

ANNEX I

**Euro 7 Emission Limits**

**Table 1: Euro 7 exhaust emission limits for M1, N1 vehicles with internal combustion engine**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutant emissions** | **M1, N1 vehicles** | **Only for N1 vehicles with power to mass ratio[[1]](#footnote-2) less than 35 kW/t** | **Emission budget for all trips less than 10 km for M1, N1 vehicles** | **Emission budget for all trips less than 10 km only for N1 vehicles with power to mass ratio less than 35 kW/t** |
| ***per km*** | ***per km*** | ***per trip*** | ***per trip*** |
| **NOx in mg** | 60 | 75 | 600 | 750 |
| **PM in mg** | 4.5 | 4.5 | 45 | 45 |
| **PN10 in #** | 6×1011 | 6×1011 | 6×1012 | 6×1012 |
| **CO in mg** | 500 | 630 | 5000 | 6300 |
| **THC in mg** | 100 | 130 | 1000 | 1300 |
| **NMHC in mg** | 68 | 90 | 680 | 900 |
| **NH3 in mg** | 20 | 20 | 200 | 200 |

**Table 2: Euro 7 exhaust emission limits for M2, M3, N2 and N3 vehicles with internal combustion engine and internal combustion engines used in those vehicles**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutant emissions** | **Cold emissions[[2]](#footnote-3)** | **Hot emissions[[3]](#footnote-4)** | **Emission budget for all trips less than 3\*WHTC long** | **Optional idle emission limits[[4]](#footnote-5)** |
| ***per kWh*** | ***per kWh*** | ***per kWh*** | ***per hour*** |
| **NOx in mg** | 350 | 90 | 150 | 5000 |
| **PM in mg** | 12 | 8 | 10 |  |
| **PN10 in #** | 5x1011 | 2x1011 | 3x1011 |  |
| **CO in mg** | 3500 | 200 | 2700 |  |
| **NMOG in mg** | 200 | 50 | 75 |  |
| **NH3 in mg** | 65 | 65 | 70 |  |
| **CH4 in mg** | 500 | 350 | 500 |  |
| **N2O in mg** | 160 | 100 | 140 |  |
| **HCHO in mg** | 30 | 30 |  |  |

**Table 3: Euro 7 evaporative emission limits for petrol fuelled M1, N1 vehicles**

|  |  |  |
| --- | --- | --- |
| **Pollutant emissions** | **M1, N1 with maximum mass up to 2650 kg** | **N1 with maximum mass equal or more than 2650 kg** |
| **Evaporative emissions (in hot soak + 2 day diurnal test)** | 0.50 g at worst day + hot soak | 0.70 g at worst day + hot soak |
| **Refuelling emissions** | 0.05 g/L of fuel | 0.05 g/L of fuel |

**Table 4: Euro 7 brake particle emission limits in standard driving cycle applying until 31/12/2034**

|  |  |  |  |
| --- | --- | --- | --- |
| **Emission limits in mg/km per vehicle** | **M1, N1 vehicles** | **M2, M3 vehicles** | **N2, N3 vehicles** |
| **Brake particle emissions (PM10)** | 7 |  |  |
| **Brake particle emissions (PN)** |  |  |  |

**Table 5: Euro 7 brake particle emission limits in applying from 1/1/2035**

|  |  |  |  |
| --- | --- | --- | --- |
| **Emission limits in mg/km per vehicle** | **M1, N1 vehicles** | **M2, M3 vehicles** | **N2, N3 vehicles** |
| **Brake particle emissions (PM10)** | 3 |  |  |
| **Brake particle emissions (PN)** |  |  |  |

**Table 6: Euro 7 tyre abrasion rate limits**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tyre mass lost in g/1000 km** | **C1 tyres** | **C2 tyres** | **C3 tyres** |
| Normal tyres |  |  |  |
| Snow tyres |  |  |  |
| Special use tyres |  |  |  |

ANNEX II

**Euro 7 Minimum performance requirements for battery durability**

**Table 1: Euro 7 Minimum performance requirements (MPR) for battery durability for M1 vehicles**

|  |  |  |  |
| --- | --- | --- | --- |
| **Battery energy based MPR** | Start of life to 5 years or 100 000 km whichever comes first | Vehicles more than 5 years or 100 000 km, and up to whichever comes first of 8 years or 160 000 km | Vehicles up to additional lifetime\* |
| OVC-HEV | 80% | 70% |  |
| PEV | 80% | 70% |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Range based MPR** | Start of life to 5 years or 100 000 km whichever comes first | Vehicles more than 5 years or 100 000 km, and up to whichever comes first of 8 years or 160 000 km | Vehicles up to additional lifetime\* |
| OVC-HEV |  |  |  |
| PEV |  |  |  |

**Table 2: Euro 7 Minimum performance requirements (MPR) for battery durability for N1 vehicles**

|  |  |  |  |
| --- | --- | --- | --- |
| **Battery energy based MPR** | Start of life to 5 years or 100 000 km whichever comes first | Vehicles more than 5 years or 100 000 km, and up to whichever comes first of 8 years or 160 000 km | Vehicles up to additional lifetime\* |
| OVC-HEV | 75% | 65% |  |
| PEV | 75% | 65% |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Range based MPR** | Start of life to 5 years or 100 000 km whichever comes first | Vehicles more than 5 years or 100 000 km, and up to whichever comes first of 8 years or 160 000 km | Vehicles up to additional lifetime\* |
| OVC-HEV |  |  |  |
| PEV |  |  |  |

**Table 3: Euro 7 Minimum performance requirements (MPR) for battery durability for M2, M3, N2, N3 vehicles**

|  |  |  |
| --- | --- | --- |
| **Battery Energy based MPR** | Vehicles in main lifetime\* | Vehicles in additional lifetime\* |
| OVC-HEV |  |  |
| PEV |  |  |

\*As specified in Annex IV

ANNEX III

**TEST CONDITIONS**

**Table 1: Conditions for testing compliance of M1, N1 vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Normal driving conditions** | **Extended driving conditions\*** |
| Extended driving divider | - | 1.6 (applies to measured emissions only during the time when one of the conditions set out in this column applies) |
| Ambient temperature | 0°C to 35°C | -10°C to 0°C or 35°C to 45°C |
| Maximum altitude | 700 m | More than 700 m and below 1 800 m |
| Maximum speed | Up to 145 km/h | Between 145 and 160 km/h |
| Towing/aerodynamic modifications | Not allowed | Allowed according to manufacturer specifications and up to the regulated speed. |
| Auxiliaries | Possible as per normal use | - |
| Maximum average wheel power during first 2 km after cold start | Lower than 20% of maximum wheel power | Higher than 20% of maximum wheel power |
| Trip composition | Any | - |
| Minimum mileage | 10 000 km | Between 3 000 and 10 000 km |

\* The same emission strategy shall be used when a vehicle is run outside those conditions, unless there is a technical reason approved by the type approval authority.

**Table 2: Conditions for testing compliance of M2, M3, N2 and N3 vehicles with exhaust emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle**

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Normal driving conditions** | **Extended driving conditions\*** |
| Extended Driving Divider | - | 2 (applies to measured emissions only during the time when one of the conditions set out in this column applies) |
| Ambient temperature | -7°C to 35°C | -10°C to -7°C or 35°C to 45°C |
| Maximum altitude | 1 600 m | From 1 600 to 1 800 m |
| Towing/aerodynamic modifications | Not allowed | Allowed according to manufacturer specifications and up to the regulated speed |
| Vehicle Payload | Higher or equal than 10% | Less than 10% |
| Auxiliaries | Possible as per normal use | - |
| Internal Combustion Engine Loading at cold start | Any | - |
| Trip composition | As per usual use | - |
| Minimum mileage | 5 000 km for <16t TPMLM 10 000 km for > 16t TPMLM | Between 3 000 km and 5 000 km for <16t TPMLM Between 3 000 km and 10 000 km for > 16t TPMLM |

\*The same emission strategy shall be used when a vehicle is run outside those conditions, unless there is a technical reason approved by the type approval authority.

**Table 3: Conditions for testing compliance with evaporative emission limits with any market fuel and lubricant within the specifications issued by the manufacturer of the vehicle**

|  |  |
| --- | --- |
|  | **Testing conditions** |
| Evaporative emission SHED[[5]](#footnote-6) test | * Baking of entire vehicle or of individual components (optional) * Vehicle canister preconditioning and fuel refilling and vehicle precondition drive * Drive temperature and hot soak test 25 and 38°C (38 °C for type approval) * 48-h diurnal test |
| Refuelling emission test | **Vehicle preconditioning**   * Fuel drain and fill to 40% * 6 h min soak at 20-30°C * preconditioning drive   **Canister preconditioning**   * Fuel drain and fill to 40% * 12-36 h soak * Load canister with hydrocarbon vapours until 2g breakthrough at 40 g/h 50% butane/N2 * Exhaust test: WLTP (recording emissions) * 0-1 h soak at 20-30°C * Canister purge drive at 20-30°C   **Refuelling event**   * Disconnect canister(s) * Fuel drain and fill to 10% * 6-24h soak at 27°C. * Reconnect canisters * Dispense fuel at 38 l/min until automatic shut-off. If < 85% of total tank capacity is dispensed, continue auto-refuelling until fuel dispensed is ≥ 85%. Authorities may use 15 l/min * Dispense fuel temperature:19°C |

**Table 4: Conditions for testing compliance with brake particle emission limits**

|  |  |  |
| --- | --- | --- |
|  | **M1, N1 vehicles** | **M2, M3, N2 and N3 vehicles** |
| Brake particle emissions test | Testing according to the UN GTR on brake emissions |  |

**Table 5: Conditions for testing compliance with tyre abrasion limits**

|  |  |  |
| --- | --- | --- |
|  | **M1, N1 vehicles** | **M2, M3, N2 and N3 vehicles** |
| Tyre abrasion limits test | Based on the testing methodologies developed in UN for testing tyre abrasion in real world | Based on the testing methodologies developed in UN for testing tyre abrasion in real world |

ANNEX IV

**LIFETIME REQUIREMENTS**

**Table 1: Lifetime of vehicles, engines and pollution control systems**

|  |  |  |  |
| --- | --- | --- | --- |
| **Lifetime of vehicles, engines and replacement pollution control devices** | **M1, N1 and M2** | **N2, N3<16t, M3<7.5t:** | **N3>16t, M3>7.5t** |
| Main lifetime | Up to 160 000 km or 8 years, whichever comes first | 300 000 km or 8 years, whichever comes first | 700 000 km or 15 years, whichever comes first |
| Additional lifetime | After main lifetime and up to 200 000 km or 10 years whichever comes first | After main lifetime and up to 375 000 km | After main lifetime and up to  875 000 km |

**Table 2: Applicable durability multipliers for adjusting exhaust emission limits under Annex 1 when testing vehicles, engines and replacement pollution control devices during additional lifetime.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Durability multipliers** | **M1, N1 and M2** | **N2, N3<16t, M3<7.5t:** | **N3>16t, M3>7.5t** |
| Durability multiplier for additional lifetime | 1.2 for gaseous pollutant emissions |  |  |

ANNEX V

**Application of test requirements and Declarations**

**Table 1: Application of test requirements and declarations for M1, N1 vehicles for vehicle manufacturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** |
| Gaseous pollutants and PN in road testing (RDE) | Required demonstration test for all fuels for which the type approval is granted and declaration of compliance for all fuels, all payloads and all applicable vehicle types | Not required | Optional[[6]](#footnote-7) |
| Gaseous pollutants, PM and PN in RDE cycles in the laboratory and CO2 emissions, fuel consumption (OBFCM), electric energy consumption and electric range (Battery Durability) (WLTP at 23 °C) | Required where all pollutants cannot be measured on the road | Required | Required where all pollutants cannot be measured on the road |
| CO2 ambient temperature correction  (WLTP at 14°C) | Declaration6 | Not required | Optional6 |
| Crankcase emissions | Declaration that a closed crankcase system or routing to the tailpipe is installed 6 | Required | Optional6 |
| Evaporative emissions SHED test | Required | Required | Optional6 |
| Refuelling emissions | Required | Not required | Not required |
| Emissions durability | Declaration | Not required | Not required |
| Battery durability | Declaration | Not required | Not required |
| Laboratory test of low temperature for emissions and range | Required | Not required | Optional6 |
| On-board diagnostics | Declaration | Not required | Optional6 |
| On-board monitoring | Declaration and demonstration | Not required | Required |
| Engine power | Required | Not required | Optional6 |
| Anti-tampering, security and cybersecurity | Declaration and documentation | Not required | Not required |
| Adaptive controls (where applicable) | Declaration and demonstration | Not required | Not required |
| Geofencing technologies (where applicable) | Declaration and demonstration | Not required | Not required |

**Table 2: Application of test requirements and declarations for M1, N1 vehicles for Member States and recognised third parties/Commission**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** | | **Tests at market surveillance)** | |
| **Relevant actor** | ***Type approval authority for issuing the type approval*** | ***Type approval authority*** | ***Type approval authority*** | ***Third parties and Commission*** | ***Market surveillance authorities*** | ***Third parties and Commission*** |
| Gaseous pollutants and PN in road testing (RDE) | Required demonstration test for all fuels for which the type approval is granted and declaration of compliance for all fuels, all payloads and all applicable vehicle types | Not required | Required for 5% of the vehicle types approved per year | Optional | Required | Optional |
| Gaseous pollutants, PM and PN in RDE cycles in the laboratory and CO2 emissions, fuel consumption (OBFCM), electric energy consumption and electric range (Battery Durability) (WLTP at 23 °C) | Required | Audits or optional testing | Optional | Optional | Optional | Optional |
| CO2 ambient temperature correction  (WLTP at 14°C) | Declaration6 | Not required | Optional | Optional | Required | Optional |
| Crankcase emissions | Declaration that a closed crankcase system or routing to the tailpipe is installed6 | Audits or optional testing | Optional | Optional | Optional | Optional |
| Evaporative emissions SHED test | Required | Audits or optional testing | Optional | Optional | Required | Optional |
| Refuelling emissions | Required | Not required | Optional | Optional | Required | Optional |
| Emissions durability | Declaration | Not required | Required | Optional | Required | Optional |
| Battery durability | Declaration | Not required | Required | Optional | Required | Optional |
| Laboratory test of Low temperature for emissions + range | Required | Not required | Optional | Optional | Required | Optional |
| On-board diagnostics | Declaration | Not required | Optional | Optional | Required | Optional |
| On-board monitoring | Demonstration +Declaration | Not required | Required | Optional | Required | Optional |
| Engine power | Required | Not required | Optional | Optional | Optional | Optional |
| Anti-tampering, security and cybersecurity | Declaration and documentation | Not required | Not required | Not required | Required | Optional |
| Adaptive controls (where applicable) | Declaration | Not required | Not required | Not required | Optional | Optional |
| Geofencing technologies (where applicable) | Declaration and demonstration | Not required | Not required | Not required | Required | Optional |

**Table 3: Application of tests, declarations and other requirements for type-approval and extensions for M2, M3, N2 and N3 vehicles for manufacturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** |
| Gaseous pollutants, PM and PN in road testing (RDE) for each fuel and for the applicable vehicle categories (M2, M3, N2 and N3) and low load test (if applicable) | Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all applicable vehicle types | Conformity of production performed at engine level only | Required test on a vehicle with any fuel and on any vehicle category and any payload for all engine types every two year |
| CO2 and fuel/energy consumption, zero emission/electric range determination of a vehicle | VECTO licence | For components | Not required |
| Energy efficiency of trailers | VECTO licence | For components | Not required |
| Verification testing procedure | Not required | Required | Not required |
| Crankcase emissions | Check installation of closed crankcase system or routing to the tailpipe | Not required | Optional6 |
| Emissions durability | Declaration | Not required | Not required |
| Battery durability | Declaration | Not required | Not required |
| On-board diagnostics (OBD family level) | Declaration | Not required | Optional6 |
| On-board monitoring (OBM family level) | Demonstration +Declaration | Not required | Required |
| Anti-tampering, security and cybersecurity | Declaration and documentation | Not required | Not required |
| Adaptive controls (where applicable) | Declaration | Not required | Not required |
| Geofencing technologies (where applicable) | Declaration and demonstration | Not required | Not required |

**Table 4: Application of test requirements and declarations for type-approval and extensions for M2, M3, N2 and N3 vehicles for Member States and recognised third parties/Commission**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** | | **Tests at market surveillance** | |
| **Relevant actor** | ***Type approval authority for issuing the type approval*** | ***Type approval authority*** | ***Type approval authority*** | ***Third parties and Commission*** | ***Market surveillance authorities*** | ***Third parties and Commission*** |
| Gaseous pollutants, PM and PN in road testing (RDE) for each fuel and for the applicable vehicle categories (M2, M3, N2 and N3) + low load test (if applicable) | Required demonstration tests for all fuels for which the type approval is granted per vehicle type and a declaration of compliance for all fuels, all payloads and all applicable vehicle types | (see engine requirements) | Required yearly for an adequate number of vehicle types on any fuel and on any vehicle category covered by the emission type approval | Optional | Required/Optional | Optional |
| CO2,emissions, fuel/energy consumption, zero-emissions/electric range determination of a vehicle | Issue VECTO licence | For components | Not required | Not required | Optional | Optional |
| Energy efficiency of trailers | Issue VECTO licence | For components | Not required | Not required | Optional | Optional |
| Verification testing procedure | Not required | Required | Optional | Optional | Optional | Optional |
| Crankcase emissions | Check installation of closed crankcase system or routing to the tailpipe | Not required | Optional | Optional | Optional | Optional |
| Emissions durability | Declaration | Not required | Optional | Optional | Required | Optional |
| Battery durability | Declaration | Not required | Optional | Optional | Optional | Optional |
| On-board diagnostics (OBD family level) | Declaration | Not required | Optional | Optional | Required | Optional |
| On-board monitoring (OBM family level) | Declaration and demonstration | Not required | Not required | Not required | Required | Optional |
| Anti-tampering, security and cybersecurity | Declaration and documentation | Not required | Not required | Not required | Required | Optional |
| Adaptive controls (where applicable) | Declaration | Not required | Not required | Not required | Optional | Optional |
| Geofencing technologies (where applicable) | Declaration and demonstration | Not required | Not required | Not required | Required | Optional |

**Table 5: Application of test requirements and declarations for type-approval and extensions of engines intended for M2, M3, N2 and N3 vehicles for manufacturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test requirements for each fuel** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** |
| Gaseous pollutants, PM and PN and CO2 emissions, fuel consumption on transient cycle (WHTC Cold and Hot) | Required on the parent engine of the emission family and declaration for all family members\*\* | Required on an engine out of the family | Performed only with the complete vehicle as in Tables 3 and 4 |
| Engine tests for verifying data required for CO2 determination | Required | Required |
| Continuous/periodic regeneration | Declaration | Not required |
| Crankcase emissions | Check installation of closed crankcase system or routing to the tailpipe | Not required |
| Emissions Durability | Declaration | Not required |
| On-board diagnostics (OBD family level) | Declaration | Not required |
| On-board monitoring (OBM family level) | Performed only with the complete vehicle as in Tables 3 and 4 | Not required |
| Engine power | Required | |

**\* The type approval authority may request a test to be performed during initial type approval.**

**\*\* Supported by data of engine testing of all power ratings.**

**Table 6: Application of test requirements and declarations for type-approval and extensions of engines intended for M2, M3, N2 and N3 vehicles for Member States and recognised third parties/Commission**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test requirements for each fuel** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in service conformity** | **Tests at market surveillance** |
| **Relevant actor** | ***Type approval authority for issuing the type approval*** | ***Type approval authority*** | ***-*** | ***-*** |
| Gaseous pollutants, PM and PN and CO2 emissions, fuel consumption on transient cycle (WHTC Cold and Hot) | Required on the parent engine and a declaration for all family members\*\* | Audit or optional testing | Performed only with the complete vehicle as in Tables 3 and 4 | Performed only with the complete vehicle as in Tables 3 and 4 |
| Engine tests for verifying data required for CO2 determination | Required | Audit or optional testing |
| Continuous/periodic regeneration | Declaration | Not required |
| Crankcase emissions | Check installation of closed crankcase system or routing to the tailpipe | Not required |
| Emissions durability | Declaration | Not required |
| On-board diagnostics (OBD family level) | Declaration | Not required |
| On-board monitoring (OBM family level) | Performed only with the complete vehicle as in Tables 3 and 4 | |
| Engine power | Required | Not required |

**Table 7: Application of test requirements and declarations for type-approval of pollution control systems for manufacturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** |
| Demonstration of performance and durability with aged parts | Required/Declaration | Not required | Optional |
| Durability requirement check in real life (RDE test with aged vehicles) | Declaration | Not required | Optional |

**Table 8: Application of test requirements and declarations for type-approval of pollution control systems for Member States and recognised third parties/Commission**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** | | **Tests at market surveillance** | |
| **Relevant actor** | ***Type approval authority for issuing the type approval*** | ***Type approval authority*** | ***Type approval authority*** | ***Third parties and Commission*** | ***Market surveillance authorities*** | ***Third parties and Commission*** |
| Demonstration of performance and durability with aged parts | Required | Optional | Optional/Optional |  | Optional/Optional |  |
| Durability requirement check in real life (RDE test with aged vehicles) | Declaration | Not required | Optional/Optional |  | Required/Optional |  |

**Table 9: Application of test requirements for type-approval of brake systems for manufacturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** |
| Brake system emissions test in WLTP brake cycle | Required | Required | Required |

**Table 10: Application of test requirements for type-approval of brake systems for Member States and recognised third parties/Commission**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test requirements** | **Tests and requirements at initial emission type approval** | **Tests at conformity of production** | **Tests at in-service conformity** | | **Tests at market surveillance** | |
| **Relevant actor** | ***Type approval authority for issuing the type approval*** | ***Type approval authority*** | ***Type approval authority*** | ***Third parties and Commission*** | ***Market surveillance authorities*** | ***Third parties and Commission*** |
| Brake system emissions test in WLTP brake cycle | Required | Audit or optional testing | Required/Optional |  | Optional/Optional |  |

ANNEX VI

*CORRELATION TABLE*

1. Regulation (EC) No 715/2007

|  |  |
| --- | --- |
| **Regulation (EC) No 715/2007** | **This Regulation** |
| Article 1(1) | Article 1(1) |
| Article 1(2) | Article 1(2) |
| Article 2(1) | Article 2(1) |
| Article 2(2) | Article 5(6) |
| Article 3 | Article 3 |
| Article 4(1), first subparagraph | Article 4(1), first subparagraph |
| Article 4(1), second subparagraph | Article 4(1), second subparagraph |
| Article 4(2) | Article 7(1) |
| Article 4(3) | Article 7(4) |
| Article 4(4) | Article 7(6) |
| Article 5(1) | Article 4(2) |
| Article 5(2) | Article 4(3) |
| Article 5(3) | Article 14(2) |
| Article 5(3), last subparagraph | Article 6 (1), second subparagraph |
| Article 10 | Article 10 |
| Article 11 | Article 11 |
| Article 12 | — |
| Article 13 | — |
| Article 14 | — |
| Article 15 | Article 17 |
| Article 16 | — |
| Article 17 | Article 19 |
| Article 18 | Article 20 |
| Annex I | Annex I |
| Annex II | — |

2. Regulation (EC) No 595/2009

|  |  |
| --- | --- |
| **Regulation (EC) No 595/2009** | **This Regulation** |
| Article 1 | Article 1 |
| Article 2, first subparagraph | Article 2, first subparagraph |
| Article 2, second subparagraph | — |
| Article 2, third subparagraph | — |
| Article 2, fourth subpagraph | — |
| Article 3 | Article 3 |
| Article 4(1) | Article 4(1) |
| Article 4(2) | Article 7(1) |
| Article 4(3) | Article 7(5) |
| Article 5(1) | Article 4(1), second subparagraph |
| Article 5(2) | Article 4(2) |
| Article 5(3) | Article 4(3) |
| Article 5(4) | Article 14(2) |
| Article 5a | Article 4(4) |
| Article 5b | Article 10(5) |
| Article 5c(a) | Article 14(4)(d) |
| Article 5c(b) | Article 14(4)(i) |
| Article 5c (c) | Article 14(4)(b) |
| Article 7 | Article 12 |
| Article 8 | Article 10(4) and Article 10(5) |
| Article 9 | Article 11 |
| Article 10 | — |
| Article 11 | — |
| Article 12 | — |
| Article 13 | Article 17 |
| Article 13a | Article 17 |
| Article 14 | — |
| Article 15 | — |
| Article 16 | — |
| Article 17 | Article 19 |
| Article 18 | Article 20 |
| Annex I | Annex I |
| Annex II | — |

1. Measured in accordance with paragraph 5.3.2. of UN/ECE Regulation No 85 in the case of ICEVs and PEVs, or, in all other cases, measured in accordance with one of the test procedures laid down in paragraph 6 of UN Global Technical Regulation 21 [↑](#footnote-ref-2)
2. Cold emissions refers to the 100th percentile of moving windows (MW) of 1 WHTC for vehicles, or WHTCcold for engines [↑](#footnote-ref-3)
3. Hot emission refers to the 90th percentile of moving windows (MW) of 1 WHTC for vehicles or WHTChot for engines [↑](#footnote-ref-4)
4. Applicable only if a system is not present that automatically shuts down the engine after 300 seconds of continuous idling operation (once the vehicle is stopped and brakes applied) [↑](#footnote-ref-5)
5. SHED: Sealed House for evaporative determination [↑](#footnote-ref-6)
6. The type-approval authority may request the test to be performed [↑](#footnote-ref-7)