17]) Term No 6.5.

([18]) Term No 6.1 and for vehicles other than those of category M1: Appendix 1 of Annex I to Regulation (EU) No 1230/2012. In the case of trailers, the lengths shall be specified as mentioned in term No 6.1.2 of Standard ISO 612:1978.

([19]) Term No 6.17.

([20]) Term No 6.2 and for vehicles other than those of category M1: Appendix 1 of Annex I to Regulation (EU) No 1230/2012.

([21]) Term No 6.3 and for vehicles other than those of category M1: Appendix 1 of Annex I to Regulation (EU) No 1230/2012.

([22]) In the case of an incomplete vehicle.

([23]) Term No 6.6.

([24]) Term No 6.10.

([25]) Term No 6.7.

([26]) Term No 6.11.

([27]) Term No 6.18.1.

([28]) Term No 6.9.

([29]) 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).

([30]) As defined in Regulation (EU) No 1230/2012.

The liquid containing systems (except those for used water that must remain empty and those for fuel) are filled to 100 % of the capacity specified by the manufacturer. The information referred to in points 2.6(b) and 2.6.1(b) do not need to be provided for vehicle categories N2, N3, M2, M3, O3, and O4.

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([31]) 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 Text with EEA relevance (OJ L 353, 21.12.2012, p. 31-79).

([32]) 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.

([33]) Please fill in here the upper and lower values for each variant.

([34]) 'Coupling overhang' is the horizontal distance between the coupling for centre-axle trailers and the centreline of the rear axle(s).

([35]) Only for the purpose of definition of off-road vehicles.

([36]) 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).

([37]) 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).

([38]) 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.

([39]) This figure shall be rounded off to the nearest tenth of a millimetre.

([40]) This value shall be calculated (π = 3,1416) and rounded off to the nearest cm^3.

([41]) Specify the tolerance.

([42]) In case of a dual-fuel engine or vehicle.

([43]) Determined in accordance with the requirements of Regulation (EC) No 715/2007 or Regulation (EC) No 595/2009 as applicable.

([44]) 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).

([45]) 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.

([46]) To be documented if not documented in the documentation referred to in point 3.2.12.2.7.1

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([47]) 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.

([48]) To be documented if not already included in the documentation referred to in point 3.2.12.2.7.0.5.

([49]) 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.

([50]) UN Regulation No 49 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines and positive ignition engines for use in vehicles (OJ L 171, 24.6.2013, p. 1).

([51]) Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008 (OJ L 751, 7.7.2017, p. 1).

([52]) UN Regulation No 83 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (OJ L 42, 15.2.2012, p. 1).

([53]) UN Regulation No 67 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the I. Approval of specific equipment of vehicles of category M and N using liquefied petroleum gases in their propulsion system; II. Approval of vehicles of category M and N fitted with specific equipment for the use of liquefied petroleum gases in their propulsion system with regard to the installation of such equipment [2016/1829] (OJ L 285, 20.10.2016, p. 1).

([54]) UN Regulation No 110 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of: I. specific components of motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system; II. vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system [2015/999] (OJ L 166, 30.6.2015, p. 1).

([55]) 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).

([56]) Determined in accordance with the requirements of Regulation No 101 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range, and of categories M 1 and N 1 vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range (OJ L 138, 26.5.2012, p. 1).

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([57]) Except for dual-fuel engines or vehicles.

([58]) In the case of Type 1B, Type 2B, and Type 3B of dual-fuel engines.

([59]) Value for the combined WHTC including cold and hot part in accordance with Annex VIII to Regulation (EU) No 582/2011.

([60]) 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).

([61]) 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).

([62]) 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).

([63]) 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).

([64]) Expand the table if necessary, using one extra row per eco-innovation.

([65]) Number of the Commission Decision approving the eco-innovation.

([66]) Assigned in the Commission Decision approving the eco-innovation.

([67]) Under agreement of the type-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.

([68]) Sum of the CO_2 emissions savings of each individual eco-innovation.

([69]) Representative vehicle is tested for the road load matrix family.

([70]) Commission Regulation (EU) No 136/2014 of 11 February 2014 amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 as regards emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and Commission Regulation (EU) No 582/2011 as regards emissions from heavy duty vehicles (Euro VI) (OJ L 43, 13.2.2014, p. 12).

([71]) Commission Regulation (EU) 2017/2400 of 12 December 2017 implementing Regulation (EC) No 595/2009 of the European Parliament and of the Council as regards the determination of the CO_2 emissions and fuel consumption of heavy-duty vehicles and amending Directive 2007/46/EC of the European Parliament and of the Council and Commission Regulation (EU) No 582/2011 (OJ L 349, 29.12.2017, p. 1).

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([72]) As defined in Regulation (EU) 2017/2400

([73]) UN Regulation No 85 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of internal combustion engines or electric drive trains intended for the propulsion of motor vehicles of categories M and N with regard to the measurement of net power and the maximum 30 minutes power of electric drive trains (OJ L 323, 7.11.2014, p. 52).

([74]) ESC test.

([75]) ETC test only.

([76]) The specified particulars are to be given for any proposed variants.

([77]) With respect to trailers, maximum speed permitted by the manufacturer.

([78]) UN Regulation No 39 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the speedometer and odometer equipment including its installation (OJ L 302 28.11.2018, p. 106).

([79]) 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).

([80]) For tyres of category Z intended to be fitted on vehicles whose maximum speed exceeds 300 km/h equivalent information shall be provided.

([81]) UN Regulation No 21 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to their interior fittings (OJ L 188, 16.7.2018, p. 32).

([82]) UN Regulation No 121 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the location and identification of hand controls, tell-tales and indicators [2016/18] (OJ L 5, 8.1.2016, p. 9).

([83]) 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.

([84]) ‘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 UN Regulation No 17 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the seats, their anchorages and any head restraints (OJ L 230, 31.8.2010, p. 81).

([85]) UN Regulation No 26 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to their external projections (OJ L 215, 14.8.2010, p. 27).

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([86]) 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.

([87]) UN Regulation No 14 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of vehicles with regard to safety-belt anchorages, ISOFIX anchorages systems, ISOFIX top tether anchorages and i-Size seating positions [2015/1406] (OJ L 218, 19.8.2015, p. 27).

([88]) For symbols and marks to be used, see paragraph 5.3.4 to UN Regulation No 16 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of: I. Safety-belts, restraint systems, child restraint systems and ISOFIX child restraint systems for occupants of power-driven vehicles; II. Vehicles equipped with safety-belts, safety-belt reminders, restraint systems, child restraint systems, ISOFIX child restraint systems and i-Size child restraint systems [2018/629] (OJ L 109, 27.4.2018, p. 1) In the case of 'S' type belts, specify the nature of the type(s).

([89]) 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).

([90]) 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).

([91]) 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).

([92]) UN Regulation No 48 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices (OJ L 14, 16.1.2019, p. 42).

([93]) UN Regulation No 10 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility (OJ L 41, 17.2.2017, p. 1).

([94]) UN Regulation No 138 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of Quiet Road Transport Vehicles with regard to their reduced audibility [2017/71] (OJ L 9, 13.1.2017, p. 33).

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([95]) 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 Text with EEA relevance (OJ L 158, 27.5.2014, p. 131–195)

([96]) UN Regulation No 66 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of large passenger vehicles with regard to the strength of their superstructure (OJ L 84, 30.3.2011, p. 1).

([97]) UN Regulation No 105 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles intended for the carriage of dangerous goods with regard to their specific constructional features (OJ L 230, 31.8.2010, p. 253).

([98]) These terms are defined in the standard ISO 22628:2002 – Road vehicles – recyclability and recoverability – calculation method.

([99]) 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).

([100]) 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).

([101]) Set out in such a way as to make the actual value clear for each technical configuration of the vehicle type.

([102]) To be indicated where the manufacturer applies Article 28(6) of Regulation (EU) 2018/858, in which case the applied regulatory act shall be specified in the second column.

([103]) Contracting Parties to the Revised 1958 Agreement.

([104]) To be indicated where not obtainable from the number of the type-approval certificate.

([105]) 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.

([106]) Please fill in ‘not applicable’ in the case of a step-by-step type-approval, where the approval authority collect the whole set of EU type-approval certificates or UN type-approval certificates, and that authority edited the final whole vehicle type-approval certificate.

([107]) In accordance with Annex II to Regulation (EU) 2018/858.

([108]) Or visual representation of an ‘advanced electronic signature’ in accordance with Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (*OJ L 257, 28.8.2014, p. 73)*, including data for verification.

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([109]) One ¾ front, one ¾ rear.

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([111]) This entry shall be completed only where the vehicle has two axles.

([112]) In the case of more than one electric motor indicate the consolidated effect of all the engines.

([113]) The codes described in Part C of Annex I to Regulation (EU) 2018/858 shall be used.

([114]) Indicate only the basic colour(s): white, yellow, orange, red, violet, blue, green, grey, brown or black.

([115]) Excluding seats designated for use only when the vehicle is stationary and the number of wheelchair positions.

([116]) Add the number of the Euro level and, if appropriate, the character corresponding to the provisions used for type-approval.

([117]) Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008 (Text with EEA relevance) (OJ L 175, 7.7.2017, p. 1–643)

([118]) Not compulsory

([119]) Drawn up in accordance with the model set out in Part I of Annex IV to Regulation (EU) 2017/2400

([120]) Drawn up in accordance with the model set out in Part II of Annex IV to Regulation (EU) 2017/2400

([121]) Only applicable if the vehicle is approved in accordance with Regulation (EC) No 595/2009 and a customer information file has been drawn up in accordance with the model set out in part II of Annex IV to Regulation (EU) 2017/2400/

([122]) 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).

([123]) 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).

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([124]) 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).

([125]) UN Regulation No 13-H of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of passenger cars with regard to braking [2015/2364] (OJ L 335, 22.12.2015, p. 1).

([126]) UN Regulation No 46 of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices (OJ L 237, 8.8.2014, p. 24).

([127]) Regulation No 28 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals (OJ L 323, 6.12.2011, p. 33).

([128]) When restrictions for the fuel are applicable, indicate those restrictions (e.g. for natural gas the L range or the H range).

([129]) 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.

([130]) For bi fuel vehicles, the table shall be repeated for both fuels.

([131]) For flex fuel vehicles, when the test is to be performed on both fuels, as required by Figure I.2.4 of Annex I to Commission Regulation (EU) 2017/1151. For vehicles running on LPG or NG/Biomethane, 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 in accordance with [When required by?] paragraph 3.1.4. of Annex 12 to UN Regulation No 83 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (OJ L 42, 15.2.2012, p. 1). The results in the table shall be indicated if they are measured or calculated.

([132]) If applicable.

([133]) For Euro VI, ESC shall be understood as WHSC and ETC as WHTC.

([134]) 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.

([135]) Repeat the table for each reference fuel tested.

([136]) The unit 'l/100km' is replaced by 'm^3/100km' for vehicles fuelled with NG and H2NG, and by 'kg/100km' for vehicles fuelled with hydrogen.

▼B

([137]) The format for the Interpolation Family Identifier is provided in paragraph 5.0 of Annex XXI to Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008 (OJ L 175, 7.7.2017, p. 1).

([138]) Commission Implementing Regulation (EU) 2017/1152 of 2 June 2017 setting out a methodology for determining the correlation parameters necessary for reflecting the change in the regulatory test procedure with regard to light commercial vehicles and amending Implementing Regulation (EU) No 293/2012 (OJ L 175, 7.7.2017, p. 644).

([139]) Commission Implementing Regulation (EU) 2017/1153 of 2 June 2017 setting out a methodology for determining the correlation parameters necessary for reflecting the change in the regulatory test procedure and amending Regulation (EU) No 1014/2010 (OJ L 175, 7.7.2017, p. 679).

([140]) The format for the Interpolation Family Identifier is provided in paragraph 5.0 of Annex XXI to Commission Regulation (EU) 2017/1151.

([141]) Repeat the table for each variant/version of the vehicle.

([142]) Expand the table if necessary, using one extra row per eco-innovation.

([143]) UN Regulation No 83 of the Economic Commission for Europe of the United Nations (UN/ECE) Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (*OJ L 42, 15.2.2012, p. 1).*

([144]) Commission Decision approving the eco-innovation. Article 12 of Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 1).

([145]) As assigned in the Commission Decision approving the eco-innovation.

([146]) If a modelling methodology is applied instead of the type 1 test cycle, this value shall be the one provided by the modelling methodology.

([147]) = point 3.5.1.3 of Annex I to Commission Implementing Regulation XX/XXX of ..... on implementing Regulation (EU) 2018/858 of the European Parliament and of the Council with regards to the administrative requirements for the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles

([148]) Sum of the results from each individual eco-innovation CO_2 emissions savings on NEDC calculated in the last Colom of this table in accordance with Annex XII to Commission Regulation (EU) 2017/1151.

▼B

([149]) Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008 (OJ L 175, 7.7.2017, p. 1).

([150]) Sum of the results from each individual eco-innovation CO_2 emissions savings on WLTP calculated in the last Colom of this table in accordance with Annex XII to Commission Regulation (EU) 2017/1151.

([151]) The general code of the eco-innovation(s) shall consist of the following elements, each separated by a blank space:

— The code of the approval authority set out in Annex IV to Commission Implementing Regulation XX/XXX of XXXX on implementing Regulation (EU) 2018/858 of the European Parliament and of the Council with regards to the administrative requirements for the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles;

— The individual code of each eco-innovation fitted in the vehicle, listed 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 into a vehicle certified by the German type-approval authority should be: ‘e1 10 15 16’).

([152]) ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories, Publication date: 2017-11.

([153]) Indicate the identification code.

([154]) Indicate whether the vehicle is suitable for use in either right or left-hand traffic or both right and left-hand traffic.

([155]) Indicate whether the speedometer or odometer fitted has metric or both metric and imperial units.

([156]) This statement shall not restrict the right of the Member States to require technical adaptations in order to allow 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.

([157]) Entries 4 and 4.1 shall be completed in accordance with definitions 25 (Wheelbase) and 26 (Axle spacing) of Regulation (EU) No 1230/2012 respectively.

([158]) Masses must be rounded to the nearest whole digit

([159]) For hybrid vehicles, indicate both outputs

▼B

([160]) Optional equipment and additional tyre/wheel combinations under this letter can be added under entry 'Remarks'. If a vehicle is supplied with a complete set of standard wheels and tyres and a complete set of snow tyres (marked with a 3 peaked mountain and snowflake symbol – 3PMS) with or without wheels, the snow tyres and their wheels where applicable shall be considered as additional tyre/wheel combinations irrespective of the wheels/tyres actually fitted to the vehicle.

([161]) Only applicable to individual vehicles from roadload matrix family (RLMF).

([162]) Repeat for the various fuels that can be used. Vehicles that can be fuelled with both petrol and gaseous fuel but in which the petrol system is fitted for emergency purposes or for starting only and the petrol tank of which cannot contain more than 15 litres of petrol will be regarded as vehicles that can only run on a gaseous fuel.

([163]) In case of EURO VI dual-fuel engines and vehicles, repeat as appropriate.

([164]) Solely emissions assessed in accordance with the applicable regulatory act or acts shall be stated.

([165]) If the vehicle is equipped with 24 GHz short-range radar equipment in accordance with Commission Decision of 17 January 2005 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), the manufacturer shall indicate here: 'Vehicle equipped with 24 GHz short-range radar equipment'.

([166]) The manufacturer may complete these entries either for international traffic or national traffic or both. For national traffic, the code of the country where the vehicle is intended to be registered shall be mentioned. The code shall be in accordance with standard ISO 3166-1:2013. For international traffic, the directive number shall be referred to (e.g. '96/53/EC' for Council Directive 96/53/EC).

([167]) Excluding seats designated for use only when the vehicle is stationary and the number of wheelchair positions. For coaches belonging to the vehicle category M3 the number of crew members shall be included in the passenger number.

([168]) In the case of completed vehicles of category N1 within the scope of Regulation (EC) No 715/2007.

([169]) Only applicable if the vehicle is approved in accordance with 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. 1–13).

▼B

([170]) Only applicable if the vehicle is approved in accordance with Regulation (EC) No 595/2009 and a customer information file has been drawn up in accordance with the model set out in Part II of Annex IV to Regulation (EU) 2017/2400.

([171]) As indicated in point 2.3 of the customer information file drawn up in accordance with the model set out in Part II of Annex IV to Regulation (EU) 2017/2400

([172]) As indicated in point 2.4 of the customer information file drawn up in accordance with the model set out in Part II of Annex IV to Regulation (EU) 2017/2400

([173]) UN Regulation No 105 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles intended for the carriage of dangerous goods with regard to their specific constructional features. (OJ L 230, 31.8.2010, p. 253).

([174]) For the term coupling point ‘0’ see Regulation (EU) No 19/2011, Annex I, Part A, paragraph 3.1.2.

▼B

TEMPLATE FOR AN INFORMATION DOCUMENT FOR THE EU TYPE-APPROVAL OF VEHICLE, SYSTEMS, COMPONENTS OR SEPARATE TECHNICAL UNITS

The information documents referred to in Regulation (EU) 2018/858 in respect of a whole-vehicle EU type-approval and in respect of the EU type-approval of a system, component or separate technical unit shall consist only of extracts from the following list and its item numbering system.

Make sure that drawings or pictures show sufficient details distinctly and visibly if printed on size A4.

Systems, components or separate technical units, referred to in this Annex, having electronic controls, information concerning their performance shall be provided.

0. GENERAL

0.1. Make (trade name of manufacturer): …

0.2. Type: …

0.2.0.1. Chassis: …

0.2.0.2. Bodywork/complete vehicle: …

0.2.1. Commercial name(s) (if available): …

0.2.2. For multi-stage 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):

Number of the type-approval certificate including extension number …

▼M1

0.2.2.1. Allowed Parameter Values for multistage type approval to use the base vehicle emission values (insert range where applicable) ([1]):

Final Vehicle actual mass: …

Final Vehicle technically permissible maximum laden mass (in kg): …

Frontal area for final vehicle (in cm^2): …

Rolling resistance (kg/t): …

Cross-sectional area of air entrance of the front grille (in cm^2): …

▼B

0.2.3. Identifiers ([1]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier

0.2.3.4.1. Roadload family of VH: …

▼B

0.2.3.4.2.	Roadload family of VL: …
0.2.3.4.3.	Roadload families applicable in the interpolation family: …
0.2.3.5.	Roadload Matrix family's identifier: …
0.2.3.6.	Periodic regeneration family's identifier: …
0.2.3.7.	Evaporative test family's identifier: …
0.2.3.8.	OBD family's identifier: …
0.2.3.9.	Other family's identifier: …
0.3.	Means of identification of type, if marked on the vehicle/component/separate technical unit ([1]) ([2]): …
0.3.0.1.	Chassis: …
0.3.0.2.	Bodywork/complete vehicle: …
0.3.1.	Location of that marking: …
0.3.1.1.	Chassis: …
0.3.1.2.	Bodywork/complete vehicle: …
0.4.	Category of vehicle ([3]): …
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport: …
0.5.	Company name and address of manufacturer: …
0.5.1.	For multi-stage approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle: …
0.6.	Location and method of attachment of statutory plates and location of vehicle identification number: …
0.6.1.	On the chassis: …
0.6.2.	On the bodywork: …
0.7.	(Not attributed)
0.8.	Name(s) and address(es) of assembly plant(s): …
0.9.	Name and address of the manufacturer's representative (if any): …
1.	GENERAL CONSTRUCTION CHARACTERISTICS
1.1.	Photographs and/or drawings of a representative vehicle/component/separate technical unit ([4]): …
1.2.	Dimensional drawing of the whole vehicle (shortest and longest wheelbase if applicable): …
1.3.	Number of axles: … and wheels ([5]): …
1.3.1.	Number and position of axles with twin wheels: …
1.3.2.	Number and position of steered axles: …
1.3.3.	Powered axles (number, position, interconnection): …

▼B

1.4.	Chassis (if any) (overall drawing – shortest and longest wheelbase if applicable): …
1.5.	Material used for the side-members ([6]): …
1.6.	Position and arrangement of the engine: …
1.7.	Driving cab: forward control ([7])/bonneted/sleeper cab ([4]): …
1.8.	Hand of drive: left/right ([4]).
1.8.1.	Vehicle is equipped to be driven in right/left ([4]) hand traffic.
1.9.	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: …
1.10.	Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …
1.11.	Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])
2.	MASSES AND DIMENSIONS ([9]) ([10]) ([11]) (in kg and mm) (Refer to drawing where applicable)
2.1.	**Wheelbase(s) (fully loaded) ([12]):**
2.1.1.	Two-axle vehicles: …
2.1.2.	Vehicles with three or more axles
2.1.2.1.	Axle spacing between consecutive axles going from the foremost to the rearmost axle: …
2.1.2.2.	Total axle spacing ([13]): …
2.2.	**Fifth wheel**
2.2.1.	In the case of semi-trailers
2.2.1.1.	Distance between the axis of the fifth wheel kingpin and the rearmost end of the semi-trailer: …
2.2.1.2.	Maximum distance between the axis of the fifth wheel kingpin and any point on the front of the semi-trailer: …
2.2.1.3.	Semi-trailer special wheelbase (as defined in point 3.2 of Part D of Annex I to Commission Regulation (EU) No 1230/2012 ([14])
2.2.2.	In the case of semi-trailer towing vehicles
2.2.2.1.	Fifth wheel lead (maximum and minimum; indicate the permissible values in the case of an incomplete vehicle) ([15]): …
2.2.2.2.	Maximum height of the fifth wheel (standardised) ([16]): …

▼B

2.3.	**Axle track(s) and width(s)**
2.3.1.	Track of each steered axle ([17]): …
2.3.2.	Track of all other axles ([17]): …
2.3.3.	Width of the widest rear axle (measured at the outermost part of the tyres excluding the bulging of the tyres close to the ground): …
2.3.4.	Width of the foremost axle (measured at the outermost part of the tyres excluding the bulging of the tyres close to the ground): …
2.4.	**Range of vehicle dimensions (overall)**
2.4.1.	For chassis without bodywork
2.4.1.1.	Length ([18]): …
2.4.1.1.1.	Maximum permissible length: …
2.4.1.1.2.	Minimum permissible length: …
2.4.1.1.3.	In the case of trailers, maximum permissible drawbar length ([19]): …
2.4.1.2.	Width ([20]): …
2.4.1.2.1.	Maximum permissible width: …
2.4.1.2.2.	Minimum permissible width: …
2.4.1.3.	Height (in running order) ([21]) (for suspensions adjustable for height, indicate normal running position): …
2.4.1.3.1.	Maximum permissible height ([22]): …
2.4.1.4.	Front overhang ([23]): …
2.4.1.4.1.	Approach angle ([24]): …… degrees.
2.4.1.5.	Rear overhang ([25]): …
2.4.1.5.1.	Departure angle ([26]): …… degrees.
2.4.1.5.2.	Minimum and maximum permissible overhang of the coupling point ([27]): …
2.4.1.5.3.	Maximum permissible rear overhang ([22]): …
2.4.1.6.	Ground clearance (as defined in point 4.5 of Part A of Annex I to Regulation (EU) 2018/858)
2.4.1.6.1.	Between the axles: …
2.4.1.6.2.	Under the front axle(s): …
2.4.1.6.3.	Under the rear axle(s): …
2.4.1.7.	Ramp angle ([28]): …… degrees.
2.4.1.8.	Extreme permissible positions of the centre of gravity of the body and/or interior fittings and/or equipment and/or payload: …

▼B

2.4.2.	For chassis with bodywork
2.4.2.1.	Length ([18]): …
2.4.2.1.1.	Length of the loading area: …
2.4.2.1.2.	In the case of trailers, maximum permissible drawbar length ([28]): …
2.4.2.1.3.	Elongated cab complying with Article 9a of Council Directive 96/53/EC ([29]): yes/no ([4])
2.4.2.2.	Width ([20]): …
2.4.2.2.1.	Thickness of the walls (in the case of vehicles designed for controlled-temperature carriage of goods): …
2.4.2.3.	Height (in running order) ([21]) (for suspensions adjustable for height, indicate normal running position): …
2.4.2.4.	Front overhang ([23]): …
2.4.2.4.1.	Approach angle ([24]): …… degrees.
2.4.2.5.	Rear overhang ([25]): …
2.4.2.5.1.	Departure angle ([26]): …… degrees.
2.4.2.5.2.	Minimum and maximum permissible overhang of the coupling point ([27]): …
2.4.2.5.3.	Maximum permissible rear overhang: …
2.4.2.6.	Ground clearance (as defined in point 4.1 and 4.2 of Part A of Annex I to Regulation (EU) 2018/858)
2.4.2.6.1.	Between the axles: …
2.4.2.6.2.	Under the front axle(s): …
2.4.2.6.3.	Under the rear axle(s): …
2.4.2.7.	Ramp angle ([28]): …… degrees.
2.4.2.8.	Extreme permissible positions of the centre of gravity of the payload (in the case of non-uniform load): …
2.4.2.9.	Position of centre of gravity of the vehicle (M2 and M3) at its technically permissible maximum laden mass in the longitudinal, transverse and vertical directions: …
2.4.3.	For bodywork approved without chassis (vehicles M2 and M3)
2.4.3.1.	Length ([18]): …
2.4.3.2.	Width ([20]): …
2.4.3.3.	Nominal height (in running order) ([21]) on intended chassis type(s) (for suspensions adjustable for height, indicate normal running position): …

▼B

2.5. **Minimum mass on the steering axle(s) for incomplete vehicles: …**

2.6. **Mass in running order ([30])**

(a) Minimum and maximum for each variant: …

(b) Mass of each version (a matrix must be provided): …

2.6.1. 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): …

2.6.2. Maximum mass of the optional equipment (see the definition set out in point (5) of Article 2 of Commission Regulation (EU) No 1230/2012) ([31]): …

2.6.2.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point: …

2.6.3. Rotational mass ([1]): 3 % of the sum of mass in running order and 25 kg or value, per axle (kg): …

2.6.4. Additional mass for alternative propulsion: …kg

2.6.5. List of equipment to for alternative propulsion (and indication of the mass of the parts): …

2.7. **Minimum mass of the completed vehicle** as stated by the manufacturer, in the case of an incomplete vehicle: …

2.7.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point: …

2.7.2. Maximum permissible actual mass as stated by the manufacturer, in the case of in incomplete vehicle: …

2.8. **Technically permissible maximum laden mass** stated by the manufacturer ([32]) ([33]): …

2.8.1. Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([33]): …

2.9. **Technically permissible maximum mass on each axle**: …

2.10. **Technically permissible mass on each group of axles**: …

2.11. **Technically permissible maximum towable mass of the towing vehicle**

in case of:

2.11.1. Drawbar trailer: …

2.11.2. Semi-trailer: …

▼B

2.11.3.	Centre-axle trailer: …
2.11.3.1.	Maximum ratio of the coupling overhang ([34]) to the wheel base: …
2.11.3.2.	Maximum V-value: …… kN.
2.11.4.	Rigid drawbar trailer: …
2.11.5.	Technically permissible maximum laden mass of the combination ([33]): …
2.11.6.	Maximum mass of unbraked trailer: …
2.12.	**Technically permissible maximum mass at the coupling point:**
2.12.1.	Of a towing vehicle: …
2.12.2.	Of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …
2.12.3.	Maximum permissible mass of the coupling device (if not fitted by the manufacturer): …
2.13.	Rear swing-out (Point 8 of Part B/Point 7 of Part C of Annex I to Regulation (EU) No 1230/2012): …
2.14.	**Engine power/maximum mass ratio**: …… kW/kg.
2.14.1.	Engine power/technically permissible maximum laden mass of the combination ratio (Point 6 of Part B of Annex I to Regulation (EU) No 1230/2012): …… kW/kg.
2.15.	**Hill-starting ability** (solo vehicle) ([35]): …… %.
2.16.	**Registration/in service maximum permissible masses, vehicle categories M_2, M_3, N_2, N_3, O_3 and O_4 (optional)**
2.16.1.	Registration/in service maximum permissible laden mass: …
2.16.2.	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: …
2.16.3.	Registration/in service maximum permissible mass on each group of axles: …
2.16.4.	Intended registration/in service maximum permissible towable mass (several entries possible for each technical configuration) ([101]): …
2.16.5.	Registration/in service maximum permissible mass of the combination: …

▼B

2.17. **Vehicle submitted to multi-stage type-approval** (only in the case of incomplete or completed vehicles of category N1 within the scope of Regulation (EC) No 715/2007 of the European Parliament and of the Council ([36])): yes/no ([4])

2.17.1. Mass of the base vehicle in running order: … kg.

2.17.2. Default added mass, calculated in accordance with Section 5 of Annex XII to Commission Regulation (EC) No 692/2008 ([37]): … kg.

3. PROPULSION ENERGY CONVERTER ([38])

3.1. **Manufacturer of the propulsion energy converter(s)**: …

3.1.1. Manufacturer's code (as marked on the propulsion energy converter or other means of identification): …

3.1.2. Number of the approval certificate (where appropriate), including fuel identification marking: …

(heavy-duty vehicles only)

3.2. **Internal combustion engine**

3.2.1. Specific engine information

3.2.1.1. Working principle: positive ignition/compression ignition/dual-fuel ([4])

Cycle: four stroke/two stroke/rotary ([4])

3.2.1.1.1. Type of dual-fuel engine: Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4]) ([42])

3.2.1.1.2. Gas energy ratio over the hot part of the WHTC test-cycle: … %

3.2.1.2. Number and arrangement of cylinders: …

3.2.1.2.1. Bore ([39]): …… mm

3.2.1.2.2. Stroke ([39]): …… mm

3.2.1.2.3. Firing order: …

3.2.1.3. Engine capacity ([40]): …… cm^3

3.2.1.4. Volumetric compression ratio ([41]): …

3.2.1.5. Drawings of combustion chamber, piston crown and, in the case of positive ignition engines, piston rings: …

3.2.1.6. Normal engine idling speed ([41]): …… min^{-1}

3.2.1.6.1. High engine idling speed ([41]): …… min^{-1}

3.2.1.6.2. Idle on diesel: yes/no ([4]) ([42])

▼B

3.2.1.7.	Carbon monoxide content by volume in the exhaust gas with the engine idling ([41]): …… % as stated by the manufacturer (positive ignition engines only)
3.2.1.8.	Maximum net power ([43]): … kW at … min^{-1} (manufacturer's declared value)
3.2.1.9.	Maximum permitted engine speed as prescribed by the manufacturer: … min^{-1}
3.2.1.10.	Maximum net torque ([43]): … Nm at … min^{-1} (manufacturer's declared value)
3.2.1.11.	Manufacturer references of the documentation and extended documentation packages required by Articles 5, 7 and 9 of Commission Regulation (EU) No 582/2011 ([44]) or by Articles 3 and 5 of Commission Regulation (EU) 2017/1151 enabling the approval authority to evaluate the emission control strategies and the systems on-board the engine or vehicle to ensure the correct operation of emissions control measures.
3.2.2.	Fuel
3.2.2.1.	Diesel/Petrol/LPG/NG or Biomethane/Ethanol (E 85)/Biodiesel/Hydrogen ([4]) ([45])
3.2.2.1.1.	RON, unleaded: …
3.2.2.2.	Heavy duty vehicles Diesel/Petrol/LPG/NG-H/NG-L/NG-HL/Ethanol (ED95)/Ethanol (E85)/LNG/LNG_{20} ([4]) ([45])
3.2.2.2.1.	(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)
3.2.2.3.	Fuel tank inlet: restricted orifice/label ([4])
3.2.2.4.	Vehicle fuel type: Mono fuel, Bi fuel, Flex fuel, Dual fuel Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])
3.2.2.5.	Maximum amount of biofuel acceptable in fuel (manufacturer's declared value): … % by volume
3.2.3.	Fuel tank(s)
3.2.3.1.	Service fuel tank(s)
3.2.3.1.1.	Number and capacity of each tank: …
3.2.3.1.1.1.	Material: …

▼B

3.2.3.1.2.	Drawing and technical description of the tank(s) with all connections and all lines of the breathing and venting system, locks, valves, fastening devices: …
3.2.3.1.3.	Drawing clearly showing the position of the tank(s) in the vehicle: …
3.2.3.2.	Reserve fuel tank(s)
3.2.3.2.1.	Number and capacity of each tank: …
3.2.3.2.1.1.	Material: …
3.2.3.2.2.	Drawing and technical description of the tank(s) with all connections and all lines of the breathing and venting system, locks, valves, fastening devices: …
3.2.3.2.3.	Drawing clearly showing the position of the tank(s) in the vehicle: …
3.2.4.	Fuel feed
3.2.4.1.	By carburettor(s): yes/no ([4])
3.2.4.2.	By fuel injection (compression ignition or dual-fuel only): yes/no ([4])
3.2.4.2.1.	System description (common rail/unit injectors/distribution pump etc.): …
3.2.4.2.2.	Working principle: direct injection/pre-chamber/swirl chamber ([4])
3.2.4.2.3.	Injection/Delivery pump
3.2.4.2.3.1.	Make(s): …
3.2.4.2.3.2.	Type(s): …
3.2.4.2.3.3.	Maximum fuel delivery ([4]) ([41]): … 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)
3.2.4.2.3.4.	Static injection timing ([41]): …
3.2.4.2.3.5.	Injection advance curve ([41]): …
3.2.4.2.3.6.	Calibration procedure: test bench/engine ([4])
3.2.4.2.4.	Engine speed limitation control
3.2.4.2.4.1.	Type: …
3.2.4.2.4.2.	Cut-off point

▼B

3.2.4.2.4.2.1. Speed at which cut-off starts under load: …… min^{-1}

3.2.4.2.4.2.2. Maximum no-load speed: …… min^{-1}

3.2.4.2.4.2.3. Idling speed: ….. min^{-1}

3.2.4.2.5. Injection piping (heavy-duty vehicles only)

3.2.4.2.5.1. Length: …… mm

3.2.4.2.5.2. Internal diameter: …… mm

3.2.4.2.5.3. Common rail, make and type: …

3.2.4.2.6. Injector(s)

3.2.4.2.6.1. Make(s): …

3.2.4.2.6.2. Type(s): …

3.2.4.2.6.3. Opening pressure ([41]): … kPa or characteristic diagram ([41]): …

3.2.4.2.7. Cold start system

3.2.4.2.7.1. Make(s): …

3.2.4.2.7.2. Type(s): …

3.2.4.2.7.3. Description: …

3.2.4.2.8. Auxiliary starting aid

3.2.4.2.8.1. Make(s): …

3.2.4.2.8.2. Type(s): …

3.2.4.2.8.3. System description: …

3.2.4.2.9. Electronic controlled injection: yes/no ([4])

3.2.4.2.9.1. Make(s): …

3.2.4.2.9.2. Type(s):

3.2.4.2.9.3. Description of the system

3.2.4.2.9.3.1. Make and type of the control unit (ECU): …

3.2.4.2.9.3.1.1. Software identification number of the ECU: …

3.2.4.2.9.3.2. Make and type of the fuel regulator: …

3.2.4.2.9.3.3. Make and type of the air-flow sensor: …

3.2.4.2.9.3.4. Make and type of fuel distributor: …

3.2.4.2.9.3.5. Make and type of the throttle housing: …

3.2.4.2.9.3.6. Make and type of water temperature sensor: …

3.2.4.2.9.3.7. Make and type of air temperature sensor: …

▼B

3.2.4.2.9.3.8. Make and type of air pressure sensor: …

3.2.4.3. By fuel injection (positive ignition only): yes/no ([4])

3.2.4.3.1. Working principle: intake manifold (single-/multi-point/direct injection ([4])/other (specify): …

3.2.4.3.2. Make(s): …

3.2.4.3.3. Type(s): …

3.2.4.3.4. System description (In the case of systems other than continuous injection give equivalent details): …

3.2.4.3.4.1. Make and type of the control unit (ECU): …

3.2.4.3.4.1.1. Software identification number of the ECU: …

3.2.4.3.4.2. Make and type of fuel regulator: …

3.2.4.3.4.3. Make and type or working principle of air-flow sensor: …

3.2.4.3.4.4. Make and type of fuel distributor: …

3.2.4.3.4.5. Make and type of pressure regulator: …

3.2.4.3.4.6. Make and type of micro switch: …

3.2.4.3.4.7. Make and type of idling adjustment screw: …

3.2.4.3.4.8. Make and type of throttle housing: …

3.2.4.3.4.9. Make and type water temperature sensor: …

3.2.4.3.4.10. Make and type air temperature sensor: …

3.2.4.3.4.11. Make and type air pressure sensor: …

3.2.4.3.4.12. Software identification number(s): …

3.2.4.3.5. Injectors

3.2.4.3.5.1. Make and type: …

3.2.4.3.6. Injection timing: …

3.2.4.3.7. Cold start system

3.2.4.3.7.1. Operating principle(s): …

3.2.4.3.7.2. Operating limits/settings ([4]) ([41]): …

3.2.4.4 Feed pump

3.2.4.4.1. Pressure ([41]): … kPa or characteristic diagram([41]): …

3.2.4.4.2. Make(s): ….

3.2.4.4.3. Type(s): …

▼B

3.2.5.	Electrical system
3.2.5.1.	Rated voltage: …… V, positive/negative ground ([41])
3.2.5.2.	Generator
3.2.5.2.1.	Make and type: …
3.2.5.2.2.	Nominal output: …… VA
3.2.6.	Ignition system (spark ignition engines only)
3.2.6.1.	Make(s): …
3.2.6.2.	Type(s): …
3.2.6.3.	Working principle: …
3.2.6.4.	Ignition advance curve or map ([41]): …
3.2.6.5.	Static ignition timing ([41]): …… degrees before TDC
3.2.6.6.	Spark plugs
3.2.6.6.1.	Make: …
3.2.6.6.2.	Type: …
3.2.6.6.3.	Gap setting: ……mm
3.2.6.7.	Ignition coil(s)
3.2.6.7.1.	Make: …
3.2.6.7.2.	Type: …
3.2.7.	Cooling system: liquid/air ([4])
3.2.7.1.	Nominal setting of the engine temperature control mechanism: …
3.2.7.2.	Liquid
3.2.7.2.1.	Nature of liquid: …
3.2.7.2.2.	Circulating pump(s): yes/no ([4])
3.2.7.2.3.	Characteristics: ……. or
3.2.7.2.3.1.	Make(s): …
3.2.7.2.3.2.	Type(s): …
3.2.7.2.4.	Drive ratio(s): …
3.2.7.2.5.	Description of the fan and its drive mechanism: …
3.2.7.3.	Air
3.2.7.3.1.	Fan: yes/no ([4])
3.2.7.3.2.	Characteristics: ……. Or

▼B

3.2.7.3.2.1. Make(s): …

3.2.7.3.2.2. Type(s): …

3.2.7.3.3. Drive ratio(s): …

3.2.8. Intake system

3.2.8.1. Pressure charger: yes/no ([4])

3.2.8.1.1. Make(s): …

3.2.8.1.2. Type(s): …

3.2.8.1.3. Description of the system (e.g. maximum charge pressure: …… kPa; wastegate if applicable): …

3.2.8.2. Intercooler: yes/no ([4])

3.2.8.2.1. Type: air-air/air-water ([4])

3.2.8.3. Intake depression at rated engine speed and at 100 % load (compression ignition engines only)

3.2.8.3.1. Minimum allowable: ……. kPa

3.2.8.3.2. Maximum allowable: …… kPa

3.2.8.3.3. (Euro VI only) Actual Intake system depression at rated engine speed and at 100 % load on the vehicle: kPa

3.2.8.4. Description and drawings of inlet pipes and their accessories (plenum chamber, heating device, additional air intakes, etc.): …

3.2.8.4.1. Intake manifold description (include drawings and/or photos): …

3.2.8.4.2. Air filter, drawings: …

3.2.8.4.2.1. Make(s): …

3.2.8.4.2.2. Type(s): …

3.2.8.4.3. Intake silencer, drawings: …

3.2.8.4.3.1. Make(s): …

3.2.8.4.3.2. Type(s): …

3.2.9. Exhaust system

3.2.9.1. Description and drawing of the exhaust manifold: …

3.2.9.2. Description and drawing of the exhaust system: …

3.2.9.2.1. (Euro VI only) Description and/or drawing of the elements of the exhaust system that are part of the engine system

▼B

3.2.9.3.	Maximum allowable exhaust back pressure at rated engine speed and at 100 % load (compression ignition engines only): …… kPa
3.2.9.3.1.	(Euro VI only) Actual exhaust backpressure at rated engine speed and at 100 % load on the vehicle (compression-ignition engines only): … kPa
3.2.9.4.	Make(s) and type(s) of exhaust silencer(s): …
	If applicable relevant for exterior noise, reducing measures in the engine compartment and on the engine: …
3.2.9.5.	Location of the exhaust outlet: …
3.2.9.6.	Exhaust silencer containing fibrous materials: …
3.2.9.6.1.	Description of the location and type of fibrous materials used: …
3.2.9.7.	Complete exhaust system volume: … dm^3
3.2.9.7.1.	(Euro VI only) Acceptable exhaust system volume: … dm^3
3.2.9.7.2.	(EURO VI only) Volume of the exhaust system that is part of the engine system: … dm^3
3.2.10.	Minimum cross-sectional areas of inlet and outlet ports: …
3.2.11.	Valve timing or equivalent data
3.2.11.1.	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: …
3.2.11.2.	Reference and/or setting ranges ([4]): …
3.2.12.	Measures taken against air pollution
3.2.12.0.	Emission character of type approval ([1])
3.2.12.1.	Device for recycling crankcase gases (description and drawings): …
3.2.12.1.1.	(Euro VI only) Device for recycling crankcase gases: yes/no ([41])
	If yes, description and drawings:
	If no, compliance with Annex V to Regulation (EU) No 582/2011 required
3.2.12.2.	Pollution control devices (if not covered by another heading)
3.2.12.2.1.	Catalytic converter
3.2.12.2.1.1.	Number of catalytic converters and elements (provide the information below for each separate unit): …

▼B

3.2.12.2.1.2. Dimensions, shape and volume of the catalytic converter(s): …

3.2.12.2.1.3. Type of catalytic action: … (oxidising, three-way, lean NO_x trap, SCR, lean NO_x catalyst or other)

3.2.12.2.1.4. Total charge of precious metals: …

3.2.12.2.1.5. Relative concentration: …

3.2.12.2.1.6. Substrate (structure and material): …

3.2.12.2.1.7. Cell density: …

3.2.12.2.1.8. Type of casing for the catalytic converter(s): …

3.2.12.2.1.9. Location of the catalytic converter(s) (place and reference distance in the exhaust line): …

3.2.12.2.1.10. Heat shield: yes/no ([4])

3.2.12.2.1.11. Normal operating temperature range: … °C

3.2.12.2.1.12. Make of catalytic converter: …

3.2.12.2.1.13. Identifying part number: …

3.2.12.2.2. Sensors

3.2.12.2.2.1. Oxygen sensor: yes/no ([4])

3.2.12.2.2.1.1. Make and type: …

3.2.12.2.2.1.2. Location: …

3.2.12.2.2.1.3. Control range: ….

3.2.12.2.2.1.4. Type or working principle: …

3.2.12.2.2.1.5. Identifying part number: …

3.2.12.2.2.2. NO_x sensor: yes/no ([4])

3.2.12.2.2.2.1. Make: …

3.2.12.2.2.2.2. Type: …

3.2.12.2.2.2.3. Location: …

▼B

3.2.12.2.2.3. Particulate sensor: yes/no ([4])

3.2.12.2.2.3.1. Make: …

3.2.12.2.2.3.2. Type: …

3.2.12.2.2.3.3. Location: …

3.2.12.2.3. Air injection: yes/no ([4])

3.2.12.2.3.1. Type (pulse air, air pump, etc.): …

3.2.12.2.4. Exhaust gas recirculation (EGR): yes/no ([4])

3.2.12.2.4.1. Characteristics (make, type, flow, high pressure/low pressure/ combined pressure, etc.): …

3.2.12.2.4.2. Water-cooled system (to be specified for each EGR system e.g. low pressure/high pressure/combined pressure: yes/no ([4])

3.2.12.2.5. Evaporative emissions control system (petrol and ethanol engines only): yes/no ([4])

3.2.12.2.5.1. Detailed description of the devices: ….

3.2.12.2.5.2. Drawing of the evaporative control system: …

3.2.12.2.5.3. Drawing of the carbon canister: …

3.2.12.2.5.3.1. Make and type of the carbon canister: …

3.2.12.2.5.4. Mass of dry charcoal: … g

3.2.12.2.5.4.1. Type of dry charcoal: …

3.2.12.2.5.5. Schematic drawing of the fuel tank (petrol and ethanol engines only): …

3.2.12.2.5.5.1. Fuel tank system capacity, material and construction: …

3.2.12.2.5.5.2. Description of vapour hose material, fuel line material and connection technique of the fuel system: …

3.2.12.2.5.5.3. Sealed tank system: yes/no ([4])

3.2.12.2.5.5.4. Description of fuel tank relief valve setting (air ingestion and relief): …

3.2.12.2.5.5.5. Description of the purge control system: …

3.2.12.2.5.6. Description and schematic of the heat shield between tank and exhaust system: …

3.2.12.2.5.7. Permeability factor: …

3.2.12.2.6. Particulate trap (PT): yes/no ([4])

▼B

3.2.12.2.6.1. Dimensions, shape and capacity of the particulate trap: …

3.2.12.2.6.2. Design of the particulate trap: …

3.2.12.2.6.3. Location (reference distance in the exhaust line): …

3.2.12.2.6.4. Make of particulate trap: …

3.2.12.2.6.5. Identifying part number: …

3.2.12.2.6.7. Normal operating temperature: … (K) and pressure range … (KPa)

(heavy-duty vehicles only)

3.2.12.2.6.8. In the case of periodic regeneration (heavy-duty vehicles only)

3.2.12.2.6.8.1. Number of ETC test cycles between 2 regenerations (n1): … (not applicable to Euro VI)

3.2.12.2.6.8.1.1. (Euro VI only) Number of WHTC test cycles without regeneration (n):

3.2.12.2.6.8.2. Number of ETC cycles during regeneration (n2): …(not applicable to Euro VI)

3.2.12.2.6.8.2.1. (Euro VI only) Number of WHTC test cycles with regeneration (n_R):

3.2.12.2.6.9. Other systems: yes/no ([4])

3.2.12.2.6.9.1. Description and operation

3.2.12.2.7. On-board-diagnostic (OBD) system: yes/no ([4]): …

3.2.12.2.7.0.1. (Euro VI only) Number of OBD engine families within the engine family

3.2.12.2.7.0.2. (Euro VI only) List of the OBD engine families (when applicable)

3.2.12.2.7.0.3. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to: …

3.2.12.2.7.0.4. (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

3.2.12.2.7.0.5. (Euro VI only) When appropriate, manufacturer reference of the Documentation for installing in a vehicle an OBD equipped engine system

3.2.12.2.7.0.6. (Euro VI only) When appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the OBD system of an approved engine

▼B

3.2.12.2.7.0.7. Written description and/or drawing of the MI ([46]): …

3.2.12.2.7.0.8. Written description and/or drawing of the OBD off-board communication interface ([46])

3.2.12.2.7.1. Written description and/or drawing of the MI: …

3.2.12.2.7.2. List and purpose of all components monitored by the OBD system: …

3.2.12.2.7.3. Written description (general working principles) for

3.2.12.2.7.3.1. Positive-ignition engines

3.2.12.2.7.3.1.1. Catalyst monitoring: …

3.2.12.2.7.3.1.2. Misfire detection: …

3.2.12.2.7.3.1.3. Oxygen sensor monitoring: …

3.2.12.2.7.3.1.4. Particulate trap monitoring: …

3.2.12.2.7.3.1.5. Other components monitored by the OBD system: …

3.2.12.2.7.3.2. Compression-ignition engines: …

3.2.12.2.7.3.2.1. Catalyst monitoring: …

3.2.12.2.7.3.2.2. Particulate trap monitoring: …

3.2.12.2.7.3.2.3. Electronic fuelling system monitoring: …

3.2.12.2.7.3.2.4. $DeNO_x$ system monitoring: …

3.2.12.2.7.3.2.5 Other components monitored by the OBD system: …

3.2.12.2.7.4. Criteria for MI activation (fixed number of driving cycles or statistical method): …

3.2.12.2.7.5. List of all OBD output codes and formats used (with explanation of each): …

3.2.12.2.7.6. 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.

3.2.12.2.7.6.1. A description of the type and number of the preconditioning cycles used for the original type approval of the vehicle.

3.2.12.2.7.6.2. 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.

▼B

3.2.12.2.7.6.3. 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 vehicle types that use a communication link in accordance with ISO 15765-4:2016 '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.

3.2.12.2.7.6.4. The information required above may be defined by completing a table as described below.

3.2.12.2.7.6.4.1. Light-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, engine load, A/F mode, catalyst temperature	Two type I cycles	Type I

3.2.12.2.7.6.4.2. 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, engine load, catalyst temperature, reagent activity	Three OBD test cycles (3 short ESC cycles)	OBD test cycle (short ESC cycle)

3.2.12.2.7.6.5. (Euro VI only) OBD Communication protocol standard ([47]):

3.2.12.2.7.7. (Euro VI only) Manufacturer reference of the OBD related information required by of 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

▼B

3.2.12.2.7.7.1. As an alternative to the 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 shall contains a table in accordance with the following 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

3.2.12.2.7.8. (EURO VI only) OBD components on-board the vehicle

3.2.12.2.7.8.0. Alternative approval as provided for in point 2.4.1 of Annex X to Regulation (EU) No 582/2011: yes/no ([4])

3.2.12.2.7.8.1. List of OBD components on-board the vehicle

3.2.12.2.7.8.2. Written description and/or drawing of the MI ([48])

3.2.12.2.7.8.3. Written description and/or drawing of the OBD off-board communication interface ([48])

3.2.12.2.8. Other system: …

3.2.12.2.8.1. (Euro VI only) Systems to ensure the correct operation of NOx control measures

3.2.12.2.8.2. Driver inducement system

3.2.12.2.8.2.1. (Euro VI only) Engine with permanent deactivation of the driver inducement, for use by the rescue services or in vehicles specified in point (d) of Article 2(2) to Regulation (EU) 2018/858: yes/no ([4])

3.2.12.2.8.2.2. Activation of the creep mode

‘disable after restart’/‘disable after fuelling’/‘disable after parking’ ([4]) ([49])

3.2.12.2.8.2.3. Type of inducement system: no engine restart after countdown/no start after refuelling/fuel-lockout/performance restriction

3.2.12.2.8.2.4. Description of the inducement system

3.2.12.2.8.2.5. Equivalent to the average driving range of the vehicle with a complete tank of fuel: … km

3.2.12.2.8.3. (Euro VI only) Number of OBD engine families within the engine family considered when ensuring the correct operation of NO_x control measures

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3.2.12.2.8.3.1. (Euro VI only) List of the OBD engine families within the engine family considered when ensuring the correct operation of NO_x control measures (when applicable)

3.2.12.2.8.3.2. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to

3.2.12.2.8.4. (Euro VI only) List of the OBD engine families (when applicable): …

3.2.12.2.8.5. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to

3.2.12.2.8.6. (Euro VI only) lowest concentration of the active ingredient present in the reagent that does not activate the warning system (CD_{min}): (% vol.)

3.2.12.2.8.7. (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

3.2.12.2.8.8. (EURO VI only) Components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

3.2.12.2.8.8.1. List of components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

3.2.12.2.8.8.2. 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

3.2.12.2.8.8.3. Written description and/or drawing of the warning signal ([48])

3.2.12.2.8.8.4. Alternative approval provided for in point 2.1 of Annex XIII to Regulation (EU) No 582/2011: yes/no ([4])

3.2.12.2.8.8.5. Heated/non-heated reagent tank and dosing system (see paragraph 2.4 of Annex 11 to UN Regulation No 49 of the Economic Commission for Europe of the United Nations (UN/ECE) ([50])

3.2.12.2.9. Torque limiter: yes/no ([4])

3.2.12.2.9.1. Description of the torque limiter activation (heavy-duty vehicles only): …

3.2.12.2.9.2. Description of the full load curve limitation (heavy-duty vehicles only): …

▼B

3.2.12.2.10. Periodically regenerating system: (provide the information below for each separate unit)

3.2.12.2.10.1. Method or system of regeneration, description and/or drawing: ….

3.2.12.2.10.2. The number of Type 1 operating cycles, or equivalent engine test bench cycles, between two cycles where regenerative phases occur under the conditions equivalent to Type 1 test (Distance 'D' in Figure A6.App1/1 in Appendix 1 to Sub-Annex 6 of Annex XXI to Commission Regulation (EU) 2017/1151 ([51]) or figure A13/1 in Annex 13 to UN Regulation No 83 of the Economic Commission for Europe of the United Nations (UNECE) ([52]) (as applicable): …

3.2.12.2.10.2.1. Applicable Type 1 cycle (indicate the applicable procedure: Regulation (EU) 2017/1151 Annex XXI, Sub-Annex 4 or UN Regulation No 83): …

3.2.12.2.10.3. Description of method employed to determine the number of cycles between two cycles where regenerative phases occur: …

3.2.12.2.10.4. Parameters to determine the level of loading required before regeneration occurs (i.e. temperature, pressure etc.): …

3.2.12.2.10.5. Description of method used to load system in the test procedure described in paragraph 3.1., Annex 13 to UN Regulation No 83: ….

3.2.12.2.11. Catalytic converter systems using consumable reagents (provide the information below for each separate unit) yes/no ([4])

3.2.12.2.11.1. Type and concentration of reagent needed: …

3.2.12.2.11.2. Normal operational temperature range of reagent: …

3.2.12.2.11.3. International standard: …

3.2.12.2.11.4. Frequency of reagent refill: continuous/maintenance (where appropriate):

3.2.12.2.11.5. Reagent indicator (description and location): …

3.2.12.2.11.6. Reagent tank

3.2.12.2.11.6.1. Capacity: …

3.2.12.2.11.6.2. Heating system: yes/no ([4])

▼B

3.2.12.2.11.6.2.1. Description or drawing: …

3.2.12.2.11.7. Reagent control unit: yes/no ([4])

3.2.12.2.11.7.1. Make: …

3.2.12.2.11.7.2. Type: …

3.2.12.2.11.8. Reagent injector (make type and location): …

3.2.12.2.12. Water injection: yes/no ([4])

3.2.13. Smoke opacity

3.2.13.1. Location of the absorption coefficient symbol (compression ignition engines only): …

3.2.13.2. Power at six points of measurement (see Appendix 2 of Annex IV to Regulation (EC) No 692/2008)

3.2.13.3. Engine power measured on test bench/on the vehicle

3.2.13.3.1. Declared speeds and powers

Measurement points	Engine speed (min^{-1})	Power (kW)
1……		
2……		
3……		
4……		
5……		
6……		

3.2.14. Details of any devices designed to influence fuel economy (if not covered by other items): …

3.2.15. LPG fuelling system: yes/no ([4])

3.2.15.1. The number of the type-approval certificate issued in accordance with Annex IV to this Regulation or UN Regulation No 67 of the Economic Commission for Europe of the United Nations (UNECE) ([53]): …

3.2.15.2. Electronic engine management control unit for LPG fuelling

3.2.15.2.1. Make(s): …

3.2.15.2.2. Type(s): …

3.2.15.2.3. Emission-related adjustment possibilities: …

3.2.15.3. Further documentation

3.2.15.3.1. Description of the safeguarding of the catalyst at switch-over from petrol to LPG or back: …

▼B

3.2.15.3.2.	System layout (electrical connections, vacuum connections compensation hoses, etc.): …
3.2.15.3.3.	Drawing of the symbol: …
3.2.16.	NG fuelling system: yes/no ([4])
3.2.16.1.	The number of the type-approval certificate issued in accordance with Annex IV to this Regulation or UN Regulation No 110 of the Economic Commission for Europe of the United Nations (UNECE) ([54]): …
3.2.16.2.	Electronic engine management control unit for NG fuelling
3.2.16.2.1.	Make(s): …
3.2.16.2.2.	Type(s): …
3.2.16.2.3.	Emission-related adjustment possibilities: …
3.2.16.3.	Further documentation
3.2.16.3.1.	Description of the safeguarding of the catalyst at switch-over from petrol to NG or back: …
3.2.16.3.2.	System layout (electrical connections, vacuum connections compensation hoses, etc.): …
3.2.16.3.3.	Drawing of the symbol: …
3.2.17.	Specific information related to gas and dual-fuel engines for heavy-duty vehicles (in the case of systems laid out in a different manner, supply equivalent information) (if applicable)
3.2.17.1.	Fuel: LPG/NG-H/NG-L/NG-HL ([4])
3.2.17.2.	Pressure regulator(s) or vaporiser/pressure regulator(s) ([4])
3.2.17.2.1.	Make(s): …
3.2.17.2.2.	Type(s): …
3.2.17.2.3.	Number of pressure reduction stages: …
3.2.17.2.4.	Pressure in final stage minimum: ….. kPa – maximum: …. kPa
3.2.17.2.5.	Number of main adjustment points: …
3.2.17.2.6.	Number of idle adjustment points: …
3.2.17.2.7.	Number of the type-approval certificate: …
3.2.17.3.	Fuelling system: mixing unit/gas injection/liquid injection/ direct injection ([4])
3.2.17.3.1.	Mixture strength regulation: …
3.2.17.3.2.	System description and/or diagram and drawings: …
3.2.17.3.3.	Number of the type-approval certificate: …
3.2.17.4.	Mixing unit
3.2.17.4.1.	Number: …

▼B

3.2.17.4.2. Make(s): …

3.2.17.4.3. Type(s): …

3.2.17.4.4. Location: …

3.2.17.4.5. Adjustment possibilities: …

3.2.17.4.6. Number of the type-approval certificate: …

3.2.17.5. Inlet manifold injection

3.2.17.5.1. Injection: single point/multipoint ([4])

3.2.17.5.2. Injection: continuous/simultaneously timed/sequentially timed ([4])

3.2.17.5.3. Injection equipment

3.2.17.5.3.1. Make(s): …

3.2.17.5.3.2. Type(s): …

3.2.17.5.3.3. Adjustment possibilities: …

3.2.17.5.3.4. Number of the type-approval certificate: …

3.2.17.5.4. Supply pump (if applicable)

3.2.17.5.4.1. Make(s): …

3.2.17.5.4.2. Type(s): …

3.2.17.5.4.3. Number of the type-approval certificate: …

3.2.17.5.5. Injector(s) …

3.2.17.5.5.1. Make(s): …

3.2.17.5.5.2. Type(s): …

3.2.17.5.5.3. Number of the type-approval certificate: …

3.2.17.6. Direct injection

3.2.17.6.1. Injection pump/pressure regulator ([4])

3.2.17.6.1.1. Make(s): …

3.2.17.6.1.2. Type(s): …

3.2.17.6.1.3. Injection timing: …

3.2.17.6.1.4. Number of the type-approval certificate: …

3.2.17.6.2. Injector(s) …

3.2.17.6.2.1. Make(s): …

3.2.17.6.2.2. Type(s): …

3.2.17.6.2.3. Opening pressure or characteristic diagram ([41]): …

3.2.17.6.2.4. Number of the type-approval certificate: …

3.2.17.7. Electronic control unit (ECU)

▼B

3.2.17.7.1. Make(s): …

3.2.17.7.2. Type(s): …

3.2.17.7.3. Adjustment possibilities: …

3.2.17.7.4. Software calibration number(s): …

3.2.17.8. NG fuel-specific equipment

3.2.17.8.1. Variant 1 (only in the case of approvals of engines for several specific fuel compositions)

3.2.17.8.1.0.1. (Euro VI only) Self-adaptive feature? yes/no ([4])

3.2.17.8.1.0.2. (Euro VI only) Calibration for a specific gas composition NG-H/NG-L/NG-HL/LNG ([4])

Transformation for a specific gas composition NG-Ht/NG-Lt/NG-HLt ([4])

3.2.17.8.1.1. 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

3.2.17.8.1.2. Injector(s)

3.2.17.8.1.2.1. Make(s): …

3.2.17.8.1.2.2. Type(s): …

3.2.17.8.1.3. Others (if applicable): …

3.2.17.8.2. Variant 2 (only in the case of approvals for several specific fuel compositions)

3.2.17.9. When appropriate, manufacturer reference of the documentation for installing the dual-fuel engine in a vehicle ([42])

3.2.18. Hydrogen fuelling system: yes/no ([4])

3.2.18.1. The number of the EU type-approval certificate issued in accordance with Regulation (EC) No 79/2009 of the European Parliament and of the Council ([55]): …

3.2.18.2. Electronic engine management control unit for hydrogen fuelling

▼B

3.2.18.2.1. Make(s): …

3.2.18.2.2. Type(s): …

3.2.18.2.3. Emission-related adjustment possibilities: …

3.2.18.3. Further documentation

3.2.18.3.1. Description of the safeguarding of the catalyst at switch-over from petrol to hydrogen or back: …

3.2.18.3.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

3.2.18.3.3. Drawing of the symbol: …

3.2.19. H_2NG fuelling system: yes/no ([4])

3.2.19.1. Percentage of hydrogen in the fuel (the maximum specified by the manufacturer): …

3.2.19.2. Number of the EU type-approval certificate issued in accordance with UN Regulation No 110: …

3.2.19.3. Electronic engine management control unit for H_2NG fuelling

3.2.19.3.1. Make(s): …

3.2.19.3.2. Type(s): …

3.2.19.3.3. Emission-related adjustment possibilities: …

3.2.19.4. Further documentation

3.2.19.4.2. System lay-out (electrical connections, vacuum connections compensation hoses, etc.): …

3.2.19.4.3. Drawing of the symbol: …

3.2.20. Heat storage information ([1])

3.2.20.1. Active heat storage device: yes/no ([4])

3.2.20.1.1. Enthalpy: … (J)

3.2.20.2. Insulation materials: yes/no ([4])

3.2.20.2.1. Insulation material: …

3.2.20.2.2. Insulation volume: …

3.2.20.2.3. Insulation weight: …

3.2.20.2.4. Insulation location: …

3.2.20.2.5. Worst case approach vehicle cool down: yes/no ([4])

3.2.20.2.5.1. (Not worst-case approach) Minimum soaking time, t_{soak_ATCT} (hours): …

▼B

3.2.20.2.5.2.	(Not worst-case approach) Location of the engine temperature measurement: …
3.2.20.2.6.	Single interpolation family within the ATCT family approach: yes/no ([4])
3.3.	**Electric machine**
	(describe information of each type of electric machine separately)
3.3.1.	Type (winding, excitation): …
3.3.1.1.1.	Maximum net power ([43]) … kW (manufacturer's declared value)
3.3.1.1.2.	Maximum 30 minutes power ([43])… kW (manufacturer's declared value)
3.3.1.2.	Operating voltage: … V
3.3.2.	REESS
3.3.2.1.	Number of cells: …
3.3.2.2.	Mass: …… kg
3.3.2.3.	Capacity: …… Ah (Amp-hours)
3.3.2.4.	Position: …
3.4.	**Combinations of propulsion energy converters**
3.4.1.	Hybrid electric vehicle: yes/no ([4])
3.4.2.	Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging ([4]):
3.4.3.	Operating mode switch: with/without ([4])
3.4.3.1.	Selectable modes
3.4.3.1.1.	Pure electric: yes/no ([4])
3.4.3.1.2.	Pure fuel consuming: yes/no ([4])
3.4.3.1.3.	Hybrid modes: yes/no ([4])
	(If yes, short description): …
3.4.4.	Description of the energy storage device: (REESS, capacitor, flywheel/generator)
3.4.4.1.	Make(s): …
3.4.4.2.	Type(s): …
3.4.4.3.	Identification number: …
3.4.4.4.	Kind of electrochemical couple: …
3.4.4.5.	Energy: … (for REESS: voltage and capacity Ah in 2 h, for capacitor: J, …)
3.4.4.6.	Charger: on board/external/without ([4])

▼B

3.4.5.	Electric machine (describe each type of electric machine separately)
3.4.5.1.	Make: …
3.4.5.2.	Type: …
3.4.5.3.	Primary use: traction motor/generator ([4])
3.4.5.3.1.	When used as traction motor: single-/multimotors (number) ([4]): …
3.4.5.4.	Maximum power: …… kW
3.4.5.5.	Working principle
3.4.5.5.5.1.	Direct current/alternating current/number of phases: …
3.4.5.5.2.	Separate excitation/series/compound ([4])
3.4.5.5.3.	Synchronous/asynchronous ([4])
3.4.6.	Control unit
3.4.6.1.	Make(s): …
3.4.6.2.	Type(s): …
3.4.6.3.	Identification number: …
3.4.7.	Power controller
3.4.7.1.	Make: …
3.4.7.2.	Type: …
3.4.7.3.	Identification number: …
3.5.	**Manufacturer's declared values for determination of CO_2 emissions/fuel consumption/electric consumption/electric range and details of eco-innovations (where applicable) ([56])**
3.5.1.	CO_2 mass emissions
3.5.1.1.	CO_2 mass emissions (urban conditions): … g/km
3.5.1.2.	CO_2 mass emissions (extra-urban conditions): … g/km
3.5.1.3.	CO_2 mass emissions (combined): … g/km
3.5.2.	Fuel consumption (provide details for each reference fuel tested)
3.5.2.1.	Fuel consumption (urban conditions)… l/100km or m^3/100km or kg/100km ([4])
3.5.2.2.	Fuel consumption (extra-urban conditions)… l/100km or m^3/100km or kg/100km ([4])
3.5.2.3.	Fuel consumption (combined) … l/100km or m^3/100km or kg/100km ([4])

▼B

3.5.3.	Electric energy consumption for electric vehicles
3.5.3.1.	Electric energy consumption for pure electric vehicles … Wh/km
3.5.3.2.	Electric energy consumption for externally chargeable hybrid electric vehicles
3.5.3.2.1.	Electric energy consumption (Condition A, combined) … Wh/km
3.5.3.2.2.	Electric energy consumption (Condition B, combined) … Wh/km
3.5.3.2.3.	Electric energy consumption (weighted combined) … Wh/km
3.5.4.	CO_2 emissions for heavy duty engines (Euro VI only)
3.5.4.1.	CO_2 mass emissions WHSC test ([57]): … g/kWh
3.5.4.2.	CO_2 mass emissions WHSC test in diesel mode ([58]): … g/kWh
3.5.4.3.	CO_2 mass emissions WHSC test in dual-fuel mode([42]) … g/kWh
3.5.4.4.	CO_2 mass emissions WHTC test ([57]) ([59]): … g/kWh
3.5.4.5.	CO_2 mass emissions WHTC test in diesel mode ([58]) ([59]): … g/kWh
3.5.4.6.	CO_2 mass emissions WHTC test in dual-fuel mode ([42]) ([59]): … g/kWh
3.5.5.	Fuel consumption for heavy duty engines (Euro VI only)
3.5.5.1.	Fuel consumption WHSC test ([57]): … g/kWh
3.5.5.2.	Fuel consumption WHSC test in diesel mode ([58]): … g/kWh
3.5.5.3.	Fuel consumption WHSC test in in dual-fuel mode ([42]): … g/kWh
3.5.5.4.	Fuel consumption WHTC test ([57]) ([59]): … g/kWh
3.5.5.5.	Fuel consumption WHTC test in diesel mode ([58]) ([59]): … g/kWh
3.5.5.6.	Fuel consumption WHTC test in dual-fuel mode ([42]) ([59]): … g/kWh

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3.5.6. 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 ([60]) for M_1 vehicles or Article 12 of Regulation (EU) No 510/2011 of the European Parliament and of the Council ([61]) for N_1 vehicles: yes/no ([4])

3.5.6.1. Type/Variant/Version of the baseline vehicle as referred to in Article 5 of Commission Implementing Regulation (EU) No 725/2011 ([62]) for M_1 vehicles or Article 5 of Commission Implementing Regulation (EU) No 427/2014 ([63]) for N_1 vehicles (if applicable) …

3.5.6.2. Existence of interactions between different eco-innovations: yes/no ([4])

3.5.6.3. Emissions data related to the use of eco-innovations (repeat the table for each reference fuel tested) ([64])

Decision approving the eco-innovation ([65])	Code of the eco-innovation ([66])	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 ([67])	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) ([68])							

3.5.7. Manufacturer's declared values

3.5.7.1. Test vehicle parameters ([1])

Vehicle	Vehicle Low (VL) if existing	Vehicle High (VH)	VM if existing	V representative (only for road load matrix family) ([69])	Default values
Vehicle (variant/version)			—		
Road load method used (measurement or calculation by road load family)			—	—	

▼B

Vehicle	Vehicle Low (VL) if existing	Vehicle High (VH)	VM if existing	V representative (only for road load matrix family) ([69])	Default values
Road load information:					
Tyres make and type, if measurement method is used			—		
Tyre dimensions (front/rear), if measurement method is used			—		
Tyre rolling resistance (front/rear) (kg/t)					
Tyre pressure (front/rear) (kPa), if measurement method is used					
Delta C_D× A of vehicle L compared to vehicle H (IP_H minus IP_L)	—		—	—	
Delta C_D× A compared to road load family vehicle L (IP_H/L minus RL_L), if calculation by road load family			—	—	
Vehicle test mass (kg)					
Road load coefficients					
f_0 (N)					
f_1 (N/(km/h))					
f_2 (N/(km/h)(^{2}))					
Frontal area m^2 (0,000 m^2)	—	—	—		
Cycle Energy Demand (J)					

3.5.7.1.1. Fuel used for the Type 1 test and selected for the measurement of the net power in accordance with Annex XX to Commission Regulation (EU) No 136/2014 ([70]): …

3.5.7.2. Combined CO_2 mass emissions

3.5.7.2.1. CO_2 mass emission for pure ICE vehicles and NOVC-HEVs

3.5.7.2.1.0. Minimum and maximum CO_2 values within the interpolation family

3.5.7.2.1.1. Vehicle high: … g/km

3.5.7.2.1.1.0. Vehicle high (NEDC): … g/km

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3.5.7.2.1.2. Vehicle low (if applicable): … g/km

3.5.7.2.1.2.0. Vehicle low (if applicable) (NEDC): … g/km

3.5.7.2.1.3. Vehicle M (if applicable): … g/km

3.5.7.2.1.3.0. Vehicle M (if applicable) (NEDC): … g/km

3.5.7.2.2. Charge-Sustaining CO_2 mass emission for OVC-HEVs

3.5.7.2.2.1. Charge Sustaining CO_2 mass emission vehicle high: g/km

3.5.7.2.2.1.0. Combined CO_2 mass emission vehicle high (NEDC Condition B): g/km

3.5.7.2.2.2. Charge Sustaining CO_2 mass emission vehicle low (if applicable): g/km

3.5.7.2.2.2.0. Combined CO_2 mass emission vehicle low (if applicable) (NEDC Condition B): g/km

3.5.7.2.2.3. Charge Sustaining CO_2 mass emission vehicle M (if applicable): g/km

3.5.7.2.2.3.0. Combined CO_2 mass emission vehicle M (if applicable) (NEDC Condition B): g/km

3.5.7.2.3. Charge Depleting CO_2 mass emission and weighted CO_2 mass emission for OVC-HEVs

3.5.7.2.3.1. Charge Depleting CO_2 mass emission of Vehicle high: … g/km

3.5.7.2.3.1.0. Charge Depleting CO_2 mass emission of Vehicle high (NEDC Condition A): … g/km

3.5.7.2.3.2. Charge Depleting CO_2 mass emission of Vehicle low (if applicable): … g/km

3.5.7.2.3.2.0. Charge Depleting CO_2 mass emission of Vehicle low (if applicable) (NEDC Condition A): … g/km

3.5.7.2.3.3. Charge Depleting CO_2 mass emission of Vehicle M (if applicable): … g/km

3.5.7.2.3.3.0. Charge Depleting CO_2 mass emission of Vehicle M (if applicable) (NEDC Condition A): … g/km

3.5.7.2.3.4. Minimum and maximum weighted CO_2 values within the OVC interpolation family: … g/km

3.5.7.3. Electric range for electrified vehicles

3.5.7.3.1. Pure Electric Range (PER) for PEVs

3.5.7.3.1.1. Vehicle high: … km

3.5.7.3.1.2. Vehicle low (if applicable): … km

3.5.7.3.2. All Electric Range AER for OVC-HEVs

3.5.7.3.2.1. Vehicle high: … km

▼B

3.5.7.3.2.2. Vehicle low (if applicable): … km

3.5.7.3.2.3. Vehicle M (if applicable): … km

3.5.7.4. Charge Sustaining fuel consumption (FC_{CS}) for FCHVs

3.5.7.4.1. Vehicle high: … kg/100km

3.5.7.4.2. Vehicle low (if applicable): … kg/100km

3.5.7.5. Electric energy consumption for electrified vehicles

3.5.7.5.1. Combined electric energy consumption (EC_{WLTC}) for Pure electric vehicles

3.5.7.5.1.1. Vehicle high: … Wh/km

3.5.7.5.1.2. Vehicle low (if applicable): … Wh/km

3.5.7.5.2. Utility factor weighted charge-depleting electric consumption $EC_{AC,CD}$ (combined)

3.5.7.5.2.1. Vehicle high: … Wh/km

3.5.7.5.2.2. Vehicle low (if applicable): … Wh/km

3.5.7.5.2.3. Vehicle M (if applicable): … Wh/km

3.5.8. Vehicle fitted with an eco-innovation within the meaning of Article 12 of Regulation (EC) No 443/2009 for M1 vehicles or Article 12 of Regulation (EU) No 510/2011 for N1 vehicles: yes/no ([4])

3.5.8.1. Type/Variant/Version of the baseline vehicle as referred to in Article 5 of Implementing Regulation (EU) No 725/2011 for M1 vehicles or Article 5 of Implementing Regulation (EU) No 427/2014 for N1 vehicles (if applicable): …

3.5.8.2. Existence of interactions between different eco-innovations: yes/no ([4])

3.5.8.3. Emissions data related to the use of eco-innovations (repeat the table for each reference fuel tested) ([64])

Decisionapproving the eco-innovation ([65])	Code of the eco-innovation ([66])	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 ([67])	4. CO_2 emissions of the eco-innovation vehicle under type 1 test-cycle	5. Usage factor (UF), i.e. temporal share of technology usage in normal operation conditions	CO_2 emissions savings $((1 - 2) - (3 - 4)) \times 5$
xxxx/201x							
Total NEDC CO_2 emissions saving (g/km) ([68])							
Total WLTP CO_2 emissions saving (g/km) ([68])							

▼B

3.5.9.	CO_2 emissions and fuel consumption certification (for heavy-duty vehicles, as specified in Article 6 of Commission Regulation (EU) 2017/2400 ([71]))
3.5.9.1.	Simulation tool license number: …
3.5.9.2.	Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])
3.5.9.3.	Vocational vehicle: yes/no ([4]) ([72]) ([170])
3.5.10.	Declared maximum RDE values (if applicable)
	Complete RDE trip: NOx: ..., Particles (number): ...
	Urban RDE trip: NOx: ..., Particles (number): ...
3.6.	**Temperatures permitted by the manufacturer**
3.6.1.	Cooling system
3.6.1.1.	Liquid cooling
	Maximum temperature at outlet: …… K
3.6.1.2.	Air cooling
3.6.1.2.1.	Reference point: …
3.6.1.2.2.	Maximum temperature at reference point: …… K
3.6.2.	Maximum outlet temperature of the inlet intercooler: …… K
3.6.3.	Maximum exhaust temperature at the point in the exhaust pipe(s) adjacent to the outer flange(s) of the exhaust manifold or turbocharger: …… K
3.6.4.	Fuel temperature
	Minimum: …… K – maximum: …… K
	For diesel engines at injection pump inlet, for gas fuelled engines at pressure regulator final stage
3.6.5.	Lubricant temperature
	Minimum: …. K – maximum: …… K
3.6.6.	Fuel pressure
	Minimum: …… kPa – maximum: …… kPa
	At pressure regulator final stage, NG fuelled gas engines only.

▼B

3.7. **Engine-driven equipment**

Power absorbed by the auxiliaries needed for operating the engine as specified in and under the operation conditions of UN Regulation No 85, Annex 5, paragraph 2.3.1 ([73])

Equipment	Power absorbed (kW) at various engine speeds						
	Idle	Low speed	High speed	Speed A ([74])	Speed B ([74])	Speed C ([74])	Ref. speed ([75])
P(a)							
Auxiliaries needed for operating the engine (to be subtracted from measured engine power)							

3.8. **Lubrication system**

3.8.1. Description of the system

3.8.1.1. Position of lubricant reservoir: …

3.8.1.2. Feed system (by pump/injection into intake/mixing with fuel, etc.) ([4])

3.8.2. Lubricating pump

3.8.2.1. Make(s): …

3.8.2.2. Type(s): …

3.8.3. Mixture with fuel

3.8.3.1. Percentage: …

3.8.4. Oil cooler: yes/no ([4])

3.8.4.1. Drawing(s): …… or

3.8.4.1.1. Make(s): …

3.8.4.1.2. Type(s): …

3.8.5. Lubricant specification: … W …

3.9. **Hydrogen propulsion**

3.9.1. Hydrogen system designed to use liquid hydrogen/Hydrogen system designed to use compressed (gaseous) hydrogen ([4])

3.9.1.1. Description and drawing of the hydrogen system: …

3.9.1.2. Name and address of the manufacturer(s) of the hydrogen system used for the propulsion of the vehicle: …

3.9.1.3. Manufacturer's system code(s) (as marked on the system, or other means of identification): ...

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3.9.1.4.	Automatic shut-off valve(s): yes/no ([4])
3.9.1.4.1.	Make(s): …
3.9.1.4.2.	Type(s): …
3.9.1.4.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.4.4.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.4.5.	Operating temperature ([4]): …
3.9.1.4.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.4.7.	Type-approval certificate number: …
3.9.1.4.8.	Material: …
3.9.1.4.9.	Operating principles: …
3.9.1.4.10.	Description and drawing: …
3.9.1.5.	Check valve(s) or non-return valve(s): yes/no ([4])
3.9.1.5.1.	Make(s): …
3.9.1.5.2.	Type(s): …
3.9.1.5.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.5.4.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.5.5.	Operating temperature ([4]): …
3.9.1.5.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.5.7.	Type-approval certificate number: …
3.9.1.5.8.	Material: …
3.9.1.5.9.	Operating principles: …
3.9.1.5.10.	Description and drawing: …
3.9.1.6.	Container(s) and container assembly: yes/no ([4])
3.9.1.6.1.	Make(s): …
3.9.1.6.2.	Type(s): …
3.9.1.6.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.6.4.	Nominal working pressure ([4]) ([41]): … MPa
3.9.1.6.5.	Number of filling cycles ([4]): …
3.9.1.6.6.	Operating temperature ([4]): …
3.9.1.6.7.	Capacity: … litres (water)

▼B

3.9.1.6.8. Type-approval certificate number: …

3.9.1.6.9. Material: …

3.9.1.6.10. Operating principles: …

3.9.1.6.11. Description and drawing: …

3.9.1.7. Fittings: yes/no ([4])

3.9.1.7.1. Make(s): …

3.9.1.7.2. Type(s): …

3.9.1.7.3. Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([41]): … MPa

3.9.1.7.4. Number of filling cycles or duty cycles as appropriate: …

3.9.1.7.5. Type-approval certificate number: …

3.9.1.7.6. Material: …

3.9.1.7.7. Operating principles: …

3.9.1.7.8. Description and drawing: …

3.9.1.8. Flexible fuel line(s): yes/no ([4])

3.9.1.8.1. Make(s): …

3.9.1.8.2. Type(s): …

3.9.1.8.3. Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa

3.9.1.8.4. Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa

3.9.1.8.5. Operating temperature ([4]): …

3.9.1.8.6. Number of filling cycles or duty cycles as appropriate ([4]): …

3.9.1.8.7. Type-approval certificate number: …

3.9.1.8.8. Material: …

3.9.1.8.9. Operating principles: …

3.9.1.8.10. Description and drawing: …

3.9.1.9. Heat exchanger(s): yes/no ([4])

3.9.1.9.1. Make(s): …

3.9.1.9.2. Type(s): …

3.9.1.9.3. Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa

3.9.1.9.4. Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa

▼B

3.9.1.9.5.	Operating temperature ([4]): …
3.9.1.9.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.9.7.	Type-approval certificate number: …
3.9.1.9.8.	Material: …
3.9.1.9.9.	Operating principles: …
3.9.1.9.10.	Description and drawing: …
3.9.1.10.	Hydrogen filter(s): yes/no ([4])
3.9.1.10.1.	Make(s): …
3.9.1.10.2.	Type(s): …
3.9.1.10.3.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.10.4.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.10.5.	Type-approval certificate number: …
3.9.1.10.6.	Material: …
3.9.1.10.7.	Operating principles: …
3.9.1.10.8.	Description and drawing: …
3.9.1.11.	Hydrogen leakage detection sensors: …
3.9.1.11.1.	Make(s): …
3.9.1.11.2.	Type(s): …
3.9.1.11.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.11.4.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.11.5.	Operating temperature ([4]): …
3.9.1.11.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.11.7.	Set values: …
3.9.1.11.8.	Type-approval certificate number: …
3.9.1.11.9.	Material: …
3.9.1.11.10.	Operating principles: …
3.9.1.11.11.	Description and drawing: …

▼B

3.9.1.12.	Manual or automatic valve(s): yes/no ([4])
3.9.1.12.1.	Make(s): …
3.9.1.12.2.	Type(s): …
3.9.1.12.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.12.4.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.12.5.	Operating temperature ([4]): …
3.9.1.12.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.12.7.	Type-approval certificate number: …
3.9.1.12.8.	Material: …
3.9.1.12.9.	Operating principles: …
3.9.1.12.10.	Description and drawing: …
3.9.1.13.	Pressure and/or temperature and/or hydrogen and/or flow sensor(s) ([4]): yes/no ([4])
3.9.1.13.1.	Make(s): …
3.9.1.13.2.	Type(s): …
3.9.1.13.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.13.4.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.13.5.	Operating temperature ([4]): …
3.9.1.13.6.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.13.7.	Set values: …
3.9.1.13.8.	Type-approval certificate number: …
3.9.1.13.9.	Material: …
3.9.1.13.10.	Operating principles: …

▼B

3.9.1.13.11.	Description and drawing: …
3.9.1.14.	Pressure regulator(s): yes/no ([4])
3.9.1.14.1.	Make(s): …
3.9.1.14.2.	Type(s): …
3.9.1.14.3.	Number of main adjustment points: …
3.9.1.14.4.	Description of principle of adjustment through main adjustment points: …
3.9.1.14.5.	Number of idle adjustment points: …
3.9.1.14.6.	Description of principles of adjustment through idle adjustment points: …
3.9.1.14.7.	Other adjustment possibilities: if so and which (description and drawings): …
3.9.1.14.8.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.14.9.	Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa
3.9.1.14.10.	Operating temperature ([4]): …
3.9.1.14.11.	Number of filling cycles or duty cycles as appropriate ([4]): …
3.9.1.14.12.	Input and output pressure: …
3.9.1.14.13.	Type-approval certificate number: …
3.9.1.14.14.	Material: …
3.9.1.14.15.	Operating principles: …
3.9.1.14.16.	Description and drawing: …
3.9.1.15.	Pressure relief device: yes/no ([4])
3.9.1.15.1.	Make(s): …
3.9.1.15.2.	Type(s): …
3.9.1.15.3.	Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa
3.9.1.15.4.	Operating temperature ([4]): …
3.9.1.15.5.	Set pressure ([4]): …
3.9.1.15.6.	Set temperature ([4]): …
3.9.1.15.7.	Blow off capacity ([4]): …
3.9.1.15.8.	Normal maximum operating temperature ([4]) ([41]): … °C

▼B

3.9.1.15.9. Nominal working pressure(s) ([4]) ([41]): … MPa

3.9.1.15.10. Number of filling cycles (Class 0 components only) ([4]): …

3.9.1.15.11. Type-approval certificate number: …

3.9.1.15.12. Material: …

3.9.1.15.13. Operating principles: …

3.9.1.15.14. Description and drawing: …

3.9.1.16. Pressure relief valve: yes/no ([4])

3.9.1.16.1. Make(s): …

3.9.1.16.2. Type(s): …

3.9.1.16.3. Nominal working pressure(s) and if downstream of the first pressure regulator, maximum allowable working pressure(s) ([4]) ([41]): … MPa

3.9.1.16.4. Set pressure ([4]): …

3.9.1.16.5. Number of filling cycles or duty cycles as appropriate ([4]): …

3.9.1.16.6. Type-approval certificate number: …

3.9.1.16.7. Material: …

3.9.1.16.8. Operating principles: …

3.9.1.16.9. Description and drawing: …

3.9.1.17. Refuelling connection or receptacle: yes/no ([4])

3.9.1.17.1. Make(s): …

3.9.1.17.2. Type(s): …

3.9.1.17.3. Maximum Allowable Working Pressure (MAWP) ([4]) ([41]): … MPa

3.9.1.17.4. Operating temperature ([4]): …

3.9.1.17.5. Nominal working pressure(s) ([4]) ([41]): … MPa

3.9.1.17.6. Number of filling cycles (Class 0 components only) ([4]): …

3.9.1.17.7. Type-approval certificate number: …

3.9.1.17.8. Material: …

3.9.1.17.9. Operating principles: …

3.9.1.17.10. Description and drawing: …

▼B

3.9.1.18.	Removable storage system connector: yes/no ([4])
3.9.1.18.1.	Make(s): …
3.9.1.18.2.	Type(s): …
3.9.1.18.3.	Nominal working pressure(s) and maximum allowable working pressure(s) ([41]): … MPa
3.9.1.18.4.	Number of duty cycles: …
3.9.1.18.5.	Type-approval certificate number: …
3.9.1.18.6.	Material: …
3.9.1.18.7.	Operating principles: …
3.9.1.18.8.	Description and drawing: …
3.9.2.	Further documentation
3.9.2.1.	Process diagram (flow chart) of the hydrogen system
3.9.2.2.	System layout including electrical connections and other external system (inputs and/or out-puts etc.)
3.9.2.3.	Key to symbols used in documentation
3.9.2.4.	Adjustment data of pressure relief devices and pressure regulators
3.9.2.5.	Layout of cooling/heating system(s) including Nominal or Maximum Allowable Working Pressure (NAWP or MAWP) and operating temperatures
3.9.2.6.	Drawings showing requirements for installation and operation.
4.	TRANSMISSION ([76])
4.1.	Drawing of the transmission: …
4.2.	Type (mechanical, hydraulic, electric, etc.): …
4.2.1.	A brief description of the electrical/electronic components (if any): …
4.3.	Moment of inertia of engine flywheel: …
4.3.1.	Additional moment of inertia with no gear engaged: …
4.4.	**Clutch(es): …**
4.4.1.	Type: …
4.4.2.	Maximum torque conversion: …

▼B

4.5. **Gearbox**

4.5.1. Type: Manual/Automatic/CVT(continuously variable transmission)/Fixedratio/Automised/Other/Wheel hub ([4])

4.5.1.4. Torque rating (for heavy duty vehicles): …

4.5.1.5. Number of clutches: …

4.5.2. Location relative to the engine: …

4.5.3. Method of control: …

4.5.4. Additional gearbox for alternative propulsions: …

4.6. **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			

4.6.1. Gearshift ([1])

4.6.1.1. Gear 1 excluded: yes/no ([4])

4.6.1.2. $n_{\_95\_high}$ for each gear: … min^{-1}

4.6.1.3. n_{min_drive}

4.6.1.3.1. 1st gear: … min^{-1}

4.6.1.3.2. 1st gear to 2nd: … min^{-1}

4.6.1.3.3. 2nd gear to standstill: … min^{-1}

4.6.1.3.4. 2nd gear: … min^{-1}

4.6.1.3.5. 3rd gear and beyond: … min^{-1}

4.6.1.4. $n_{\_min\_drive\_set}$ for acceleration/constant speed phases ($n_{\_min\_drive\_up}$): … min^{-1}

▼B

4.6.1.5. $n_{\_min\_drive\_set}$ for deceleration phases ($n_{min\_drive\_down}$):

4.6.1.6. initial period of time

4.6.1.6.1. $t_{\_start\_phase}$: … s

4.6.1.6.2. $n_{\_min\_drive\_start}$: … min^{-1}

4.6.1.6.3. $n_{\_min\_drive\_up\_start}$: … min^{-1}

4.6.1.7. use of ASM: yes/no ([4])

4.6.1.7.1. ASM values: …

4.7. Maximum vehicle design speed (in km/h) ([77]): …

4.8. **Speedometer and odometer**

Speedometer:

4.8.1. Method of operation and description of drive mechanism: …

4.8.2. Instrument constant: …

4.8.3. Tolerance of the measuring mechanism (pursuant to paragraph 2.2.3 of UN Regulation No 39 of the Economic Commission for Europe of the United Nations (UN/ECE) ([78]): …

4.8.4. Overall transmission ratio (pursuant to paragraph 2.2.2 of UN Regulation No 39) or equivalent data: …

4.8.5. Diagram of the speedometer scale or other forms of display: …

Odometer:

4.8.6. The technical constant of odometer (pursuant to paragraph 2.2.4 of UN Regulation No 39: …

4.8.7. The number of numerals: …

4.9. **Tachograph: yes/no** ([4])

4.9.1. Approval mark: …

4.10. Differential lock: yes/no/optional ([4])

4.11. **Gear shift indicator (GSI)**

4.11.1. Acoustic indication available yes/no ([4]). If yes, description of sound and sound level at the driver's ear in dB(A). (Acoustic indication always switchable on/off)

▼B

4.11.2.	Information according to point 4.6 of Annex I to Commission Regulation (EU) No 65/2012 ([79]) (manufacturer's declared value)
4.11.3.	Photographs and/or drawings of the gear shift indicator instrument and brief description of the system components and operation:
4.12.	Gearbox lubricant: … W …
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
6.1.	Drawing of the suspension arrangements: …
6.2.	Type and design of the suspension of each axle or group of axles or wheel: …
6.2.1.	Level adjustment: yes/no/optional ([4])
6.2.2.	A brief description of the electrical/electronic components (if any): …
6.2.3.	Air-suspension for driving axle(s): yes/no ([4])
6.2.3.1.	Suspension of driving axle(s) equivalent to air-suspension: yes/no ([4])
6.2.3.2.	Frequency and damping of the oscillation of the sprung mass: …
6.2.4.	Air-suspension for non-driving axle(s): yes/no ([4])
6.2.4.1.	Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([4])
6.2.4.2.	Frequency and damping of the oscillation of the sprung mass: …
6.3.	Characteristics of the springing parts of the suspension (design, characteristics of the materials and dimensions): …
6.4.	Stabilisers: yes/no/optional ([4])
6.5.	Shock absorbers: yes/no/optional ([4])

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6.6. **Tyres and wheels**

6.6.1. Tyre/wheel combination(s)

6.6.1.1. Axles

6.6.1.1.1. Axle 1: …

6.6.1.1.1.1. Tyre size designation	6.6.1.1.1.2. Load-capacity index	6.6.1.1.1.3. Speed category symbol ([80])	6.6.1.1.1.4. Wheel rim size(s)	6.6.1.1.1.5. Wheel off-set(s)	6.6.1.1.1.6. Rolling resistance coefficient (RRC)

6.6.1.1.2. Axle 2: …

6.6.1.1.2.1. Tyre size designation	6.6.1.1.2.2. Load-capacity index	6.6.1.1.2.3. Speed category symbol ([80])	6.6.1.1.2.4. Wheel rim size(s)	6.6.1.1.2.5. Wheel off-set(s)	6.6.1.1.2.6. Rolling resistance coefficient (RRC)

etc.

6.6.1.2. Spare wheel, if any: …

6.6.2. Upper and lower limits of rolling radii

6.6.2.1. Axle 1: … mm

6.6.2.2. Axle 2: … mm

6.6.2.3. Axle 3: …mm

6.6.2.4. Axle 4: …mm

etc.

6.6.3. Tyre pressure(s) as recommended by the vehicle manufacturer: … kPa

6.6.4. Snow traction device/tyre/wheel combination on the front and/or rear axle that is suitable for the type of vehicle, as recommended by the manufacturer: …

6.6.5. Brief description of temporary use spare unit (if any): …

7. STEERING

7.1. Schematic diagram of steered axle(s) showing steering geometry: …

7.2. **Transmission and control**

7.2.1. Type of steering transmission (specify for front and rear, if applicable): …

7.2.2. Linkage to wheels (including other than mechanical means; specify for front and rear, if applicable): …

7.2.2.1. A brief description of the electrical/electronic components (if any): …

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7.2.3. Method of assistance (if any): …

7.2.3.1. Method and diagram of operation, make(s) and type(s): …

7.2.4. Diagram of the steering equipment as a whole, showing the position on the vehicle of the various devices influencing its steering behaviour: …

7.2.5. Schematic diagram(s) of the steering control(s): …

7.2.6. Range and method of adjustment (if any), of the steering control: …

7.3. **Maximum steering angle of the wheels**

7.3.1. To the right: … degrees; number of turns of the steering wheel (or equivalent data): …

7.3.2. To the left: … degrees; number of turns of the steering wheel (or equivalent data): …

8. BRAKES

(The following particulars, including means of identification, where applicable, are to be given)

8.1. Type and characteristics of the brakes including details and drawings of i.a. 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, electro-magnetic action, fluid braking forces, engine braking, relevant parts of the axle(s) and suspension: …

8.2. Operating diagram, description and/or drawing of the braking system including details and drawings of the transmission and controls:

8.2.1. Service braking system: …

8.2.2. Secondary braking system: …

8.2.3. Parking braking system: …

8.2.4. Any additional braking system: …

8.2.5. Break-away braking system: …

8.2.6. Category of regenerative braking system: A/B ([4])

8.2.6.1. Description of the regeneration system: …

8.2.6.1.1. Make control unit: …

8.2.6.1.2. Type control unit: …

8.2.6.1.3. Axle the braking system is fitted to: Axle 1/Axle 2/Axle 3/…

8.2.6.1.4. Parameters controlling the brake force: …

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8.3.	Control and transmission of trailer braking systems in vehicles designed to tow a trailer: …
8.4.	Vehicle is equipped to tow a trailer with electric/pneumatic/hydraulic ([4]) service brakes: yes/no ([4])
8.5.	Anti-lock braking system: yes/no/optional ([4])
8.5.1.	Make of the ABS unit: …
8.5.2.	Type of the ABS unit: …
8.5.3.	For vehicles with anti-lock systems, description of system operation (including any electronic parts), electric block diagram, hydraulic or pneumatic circuit plan: …
8.6.	Calculation and curves according to Annex 10 to UN Regulation No 13 or to the Annex 14 thereto, if applicable: …
8.7.	Description and/or drawing of the energy supply, also to be specified for power-assisted braking systems: …
8.7.1.	In the case of compressed-air braking systems, working pressure p2 in the pressure reservoir(s): …
8.7.2.	In the case of vacuum braking systems, the initial energy level in the reservoir(s): …
8.8.	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: …
8.9.	Brief description of the braking system according to paragraph 12 of Annex 2 to UN Regulation No 13: …
8.10.	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 3 of Annex 11 to UN Regulation No 13: …
8.11.	Particulars of the type(s) of endurance braking system(s): …
9.	BODYWORK
9.1.	Type of bodywork using the codes defined in Part C of Annex I to Regulation (EU) 2018/858 or in case of a special purpose vehicle the codes defined in point 5 to Part A of that Annex: …
9.2.	Materials used and methods of construction: …
9.3.	**Occupant doors, latches and hinges**
9.3.1.	Door configuration and number of doors: …
9.3.1.1.	Dimensions, direction and maximum angle of opening: …

▼B

9.3.2.	Drawing of latches and hinges and of their position in the doors: …
9.3.3.	Technical description of latches and hinges: …
9.3.4.	Details, including dimensions, of entrances, steps and necessary handles where applicable: …
9.3.5.	Electrical/electronic components of the door system: …
9.3.5.1.	Brief description of any electrical/electronic components: …
9.3.5.2.	Description of electrical/electronic functionality in the door system: …
9.3.5.2.1.	Rolling door locks fitted: yes/no/optional ([4])
9.4.	**Field of vision**
9.4.1.	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: …
9.4.2.	Drawing(s) or photograph(s) showing the location of component parts within the 180° forward field of vision: …
9.5.	**Windscreen and other windows**
9.5.1.	Windscreen
9.5.1.1.	Materials used: …
9.5.1.2.	Method of mounting: …
9.5.1.3.	Angle of inclination: …
9.5.1.4.	Number(s) of the type-approval certificate(s): …
9.5.1.5.	Windscreen accessories and the position in which they are fitted together with a brief description of any electrical/electronic components involved: …
9.5.2.	Other windows
9.5.2.1.	Materials used: …
9.5.2.2.	Number(s) of the type-approval certificate(s): …
9.5.2.3.	A brief description of the electrical/electronic components (if any) of the window lifting mechanism: …
9.5.2.3.1.	Description of the auto-reversing system: …

▼B

9.5.3. Opening roof glazing

9.5.3.1. Materials used: …

9.5.3.2. Number(s) of the type-approval certificate (s): …

9.5.3.3. A brief description of the electrical/electronic components (if any) of the opening roof mechanism: …

9.5.3.3.1. Description of the auto-reversing system: …

9.5.4. Other glass panes

9.5.4.1. Materials used: …

9.5.4.2. Number(s) of the type-approval certificate (s): …

9.6. **Windscreen wiper(s)**

9.6.1. Detailed technical description (including photographs or drawings): …

9.6.1.1. Dimensions of the wiper arm and wiper blade: …

9.7. **Windscreen and headlamp washer**

9.7.1. Detailed technical description (including photographs or drawings) or, if approved as separate technical unit, number of the type-approval certificate: …

9.8. **Defrosting and demisting**

9.8.1. Detailed technical description (including photographs or drawings): …

9.8.2. Maximum electrical consumption: … kW

9.9. **Devices for indirect vision**

9.9.1. Rear-view mirrors, stating for each mirror:

9.9.1.1. Make: …

9.9.1.2. Type-approval mark: …

9.9.1.3. Variant: …

9.9.1.4. Drawing(s) for the identification of the mirror showing the position of the mirror relative to the vehicle structure: …

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9.9.1.5. Details of the method of attachment including that part of the vehicle structure to which it is attached: …

9.9.1.6. Optional equipment which may affect the rearward field of vision: …

9.9.1.7. A brief description of the electronic components (if any): …

9.9.2. Devices for indirect vision other than mirrors: …

9.9.2.1. Type and description of the device: …

9.9.2.1.1. 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: …

9.9.2.1.2. 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.

9.10. **Interior arrangement**

9.10.1. Interior protection for occupants

9.10.1.1. Layout drawing or photographs showing the position of the attached sections or views: …

9.10.1.2. Photograph or drawing showing the reference zone including the exempted area referred to in paragraph 2.3.1 to UN Regulation No 21 of the Economic Commission for Europe of the United Nations (UN/ECE) ([81]): …

9.10.1.3. 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: …

9.10.2. Arrangement and identification of controls, tell-tales and indicators

9.10.2.1. Photographs and/or drawings of the arrangement of symbols and controls, tell-tales and indicators: …

9.10.2.2. Photographs and/or drawings of the identification of controls, tell-tales and indicators and of the vehicle parts referred to UN Regulation No 121 ([82]) of the Economic Commission for Europe of the United Nations (UN/ECE) where relevant: …

9.10.3. Seats

9.10.3.1. Number of seating positions ([83]): …

9.10.3.1.1. Location and arrangement: …

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9.10.3.2.	Seat(s) designated for use only when the vehicle is stationary: …
9.10.3.3.	Mass: …
9.10.3.4.	Characteristics: for seats not type-approved as components, description and drawings of
9.10.3.4.1.	The seats and their anchorages: …
9.10.3.4.2.	The adjustment system: …
9.10.3.4.3.	The displacement and locking systems: …
9.10.3.4.4.	The seat-belt anchorages (if incorporated in the seat structure): …
9.10.3.4.5.	The parts of the vehicle used as anchorages: …
9.10.3.5.	Coordinates or drawing of the R-point ([84])
9.10.3.5.1.	Driver's seat: …
9.10.3.5.2.	All other seating positions: …
9.10.3.6.	Design torso angle
9.10.3.6.1.	Driver's seat: …
9.10.3.6.2.	All other seating positions: …
9.10.3.7.	Range of seat adjustment
9.10.3.7.1.	Driver's seat: …
9.10.3.7.2.	All other seating positions: …
9.10.3.8.	Detailed description of the electrical/electronic components (if any) of the seat adjustment system: …
9.10.3.9.	Description of the luggage compartment space if the seat back(s) constitute the forward boundary of this space: …
9.10.3.10.	Vehicle equipped with a partitioning system: yes/no/optional ([4])
9.10.3.10.1.	Detailed description of the partitioning system including the mounting to the vehicle structure: …
9.10.4.	Head restraints
9.10.4.1.	Type(s) of head restraints: integrated/detachable/separate ([4])
9.10.4.2.	Number(s) of the type-approval certificate (s), if available: …
9.10.4.3.	For head restraints not yet approved
9.10.4.3.1.	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: …

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9.10.4.3.2. In the case of a ‘separate’ head restraint

9.10.4.3.2.1. A detailed description of the structural zone to which the head restraint is intended to be fixed: …

9.10.4.3.2.2. Dimensional drawings of the characteristic parts of the structure and the head restraint: …

9.10.4.4. Detailed description of the electrical/electronic components (if any) of the head restraint adjustment system: …

9.10.5. Heating systems for the passenger compartment

9.10.5.1. A brief description of the vehicle type with regard to the heating system if the heating system uses the heat of the engine cooling fluid: …

9.10.5.2. A detailed description of the vehicle type with regard to the heating if the cooling air or the exhaust gases of the engine are used as heat source, including:

9.10.5.2.1. Layout drawing of the heating system showing its position in the vehicle: …

9.10.5.2.2. 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): …

9.10.5.2.3. 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: …

9.10.5.2.4. 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: …

9.10.5.3. A brief description of the vehicle type with regard to the combustion heating system and the automatic control: …

9.10.5.3.1. 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.

9.10.5.4. Maximum electrical consumption: …… kW

9.10.6. Components with regard to the protection of the occupants of the front seats in the event of a frontal/lateral/rear collision.

9.10.6.1. A detailed description, including photograph(s) and/or drawing(s), of the vehicle type 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: …

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9.10.6.2.	Photograph(s) and/or drawing(s) of vehicle components other than those described in 9.10.6.1 as identified by the manufacturer in agreement with the technical service, as contributing to the behaviour of the steering mechanism in case of impact: …
9.10.6.3.	Other components located in the energy absorption zone of the vehicle:
9.10.6.3.1.	Description of liquid fuel supply system: …
9.10.6.3.2.	Description of high voltage BUS and high voltage components located in the energy absorption zone of the vehicle: …
9.10.6.3.3.	Description of hydrogen system/components located in the energy absorption zone of the vehicle: …
9.10.7.	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles
9.10.7.1.	Material(s) used for the interior lining of the roof
9.10.7.1.1.	Number(s) of the component type-approval certificate (s), if available: …
9.10.7.1.2.	For materials not approved
9.10.7.1.2.1.	Base material(s)/designation: ……/……
9.10.7.1.2.2.	Composite/single ([4]) material, number of layers ([4]): …
9.10.7.1.2.3.	Type of coating ([4]): …
9.10.7.1.2.4.	Maximum/minimum thickness: ……/…… mm
9.10.7.2.	Material(s) used for the rear and side walls
9.10.7.2.1.	Number(s) of the component type-approval certificate (s), if available: …
9.10.7.2.2.	For materials not approved
9.10.7.2.2.1.	Base material(s)/designation: ……/……
9.10.7.2.2.2.	Composite/single ([4]) material, number of layers ([4]): …
9.10.7.2.2.3.	Type of coating ([4]): …
9.10.7.2.2.4.	Maximum/minimum thickness: ……/…… mm
9.10.7.3.	Material(s) used for the floor
9.10.7.3.1.	Number(s) of the component type-approval certificate (s), if available: …
9.10.7.3.2.	For materials not approved
9.10.7.3.2.1.	Base material(s)/designation: ……/……

▼B

9.10.7.3.2.2. Composite/single ([4]) material, number of layers ([4]): …

9.10.7.3.2.3. Type of coating ([4]): …

9.10.7.3.2.4. Maximum/minimum thickness: ……/…… mm

9.10.7.4. Material(s) used for the upholstery of the seats

9.10.7.4.1. Number(s) of the component type-approval certificate (s), if available: …

9.10.7.4.2. For materials not approved

9.10.7.4.2.1. Base material(s)/designation: ……/……

9.10.7.4.2.2. Composite/single ([4]) material, number of layers ([4]): …

9.10.7.4.2.3. Type of coating ([4]): …

9.10.7.4.2.4. Maximum/minimum thickness: ……/…… mm

9.10.7.5. Material(s) used for the heating and ventilation pipes

9.10.7.5.1. Numbers of the component type-approval certificate (s), if available: …

9.10.7.5.2. For materials not approved

9.10.7.5.2.1. Base material(s)/designation: ……/…...

9.10.7.5.2.2. Composite/single ([4]) material, number of layers ([4]): …

9.10.7.5.2.3. Type of coating ([4]): …

9.10.7.5.2.4. Maximum/minimum thickness: ……/……. Mm

9.10.7.6. Material(s) used for luggage racks

9.10.7.6.1. Number(s) of the component type-approval certificate (s), if available: …

9.10.7.6.2. For materials not approved

9.10.7.6.2.1. Base material(s)/designation: ……/……

9.10.7.6.2.2. Composite/single ([4]) material, number of layers ([4]): …

9.10.7.6.2.3. Type of coating ([4]): …

9.10.7.6.2.4. Maximum/minimum thickness: ……/…… mm

9.10.7.7. Material(s) used for other purposes

9.10.7.7.1. Intended purposes: …

9.10.7.7.2. Number(s) of the component type-approval certificate (s), if available: …

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9.10.7.7.3.	For materials not approved
9.10.7.7.3.1.	Base material(s)/designation: ……/……
9.10.7.7.3.2.	Composite/single ([4]) material, number of layers ([4]): …
9.10.7.7.3.3.	Type of coating ([4]): …
9.10.7.7.3.4.	Maximum/minimum thickness: …./…. Mm
9.10.7.8.	Components approved as complete devices (seats, separation walls, luggage racks, etc.)
9.10.7.8.1.	Number(s) of the component type-approval certificate (s): …
9.10.7.8.2.	For the complete device: seat, separation wall, luggage racks, etc. ([4])
9.10.8.	Gas used as refrigerant in the air-conditioning system: …
9.10.8.1.	The air-conditioning system is designed to contain fluorinated greenhouse gases with global warming potential higher than 150: yes/no ([4])
9.10.8.2.	If yes, fill in the following points
9.10.8.2.1.	Drawing and brief description of the air-conditioning system, including the reference or part number and material of the leak components;
9.10.8.2.2.	Leakage of the air-conditioning system
9.10.8.2.4.	Reference or part number and material of the components of the system and information about the test (e.g. test report number, number of the approval certificate, etc.): …
9.10.8.3.	Overall leakage in g/year of the entire system: …
9.11.	**External projections**
9.11.1.	Photographs of the front, rear and side parts of the vehicle at an angle of 30° to 45° to the vertical longitudinal median plane of the vehicle:
9.11.2.	Drawings of the ‘external surface’ to demonstrate compliance with the requirements: …
9.11.3.	Drawings of parts of the external surface in accordance with paragraph 6.9.1 to UN Regulation No 26 of the Economic Commission for Europe of the United Nations (UNECE) ([85]): …
9.11.4.	Drawing of bumpers: …
9.11.5.	Drawing of the floor line: …

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9.12. **Safety belts and/or other restraint systems**

9.12.1. 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, if applicable	Belt adjustment device for height (indicate yes/no/optional)
First row of seats	L			
	C			
	R			
Second row of seats ([86])	L			
	C			
	R			

9.12.2. 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	Other airbag systems (i.e. knee airbag, etc.)
First row of seats	L			
	C			
	R			
Second row of seats ([86])	L			
	C			
	R			

9.12.3. Number and position of safety belt anchorages and proof of compliance with UN Regulation No 14 ([87]), (i.e. number of the type-approval certificate or test report): …

9.12.4. A brief description of the electrical/electronic components (if any): …

9.12.5. Description of the seat belt reminder system: …

9.13. **Safety belt anchorages**

9.13.1. Photographs and/or drawings of the bodywork showing the position and dimensions of the actual and the effective anchorages including the R-points: …

9.13.2. Drawings of the belt anchorages and parts of the vehicle structure where they are attached (with the material indication): …

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9.13.3. Designation of the types ([88]) 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 ([86])				
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			

9.13.4. Description of a particular type of safety belt where an anchorage is located in the seat backrest or incorporates an energy dissipating device: …

9.14. **Space for mounting rear registration plates (give range where appropriate, drawings may be used where applicable)**

9.14.1. Height above road surface, upper edge: …

9.14.2. Height above road surface, lower edge: …

9.14.3. Distance of the centre line from the longitudinal median plane of the vehicle: …

9.14.4. Distance from the left vehicle edge: …

▼B

9.14.5. Dimensions (length × width): …

9.14.6. Inclination of the plane to the vertical: …

9.14.7. Angle of visibility in the horizontal plane: …

9.15. **Rear under-run protection**

9.15.0. Presence: yes/no/incomplete ([4])

9.15.1. 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: …

9.15.2. 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, number of the type-approval certificate: …

9.16. **Wheel guards**

9.16.1. Brief description of the vehicle with regard to its wheel guards: …

9.16.2. 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 ([89]) and taking account of the extremes of tyre/wheel combinations: …

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. Manufacturer's declaration of compliance with Part B of Annex I to Commission Regulation (EU) No 19/2011 ([90])

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9.17.4.1. The meaning of characters in the vehicle descriptor section (VDS) of point 2.1. of Part B of Annex I to Regulation (EU) No 19/2011 and, if applicable, the vehicle indicator section (VIS) thereof, to comply with the requirements of section 5.3 of ISO Standard 3779:2009 shall be explained: …

9.17.4.2. If characters in the vehicle descriptor second section are used to comply with the requirements of section 5.4 of ISO Standard 3779:2009 (i.e. model year) these characters shall be indicated: …

9.18. **Radio interference/electromagnetic compatibility**

9.18.1. 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: …

9.18.2. 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.): …

9.18.3. Table and drawing of radio-interference control equipment: …

9.18.4. Particulars of the nominal value of the direct current resistance, and, in the case of resistive ignition cables, of their nominal resistance per metre: …

9.19. **Lateral protection**

9.19.0. Presence: yes/no/incomplete ([4])

9.19.1. 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: …

9.19.2. In the case of lateral protection device(s), full description and/or drawing of such device(s) (including mountings and fittings) or its/their number(s) of the component type-approval certificate(s): …

9.20. **Spray-suppression system**

9.20.0. Presence: yes/no/incomplete ([4])

9.20.1. Brief description of the vehicle with regard to its spray-suppression system and the constituent components: …

9.20.2. Detailed drawings of the spray-suppression system and its position on the vehicle showing the dimensions specified in the figures in Annex VI to Commission Regulation (EU) No 109/2011 ([91]) and taking account of the extremes of tyre/wheel combinations: …

9.20.3. Number(s) of the type-approval certificate(s) of spray-suppression device(s), if available: …

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9.21.	**Side-impact resistance**
9.21.1.	A detailed description, including photographs and/or drawings, of the vehicle with respect to the structure, the dimensions, the lines and the constituent materials of the side walls of the passenger compartment (exterior and interior), including specific details of the protection system, where applicable: …
9.22.	**Front under-run protection**
9.22.0.	Presence: yes/no/incomplete ([4])
9.22.1.	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: …
9.22.2.	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, number of the type-approval certificate: …
9.23.	**Pedestrian protection**
9.23.1.	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.
9.24.	**Frontal protection systems**
9.24.1.	General arrangement (drawings or photographs) indicating the position and attachment of the frontal protection systems:
9.24.2.	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:
9.24.3.	Complete details of fittings required and full instructions, including torque requirements, for fitting:
9.24.4.	Drawing of bumpers:
9.24.5.	Drawing of the floor line at the vehicle front end:

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9.25.	**Aerodynamic device or equipment**
9.25.1.	Detailed technical description (including photographs or drawings, as well as a description of the materials) of the vehicle parts relevant to Part C, point 1.4 of Annex I to Commission Regulation (EU) No 1230/2012: ...
9.26.	**Aerodynamic device or equipment on the front of the vehicle**
9.26.1.	Vehicle equipped with aerodynamic device or equipment on the front: yes/no ([4])
9.26.2.	Number of the type-approval certificate of the aerodynamic device or equipment, if available: …
	Or, if not available provide the information below:
9.26.3.	Detailed description (including photographs or drawings) of the aerodynamic device or equipment (NB: taken over from the addendum to the type-approval certificate)
9.26.3.1.	Construction and materials: …
9.26.3.2.	Locking and adjustment system: …
9.26.3.3.	Attachment and mounting to the vehicle: …
9.27.	**Aerodynamic device or equipment on the rear of the vehicle**
9.27.1.	Vehicle equipped with aerodynamic device or equipment on the rear: yes/no ([4])
9.27.2.	Number of the type-approval certificate of the aerodynamic device or equipment, if available: …
	Or, if not available provide the information below:
9.27.3.	Detailed description (including photographs or drawings) of the aerodynamic device or equipment (NB: taken over from the addendum to the TA certificate)
9.27.3.1.	Construction and materials: …
9.27.3.2.	Locking and adjustment system: …
9.27.3.3.	Attachment and mounting to the vehicle: …
10.	LIGHTING AND LIGHT SIGNALLING DEVICES
10.1.	Table of all devices: number, make, model, type-approval mark, maximum intensity of main-beam headlamps, colour, tell-tale: …
10.2.	Drawing of the position of lighting and light signalling devices: …
10.3.	For every lamp and reflector specified in UN Regulation No 48 ([92]) of the Economic Commission for Europe of the United Nations (UNECE) supply the following information (in writing and/or by diagram)
10.3.1.	Drawing showing the extent of the illuminating surface: …

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10.3.2. Method used for the definition of the apparent surface in accordance with paragraph 2.10 of UN Regulation No 48: …

10.3.3. Axis of reference and centre of reference: …

10.3.4. Method of operation of concealable lamps: …

10.3.5. Any specific mounting and wiring provisions: …

10.4. Dipped beam lamps: normal orientation in accordance to paragraph 6.2.6.1 of UN Regulation No 48:

10.4.1. Value of initial adjustment: …

10.4.2. Location of indication: …

10.4.3.	Description/drawing ([4]) and type of headlamp levelling device (e.g. automatic, stepwise manually adjustable, continuously manually adjustable):	Applicable only for vehicles with headlamp levelling device
10.4.4.	Control device:	
10.4.5.	Reference marks:	
10.4.6.	Marks assigned for loading conditions:	

10.5. A brief description of electrical/electronic components other than lamps (if any): …

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: …

11.2. 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

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 vehicle type: …

11.4. Information of the fitting of special towing brackets or mounting plates: …

11.5. Number(s) of the type-approval certificate(s): …

12. MISCELLANEOUS

12.1. Audible warning device(s)

12.1.1. Location, method of affixing, placement and orientation of the device(s), with dimensions: …

12.1.2. Number of device(s): …

▼B

12.1.3.	Number(s) of the type-approval certificate (s): …
12.1.4.	Electrical/pneumatic ([4]) circuit diagram: …
12.1.5.	Rated voltage or pressure: …
12.1.6.	Drawing of the mounting device: …
12.2.	Devices to prevent unauthorised use of the vehicle
12.2.1.	Protective device
12.2.1.1.	A detailed description of the vehicle type with regard to the arrangement and design of the control or of the unit on which the protective device acts: …
12.2.1.2.	Drawings of the protective device and of its mounting on the vehicle: …
12.2.1.3.	A technical description of the device: …
12.2.1.4.	Details of the lock combinations used: …
12.2.1.5.	Vehicle immobiliser
12.2.1.5.1.	Number of the type-approval certificate, if available: …
12.2.1.5.2.	For immobilisers not yet approved
12.2.1.5.2.1.	A detailed technical description of the vehicle immobiliser and of the measures taken against inadvertent activation: …
12.2.1.5.2.2.	The system(s) on which the vehicle immobiliser acts: …
12.2.1.5.2.3.	Number of effective interchangeable codes, if applicable: …
12.2.2.	Alarm system (if any)
12.2.2.1.	Number of the type-approval certificate, if available: …
12.2.2.2.	For alarm systems not yet approved
12.2.2.2.1.	A detailed description of the alarm system and of the vehicle parts related to the alarm system installed: …
12.2.2.2.2.	A list of the main components comprising the alarm system: …
12.2.3.	A brief description of the electrical/electronic components (if any): …
12.3.	Towing device(s)
12.3.1.	Front: Hook/eye/other ([4])
12.3.2.	Rear: Hook/eye/other/none ([4])

▼B

12.3.3. Drawing or photograph of the chassis/area of the vehicle body showing the position, construction and mounting of the towing device(s): …

12.4. Details of any non-engine related devices designed to influence fuel consumption (if not covered by other items): …

12.5. Details of any non-engine related devices designed to reduce noise (if not covered by other items): …

12.6. Speed limitation devices

12.6.1. Manufacturer(s): …

12.6.2. Type(s): …

12.6.3. Number(s) of the type-approval certificate (s), if available: …

12.6.4. Speed or range of speeds at which the speed limitation may be set: …… km/h

12.7. Table of installation and use of RF transmitters in the vehicle(s), if applicable: …

Frequency bands (Hz)	Maximum output power (W)	Antenna position at vehicle, specific conditions for installation and/or use

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, type approved during this whole vehicle type-approval, concerned by UN Regulation No 10 ([93]) of the Economic Commission for Europe of the United Nations (UNECE).

Appendix 2

Schematics or drawing of the general arrangement of electrical and/or electronic components, type approved during this whole vehicle type-approval, concerned by UN 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 ([4])

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

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12.7.1. Vehicle equipped with a 24 GHz short-range radar equipment: yes/no ([4])

12.8. eCall system

12.8.1. Presence: yes/no ([4])

12.8.2. Technical description and drawings of the device or type-approval certificate number(s): …

12.9. Acoustic Vehicle Alerting System (AVAS)

12.9.1. The number of the approval certificate issued on the basis of requirements laid down in UN Regulation No 138 ([94]) of the Economic Commission for Europe of the United Nations (UNECE):

or

12.9.2. Complete reference to the test results of AVAS sound emission levels, measured in accordance with Regulation (EU) No 540/2014 ([95]) of the European Parliament and of the Council.

12.10. Devices or systems with driver selectable modes which influence CO_2 emissions and/or criteria emissions and do not have a predominant mode: yes/no ([4])

12.10.1. Charge sustaining test (if applicable) (state for each device or system)

12.10.1.1. Best case mode: …

12.10.1.2. Worst case mode: …

12.10.2. Charge depleting test (if applicable) (state for each device or system)

12.10.2.1. Best case mode: …

12.10.2.2. Worst case mode: …

12.10.3. Type 1 test (if applicable) (state for each device or system)

12.10.3.1. Best case mode: …

12.10.3.2. Worst case mode: …

13. SPECIAL PROVISIONS FOR BUSES AND COACHES

13.1. Class of vehicle: Class I/Class II/Class III/Class A/Class B ([4])

13.1.1. Number of the type-approval certificate of bodywork approved as a separate technical unit: …

13.1.2. Chassis types where the type-approved bodywork can be installed (manufacturer(s), and types of incomplete vehicle): …

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13.2.	**Area for passengers (m^2)**
13.2.1.	Total (S_0): …
13.2.2.	Upper deck (S_{0a}) ([4]): …
13.2.3.	Lower deck (S_{0b}) ([4]): …
13.2.4.	For standing passengers (S_1): …
13.3.	**Number of passengers (seated and standing)**
13.3.1.	Total (N): …
13.3.2.	Upper deck (N_a) ([4]): …
13.3.3.	Lower deck (N_b) ([4]): …
13.4.	**Number of passengers seated**
13.4.1.	Total (A): …
13.4.2.	Upper deck (Aa) ([4]): …
13.4.3.	Lower deck (Ab) ([4]): …
13.4.4.	Number of wheelchair user accessible positions: …
13.5.	Number of service doors: …
13.6.	Number of emergency exits (doors, windows, escape hatches, intercommunication staircase and half staircase): …
13.6.1.	Total: …
13.6.2.	Upper deck ([4]): …
13.6.3.	Lower deck ([4]): …
13.7.	Volume of luggage compartments (m^3): …
13.8.	Area of luggage transportation on the roof (m^2): …
13.9.	Technical devices facilitating the access to vehicles (e.g. ramp, lifting platform, kneeling system), if fitted: …
13.10.	Strength of superstructure
13.10.1.	Number of the type-approval certificate, if available: …
13.10.2.	For superstructures not yet approved
13.10.2.1.	Detailed description of the superstructure of the vehicle type including its dimensions, configuration and constituent materials and its attachment to any chassis frame: …
13.10.2.2.	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: …

▼B

13.10.2.3. Position of centre of gravity of the vehicle in running order in the longitudinal, transverse and vertical directions: …

13.10.2.4. Maximum distance between the centre lines of the outboard passenger seats: …

13.11. Points of UN Regulation No 66 ([96]) of the Economic Commission for Europe of the United Nations (UN/ECE) to be accomplished and demonstrated for this technical unit: …

13.12. 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

14. SPECIAL PROVISIONS FOR VEHICLES INTENDED FOR THE TRANSPORT OF DANGEROUS GOODS

14.1. **Electrical equipment according to UN Regulation No 105 ([97]) of the Economic Commission for Europe of the United Nations (UN/ECE)**

14.1.1. Protection against overheating of conductors: …

14.1.2. Type of circuit breaker: …

14.1.3. Type and operation of battery master switch: …

14.1.4. Description and location of safety barrier for tachograph: …

14.1.5. Description of permanently energised installations. Indicate the EN standard applied: …

14.1.6. Construction and protection of electrical installation situated to the rear of the driver's compartment: …

14.2. **Prevention of fire risks**

14.2.3. Position and heat protection of engine: …

14.2.4. Position and heat protection of the exhaust system: …

14.2.5. Type and design of the endurance braking systems heat protection: …

14.2.6. Type, design and position of combustion heaters: …

15. REUSABILITY, RECYCLABILITY AND RECOVERABILITY

15.1. Version to which the reference vehicle belongs: …

15.2. 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: …

15.3. Mass of materials of the reference vehicle: …

▼B

15.3.1.	Mass of material taken into account at the pre-treatment step ([98]): …
15.3.2.	Mass of the material taken into account at the dismantling step ([98]): …
15.3.3.	Mass of material taken into account at the non-metallic residue treatment step, considered as recyclable([98]): …
15.3.4.	Mass of material taken into account at the non-metallic residue treatment step, considered as energy recoverable ([98]): …
15.3.5.	Materials breakdown ([98]): …
15.3.6.	Total mass of materials, which are reusable and/or recyclable: …
15.3.7.	Total mass of materials, which are reusable and/or recoverable: …
15.4.	**Rates**
15.4.1.	Recyclability rate 'R_{cyc}' (%): …
15.4.2.	Recoverability rate 'R_{cov}' (%): …
16.	ACCESS TO VEHICLE REPAIR AND MAINTENANCE INFORMATION
16.1.	Address of principal website for access to vehicle repair and maintenance information: …
16.1.1.	Date from which it is available (no later than 6 months from the date of type-approval): …
16.2.	Terms and conditions of access to website: …
16.3.	Format of the vehicle repair and maintenance information accessible through website: …

▼B

ANNEX II

TEMPLATE FOR AN INFORMATION DOCUMENT FOR THE PURPOSES OF EU WHOLE-VEHICLE STEP-BY-STEP TYPE-APPROVAL

The information documents referred to in Regulation (EU) 2018/858 in respect of a whole-vehicle EU type-approval shall consist only of extracts from, and adhere to the item numbering system of the following list.

Make sure that drawings or pictures show sufficient details distinctly and visibly if printed on size A4.

PART I

A. **Categories M and N**

0. GENERAL

0.1. Make (trade name of manufacturer): …

0.2. Type: …

0.2.1. Commercial name(s) (if available): …

0.2.2. For multi-stage 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): …

Number of the type-approval certificate, including extension number: …

0.2.2.1. Allowed Parameter Values for multistage type approval to use the base vehicle emission values (insert range if applicable) ([1])

Final Vehicle mass (in kg): …

Frontal area for final vehicle (in cm^2): …

Rolling resistance (kg/t): …

Cross-sectional area of air entrance of the front grille (in cm^2): …

0.2.3. Identifiers ([1]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier

0.2.3.4.1. Roadload family of VH: …

0.2.3.4.2. Roadload family of VL: …

0.2.3.4.3. Roadload families applicable in the interpolation family: …

▼B

0.2.3.5.	Roadload Matrix family's identifier: …
0.2.3.6.	Periodic regeneration family's identifier: …
0.2.3.7.	Evaporative test family's identifier: …
0.2.3.8.	OBD family's identifier: …
0.2.3.9.	Other family's identifier: …
0.3.	Means of identification of type, if marked on the vehicle ([2]): …
0.3.1.	Location of that marking: …
0.4.	Category of vehicle ([3]): …
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport: …
0.5.	Company name and address of manufacturer: …
0.5.1.	For multi-stage approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle: …
0.8.	Name(s) and address(es) of assembly plant(s): …
0.9.	Name and address of the manufacturer's representative (if any): …
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle: …
1.3.	Number of axles: … and wheels ([5]): …
1.3.1.	Number and position of axles with twin wheels: …
1.3.2.	Number and position of steered axles: …
1.3.3.	Powered axles (number, position, interconnection): …
1.4.	Chassis (if any) (overall drawing – shortest and longest wheelbase): …
1.6.	Position and arrangement of the engine: …
1.8.	Hand of drive: left/right ([4])
1.8.1.	Vehicle is equipped to be driven in right/left ([4]) hand traffic
1.9.	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: …
1.10.	Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …
1.11.	Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

▼B

2.	MASSES AND DIMENSIONS ([9]) ([10]) ([11]) (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheelbase(s) (fully loaded) ([12]):
2.1.1.	Two-axle vehicles: …
2.1.2.	Vehicles with three or more axles
2.1.2.1.	Axle spacing between consecutive axles going from the foremost to the rearmost axle: …
2.1.2.2.	Total axle spacing ([13]): …
2.3.1.	Track of each steered axle ([17]): …
2.3.2.	Track of all other axles ([17]): …
2.4.	Range of vehicle dimensions (overall)
2.4.1.	For chassis without bodywork
2.4.1.1.	Length ([18]): …
2.4.1.1.1.	Maximum permissible length: …
2.4.1.1.2.	Minimum permissible length: …
2.4.1.2.	Width ([20]): …
2.4.1.2.1.	Maximum permissible width: …
2.4.1.2.2.	Minimum permissible width: …
2.4.1.3.	Height (in running order) ([21]) (for suspensions adjustable for height, indicate normal running position): …
2.4.1.3.1.	Maximum permissible height ([22]): …
2.4.2.	For chassis with bodywork
2.4.2.1.	Length ([18]): …
2.4.2.1.1.	Length of the loading area: …
2.4.2.1.3.	Elongated cab complying with Article 9a of Directive 96/53/EC: yes/no ([4])
2.4.2.2.	Width ([20]): …
2.4.2.2.1.	Thickness of the walls (in the case of vehicles designed for controlled-temperature transport of goods): …
2.4.2.3.	Height (in running order) ([21]) (for suspensions adjustable for height, indicate normal running position): …
2.5.	Minimum mass on the steering axle(s) for incomplete vehicles: …

▼B

2.6.	Mass in running order ([30])
	(a) minimum and maximum for each variant: …
	(b) mass of each version (a matrix must be provided): …
2.6.1.	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): …
2.6.2.	Mass of the optional equipment (as defined in point (5) of Article 2 of Commission Regulation (EU) No 1230/2012: …
2.6.4.	Additional mass for alternative propulsion: …kg
2.6.5.	List of equipment to for alternative propulsion (and indication of the mass of the parts):
2.7.	Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle: …
2.8.	Technically permissible maximum laden mass stated by the manufacturer ([32]) ([33]): …
2.8.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([33]): …
2.9.	Technically permissible maximum mass on each axle: …
2.10.	Technically permissible mass on each group of axles: …
2.11.	Technically permissible maximum towable mass of the towing vehicle
	in case of:
2.11.1.	Drawbar trailer: …
2.11.2.	Semi-trailer: …
2.11.3.	Centre-axle trailer: …
2.11.4.	Rigid drawbar trailer: …
2.11.5.	Technically permissible maximum laden mass of the combination ([33]): …
2.11.6.	Maximum mass of unbraked trailer: …
2.12.	Technically permissible maximum mass at the coupling point:
2.12.1.	of a towing vehicle: …
2.12.2.	of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …

▼B

2.16.	**Registration/in service maximum permissible masses, vehicle categories M_2, M_3, N_2, N_3, O_3 and O_4 (optional)**
2.16.1.	Registration/in service maximum permissible laden mass: …
2.16.2.	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: …
2.16.3.	Registration/in service maximum permissible mass on each group of axles: …
2.16.4.	Registration/in service maximum permissible towable mass: …
2.16.5.	Registration/in service maximum permissible mass of the combination: …
2.17.	**Vehicle submitted to multi-stage type-approval** (only in the case of incomplete or completed vehicles of category N1 within the scope of Regulation (EC) No 715/2007 of the European Parliament and of the Council ([99]): yes/no ([4])
2.17.1.	Mass of the base vehicle in running order: … kg.
2.17.2.	Default added mass, calculated in accordance with Section 5 of Annex XII to Commission Regulation (EC) No 692/2008 ([100]): … kg.
3.	PROPULSION ENERGY CONVERTER ([38])
3.1.	Manufacturer of the propulsion energy converter(s): …
3.1.1.	Manufacturer's code (as marked on the propulsion energy converter or other means of identification): …
3.1.2.	Number of the approval certificate (where appropriate), including fuel identification marking: …
	(heavy-duty vehicles only)
3.2.	Internal combustion engine
3.2.1.1.	Working principle: positive ignition/compression ignition/dual-fuel (
	Cycle: four stroke/two stroke/rotary ([4])
3.2.1.1.1.	Type of dual-fuel engine: Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4]) ([42])
3.2.1.1.2.	Gas Energy Ratio over the hot part of the WHTC test-cycle: … %
3.2.1.2.	Number and arrangement of cylinders: …

▼B

3.2.1.3.	Engine capacity ([40]): …… cm^3
3.2.1.6.	Normal engine idling speed ([41]): …… min^{-1}
3.2.1.6.2.	Idle on diesel: yes/no ([4]) ([42])
3.2.1.8.	Maximum net power ([43]): … kW at … min^{-1} (manufacturer's declared value)
3.2.1.11.	(Euro VI only) Manufacturer references of the Documentation package required by Articles 5, 7 and 9 of Commission 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
3.2.2.1.	Diesel/Petrol/LPG/NG or Biomethane/Ethanol (E 85)/Biodiesel/Hydrogen ([4]) ([45])
3.2.2.2.	Heavy duty vehicles Diesel/Petrol/LPG/NG-H/NG-L/NG-HL/Ethanol (ED95)/Ethanol (E85)/LNG/LNG_{20} ([4]) ([45])
3.2.2.2.1.	(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)
3.2.2.4.	Vehicle fuel type: Mono fuel, Bi fuel, Flex fuel, Dual fuel Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])
3.2.2.5.	Maximum amount of biofuel acceptable in fuel (manufacturer's declared value): …… % by volume
3.2.3.	Fuel tank(s)
3.2.3.1.	Service fuel tank(s)
3.2.3.1.1.	Number and capacity of each tank: …
3.2.3.2.	Reserve fuel tank(s)
3.2.3.2.1.	Number and capacity of each tank: …
3.2.4.	Fuel feed
3.2.4.1.	By carburettor(s): yes/no ([4])
3.2.4.2.	By fuel injection (compression ignition or dual-fuel only): yes/no ([4])
3.2.4.2.2.	Working principle: direct injection/pre-chamber/swirl chamber ([4])
3.2.4.3.	By fuel injection (positive ignition only): yes/no ([4])
3.2.7.	Cooling system: liquid/air ([4])

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3.2.8.	Intake system
3.2.8.1.	Pressure charger: yes/no ([4])
3.2.8.2.	Intercooler: yes/no ([4])
3.2.8.3.3.	(Euro VI only) Actual Intake system depression at rated engine speed and at 100 % load on the vehicle: kPa
3.2.9.	Exhaust system
3.2.9.2.1.	(Euro VI only) Description and/or drawing of the elements of the exhaust system that are not part of the engine system
3.2.9.3.1.	(Euro VI only) Actual exhaust back pressure at rated engine speed and at 100 % load on the vehicle (compression-ignition engines only): … kPa
3.2.9.4.	Type, marking of exhaust silencer(s): …
	Where relevant for exterior noise, reducing measures in the engine compartment and on the engine: …
3.2.9.5.	Location of the exhaust outlet: …
3.2.9.7.1.	(Euro VI only) Acceptable Exhaust system volume: … dm^3
3.2.12.	Measures taken against air pollution
3.2.12.1.1.	(Euro VI only) Device for recycling crankcase gases: yes/no ([41])
	If yes, description and drawings:
	If no, compliance with Annex V to Regulation (EU) No 582/2011 required
3.2.12.2.	Pollution control devices (if not covered by another heading)
3.2.12.2.1.	Catalytic converter
3.2.12.2.2.1.	Oxygen sensor: yes/no ([4])
3.2.12.2.3.	Air injection: yes/no ([4])
3.2.12.2.4.	Exhaust gas recirculation (EGR): yes/no ([4])
3.2.12.2.5.	Evaporative emissions control system (petrol and ethanol engines only): yes/no ([4])
3.2.12.2.6.	Particulate trap (PT): yes/no ([4])
3.2.12.2.6.9.	Other systems: yes/no ([4])
3.2.12.2.6.9.1.	Description and operation
3.2.12.2.7.	On-board-diagnostic (OBD) system: yes/no ([4])

▼B

3.2.12.2.7.0.1. (Euro VI only) Number of OBD engine families within the engine family

3.2.12.2.7.0.2. (Euro VI only) List of the OBD engine families (when applicable)

3.2.12.2.7.0.3. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to:

3.2.12.2.7.0.4. (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

3.2.12.2.7.0.5. (Euro VI only) When appropriate, manufacturer reference of the documentation for installing in a vehicle an OBD equipped engine system

3.2.12.2.7.0.6. (Euro VI only) When appropriate, manufacturer reference of the documentation package related to the installation on the vehicle of the OBD system of an approved engine

3.2.12.2.7.0.7. Written description and/or drawing of the MI ([46]): …

3.2.12.2.7.0.8. Written description and/or drawing of the OBD off-board communication interface ([46])

3.2.12.2.7.6.5. (Euro VI only) OBD Communication protocol standard ([47]):

3.2.12.2.7.7. (Euro VI only) Manufacturer reference of the OBD related information required by of 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

3.2.12.2.7.7.1. 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 contains a table according to the given following 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

▼B

3.2.12.2.7.8. (EURO VI only) OBD components on-board the vehicle

3.2.12.2.7.8.1. List of OBD components on-board the vehicle

3.2.12.2.7.8.2. Written description and/or drawing of the MI ([48])

3.2.12.2.7.8.3. Written description and/or drawing of the OBD off-board communication interface ([48])

3.2.12.2.8. Other system

3.2.12.2.8.1. (Euro VI only) Systems to ensure the correct operation of NO_x control measures

3.2.12.2.8.2. Driver inducement system

3.2.12.2.8.2.1. (Euro VI only) Engine with permanent deactivation of the driver inducement, for use by the rescue services or in vehicles specified in point (d) of Article 2(2) to Regulation (EU) 2018/858: yes/no ([4])

3.2.12.2.8.2.2. Activation of the creep mode ‘disable after restart’/‘disable after fuelling’/‘disable after parking’ ([11])

3.2.12.2.8.3. (Euro VI only) Number of OBD engine families within the engine family considered when ensuring the correct operation of NO_x control measures

3.2.12.2.8.4. (Euro VI only) List of the OBD engine families (when applicable)

3.2.12.2.8.5. (Euro VI only) Number of the OBD engine family the parent engine/the engine member belongs to

3.2.12.2.8.6. (Euro VI only) Lowest concentration of the active ingredient present in the reagent that does not activate the warning system (CD_{min}): (% vol.)

3.2.12.2.8.7. (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

3.2.12.2.8.8. (Euro VI only) Components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

3.2.12.2.8.8.1. List of components on-board the vehicle of the systems ensuring the correct operation of NO_x control measures

3.2.12.2.8.8.2. 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

▼B

3.2.12.2.8.8.3.	Written description and/or drawing of the warning signal ([48])
3.2.12.2.9.	Torque limiter: yes/no ([4])
3.2.12.2.10.	Periodically regenerating system: (provide the information below for each separate unit)
3.2.12.2.10.1.	Method or system of regeneration, description and/or drawing: ….
3.2.12.2.11.1.	Type and concentration of reagent needed: …
3.2.13.1.	Location of the absorption coefficient symbol (compression ignition engines only): …
3.2.15.	LPG fuelling system: yes/no ([4])
3.2.16.	NG fuelling system: yes/no ([4])
3.2.17.8.1.0.1.	(Euro VI only) Self adaptive feature? yes/no ([4])
3.2.17.8.1.0.2.	(Euro VI only) Calibration for a specific gas composition NG-H/NG-L/NG-HL/LNG ([4])
	Transformation for a specific gas composition $NG\text{-}H_t/NG\text{-}L_t/NG\text{-}HL_t$ ([4])
3.3.	Electric machine (describe information of each type of electric machine separately)
3.3.1.	Type (winding, excitation): …
3.3.1.1.1.	Maximum net power ([43]) … kW
	(manufacturer's declared value)
3.3.1.1.2.	Maximum 30 minutes power ([43]) … kW
	(manufacturer's declared value)
3.3.1.2.	Operating voltage: …… V
3.3.2.	REESS
3.3.2.4.	Position: …
3.4.	Combinations of propulsion energy converters
3.4.1.	Hybrid electric vehicle: yes/no ([4])
3.4.2.	Category of hybrid electric vehicle: off-vehicle charging/not off-vehicle charging: ([4])
3.4.3.1.1.	Pure electric: yes/no ([4])
3.5.9.	CO_2 emissions and fuel consumption certification (for heavy-duty vehicles, as specified in Article 6 of Commission Regulation (EU) 2017/2400)
3.5.9.1.	Simulation tool licence number: …

▼B

3.5.9.2. Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])

3.5.9.3. Vocational vehicle: yes/no ([4]) ([72]) ([170])

3.5.10. Declared maximum RDE values (if applicable)

Complete RDE trip: NOx: ..., Particles (number): ...

Urban RDE trip: NOx: ..., Particles (number): ...

3.6.5. Lubricant temperature

Minimum: …… K

Maximum: …… K

4. TRANSMISSION([76])

4.2. Type (mechanical, hydraulic, electric, etc.): …

4.5. Gearbox

4.5.1. Type: Manual/Automatic/CVT(continuously variable transmission)/Fixed ratio/Automised/Other/Wheel hub ([4])

4.6. 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			

4.7. Maximum vehicle design speed (in km/h) ([77]): …

4.9. Tachograph: yes/no ([4])

4.9.1. Approval mark: …

4.11. Gear shift indicator (GSI)

4.11.1. Acoustic indication available yes/no ([4])

If yes, description of sound and sound level at the driver's ear in dB(A). (Acoustic indication always switchable on/off)

▼B

4.11.2. Information according to point 4.6 of Annex I to Commission Regulation (EU) No 65/2012 (manufacturer's declared value)

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 group of axles or wheel: …

6.2.1. Level adjustment: yes/no/optional ([4])

6.2.3. Air-suspension for driving axle(s): yes/no ([4])

6.2.3.1. Suspension of driving axle equivalent to air-suspension: yes/no ([4])

6.2.4. Air-suspension for non-driving axle(s): yes/no ([4])

6.2.4.1. Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([4])

6.6.1. Tyre/wheel combination(s)

6.6.1.1. Axles

6.6.1.1.1. Axle 1: …

6.6.1.1.1.1. Tyre size designation	6.6.1.1.1.2. Load-capacity index	6.6.1.1.1.3. Speed category symbol ([80])	6.6.1.1.1.4. Wheel rim size(s)	6.6.1.1.1.5. Wheel off-set(s)	6.6.1.1.1.6. Rolling resistance coefficient (RRC)

6.6.1.1.2. Axle 2: …

6.6.1.1.2.1. Tyre size designation	6.6.1.1.2.2. Load-capacity index	6.6.1.1.2.3. Speed category symbol ([80])	6.6.1.1.2.4. Wheel rim size(s)	6.6.1.1.2.5. Wheel off-set(s)	6.6.1.1.2.6. Rolling resistance coefficient (RRC)

etc.

6.6.1.2. Spare wheel, if any: …

6.6.2. Upper and lower limits of rolling radii

6.6.2.1. Axle 1: …

▼B

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, if applicable): …
7.2.2.	Linkage to wheels (including other than mechanical means; specify for front and rear, if applicable): …
7.2.3.	Method of assistance, if any: …
8.	BRAKES
8.5.	Anti-lock braking system: yes/no/optional ([4])
8.9.	Brief description of the braking system according to paragraph 12 of Annex 2 to UN Regulation No 13: …
8.11.	Particulars of the type(s) of endurance braking system(s): …
9.	BODYWORK
9.1.	Type of bodywork using the codes defined in Part C of Annex I to Regulation (EU) 2018/858 or in case of a special purpose vehicle the codes defined in point 5 to Part A of that Annex: …
9.3.	Occupant doors, latches and hinges
9.3.1.	Door configuration and number of doors: …
9.9.	Devices for indirect vision
9.9.1.	Rear-view mirrors, stating, for each rear-view mirror:
9.9.1.1.	Make: …
9.9.1.2.	Type-approval mark: …
9.9.1.3.	Variant: …
9.9.1.6.	Optional equipment which may affect the rearward field of vision: …
9.9.2.	Devices for indirect vision other than mirrors: …
9.9.2.1.	Type and description of the device: …
9.10.	Interior arrangement
9.10.3.	Seats
9.10.3.1.	Number of seating positions ([83]): …

▼B

9.10.3.1.1. Location and arrangement: …

9.10.3.2. Seat(s) designated for use only when the vehicle is stationary: …

9.10.8. Gas used as refrigerant in the air-conditioning system: …

9.10.8.1. The air-conditioning system is designed to contain fluorinated greenhouse gases with a global warming potential higher than 150: yes/no ([4])

9.12.2. 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([86])	L			
	C			
	R			

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 (VDS) of point 2.1. of Part B of Annex I to Regulation (EU) No 19/2011 and, if applicable, the vehicle indicator section thereof, to comply with the requirements of section 5.3 of ISO Standard 3779:2009 shall be explained: …

9.17.4.2. If characters in the vehicle descriptor second section are used to comply with the requirements of section 5.4 of ISO Standard 3779:2009 these characters shall be indicated: …

9.22. Front under-run protection

9.22.0. Presence: yes/no/incomplete ([4])

▼B

9.23.	Pedestrian protection
9.23.1.	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
9.24.	Frontal protection systems
9.24.1.	General arrangement (drawings or photographs) indicating the position and attachment of the frontal protection systems:
9.24.3.	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 vehicle type: …
11.4.	Information of the fitting of special towing brackets or mounting plates: …
11.5.	Number(s) of the type-approval certificate(s): …
12.	MISCELLANEOUS
12.7.1.	Vehicle equipped with a 24 GHz short-range radar equipment: yes/no ([4])
12.8.	eCall system
12.8.1.	Presence: yes/no ([4])
12.9.	Acoustic Vehicle Alerting System (AVAS)
12.9.1.	The number of the approval certificate issued on the basis of requirements laid down in UN Regulation No 138 of the Economic Commission for Europe of the United Nations (UNECE):
	or
12.9.2.	Complete reference to the test results of AVAS sound emission levels, measured in accordance with Regulation (EU) No 540/2014 of the European Parliament and of the Council.
13.	SPECIAL PROVISIONS FOR BUSES AND COACHES
13.1.	Class of vehicle: Class I/Class II/Class III/Class A/Class B ([4])
13.1.2.	Chassis types where the type-approved bodywork can be installed (manufacturer(s), and type of incomplete vehicle(s): …

▼B

13.3.	Number of passengers (seated and standing)
13.3.1.	Total (N): …
13.3.2.	Upper deck (N_a) ([4]): …
13.3.3.	Lower deck (N_b) ([4]): …
13.4.	Number of passengers (seated)
13.4.1.	Total (A): …
13.4.2.	Upper deck (A_a) ([4]): …
13.4.3.	Lower deck (A_b) ([4]): …
13.4.4.	Number of wheelchair user accessible position: …
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**

0.	GENERAL
0.1.	Make (trade name of manufacturer): …
0.2.	Type: …
0.2.1.	Commercial name(s) (if available): …
0.3.	Means of identification of type, if marked on the vehicle ([2]): …
0.3.1.	Location of that marking: …
0.4.	Category of vehicle ([3]): …
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport: …
0.5.	Company name and address of manufacturer: …
0.8.	Name(s) and address(es) of assembly plant(s): …
0.9.	Name and address of the manufacturer's representative (if any): …
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle: …
1.3.	Number of axles: … and wheels ([5]): …
1.3.1.	Number and position of axles with twin wheels: …
1.3.2.	Number and position of steered axles: …

▼B

1.4.	Chassis (if any) (overall drawing): …
1.9.	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: …
1.10.	Specify if the vehicle is specially designed for the controlled-temperature carriage of goods: …
2.	MASSES AND DIMENSIONS ([9]) ([10]) ([11]) (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheelbase(s) (fully loaded) ([12]):
2.1.1.	Two-axle vehicles: …
2.1.2.	Vehicles with three or more axles
2.1.2.1.	Axle spacing between consecutive axles going from the foremost to the rearmost axle: …
2.1.2.2.	Total axle spacing ([13]): …
2.3.1.	Track of each steered axle ([17]): …
2.3.2.	Track of all other axles ([17]): …
2.4.	Range of vehicle dimensions (overall)
2.4.1.	For chassis without bodywork
2.4.1.1.	Length ([18]): …
2.4.1.1.1.	Maximum permissible length: …
2.4.1.1.2.	Minimum permissible length: …
2.4.1.1.3.	In the case of trailers, maximum permissible drawbar length ([19]): …
2.4.1.2.	Width ([20]): …
2.4.1.2.1.	Maximum permissible width: …
2.4.1.2.2.	Minimum permissible width: …
2.4.2.	For chassis with bodywork
2.4.2.1.	Length ([18]): …

▼B

2.4.2.1.1.	Length of the loading area: …
2.4.2.1.2.	In the case of trailers, maximum permissible drawbar length ([19]): …
2.4.2.2.	Width ([20]): …
2.4.2.2.1.	Thickness of the walls (in the case of vehicles designed for controlled-temperature transport of goods): …
2.4.2.3.	Height (in running order) ([21]) (for suspension adjustable for height, indicate normal running position): …
2.6.	Mass in running order ([30])
	(a) minimum and maximum for each variant: …
	(b) mass of each version (a matrix must be provided): …
2.6.1.	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): …
2.6.2.	Mass of the optional equipment (as defined in point (5) of Article 2 of Regulation (EU) No 1230/2012: …
2.7.	Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle: …
2.8.	Technically permissible maximum laden mass stated by the manufacturer ([32]) ([33]): …
2.8.1.	Distribution of this mass among the axles, and in the case of a semi-trailer or centre-axle trailer, load on the coupling point ([33]): …
2.9.	Technically permissible maximum mass on each axle: …
2.10.	Technically permissible mass on each group of axles: …
2.12.	Technically permissible maximum mass at the coupling point:
2.12.2.	Of a semi-trailer, a centre-axle trailer or a rigid drawbar trailer: …
2.16.	Registration/in service maximum permissible masses (optional)
2.16.1.	Registration/in service maximum permissible laden mass: …
2.16.2.	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: …

▼B

2.16.3. Registration/in service maximum permissible mass on each group of axles: …

2.16.4. Intended registration/in service maximum permissible towable mass (several entries possible for each technical configuration ([101])): …

4. TRANSMISSION

4.7. Maximum vehicle design speed (in km/h) ([77]): …

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 ([4])

6.2.4. Air-suspension for non-driving axle(s): yes/no ([4])

6.2.4.1. Suspension of non-driving axle(s) equivalent to air-suspension: yes/no ([4])

6.6.1. Tyre/wheel combination(s)

6.6.1.1. Axles

6.6.1.1.1. Axle 1: …

6.6.1.1.1.1. Tyre size designation	6.6.1.1.1.2. Load-capacity index	6.6.1.1.1.3. Speed category symbol ([80])	6.6.1.1.1.4. Wheel rim size(s)	6.6.1.1.1.5. Wheel off-set(s)	6.6.1.1.1.6. Rolling resistance coefficient (RRC)

6.6.1.1.2. Axle 2: …

6.6.1.1.2.1. Tyre size designation	6.6.1.1.2.2. Load-capacity index	6.6.1.1.2.3. Speed category symbol ([80])	6.6.1.1.2.4. Wheel rim size(s)	6.6.1.1.2.5. Wheel off-set(s)	6.6.1.1.2.6. Rolling resistance coefficient (RRC)

etc.

6.6.1.2. Spare wheel, if any: …

▼B

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, if applicable): …
7.2.2.	Linkage to the wheels (including other than mechanical means; specify for front and rear, if applicable): …
7.2.3.	Method of assistance, if any: …
8.	BRAKES
8.5.	Antilock braking system: yes/no/optional ([4])
8.9.	Brief description of the braking system, according to paragraph 12 of Annex 2 to UN Regulation No 13: …
9.	BODYWORK
9.1.	Type of bodywork using the codes defined in Part C of Annex I to Regulation (EU) 2018/858 or in case of a special purpose vehicle the codes defined in point 5 to Part A of that Annex: …
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 (VDS) of point 2.1. of Part B of Annex I to Regulaiton (EU) No 19/2011 and, if applicable, the vehicle indicator section thereof, to comply with the requirements of section 5.3 of ISO Standard 3779:2009 shall be explained: …
9.17.4.2.	If characters in the vehicle descriptor second section are used to comply with the requirements of section 5.4 of ISO Standard 3779:2009 these characters shall be indicated: …

▼B

9.26.	**Aerodynamic device or equipment on the front of the vehicle**
9.26.1.	Vehicle equipped with aerodynamic device or equipment on the front:
	yes/no ([6])
9.26.2.	Number of the type-approval certificate of the aerodynamic device or equipment, if available: …
	Or, if not available provide the information below:
9.26.3.	Detailed description (including photographs or drawings) of the aerodynamic device or equipment (NB: taken over from the addendum to the TA certificate)
9.26.3.1.	Construction and materials: …
9.26.3.2.	Locking and adjustment system: …
9.26.3.3.	Attachment and mounting to the vehicle: …
9.27.	**Aerodynamic device or equipment on the rear of the vehicle**
9.27.1.	Vehicle equipped with aerodynamic device or equipment on the rear: yes/no ([6])
9.27.2.	Number of the type-approval certificate of the aerodynamic device or equipment, if available: …
	Or, if not available provide the information below:
9.27.3.	Detailed description (including photographs or drawings) of the aerodynamic device or equipment (NB: taken over from the addendum to the type-approval certificate)
9.27.3.1.	Construction and materials: …
9.27.3.2.	Locking and adjustment system: …
9.27.3.3.	Attachment and mounting to the vehicle: …
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.	Number(s) of the type-approval certificate (s): …

▼B

PART II

Matrix showing the combinations of the entries listed in Part I within the versions and variants of the vehicle type

Item No	All	Version 1	Version 2	Version 3	Version n

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 above information may be presented in an alternative layout or merged with the information supplied in 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 VIII of this Regulation) of the vehicle concerned.

(e) Variant(s) which fall(s) under Part III of Annex II to Regulation (EU) 2018/858 shall be identified by a specific alphanumerical code.

PART III

Number(s) of the type-approvals

Supply the information required by the following table in respect of the applicable subjects for this vehicle in Annex II to Regulation (EU) 2018/858. (All relevant approvals for each subject 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 prescriptions).

Item	Subject	Number of the type-approval certificate or of the test report ([102])	Member State or Contracting Party ([103]) issuing the type-approval ([104]) or technical service issuing the test report ([102])	Extension date	Variant(s)/version(s)

Signed ([108]): …

Position in company: …

Date: …

▼B

ANNEX III

TEMPLATES FOR APPROVAL CERTIFICATES

1. General Description

1.1. The approval certificates shall be issued in paper of maximum format A4 (210 × 297 mm), or in PDF-Format.

1.2. All information on the approval certificates shall be provided in ISO 8859 series characters (for approval certificates issued in Bulgarian Language in Cyril characters, for approval certificates issued in Greek Language in Greek characters) and Arabic numerals.

1.3. Model A shall be used for whole vehicle type-approvals.

Where this template is used for a national type-approval of vehicles produced in small series in accordance with Article 42(4) of Regulation (EU) 2018/858 it shall bear the heading ‘National small series vehicle type-approval certificate’.

1.4. Model B shall be used for EU system type-approvals.

1.5. Model C shall be used for EU component type-approvals and EU separate technical unit type-approvals.

1.6. Model D shall be used for EU individual vehicle approvals.

1.7. Model E shall be used for national individual vehicle approval.

▼B

MODEL A

(to be used for type-approval of a vehicle)

EU VEHICLE TYPE-APPROVAL CERTIFICATE

Identification of type-approval authority

Communication concerning granting/extension/refusal/withdrawal ([4]) of

— EU whole vehicle type-approval in accordance with Regulation (EU) 2018/858 ([4])

— EU whole vehicle type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 authorised by the Commission in accordance with Article 39(3) thereof ([4])

— Provisional EU whole vehicle type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 pending on the authorisation by the Commission in accordance with Article 39(4) thereof. The validity of the EU type-approval is thus limited to DD/MM/YYYY ([4])

— EU type-approval of vehicles produced in small series in accordance with Article 41 of Regulation (EU) 2018/858 ([4])

— National type-approval of vehicles produced in small series in accordance with Article 42 of Regulation (EU) 2018/858 ([4])

of a type of:

— Complete vehicle ([4])

— Completed vehicle ([4])

— Incomplete vehicle ([4])

— Vehicle with complete and incomplete variants ([4])

— Vehicle with completed and incomplete variants ([4])

Number of the EU type-approval certificate: …

Reason for extension/refusal/withdrawal ([4]): …

SECTION I

0.1. Make (trade name of manufacturer): …

0.2. Type: …

0.2.1. Commercial name(s) ([105]): …

0.3. Means of identification of type, if marked on the vehicle: …

0.3.1. Location of that marking: …

0.4. Category of vehicle ([3]): …

▼B

0.5. Company name and address of manufacturer of the incomplete/complete/completed vehicle ([4]): …

0.5.1. For multi-stage approved vehicles, company name and address of the manufacturer of the base/previous stage(s) vehicle …

0.8. Name(s) and address(es) of assembly plant(s): …

0.9. Name and address of the manufacturer's representative (if any): …

SECTION II

1. Technical service responsible for carrying out the tests ([106]): …

2. Date of test report: …

3. Number of test report: …

The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the vehicle(s) described above, ((a) sample(s) having been selected by the EU type-approval authority and submitted by the manufacturer as prototype(s) of the vehicle type), and that the attached test results are applicable to the vehicle type.

1. For complete and completed vehicles/variants ([4]):

The vehicle type meets/does not meet ([4]) the technical requirements of all the relevant regulatory acts referred to in Annex II to Regulation (EU) 2018/858.

2. For incomplete vehicles/variants ([4]):

The vehicle type meets/does not meet ([4]) the technical requirements of the regulatory acts listed in the table in part 2 of this certificate

(Place) (Signature) ([108]) (Date)

Attachments: Information package.

Test results sheet in accordance with the template set out in Annex VI of this Regulation.

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.

File containing the information referred to in paragraph 2 of Article 39 of Regulation (EU) 2018/858 ([4])

EU VEHICLE TYPE-APPROVAL CERTIFICATE

Part 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 below:

Stage 1: Manufacturer of the base vehicle: …

Number of the EU type-approval certificate: …

Dated: …

Applicable to variants or versions (as appropriate): …

▼B

Stage 2: Manufacturer: …

Number of the EU type-approval certificate: …

Dated: …

Applicable to variants or versions (as appropriate): …

Stage 3: Manufacturer: …

Number of the EU type-approval certificate: …

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 vehicle type, variant or version (as appropriate, taking account of the scope and latest amendment to each of the regulatory acts listed below).

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 Part III of Annex II to Regulation (EU) 2018/858, exemptions granted pursuant to Article 39 of Regulation (EU) 2018/858, and exemptions granted pursuant to Article 42 of Regulation (EU) 2018/858:

Item	Subject	Regulatory act reference	Kind of approval and nature of exemption	Applicable to variant or, if need be, to version

▼B

Appendix

List of regulatory acts to which the type of vehicle complies

(to be filled in only in the case of a whole-vehicle type-approval in accordance with Article 22(1)(b) and (c) of Regulation (EU) 2018/858).

Item	Subject ([107])	Regulatory act reference ([107])	As amended by	Applicable to variant or, if need be, to version

▼B

MODEL B

(to be used for type-approval of a system)

EU TYPE-APPROVAL CERTIFICATE

Identification of type-approval authority

Communication concerning granting/extension/refusal/withdrawal ([4]) of:

— EU system type-approval in accordance with Directive …/…/EC/Regulation (EU) No …/… ([4]) as last amended by Directive …/…/EC/Regulation (EU) No …/… ([4])

— EU system type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 authorized by the Commission in accordance with Article 39(3) thereof ([4])

— Provisional EU system type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 pending on the authorisation by the Commission in accordance with Article 39(4) thereof. The validity of the EU type-approval is thus limited to DD/MM/YYYY ([4])

Number of the EU type-approval certificate: …

Reason for extension/refusal/withdrawal ([4]): …

SECTION I

0.1. Make (trade name of manufacturer): …

0.2. Type: …

0.2.1. Commercial name(s) (if available): …

0.3. Means of identification of type, if marked on the vehicle ([2]): …

0.3.1. Location of that marking: …

0.4. Category of vehicle ([107]): …

0.5. Name and address of manufacturer: …

0.8. Name(s) and address(es) of assembly plant(s): …

0.9. Name and address of the manufacturer's representative (if any): …

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: …

▼B

7.	Date: …
8.	Signature ([108]): …
Attachments:	Information package
	Test report
	File containing the information referred to in paragraph 2 of Article 39 of Regulation (EU) 2018/858 ([4])

Addendum

to EU type-approval certificate number …

1.	Additional information
1.1.	[…]:
1.1.1.	[…]:
[…]	
2.	List of the numbers of the type-approval certificates of components and/or separate technical units used for the type-approval of the system with EU type-approval certificate number ….. approved under Directive/Regulation ([4]): …
2.1.	[…]:
3.	Remarks
3.1.	[…]:

▼B

MODEL C

(to be used for type-approval of components or separate technical units)

EU TYPE-APPROVAL CERTIFICATE

Identification of type-approval authority

Communication concerning granting/extension/refusal/withdrawal ([4]) of:

— EU component/separate technical unit([4]) type-approval in accordance with Directive …/…/EC/Regulation (EU) No …/… ([4])

— EU component/separate technical unit ([4]) type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 authorized by the Commission in accordance with Article 39(3) thereof ([4])

— Provisional EU component/separate technical unit ([4]) type-approval with exemptions for new technologies or concepts in accordance with Article 39(2) of Regulation (EU) 2018/858 pending on the authorisation by the Commission in accordance with Article 39(4) thereof. The validity of the EU type-approval is thus limited to DD/MM/YYYY ([4])

The number of the EU type-approval certificate: …

Reason for extension/refusal/withdrawal ([4]): …

SECTION I

0.1. Make (trade name of manufacturer): …

0.2. Type: …

0.3. Means of identification of type, if marked on the component/separate technical unit ([2]) ([4]): …

0.3.1. Location of that marking: …

0.5. Name and address of manufacturer: …

0.7. In the case of components and separate technical units, location and method of affixing of the EU approval mark: …

0.8. Name(s) and address(es) of assembly plant(s): …

0.9. Name and address of the manufacturer's representative (if any): …

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: …

▼B

7. Date: …

8. Signature ([108]): …

Attachments: Information package.

Test report.

File containing the information referred to in paragraph 2 of Article 39 of Regulation (EU) 2018/858 ([4])

Addendum

to EU type-approval certificate number …

1. Additional information

1.1. […]:

1.1.1. […]:

[…]

2. Restriction of use of the device (if any)

2.1. […]:

3. Remarks

3.1. […]:

▼B

MODEL D

(to be used for EU individual vehicle approval)

EU INDIVIDUAL VEHICLE APPROVAL CERTIFICATE

e(4)	Name, address, phone number and email-address of the individual approval authority

Communication concerning granting/refusal/withdrawal ([4]) of:

— EU individual vehicle approval in accordance with Article 44 of Regulation (EU) 2018/858

Number of the EU individual vehicle approval certificate: …

Reason for refusal/withdrawal ([4]): …

SECTION I

The undersigned [… …name and position] hereby certifies that the vehicle:

0.1. Make (trade name of manufacturer): …

0.2. Type: … Variant: … Version: …

0.2.1. Commercial name: …

0.2.2. For multi-stage approved vehicles, type-approval information of the base/previous stages vehicle (list the information for each stage) ([4]):

Manufacturer: …

Make: …

Type: … Variant: … Version: …

Category of vehicle ([3]): …

Number of the type-approval certificate, including extension number …

0.2.3. Identifiers (where applicable) ([1]): …

0.2.3.1. Interpolation family's identifier: …

0.4. Category of vehicle ([107]): …

0.5. Name and address of the 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: …

submitted for approval on […… date of application]

by […… Name and address of the applicant]

For multi-stage approved vehicles: the vehicle has been completed or altered ([4]) as follows: …

The vehicle complies with:

— Appendix 2 to Part I of Annex II to Regulation (EU) 2018/858;

▼B

— Part III of Annex II to Regulation (EU) 2018/858 EU (special purpose vehicles).

The vehicle can be permanently registered without further approval in Member States having right/left ([4]) hand traffic and using metric/imperial ([4]) units for the speedometer.

(Place) (Date)	(Signature (►M1 [108] ◄))	(Stamp of the approval authority)
[…]	[…]	[…]

Attachments: Two photos (►M1 [109] ◄) of the vehicle

(min resolution 640 x 480 pixel, ~7 x 10 cm).

In the case of an multi-stage approval, all certificates of conformity in paper format that were delivered at the previous stages.

SECTION II

1. Technical service responsible for carrying out the tests: …

2. Date of test report: …

3. Number of test report: …

Part 2

(Part 2 shall consist of the information in Appendix 1 to this Annex for the vehicle category approved)

▼B

MODEL E

(to be used for national individual vehicle approval)

NATIONAL INDIVIDUAL VEHICLE APPROVAL CERTIFICATE

e(4)	Name, address, phone number and email-address of the approval authority

Communication concerning granting/refusal/withdrawal ([4]) of:

— National individual vehicle approval in accordance with Article 45 of Regulation (EU) 2018/858

Number of the national individual vehicle approval certificate: …

Reason for refusal/withdrawal ([4]): …

SECTION I

The undersigned [… name and … position], hereby certifies that the vehicle:

0.1. Make (trade name of manufacturer): …

0.2. Type: … Variant: … Version: …

0.2.1. Commercial name: …

0.2.2. For multi-stage approved vehicles, type-approval information of the base/previous stages vehicle (list the information for each stage) ([4]):

Manufacturer: …

Make: …

Type: … Variant: … Version: …

Category of vehicle ([3]): …

Number of the type-approval certificate, including extension number …

0.2.3. Identifiers (where applicable) ([1]): …

0.2.3.1. Interpolation family's identifier: …

0.4. Category of vehicle ([3]): …

0.5. Name and address of the 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: …

submitted for approval on […… date of application]

by […… Name and address of the applicant]

For multi-stage approved vehicles: the vehicle has been completed or altered ([4]) as follows: …

▼B

The vehicle complies with the regulatory acts listed in Annex II to Regulation (EU) 2018/858, with exemption(s) of the following regulatory acts: ……. The issuing Member State has imposed alternative requirements.

The vehicle can be permanently registered without further approval in (name of the Member State).

(Place) (Signature) ([108]) (Date)

SECTION II

1. Technical service responsible for carrying out the tests: …

2. Date of test report: …

3. Number of test report: …

Attachments: Two photos ([109]) of the vehicle (optional)

(min resolution 640 x 480 pixel, ~7 x 10 cm).

In the case of an multi-stage approval, all certificates of conformity in paper format that were delivered at the previous stages.

Part 2

(Part 2 shall consist of the information in Appendix 1 to this Annex for the vehicle category approved)

▼B

Appendix 1

Part 2 of the EU individual vehicle approval certificate and of the national individual approval certificate

Category M1

General construction characteristics

1. Number of axles: … and wheels ([5]): …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

6. Width: … mm

7. Height: … mm

Masses

13.2. 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: …

▼B

23. Pure electric: yes/no ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Bodywork

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

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)

▼B

47. Exhaust emission level ([116]): Euro … or other legislation: …

47.1.1. Test mass, kg: …

48. Exhaust emissions ►M1 ———————— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]):

1. all power train except pure electric vehicles

NEDC:	CO_2 emissions	Fuel consumption
Combined:	… g/km	… l/100km/m^3/100km ([4])
Weighted, combined	… g/km	… l/100km/m^3/100km ([4])

Deviation factor (if applicable): …

Verification factor (if applicable) ‘1’ or ‘0’: …

2. NEDC: pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([4])) … Wh/km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([68])

(repeat for each reference fuel tested):

3.2.1. NEDC savings: … g/km (if applicable)

3.2.2. WLTP savings: … g/km (if applicable)

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 ([117]) (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Combined ([4]):	…g/km	…l/100km/m^3/100km/kg/100km ([4])
Weighted, combined ([4])	…g/km	…l/100km/m^3/100km/kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption … Wh/km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$) … Wh/km

▼B

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

Category M2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6. Width: … mm

7. Height: … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

Masses

13.2. Actual mass of the vehicle: …kg

13.3. Additional mass for alternative propulsion: … kg

14. Mass of the base vehicle in running order: … 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.

▼B

16.4. Technically permissible maximum mass of the combination: … kg

17. Intended registration/in service maximum permissible masses in national/international traffic ([4]) ([166])

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, etc.

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

18.3. 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

▼B

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

▼M1

37. Pressure in feed line for trailer braking system: … kPa

▼B

Bodywork

38. Code for bodywork ([113]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([4])

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

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 ([4]): 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 ([116]): Euro … or other legislation: …

▼B

48. Exhaust emissions ►M1 ——————— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]):

1. all power train except pure electric vehicles

NEDC:	CO_2 emissions	Fuel consumption
Combined:	… g/km	… l/100km/m^3/100km ([4])
Weighted, combined	… g/km	… l/100km

Deviation factor (if applicable): …

Verification factor (if applicable) ‘1’ or ‘0’: …

2. NEDC: pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined ([4])) … Wh/km

4. All power trains, except pure electric vehicle, under Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Combined ([4]):	…g/km	…l/100km/m^3/100km/kg/100km
Weighted, combined[4]	… g/km	…l/100km/m^3/100km/kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption … Wh/km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$) … Wh/km

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

Category M3

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): …

▼B

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6. Width: … mm

7. Height: … mm

9. Distance between the front end of the vehicle and the centre of the coupling device: … mm

Masses

13.2. Actual mass of the vehicle: …kg

13.3. Additional mass for alternative propulsion: … kg

14. Mass of the base vehicle in running order: … 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 ([4]) ([166])

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, etc.

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

▼B

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

▼B

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

▼M1

37. Pressure in feed line for trailer braking system: … kPa

▼B

Bodywork

38. Code for bodywork ([113]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([4])

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

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 ([4]): 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 ([116]): Euro … or other legislation: …

48. Exhaust emissions ►M1 ———— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

▼B

Category N1

General construction characteristics

1. Number of axles: … and wheels([5]): …

1.1. Number and position of axles with twin wheels: …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … 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

11. Length of the loading area: … mm

Masses

13.2. Actual mass of the vehicle: … kg

14. Mass of the base vehicle in running order: … kg ([168])

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

▼B

Power plant

20. Manufacturer of the engine: …

21. Engine code as marked on the engine: …

22. Working principle: …

23. Pure electric: yes/no ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC -HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum net power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track: 1. … mm 2. … mm 3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Bodywork

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

42.1. Seat(s) designated for use only when the vehicle is stationary: …

▼B

42.3. Number of wheelchair user accessible position: …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values([4]): 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 ([116]): Euro … or other legislation: …

47.1.1. WLTP test mass ([1])

48. Exhaust emissions ►M1 ———————— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

49. CO_2 emissions/fuel consumption/electric energy consumption ([1]):

1. all power train except pure electric vehicles

NEDC:	CO_2 emissions	Fuel consumption
Combined ([4]):	… g/km	…l/100km/m^3/100km/kg/100km
Weighted, combined ([4])	… g/km	… l/100km/$m^{3/}$100km/kg/100km

Deviation factor (if applicable): …

Verification factor (if applicable) (‘0’ or ‘1’): …

2. NEDC: pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined) ([4])… Wh/km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([68])

(repeat for each reference fuel tested):

3.2.1. NEDC savings: … g/km (if applicable)

3.2.2. WLTP savings: … g/km (if applicable)

4. All power trains, except pure electric vehicle, under Regulation (EU) 2017/1151

(if applicable)

WLTP:	CO_2 emissions	Fuel consumption
Combined ([4])	… g/km	… l/100km/m^3/100km/kg/100km ([4])

▼B

Weighted, combined ([4])	… g/km	… l/100km

5. Pure electric vehicles and OVC hybrid electric vehicles, under Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption: … Wh/km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$): … Wh/km

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

Category N2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

5.2. Elongated cab complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6. Width: … mm

7. Height: … mm

▼B

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

13.2. Actual mass of the vehicle: … kg

13.3. Additional mass for alternative propulsion: … kg

14. Mass of the base vehicle in running order: … kg ([168])

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 ([4]) ([166])

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, etc.

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

▼B

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC -HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum net power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

▼M1

37. Pressure in feed line for trailer braking system: … kPa

▼B

Bodywork

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): 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 ([116]): Euro … or other legislation: …

47.1.1. WLTP test mass ([1])

48. Exhaust emissions ►M1 ———— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

49. CO_2 emissions/fuel consumption/electric energy consumption ([1]):

1. all power train except pure electric vehicles

NEDC:	CO_2 emissions	Fuel consumption
Combined ([4]):	… g/km	…l/100km/m^3/100km/kg/100km
Weighted, combined ([4])	… g/km	… l/100km/m^3/100km/kg/100km

Deviation factor (if applicable): …

Verification factor (if applicable) (‘0’ or ‘1’): …

2. NEDC: pure electric vehicles and OVC hybrid electric vehicles

Electric energy consumption (weighted, combined) ([4])… Wh/km

4. All power trains, except pure electric vehicle, under Regulation (EU) 2017/1151 (if applicable)

WLTP:	CO_2 emissions	Fuel consumption
Combined ([4])	… g/km	… l/100km/m^3/100km/kg/100km ([4])

▼B

	Weighted, combined ([4])	… g/km	… l/100km

5. Pure electric vehicles and OVC hybrid electric vehicles, under Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption: … Wh/km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$): … Wh/km

49.1. Cryptographic hash of the manufacturer's records file ([119]): ....

49.4. Cryptographic hash of the customer information file: .... ([120]) ([121])

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

Category N3

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([4]) ([8])

Main dimensions

4. Wheelbase ([111]): … mm

4.1. Axle spacing: 1-2: … mm 2-3: … mm 3-4: … mm

5. Length: … mm

5.2. Elongated cab complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

▼B

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

13.2. Actual mass of the vehicle: … kg

13.3. Additional mass for alternative propulsion: … 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 traffic ([4]) ([166])

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, etc.

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

▼B

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC -HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual Fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum net power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

35. Fitted tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

▼M1

37. Pressure in feed line for trailer braking system: … kPa

▼B

Bodywork

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): 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 ([116]): Euro … or other legislation: …

48. Exhaust emissions ►M1 ———— ◄:

Number of the base regulatory act and latest amending regulatory act applicable: …

49.1. Cryptographic hash of the manufacturer's records file ([119]): ....

49.4. Cryptographic hash of the customer information file: .... ([120])

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information (mileage ([118]), …)

Categories O1/O2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

▼B

1.1. Number and position of axles with twin wheels: …

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

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

Masses

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 vertical mass at the coupling point: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30.1. Track of each steered axle: … mm

▼M1

30.2. Track of all other axles: … mm.

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4]).

▼B

35. Fitted tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

38. Code for bodywork ([113]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information: …

Categories O3/O4

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.3. Vehicle equipped with aerodynamic device or equipment on the rear/not equipped ([4])

▼B

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

Masses

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 traffic ([4]) ([166])

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, etc.

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

19. Technically permissible maximum static vertical mass at the coupling point: … kg

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Fitted tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

38. Code for bodywork ([113]): …

Coupling device

44. Approval number or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

50. Type-approved according to the design requirements for transporting dangerous goods: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks: …

53. Additional information: …

▼B

ANNEX IV

APPROVAL CERTIFICATE NUMBERING SYSTEM

1. Approval certificates shall be numbered in accordance with the method set out in this Annex.

2. The number of the approval certificate for whole-vehicle type-approvals shall consist of four sections and the number of the approval certificate for type-approvals of systems, components, and separate technical units shall consist of five sections, as detailed below. In both cases, the sections shall be separated by an asterisk (‘*’).

2.1 Section 1: (applicable to all approvals): The lower-case letter ‘e’ is followed by the distinguishing number of the Member State issuing the 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.

2.2 Section 2: (only for an EU type-approval of a system, component or separate technical unit) The number of the Regulation of the European Parliament and of the Council, Directive of the European Parliament and of the Council, Commission Delegated Regulation or Commission Implementing Regulation laying down the applicable requirements. For an EU type-approval of a system, component or separate technical unit, one of the following shall be indicated, as applicable:

(a) the number of the applicable Commission Delegated Regulation supplementing Regulation (EU) 2018/858;

(b) the number of the Regulation of the European Parliament and of the Council laying down the applicable requirements;

(c) the number of the Commission Regulation adopted pursuant to Article 14(1)(a) to (e) of Regulation (EC) No 661/2009 and laying down the applicable requirements.

▼B

2.3 Section 3: (applicable to all approvals): Either the number of the Regulation of the European Parliament and of the Council, Directive of the European Parliament and of the Council, Commission Delegated Regulation or Commission Implementing Regulation laying down the applicable requirements, or, where amended, of the latest Regulation/Directive amending that Regulation/Directive.

For an EU whole-vehicle type-approval in accordance with Regulation (EU) 2018/858, '2018/858' shall be indicated. However:

(a) in the case of an EU type-approval of vehicles produced in small series in accordance with Article 41 of Regulation (EU) 2018/858, the letters 'KS' in capitals shall replace the first two digits of that Regulation's number (i.e. 'KS18/858');

(b) in the case of a national type-approval of vehicles produced in small series in accordance with Article 42 of Regulation (EU) 2018/858, the letters 'NKS' in capitals shall replace the first two digits of that Regulation's number (i.e. 'NKS18/858');

(c) in the case of an EU individual vehicle approval in accordance with Article 44 of Regulation (EU) 2018/858, the letters 'IV' in capitals shall replace the first two digits of that Regulation's number (i.e. 'IV18/858');

(d) in the case of a national individual vehicle approval in accordance with Article 45 of Regulation (EU) 2018/858, the letters 'NIV' in capitals shall replace the first two digits of that Regulation's number (i.e. 'NIV18/858').

Where a Directive or Regulation laying down the applicable requirements, or its amendment, contains different technical prescriptions to be applied from specific dates, section 3 shall be followed by one or more alphabetical characters, as prescribed in the applicable Directive or Regulation to identify against which requirements the approval was granted. Where different vehicle categories are concerned, the character may also refer to a specific vehicle category.

2.4 Section 4: (applicable to all approvals): A five-digit sequential number (with leading zeros as applicable) for an EU whole-vehicle type-approval, EU type-approval of vehicles produced in small series, national type-approval of vehicles produces in small series, a system, component or separate technical unit. The sequence shall start from 00001 for each Regulation that is indicated in section 2 for a type-approval of a system, component or separate technical unit, or in section 3 for a whole-vehicle type-approval.

In the case of an EU individual vehicle approval or a national individual vehicle approval, section 4 shall consist of 6 alpha-numerical digits. The Member States shall determine the detailed rules for the sequence of the numbers.

▼B

2.5 Section 5: (not for EU individual vehicle approvals and national individual vehicle approvals): A two-digit sequential number (with leading zeros if applicable) to denote an extension in accordance with Article 34 of Regulation (EU) 2018/858. The sequence shall start from 00 for each new type-approval certificate. On the vehicle's statutory plate(s) only, Section 5 shall be omitted.

3. Examples of approval certificate numbers

3.1. Examples of a third type-approval of a system, component or a separate technical unit (with no extension) granted by France:

(a) in accordance with Regulation (EC) No 715/2007, and Regulation (EU) 2017/1151 as amended by Regulation (EU) 2018/1832 (Regulation with different application dates through the alphabetical characters reflecting the different vehicle categories in accordance with that Regulation or its amendments):

e2*715/2007*2018/1832DG*00003*00

(b) in accordance with Regulation (EC) No 595/2009, and Regulation (EU) No 582/2011 as amended by Regulation (EU) 2018/932 (Regulation with different application dates):

e2*595/2009*2018/932D*00003*00

(c) in accordance with Commission Regulation (EU) No 1008/2010 ([122]):

e2*1008/2010*1008/2010*00003*00

(d) in accordance with Commission Regulation (EU) No 19/2011 ([123]), as amended by Commission Regulation (EU) No 249/2012 ([124])

e2*19/2011*249/2012*00003*00

3.2. Example of a second extension to the fourth EU whole-vehicle type-approval granted by Ireland in accordance with Regulation (EU) 2018/858:

e24*2018/858*00004*02

3.3. Example of an EU type-approval of vehicles produced in small series granted by Luxembourg in accordance with Regulation (EU) 2018/858:

e13*KS18/858*00001*00

3.4. Example of a national type-approval of vehicles produced in small series granted by the Netherlands in accordance with Regulation (EU) 2018/858:

e4*NKS18/858*00001*00

3.5. Example of an EU individual vehicle approval granted by Austria in accordance with Regulation (EU) 2018/858:

e12*IV18/858*ST0001

▼B

3.6. Example of a national individual vehicle approval granted by Austria in accordance with Regulation (EU) 2018/858:

e12*NIV18/858*W00001

4. This Annex does not apply to type-approvals granted in accordance with the UN Regulations listed in Annex II to Regulation (EU) 2018/858, as the relevant numbering system is provided for in the respective UN Regulations.

However, this Annex applies to EU type-approvals granted in accordance with Regulation (EC) No 661/2009 on the basis of requirements laid down in the UN Regulations listed in Annex II to Regulation (EU) 2018/858, in which case, the following numbering system shall apply:

4.1. Section 1: Point 2.1 of this Annex shall apply.

4.2. Section 2: The number of Regulation (EC) No 661/2009 (i.e. '661/2009')

4.3. Section 3: Section 3 shall be composed of the following elements in the following order:

(a) the number of the UN Regulation laying down the applicable requirements-, followed by the letter 'R';

(b) two digits (with leading zeros as applicable) indicating the series of amendments that lay down the applicable requirements (00 for the original version of the UN Regulation);

(c) a slash and the number of the supplement to the original version or series of amendments laying down the applicable requirements (with leading zeros as applicable);

(d) the implementing stage, if applicable, a slash and one or two character(s).

4.4. Section 4: Point 2.4 of this Annex shall apply.

4.5. Section 5: Point 2.5 of this Annex shall apply.

4.6. Examples of type-approval certificate numbers

4.6.1. Example of a type-approval granted by Germany in accordance with UN Regulation No 13-H ([125]) of the Economic Commission for Europe of the United Nations (UN/ECE) Uniform provisions concerning the approval of passenger cars with regard to braking, original series of amendments, supplement 16, first approval granted, no extensions:

e1*661/2009*13-HR00/16*00001*00

4.6.2. Example of a type-approval granted by Croatia in accordance with UN Regulation No 46 ([126]) of the Economic Commission for Europe of the United Nations (UNECE) – Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these device, 04 series of amendments, supplement 1, 123rd approval granted, 5th extension:

e25*661/2009*46R04/01*00123*05

▼B

ANNEX V

EU type-approval mark of components and separate technical units

1. The EU type-approval mark for components and separate technical units referred to in Article 38(2) of Regulation (EU) 2018/858 shall consist of:

1.1. A rectangle surrounding the lower-case letter ‘e’, followed by the distinguishing number of the Member State which has granted the type-approval for the component or separate technical unit:

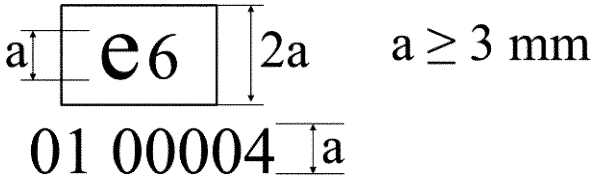
1 for Germany;	19 for Romania;
2 for France;	20 for Poland;
3 for Italy;	21 for Portugal;
4 for the Netherlands;	23 for Greece;
5 for Sweden;	24 for Ireland;
6 for Belgium;	25 for Croatia;
7 for Hungary;	26 for Slovenia;
8 for the Czech Republic;	27 for Slovakia;
9 for Spain;	29 for Estonia;
11 for the 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, two digits indicating the series of amendments laying down the requirements with which this component or separate technical units complies, followed by a space and the five-digit number referred to in point 2.4 of Annex IV.

1.3. An additional symbol or symbols located above the rectangle where required by the regulatory act laying down the applicable requirements.

2. The type-approval mark of components or separate technical units shall be indelible and clearly legible.

3. Example of a type-approval mark for a fourth type-approval of a component granted by Belgium. 01 denotes the series of amendments of the Regulation laying down the applicable requirements with which this component complies.



▼B

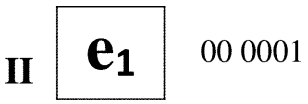
4. This Annex does not apply to type-approvals granted in accordance with the UN Regulations listed in Annex II to Regulation (EU) 2018/858.

However, this Annex applies to EU type-approvals of components and separate technical units granted in accordance with Regulation (EC) No 661/2009 on the basis of requirements laid down in the UN Regulations listed in Annex II to that Regulation, in which case the following shall apply:

(a) the distinguishing type-approval marking shall be as prescribed in the applicable UN Regulation;

(b) where the applicable UN Regulation requires a circle surrounding the letter 'E' to be part of the type-approval mark, a rectangle rather than a circle shall be used. The height of the rectangle shall correspond to at least the prescribed diameter of the circle and its width shall exceed that value. Instead of the upper-case letter 'E', the lower-case letter 'e' shall be used, followed by the distinguishing number of the Member State which has granted the EU type approval of the component or separate technical unit.

Example of a type-approval mark for a type-approval granted by Germany, on the basis of requirements laid down in the UN Regulation 28 ([127]) of the Economic Commission for Europe of the United Nations (UN/ECE), on uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals, listed in Annex II to Regulation (EU) 2018/858, original series, first approval issued, for a Class II audible warning device incorporating new technologies:



▼B

ANNEX VI

TEMPLATE FOR THE TEST RESULT SHEET

TEST RESULTS SHEET

(To be completed by the type-approval authority and attached to the whole-vehicle EU type-approval certificate referred to in Article 28 of Regulation (EU) 2018/858)

Please indicate clearly to which variant and version of the vehicle the test result applies. Each version shall not have more than one test result. In the case of several test results per version indicating the worst test result, a note shall state that for items marked (*) the worst test results are provided.

1. **Results of the sound level tests**

Please provide the number of the regulatory act laying down the applicable requirements and the number of its latest amendment. Where the regulatory act provides for two or more implementation stages, please also indicate the implementation stage:

Variant/Version of the vehicle:	…	…	…
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

Please provide the number of the regulatory act laying down the applicable requirements or, where amended, the number of its latest amendment. Where the regulatory act provides for two or more implementation stages, please also indicate the implementation stage: …

Fuel(s) ([128])… (diesel, petrol, LPG, NG, Bi-fuel: petrol/NG, LPG, NG/biomethane, Flex-fuel: petrol/ethanol…) ([4]) ([129])

2.1.1. Type 1 test ([130]) ([131]), (vehicle emissions in the test cycle after a cold start)

NEDC average values, WLTP highest values

Variant/Version of the vehicle:	…	…	…
CO (mg/km)	…	…	…
THC (mg/km)	…	…	…
NMHC (mg/km)	…	…	…
NO_x (mg/km)	…	…	…
THC + NO_x (mg/km)	…	…	…

▼B

Mass of particulate matter (PM) (mg/km) (if applicable)	…	…	…
Number of particles (PN) (#/km) (if applicable)	…	…	…

Ambient Temperature Correction Test (ATCT)

ATCT Family	Interpolation family	—-
…	…	—-
…	…	—-

Family correction factors

ATCT Family	FCF
…	…
…	…

2.1.2. Type 2 test ([130]) ([131]), (emissions data required at type-approval for road-worthiness purposes)

Type 2, low idle test:

Variant/Version of the vehicle:	…	…	…
CO (% vol.)	…	…	…
Engine speed (min^{-1})	…	…	…
Engine oil temperature (°C)	…	…	…

Type 2, high idle test:

Variant/Version of the vehicle:	…	…	…
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

▼B

2.1.5. Type 5 test (durability of anti-pollution control devices):

— Ageing distance covered (km) (e.g. 160000 km): …

— Deterioration factor DF: calculated/fixed ([4])

— Values:

Variant/Version of the vehicle:	…	…	…
CO	…	…	…
THC	…	…	…
NMHC	…	…	…
NO_x	…	…	…
THC + NO_x	…	…	…
Mass of particulate matter (PM) (if applicable)	…	…	…
Number of particles (PN) (if applicable)	…	…	…

2.1.6. Type 6 test (average emissions at low ambient temperatures):

Variant/Version of the vehicle:	…	…	…
CO (g/km)	…	…	…
THC (g/km)	…	…	…

2.1.7. OBD: yes/no ([4])

2.2. Emissions from engines tested under the test procedure for heavy-duty vehicles.

Please provide the number of the regulatory act laying down the applicable requirements or, where amended, the number of its latest amendment. Where the regulatory act provides for two or more implementation stages, please also indicate the implementation stage: .....

Fuel(s) ([128]) … (diesel, petrol, LPG, NG, ethanol …)

2.2.1. Results of the ESC test ([132]) ([133]) ([134])

Variant/Version of the vehicle:	…	…	…
CO (mg/kWh)	…	…	…
THC (mg/kWh)	…	…	…
NO_x (mg/kWh)	…	…	…
NH_3 (ppm)([132])	…	…	…

▼B

PM mass (mg/kWh)	…	…	…
PM number (#/kWh) ([132])	…	…	…

2.2.2. Result of the ELR test ([132])

Variant/Version of the vehicle:	…	…	…
Smoke value: … m^{-1}	…	…	…

2.2.3. Result of the ETC test ([133]) ([134]),

Variant/Version of the vehicle:	…	…	…
CO (mg/kWh)	…	…	…
THC (mg/kWh)	…	…	…
NMHC (mg/kWh) ([132])	…	…	…
CH_4 (mg/kWh) ([132])	…	…	…
NO_x (mg/kWh)	…	…	…
NH_3 (ppm) ([132])	…	…	…
PM mass (mg/kWh)	…	…	…
PM number (#/kWh) ([132])	…	…	…

2.2.4. Idle test ([132])

Variant/Version of the vehicle:	…	…	…
CO (% vol.)	…	…	…
Lambda Value ([132])	…	…	…
Engine speed (min^{-1})	…	…	…
Engine oil temperature (K)	…	…	…

2.3. Diesel smoke

Please provide the number of the regulatory act laying down the applicable requirements or, where amended, the number of its latest amendment. Where the regulatory act provides for two or more implementation stages, please also indicate the implementation stage: .....

▼B

2.3.1. Results of the test under free acceleration

Variant/Version of the vehicle:	…	…	…
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**

Please provide the number of the regulatory act laying down the applicable requirements or, where amended, the number of its latest amendment.: …

3.1. Internal combustion engines, including not externally chargeable hybrid electric vehicles (NOVC) ([132]) ([135])

Variant/Version of the vehicle:	…	…	…
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/100km) ([136])	…	…	…
Fuel consumption (extra-urban conditions) (l/100km) ([136])	…	…	…
Fuel consumption (combined) (l/100km) ([136])	…	…	…

Interpolation family identifier ([137])	Variant/versions
…	…
…	…
…	…

Results:	Interpolation family identifier			
	VH	VM ([132])	VL ([132])	
CO_2 mass emission LOW phase (g/km)	…	…	…	
CO_2 mass emission MID phase (g/km)	…	…	…	

▼B

Results:	Interpolation family identifier			
	VH	VM ([132])	VL ([132])	
CO_2 mass emission HIGH phase (g/km)	…	…	…	
CO_2 mass emission EXTRA-HIGH phase (g/km)	…	…	…	
CO_2 mass emission (combined) (g/km)	…	…	…	
Fuel consumption LOW phase (l/100km m^3/100km kg/100km)	…	…	…	
Fuel consumption MID phase (l/100km m^3/100km kg/100km)	…	…	…	
Fuel consumption HIGH phase (l/100km m^3/100km kg/100km)	…	…	…	
Fuel consumption EXTRA-HIGH phase (l/100km m^3/100km kg/100km)	…	…	…	
Fuel consumption (combined) (l/100km m^3/100km kg/100km)	…	…	…	
f_0 (N)	…	…	…	
f_1 (N/(km/h))	…	…	…	
f_2 (N/(km/h) ([2]))	…	…	…	
RR (kg/t)	…	…	…	
Delta C_D * A (for VL if applicable compared to VH) (m^2)	…	…	…	
Test Mass (kg)	…	…	…	
Frontal area (m^2) (for road load matrix family vehicles only)				

Repeat for each interpolation family.

3.2. Externally chargeable hybrid electric vehicles (OVC) ([132])

Variant/Version of the vehicle:	…	…	…
CO_2 mass emission (Condition A, combined) (g/km)	…	…	…

▼B

CO_2 mass emission (Condition B, combined) (g/km)	…	…	…
CO_2 mass emission (weighted, combined) (g/km)	…	…	…
Fuel consumption (Condition A, combined) (l/100km) ([g])	…	…	…
Fuel consumption (Condition B, combined) (l/100km) ([g])	…	…	…
Fuel consumption (weighted, combined) (l/100km) ([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)	…	…	…

Interpolation family number	Variant/versions
…	…
…	…
…	…

Results:	Interpolation family identifier			
	VH	VM([132])	VL([132])	
CS CO_2 mass emission LOW phase (g/km)	…		…	
CS CO_2 mass emission MID phase (g/km)	…		…	
CS CO_2 mass emission HIGH phase (g/km)	…		…	
CS CO_2 mass emission EXTRA-HIGH phase (g/km)	…		…	
CS CO_2 mass emission (combined) (g/km)	…		…	
CD CO_2 mass emission (combined) (g/km)				
CO_2 mass emission (weighted, combined) (g/km)				
CS Fuel consumption LOW phase (l/100km)	…		…	
CS Fuel consumption MID phase (l/100km)	…		…	

▼B

Results:	Interpolation family identifier			
	VH	VM([132])	VL([132])	
CS Fuel consumption HIGH phase (l/100km)	…		…	
CS Fuel consumption EXTRA-HIGH phase (l/100km)	…		…	
CS Fuel consumption (combined) (l/100km)	…		…	
CD Fuel consumption (combined) (l/100km)	…		…	
Fuel consumption (weighted, combined) (l/100km)	…		…	
$EC_{AC,weighted}$	…		…	
EAER (combined)	…		…	
$EAER_{city}$	…		…	
f_0 (N)	…		…	
f_1 (N/(km/h))	…		…	
f_2 (N/(km/h) ([2]))	…		…	
RR (kg/t)	…		…	
Delta C_D× A (for VL or VM compared to VH) (m^2)	…		…	
Test Mass (kg)	…		…	
Frontal area (m^2) (for road load matrix family vehicles only)				

Repeat for each interpolation family.

3.3. Pure electric vehicles ([132])

Variant/Version of the vehicle:	…	…	…
Electric energy consumption (Wh/km)	…	…	…
Range (km)	…	…	…

Interpolation family number	Variant/versions
…	…
…	…
…	…

▼B

Results:	Interpolation family identifier		
	VH	VL	
Electric Consumption (Combined) (Wh/km)	…	…	
Pure Electric Range (Combined) (km)	…	…	
Pure Electric Range (City) (km)	…	…	
f_0 (N)	…	…	
f_1 (N/(km/h))	…	…	
f_2 (N/(km/h) (^{2}))	…	…	
RR (kg/t)	…	…	
Delta $C_D\times$ A (for VL compared to VH) (m^2)	…	…	
Test Mass (kg)	…	…	
Frontal area (m^2) (for road load matrix family vehicles only)			

3.4. Hydrogen fuel cell vehicles ([132])

Variant/Version of the vehicle:	…	…	…
Fuel consumption (kg/100km)	…	…	…

	Variant/Version:	Variant/Version:
Fuel Consumption (Combined) (kg/100km)	…	…
f_0 (N)	…	…
f_1 (N/(km/h))	…	…
f_2 (N/(km/h) (^{2})	…	…
RR (kg/t)	…	…
Test Mass (kg)	…	

3.5. The correlation tool output report(s) referred to in Commission Implementing Regulation (EU) 2017/1152 ([138]) or Commission Implementing Regulation (EC) No 2017/1153 ([139]), and final NEDC values

Repeat for each interpolation family:

Interpolation family identifier ([140])

VH report: …

VL report (if applicable): …

▼B

3.5.1. Deviation factor (if applicable)

Repeat for each interpolation family:

Interpolation family identifier ([140]): …

3.5.2. Verification factor (if applicable)

Repeat for each interpolation family:

Interpolation family identifier ([140])

3.5.3. Internal combustion engines, including not externally chargeable hybrid electric vehicles (NOVC) ([141]) ([135])

Final correlated NEDC values	Interpolation family identifier	
	VH	VL ([132])
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/100km) ([132])		
Fuel consumption (extra-urban conditions) (l/100km) ([132])		
Fuel consumption (combined) (l/100km) ([132])		

3.5.4. Externally chargeable hybrid electric vehicles (OVC) ([132])

Final correlated NEDC values	Interpolation family identifier	
	VH	VL ([132])
CO_2 mass emission (weighted, combined) (g/km)	…	…
Fuel consumption (weighted, combined) (l/100km) ([g])	…	…

▼B

4. **Results of the tests for vehicles fitted with eco-innovation(s) ([141]) ([135]) ([142])**

Tests conducted as required by UN Regulation No 83 ([143]) (where applicable)

	Variant/Version of the vehicle…							
Decision approving the eco-innovation ([144])	Code of the eco-innovation ([145])	Type 1/I cycle (NEDC/ WLTP)	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 ([146])	4. CO_2 emissions of the eco-innovation vehicle under Type 1 test-cycle ([147])	5. Usage factor (UF) i.e. temporal share of technology usage in normal operation conditions	CO_2 emissions savings ((1 – 2) – (3 – 4)) × 5
xxx/201x	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…
	Total CO_2 emissions savings on NEDC(g/km) ([148])							…

Test conducted as required by Annex XXI to Commission Regulation (EU) 2017/1151 ([149]) (where applicable)

	Variant/Version …							
Decision approving the eco-innovation ([144])	Code of the eco-innovation ([145])	Type 1/I cycle (NEDC/ WLTP)	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 ([146])	4. CO_2 emissions of the eco-innovation vehicle under Type 1 test-cycle	5. Usage factor (UF) i.e. temporal share of technology usage in normal operation conditions	CO_2 emissions savings ((1 – 2) – (3 – 4)) × 5
xxx/201x	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…
			Total CO_2 emissions savings on WLTP(g/km) ([150])					

4.1. General code of the eco-innovation(s) ([151]): …

▼B

ANNEX VII

FORMAT OF TEST REPORTS FOR THE TYPE-APPROVAL OF A SYSTEM, COMPONENT OR SEPARATE TECHNICAL UNIT

1. For each of the regulatory acts listed in Part I of Annex II to Regulation (EU) 2018/858, the test report referred to in Article 30(2) of Regulation (EU) 2018/858 shall comply with the Standard EN ISO/IEC 17025:2017 ([152]). It shall in particular include the information referred to in point 7.8.2 of that standard.

2. The test report shall be issued in one of the official languages of the Union determined by the type-approval authority.

3. The test report shall include at least the following information:

   (a) the identification of the vehicle, system, component or separate technical unit tested;

   (b) a detailed description of the, vehicle, system, component or separate technical unit characteristics required by the applicable regulatory act listed in Annex II to Regulation (EU) 2018/858;

   (c) the results of the measurements required by the applicable regulatory act;

   (d) with regard to each measurement mentioned in point 3(c), whether the limit or threshold laid down by the applicable regulatory act has been met;

   (e) when other test methods than those prescribed in the applicable regulatory acts are permitted and used, the report shall include a description of those test methods;

   (f) 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;

   (g) overall test conclusions that describes that the system, component or separate technical unit in the test report is in compliance with all the requirements of the applicable regulatory act listed in Annex II to Regulation (EU) 2018/858 and that the tested system, component or separate technical unit was representative in terms of the type to be approved;

   (h) opinions and interpretations shall be documented properly and marked as such in the test report.

4. Where the manufacturer and the type-approval authority or technical service have reached an agreement on a worst-case configuration, testing of that configuration alone shall be sufficient. The test report shall include the information how the worst-case configuration of the system, component or separate technical unit has been determined.

5. If a format of a test report is provided in the respective Regulatory act listed in Part I of Annex II to Regulation (EU) 2018/858 that model shall be used.

▼B

ANNEX VIII

CERTIFICATE OF CONFORMITY IN PAPER FORMAT

0. OBJECTIVES

The certificate of conformity shall include:

(a) the Vehicle Identification Number;

(b) the date of manufacture of the vehicle;

(c) the exact technical characteristics of the vehicle as well as its technical performance in concrete terms (It is not permitted to mention any range of value in the various entries, except in cases where this in the nature of the vehicle (e.g. trailers with extendible chassis, tractor unit for semi-trailer with adjustable fifth wheel coupling).

1. GENERAL DESCRIPTION

1.1. The certificate of conformity in paper format shall consist of the following two parts.

(a) Part 1, which consists of a statement of compliance by the manufacturer and which is common to all vehicle categories.

(b) Part 2, which is a technical description of the main characteristics of the vehicle and which is adapted to each specific vehicle category.

1.2. The certificate of conformity in paper format shall be of maximum format A4 (210 × 297 mm) and conform to the templates set out in the Appendix.

1.3. The technical descriptions indicated in Part 2 of the certificate of conformity in paper format shall be those given in the type-approval documentation of the relevant regulatory acts.

1.4. All information on the certificate of conformity in paper format shall be provided in ISO 8859 series characters (for certificates of conformity in paper format issued in Bulgarian in Cyrillic characters, for certificates of conformity in paper format issued in Greek in Greek characters) and Arabic numerals.

2. SPECIAL PROVISIONS

2.1. Model A of the certificate of conformity in paper format shall be used for complete vehicles

2.2. Model B of the certificate of conformity in paper format shall be used for completed vehicles

The additional technical characteristics of the vehicle as well as its technical performance in concrete terms added during the multi-stage type-approval process shall be described briefly.

2.3. Model C of the certificate of conformity shall be used for incomplete vehicles.

▼B

3. PAPER AND SECURITY PRINTING FEATURES TO PREVENT FORGERY

To prevent forgery, the certificate of conformity shall be protected by coloured graphics and at least one of the following:

(a) a watermark in the form of the registered mark of the manufacturer;

(b) another security printing feature (e.g. ultraviolet fluorescent ink, inks with viewing angle-dependent colour, inks with temperature-dependent colour, micro printing, guilloche printing, iridescent printing, laser engraving, custom holograms, variable laser images, optical variable images, physically embossed or engraved manufacturer's logo, etc.).

▼B

Appendix

TEMPLATES FOR THE CERTIFICATE OF CONFORMITY IN PAPER FORMAT

PART I

COMPLETE AND COMPLETED VEHICLES

MODEL A1 —PART 1

COMPLETE VEHICLES

CERTIFICATE OF CONFORMITY

Part 1

The undersigned [… (Full name and position)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

— Variant ([153]): …

— Version ([153]): …

0.2.1. Commercial name(s): …

0.2.3. Identifiers ([1]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier: …

0.2.3.5. Roadload Matrix family's identifier (if applicable): …

0.2.3.6. Periodic regeneration family's identifier: …

0.2.3.7. Evaporative test family's identifier: …

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: …

▼B

0.11. Date of manufacture of the vehicle: …

conforms in all respects to the type described in approval (… number of the type-approval certificate, including extension number) granted on (… date of the type-approval) and can be permanently registered in Member States having right/left ([154]) hand traffic and using metric/imperial ([155]) units for the speedometer and metric/imperial ([155]) units for the odometer (if applicable) ([156]).

(Place) (Date): … (Signature): …

▼B

MODEL A2 —PART 1

COMPLETE VEHICLES TYPE-APPROVED IN SMALL SERIES

[Year] [Sequential number]

CERTIFICATE OF CONFORMITY

Part 1

The undersigned [… (Full name and position)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

— Variant ([153]): …

— Version ([153]): …

0.2.1. Commercial name(s): …

0.2.3. Identifiers ([1]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier: …

0.2.3.5. Roadload Matrix family's identifier (if applicable): …

0.2.3.6. Periodic regeneration family's identifier: …

0.2.3.7. Evaporative test family's identifier: …

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: …

▼B

0.11. Date of manufacture of the vehicle: …

conforms in all respects to the type described in approval (… number of the type-approval certificate, including extension number) granted on (… date of the type-approval) and can be permanently registered in Member States having right/left ([154]) hand traffic and using metric/imperial ([155]) units for the speedometer and metric/imperial ([155]) units for the odometer (if applicable) ([156]).

(Place) (Date): … (Signature): …

▼B

MODEL B —PART 1

COMPLETED VEHICLES

CERTIFICATE OF CONFORMITY

Part 1

The undersigned [… (Full name and position)] hereby certifies that the vehicle:

0.1. Make (Trade name of the manufacturer): …

0.2. Type: …

— Variant ([153]): …

— Version ([153]): …

0.2.1. Commercial name(s): …

0.2.2. For multi-stage approved vehicles, type-approval information of the base/previous stages vehicle (list the information for each stage):

— Type: …

— Variant ([153]): …

— Version ([153]): …

Number of the type-approval certificate, including the extension number: …

0.2.3. Identifiers ([1]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier: …

0.2.3.5. Roadload Matrix family's identifier (if applicable): …

0.2.3.6. Periodic regeneration family's identifier: …

0.2.3.7. Evaporative test family's identifier: …

▼B

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

0.5.1. For multi-stage 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 of the vehicle: …

(a) has been completed and altered ([4]) as follows: … and

(b) conforms in all respects to the type described in approval (... number of the type-approval certificate, including extension number) granted on (… date of the type-approval) and

(c) can be permanently registered in Member States having right/left ([154]) hand traffic and using metric/imperial ([155]) units for the speedometer and metric/imperial ([155]) units for the odometer (if applicable) ([156]).

(Place) (Date): … (Signature): …

Attachments: Certificate of conformity delivered at each previous stage.

PART 2

VEHICLE CATEGORY M1

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

▼B

5. Length: … mm

6. Width: … mm

7. Height: … mm

Masses ([158])

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

▼B

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

▼B

42. Number of seating positions (including the driver) ([115]): …

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 ([116]): Euro…

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. Test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): …

Particles (number): …

2.2. test procedure: WHTC (EURO VI)

CO: … NOx: … NMHC: … THC: … CH_4: … NH_3: … Particulates (mass): …Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

▼B

48.2. Declared maximum RDE values (if applicable)

Complete RDE trip: NOx: …, Particles (number): …

Urban RDE trip: NOx: …, Particles (number): …

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([150]) (repeat for each reference fuel tested):

3.2.1. NEDC savings: … g/km (if applicable)

3.2.2. WLTP savings: … g/km (if applicable)

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])

▼B

WLTP values	CO_2 emissions	Fuel consumption
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

Additional tyre/wheel combinations: technical parameters (no reference to RR)

PART 2

VEHICLE CATEGORY M2

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: … 2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

▼B

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

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 ([158])

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

13.3. Additional mass for alternative propulsion: … 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.

▼B

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 ([4]) ([166])

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, etc.

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

18.3. 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: …

▼B

23. Pure electric: yes/no ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. ►M1 Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1]) ◄

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm etc.

▼B

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Bodywork

38. Code for bodywork ([113]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([4])

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

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. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

▼B

47.1.3.0. f0, N:

47.1.3.1. f1, N/(km/h):

▼M1

47.1.3.2. f2, N/(km/h)^2: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): …

Particles (number): …

2.2. test procedure: WHTC (EURO VI)

CO: … NOx: … NMHC: … THC: … CH_4: … NH3: … Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

48.2. Declared maximum RDE values (if applicable)

Complete RDE trip: NOx: …, Particles (number): …

Urban RDE trip: NOx: …, Particles (number): …

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

▼B

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

▼B

PART 2

VEHICLE CATEGORY M3

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: … 2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

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 ([158])

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

13.3. Additional mass for alternative propulsion: … 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.

16.3. 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 ([4]) ([166])

17.1. Intended registration/in service maximum permissible laden mass: … kg

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, etc.

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

18.3. Centre-axle trailer: … kg

▼B

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm etc.

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Bodywork

38. Code for bodywork ([113]): …

39. Class of vehicle: class I/Class II/Class III/Class A/Class B ([4])

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

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) ([167])

42.3. Number of wheelchair user accessible position: …

43. Number of standing places: …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A

47. Exhaust emission level ([116]): Euro …

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

▼M1

1.2. test procedure: WHSC (EURO VI)

▼B

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

2.2 test procedure: WHTC (EURO VI)

CO: … NOx: … NMHC: … THC: … CH_4: … NH3: … Particulates (mass): … Particles (number): …

48.1. Smoke corrected absorption coefficient: … (m^{-1})

▼B

Miscellaneous

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY N1

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … 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[158]

13. Mass in running order: … kg

13.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

▼B

13.2. Actual mass of the vehicle: … kg

14. Mass of the base vehicle in running order: … kg ([4]) ([168])

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

▼B

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

38. Code for bodywork ([113]): …

40. Colour of vehicle ([114]): …

41. Number and configuration of doors: …

▼B

42. Number of seating positions (including the driver) ([115]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼B

48.2. Declared maximum RDE values (if applicable)

Complete RDE trip: NOx: …, Particles (number): …

Urban RDE trip: NOx: …, Particles (number): …

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151])

3.2. Total CO_2 emissions saving due to the eco-innovation(s) ([68]) (repeat for each reference fuel tested):

3.2.1. NEDC savings:… g/km (if applicable)

3.2.2. WLTP savings:… g/km (if applicable)

4. All power trains except pure electric vehicles under Commission Regulation (EU) 2017/1151

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])

▼B

WLTP values	CO_2 emissions	Fuel consumption
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles ([4]) or (if applicable)

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles ([4]) or (if applicable)

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

50. Type-approved in accordance with the design requirements for transporting dangerous goods of UN Regulation No 105 of the Economic Commission for Europe of the United Nations: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

List of tyres: technical parameters (no reference to RR)

PART 2

VEHICLE CATEGORY N2

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

▼B

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6. Width: … mm

7. Height ([1]): … 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 ([158])

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

13.3. Additional mass for alternative propulsion: … 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.

▼B

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 ([4]) ([166])

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, etc.

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

18.3.1. Rigid drawbar 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: …

▼B

22. Working principle: …

23. Pure electric: yes/no ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

31. Position of lift axle(s): …

▼B

32. Position of loadable axle(s): …

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Bodywork

38. Code for bodywork ([113]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, N/(km/h)^2: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

48.2. Declared maximum RDE values (if applicable)

Complete RDE trip: NOx: …, Particles (number): …

Urban RDE trip: NOx: …, Particles (number): …

49. ►M1 CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([169]) ([1]): ◄

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

▼B

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

4. All power trains except pure electric vehicles under Commission Regulation (EU) 2017/1151

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles ([4]) or (if applicable)

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles ([4]) or (if applicable)

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

49.1. Cryptographic hash of the manufacturer's records file ([119]): .....
.....

49.2. Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])

49.3. Vocational vehicle: (yes/no) ([4]) ([72]) ([170])

▼B

49.4. Cryptographic hash of the customer information file: .... ([120]) ([170])

49.5. Specific CO_2 emissions: ... gCO_2/tkm ([171])

49.6. Average payload value: ..... t' ([172])

Miscellaneous

50. Type-approved in accordance with the design requirements for transporting dangerous goods of UN Regulation No 105 of the Economic Commission for Europe of the United Nations: yes/class(es): …/no ([4]) ([173]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY N3

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

▼B

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

12. Rear overhang: … mm

Masses ([158])

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

13.3. Additional mass for alternative propulsion: … 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 ([4]) ([166])

17.1. Intended registration/in service maximum permissible laden mass: … kg

▼B

17.2. Intended registration/in service maximum permissible laden mass on each axle:

1. … kg

2. … kg

3. … kg, etc.

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

18.3.1. Rigid drawbar 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

▼B

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Bodywork

38. Code for bodywork ([113]): …

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

▼B

47. Exhaust emission level ([116]): Euro …

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼M1

49. CO_2 emissions/fuel consumption/electric energy consumption ([169]):

▼B

49.1. Cryptographic hash of the manufacturer's records file ([119]): ....

49.2. Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])

49.3. Vocational vehicle: (yes/no) ([4]) ([72]) ([170])

49.4. Cryptographic hash of the customer information file: .... ([120]) ([170])

49.5. Specific CO_2 emissions: ... gCO_2/tkm ([171])

49.6. Average payload value: ..... t' ([172])

Miscellaneous

50. Type-approved in accordance with the design requirements for transporting dangerous goods of UN Regulation No 105 of the Economic Commission for Europe of the United Nations: yes/ class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORIES O1 AND O2

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

▼B

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

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 ([158])

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.

▼B

17. Intended registration/in service maximum permissible masses in national/international traffic ([4]) ([166])

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, etc.

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

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): …

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

38. Code for bodywork ([113]): …

▼B

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

50. Type-approved in accordance with the design requirements for transporting dangerous goods of UN Regulation No 105 of the Economic Commission for Europe of the United Nations: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORIES O3 AND O4

(complete and completed vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

1-2: … mm

2-3: … mm

3-4: … mm

5. Length: … mm

5.3. Vehicle equipped with aerodynamic device or equipment on the rear/not equipped ([4])

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

▼B

12. Rear overhang: … mm

Masses ([158])

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.

17. Intended registration/in service maximum permissible masses in national/international traffic ([4]) ([166])

Only for national traffic, the lower-case letter ‘e’ followed by the distinguishing number of the Member State: …

For international traffic, number of the Directive/Regulation: …

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, etc.

▼B

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): …

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

38. Code for bodywork ([113]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

50. Type-approved in accordance with the design requirements for transporting dangerous goods of UN Regulation No 105 of the Economic Commission for Europe of the United Nations: yes/class(es): …/no ([4]):

51. For special purpose vehicles: designation in accordance with point 5 of Part A of Annex I to Regulation (EU) 2018/858 of the European Parliament and of the Council: …

52. Remarks ([165]): …

▼B

PART II

INCOMPLETE VEHICLES

MODEL C1 —PART 1

INCOMPLETE VEHICLES

CERTIFICATE OF CONFORMITY

Part 1

The undersigned [… (Full name and position)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([153]): …

Version ([153]): …

0.2.1. Commercial name(s): …

0.2.2. For multi-stage approved vehicles, type-approval information of the base/previous stages vehicle

(List the information for each stage):

Type: …

Variant ([153]): …

Version ([153]): …

Number of the type-approval certificate, including extension number …

0.2.3. Identifiers (if applicable) ([161]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier: …

0.2.3.5. Roadload Matrix family's identifier (if applicable): …

0.2.3.6. Periodic regeneration family's identifier: …

0.2.3.7. Evaporative test family's identifier: …

0.4. Vehicle category: …

0.5. Company name and address of manufacturer: …

▼B

0.5.1. For multi-stage 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 of the vehicle: …

conforms in all respects to the type described in approval (… number of the type-approval certificate, including extension number) granted on (… date of the type-approval) and

cannot be permanently registered without further approvals.

(Place) (Date): … (Signature): …

▼B

MODEL C2 —PART 1

INCOMPLETE VEHICLES TYPE-APPROVED IN SMALL SERIES

[Year] [Sequential number]

CERTIFICATE OF CONFORMITY

Part 1

The undersigned [… (Full name and position)] hereby certifies that the vehicle:

0.1. Make (Trade name of manufacturer): …

0.2. Type: …

Variant ([153]): …

Version ([153]): …

0.2.1. Commercial name(s): …

0.2.3. Identifiers (if applicable) ([161]):

0.2.3.1. Interpolation family's identifier: …

0.2.3.2. ATCT family's identifier: …

0.2.3.3. PEMS family's identifier: …

0.2.3.4. Roadload family's identifier:…

0.2.3.5. Roadload Matrix family's identifier (if applicable): …

0.2.3.6. Periodic regeneration family's identifier: …

0.2.3.7. Evaporative test family's identifier: …

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 of the vehicle: …

conforms in all respects to the type described in approval (… number of the type-approval certificate, including extension number) granted on (… date of the type-approval) and

▼B

cannot be permanently registered without further approvals.

(Place) (Date): … (Signature): …

PART 2

VEHICLE CATEGORY M1

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … 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 ([158])

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

▼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

18.3. 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min–1 (internal combustion engine) ([4])

▼B

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. ►M1 Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1]) ◄

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

Bodywork

41. Number and configuration of doors: …

42. Number of seating positions (including the driver) ([115]): …

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

▼B

47. Exhaust emission level ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N:

47.1.3.1. f1, N/(km/h):

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values)or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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 ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km

▼B

NEDC values	CO_2 emissions	Fuel consumption
Deviation factor (if applicable)		
Verification factor (if applicable)	'1' or '0'	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([68]) (repeat for each reference fuel tested):

3.2.1. NEDC savings: … g/km (if applicable)

3.2.2. WLTP savings: … g/km (if applicable)

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

▼B

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY M2

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

▼M1

4. Wheelbase ([157]): … mm

▼B

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5.1. Maximum permissible length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

12.1. Maximum permissible rear overhang: … mm

Masses ([158])

13.3. Additional mass for alternative propulsion: … kg

▼B

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

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 ([4]) ([166])

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, etc.

▼B

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

18.3. 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

▼B

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

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 ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Type or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

▼B

Environmental performances

46. Sound level

Stationary: … dB(A) at engine speed: … min^{-1}

Drive-by: … dB(A)

47. Exhaust emission level ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

▼M1

1.2. test procedure: Type 1 (WLTP highest values) or WHSC (EURO VI) ([4]):

▼B

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼B

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

▼B

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY M3

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

▼M1

4. Wheelbase ([157]): … mm

▼B

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5.1. Maximum permissible length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

6.1. Maximum permissible width: … mm

7.1. Maximum permissible height: … mm

12.1. Maximum permissible rear overhang: … mm

▼B

Masses ([158])

13.3. Additional mass for alternative propulsion: … kg

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

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 ([4]) ([166])

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, etc.

▼B

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

18.3. 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

▼B

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

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 ([4])

35. Tyre/wheel combination ([160]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼B

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY N1

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … 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 ([158])

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, etc.

15. Minimum mass of the vehicle when completed: … kg

▼B

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

▼B

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

Maximum speed

29. Maximum speed: … km/h

Axles and suspension

30. Axle(s) track:

1. … mm

2. … mm

3. … mm

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([160]) ([1]): …

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

▼B

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼B

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([1]):

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

3. Vehicle fitted with eco-innovation(s): yes/no ([4])

3.1. General code of the eco-innovation(s) ([151]): …

3.2. Total CO_2 emissions savings due to the eco-innovation(s) ([68]) (repeat for each reference fuel tested):

3.2.1. NEDC savings: … g/km (if applicable)

3.2.2. WLTP savings: … g/km (if applicable)

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

▼B

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY N2

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5.1. Maximum permissible length: … mm

▼B

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

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 ([158])

13.3. Additional mass for alternative propulsion: … kg

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

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

▼B

17. Intended registration/in service maximum permissible masses in national/international traffic ([4]) ([166])

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, etc.

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

18.3.1. Rigid drawbar 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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

▼B

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

28.1. Gearbox ratios (to complete for vehicles with manual shift transmissions) ([1])

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

28.1.1. Final drive ratio (if applicable): …

28.1.2. Final drive ratios (to complete if and where applicable)

1st gear	2nd gear	3rd gear	4th gear	5th gear	6th gear	7th gear	8th gear	…

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 ([4])

35. Fitted tyre/wheel combination/energy efficiency class of rolling resistance coefficients (RRC) and tyre category used for CO_2 determination (if applicable) ([1]) ([160]): …

▼B

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

47.1. Parameters for emission testing of V_{ind} ([1])

47.1.1. Test mass, kg: …

47.1.2. Frontal area, m^2 ([161]): …

47.1.2.1. Projected frontal area of air entrance of the front grille (if applicable), cm^2: …

47.1.3. Road load coefficients

47.1.3.0. f0, N: …

47.1.3.1. f1, N/(km/h): …

▼M1

47.1.3.2. f2, $N/(km/h)^2$: …

▼B

47.2. Driving cycle ([1])

47.2.1. Driving Cycle class: 1/2/3a/3b ([4])

47.2.2. Downscaling factor (f_{dsc}): …

47.2.3. Capped speed: yes/no ([4])

▼B

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: Type 1 (NEDC average values, WLTP highest values) or WHSC (EURO VI) ([4])

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼M1

49. CO_2 emissions/fuel consumption/electric energy consumption ([162]) ([169]) ([1]):

▼B

1. All power trains, except pure electric vehicles (if applicable)

NEDC values	CO_2 emissions	Fuel consumption
Urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra-urban conditions ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Combined ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km
Deviation factor (if applicable)		
Verification factor (if applicable)	‘1’ or ‘0’	

2. Pure electric vehicles and OVC hybrid electric vehicles (if applicable)

Electric energy consumption (weighted, combined ([4]))		… Wh/km
Electric range		… km

4. All power trains, except pure electric vehicle, under Commission Regulation (EU) 2017/1151 (if applicable)

WLTP values	CO_2 emissions	Fuel consumption
Low ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Medium ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Extra High ([4]):	… g/km	… l/100km or m^3/100km or kg/100km ([4])

▼B

WLTP values	CO_2 emissions	Fuel consumption
Combined:	… g/km	… l/100km or m^3/100km or kg/100km ([4])
Weighted, combined ([4])	… g/km	… l/100km or m^3/100km or kg/100km ([4])

5. Pure electric vehicles and OVC hybrid electric vehicles, under Commission Regulation (EU) 2017/1151 (if applicable)

5.1. Pure electric vehicles

Electric energy consumption		… Wh/km
Electric range		… km
Electric range city		… km

5.2. OVC hybrid electric vehicles

Electric energy consumption ($EC_{AC,weighted}$)		… Wh/km
Electric range (EAER)		… km
Electric range city (EAER city)		… km

49.1. Cryptographic hash of the manufacturer's records file ([119]): .....
.....

49.2. Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])

49.3. Vocational vehicle: (yes/no) ([4]) ([72]) ([170])

49.4. Cryptographic hash of the customer information file: .....
..... ([120]) ([170])

49.5. Specific CO_2 emissions: ... gCO_2/tkm ([171])

49.6. Average payload value: ..... t' ([172])

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORY N3

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axles (number, position): …

▼B

3. Powered axles (number, position, interconnection): … …

3.1. Specify if the vehicle is non-automated/automated/fully automated ([8])

Main dimensions

4. Wheelbase ([157]): … mm

4.1. Axle spacing:

1-2: … mm

2-3: … mm

3-4: … mm

5.1. Maximum permissible length: … mm

5.2. Elongated Cabs complying with Article 9a of Directive 96/53/EC: yes/no ([4])

5.3. Vehicle equipped with aerodynamic device or equipment on the front/rear/not equipped ([4])

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 ([158])

13.3. Additional mass for alternative propulsion: … kg

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

16. Technically permissible maximum masses

16.1. Technically permissible maximum laden mass: … kg

▼B

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 ([4]) ([166])

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, etc.

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

18.3.1. Rigid drawbar trailer: … kg

18.4. Unbraked trailer: … kg

▼B

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 ([4])

23.1. Class of Hybrid [electric] vehicle: OVC-HEV/NOVC-HEV/OVC-FCHV/NOVC-FCHV ([4])

24. Number and arrangement of cylinders: …

25. Engine capacity: … cm^3

26. Fuel: Diesel/petrol/LPG/NG – Biomethane/Ethanol/Biodiesel/Hydrogen ([4])

26.1. Mono fuel/Bi fuel/Flex fuel/Dual-fuel ([4])

26.2. (Dual-fuel only) Type 1A/Type 1B/Type 2A/Type 2B/Type 3B ([4])

27. Maximum power

27.1. Maximum net power ([159]): … kW at … min^{-1} (internal combustion engine) ([4])

27.3. Maximum net power: … kW (electric motor) ([4]) ([112])

27.4. Maximum 30 minutes power: … kW (electric motor) ([4]) ([112])

28. Gearbox (type): …

Maxim um 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 ([4])

35. Tyre/wheel combination ([160]): …

▼B

Brakes

36. Trailer brake connections mechanical/electric/pneumatic/hydraulic ([4])

37. Pressure in feed line for trailer braking system: … kPa

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): 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 ([116]): Euro …

48. Exhaust emissions ([162]) ([163]) ([164]):

Number of the base regulatory act and latest amending regulatory act applicable: …

1.2. test procedure: WHSC (EURO VI)

CO: … THC: … NMHC: … NO_x: … THC + NO_x: … NH_3: … Particulates (mass): … Particles (number): …

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})

▼M1

49. CO_2 emissions/fuel consumption/electric energy consumption ([169]):

▼B

49.1. Cryptographic hash of the manufacturer's records file ([119]): ....

49.2. Zero emission heavy-duty vehicle: yes/no ([4]) ([72]) ([169])

49.3. Vocational vehicle: (yes/no) ([4]) ([72]) ([170])

49.4. Cryptographic hash of the customer information file: .... ([120]) ([170])

49.5. Specific CO_2 emissions: ... gCO_2/tkm ([171])

49.6. Average payload value: ..... t' ([172])

▼B

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORIES O1 AND O2

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

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 ([158])

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

▼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.

16.3. 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 ([4]) ([166])

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, etc.

17.3. Intended registration/in service maximum permissible laden 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): …

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Tyre/wheel combination ([160]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

52. Remarks ([165]): …

PART 2

VEHICLE CATEGORIES O3 AND O4

(incomplete vehicles)

Part 2

General construction characteristics

1. Number of axles: … and wheels ([5]): …

1.1. Number and position of axles with twin wheels: …

2. Steered axle (number, position): …

Main dimensions

4. Wheelbase ([157]) ([174]): … mm

4.1. Axle spacing:

0-1: … mm

1-2: … mm

2-3: … mm

3-4: … mm

5.1. Maximum permissible length: …mm

5.3. Vehicle equipped with aerodynamic device or equipment on the rear/not equipped ([4])

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

▼B

Masses ([158])

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, etc.

15. Minimum mass of the vehicle when completed: … kg

15.1. Distribution of this mass amongst the axles:

1. … kg

2. … kg

3. … kg, etc.

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 ([4]) ([166])

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, etc.

▼B

17.3. Intended registration/in service maximum permissible laden 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

31. Position of lift axle(s): …

32. Position of loadable axle(s): …

▼M1

33. Drive axle(s) fitted with air suspension or equivalent: yes/no ([4])

▼B

35. Tyre/wheel combination ([160]): …

Coupling device

44. Number of the approval certificate or approval mark of coupling device (if fitted): …

45. Types or classes of coupling devices which can be fitted: …

45.1. Characteristics values ([4]): D: …/V: …/S: …/U: …

Miscellaneous

52. Remarks ([165]): …