

EUROPEAN COMMISSION

> Brussels, 8.11.2017 COM(2017) 676 final

ANNEXES 1 to 5

ANNEXES

to the proposal for a

Regulation of the European Parliament and of the Council

setting emission performance standards for new passenger cars and new light commercial vehicles as part of the Union's integrated approach to reduce CO2 emissions from light-duty vehicles and amending Regulation (EC) No 715/2007 (recast)

 $\{SWD(2017)\ 650\ final\}\ \ -\ \{SWD(2017)\ 651\ final\}$

↓ 443/2009

⇔ new

<u>ANNEXES</u>

↓ 443/2009 (adapted)
 ⇒ new

ANNEX I

PART A. SPECIFIC EMISSIONS TARGETS > FOR PASSENGER CARS <

1. \Rightarrow In 2020 $\Leftrightarrow \pm \underline{t}$ he specific emissions of CO₂ for each new passenger car, measured in grams per kilometre, shall , for the purposes of the calculations in this Annex, be determined in accordance with the following formulae:

(a) From 2012 to 2015:

Specific emissions of $CO_2 = 130 + a \times (M - M_0)$

Where:

M	=	mass of the vehicle in kilograms (kg)
₩₀	=	1372,0
æ	=	0,0457

♦ 6/2015 Art.1 (adapted)

(b) From 2016:

Specific emission of
$$CO_2 = 130 + a \times (M - M_0)$$

Where:

M	=	mass of the vehicle in kilograms (kg)
₩₀	=	1392,4
æ	=	0,0457

From 2020:

↓ 333/2014 Art. 1.13 (adapted) ⇒ new

Specific emission of $CO_2 = 95 + a \times (M - M0)$

Where:

М	=	Mass ⇒ in running order ⇐ of the vehicle in kilograms (kg)
M ₀	=	The value adopted pursuant to Article 13(2)
a	=	0 ₅ _0333

↓ 443/2009 (adapted)

2. The specific emissions target for a manufacturer in a calendar year \boxtimes 2020 \bigotimes shall be calculated as the average of the specific emissions of CO₂ of each new passenger car registered in that calendar year of which it is the manufacturer.

✓ 2017/1502 Art. 1 and Annex pt.
 1 (adapted)
 ⇒ new

3. The specific emission reference target for a manufacturer in 2021 shall be calculated as follows:

WLTP specific emission reference target = WLTP_{CO2} $\cdot \left(\frac{NEDC_{\text{spect arget}}}{NEDC_{CO2}}\right)$

Where:

- **WLTP**_{CO2} is the average specific emissions of CO₂ in 2020 determined in accordance with Annex XXI to Regulation 2017/1151 and calculated in accordance with the sixth second indent in the second paragraph of Article 4(3) of this Regulation, without including CO₂ savings resulting from the application of Articles 55a and 1211 of this Regulation;
- NEDC_{CO2} is the average specific emissions of CO₂ in 2020 determined in accordance with Implementing Regulation (EU) 2017/1153, and calculated in accordance with the sixth \boxtimes second \bigotimes indent in the second paragraph of Article 4(3) of this Regulation, without including CO₂ savings resulting from the application of Articles 55a and 12 11 of this Regulation
- NEDC_{2020target} is the 2020 specific emissions target calculated in accordance with points 1(e) and 2 of this Annex.

4. Starting from \Rightarrow For the calendar years \Leftrightarrow 2021 \Rightarrow to 2024 \Leftrightarrow , the specific emissions target for a manufacturer shall be calculated as follows:

Specific emissions tan $M_{0,2020}$]	$rget = WLTP_{reference target} + a [(Mø-M_0) - (Mø_{2020} - Ma_{2020})] - (Mw_{2020} - Ma_{2020})] - (Mw_{2020})] - (Mw_{2020})$
Where:	
WLTP _{reference target}	is the 2021 \boxtimes WLTP \boxtimes specific emission reference
	target calculated in accordance with point 3;
a	is as defined in point 1(c) <u>0.0333</u> ;
Mø	is the average of the mass \boxtimes in running order \bigotimes (M) as defined in point 1 of the new registered vehicles in the target year in kilograms (kg);

M_0	is \Rightarrow 1379.88 in 2021,and \Leftrightarrow as defined in point 1; \boxtimes Article 13(1)(a) \boxtimes \Rightarrow for the period 2022, 2023 and 2024 \Leftrightarrow
Mø ₂₀₂₀	is the average of the mass \boxtimes in running order \bigotimes (M) as defined in point 1 of the new registered vehicles in 2020 in kilograms (kg);
M _{0,2020}	is ⇒ 1379.88 ⇔ the M0 value applicable in the reference year 2020.

5. For a manufacturer that has been granted a derogation with regard to a specific NEDC based emissions target in 2021, the WLTP based derogation target shall be calculated as follows:

Derogation target₂₀₂₁ = WLTP_{CO2} $\cdot \left(\frac{NEDC_{popularget}}{NEDC_{COn}}\right)$

Where:	
WLTP _{CO2}	is as defined in point 3;
NEDC _{CO2}	is as defined in point 3;
NEDC _{2021target}	is the 2021 specific emissions target granted by the Commission
	pursuant to Article $\frac{11}{10}$ of this Regulation.

[₽] new

6. From 1 January 2025, the EU fleet-wide targets and the specific emissions targets of CO₂ for a manufacturer shall be calculated as follows:

6.1 EU fleet-wide targets for 2025 and 2030

6.1.1 EU fleet-wide target for 2025 to 2029

EU fleet-wide target₂₀₂₅ = EU fleet-wide target₂₀₂₁ \cdot (1- reduction factor₂₀₂₅)

Where,

EU fleet-wide target₂₀₂₁ is the average, weighted on the number of newly registered cars of each individual manufacturer, of the specific emissions targets determined for each individual manufacturer in 2021 in accordance with point 4 of this Annex

Reduction factor ₂₀₂₅	is the reduction specified in Article 1(4)(a)

6.1.2 EU fleet-wide target for 2030 onwards

EU fleet-wide target₂₀₃₀ = EU fleet-wide target₂₀₂₁ \cdot (1- reduction factor₂₀₃₀)

Where,

EU fle	eet-wide target ₂₀₂₁	of each indi	, weighted on the number of newly registered cars vidual manufacturer, of the specific emissions ined for each individual manufacturer in 2021 in th point 4
Reduc	tion factor ₂₀₃₀	is the reductio	n specified in Article 1(5)(a)
6.2	Specific emissions re	ference targets	from 2025 onwards
6.2.1	2025 to 2029		
The sp	pecific emissions refere	ence target = EU	J fleet-wide target ₂₀₂₅ + $a_{2025} \cdot (TM-TM_0)$
Where	2,		
EU fle	eet-wide target ₂₀₂₅	is as d	etermined in accordance with point 6.1.1
a ₂₀₂₅		is	a ₂₀₂₁ ·EU fleet-wide target ₂₀₂₅ Average emissions ₂₀₂₁
	where,		
	a ₂₀₂₁	applyi test m emissi	slope of the best fitting straight line established by ng the linear least squares fitting method to the ass (explanatory variable) and the specific CO_2 ons (dependent variable) of each individual e in the 2021 EU fleet
	average emissions ₂₀₂	newly manuf	average of the specific emissions of CO_2 of all registered vehicles in 2021 of those acturers for which a specific emissions target is atted in accordance with point 4
	ТМ		e test mass in kilograms of all newly registered
	TN (e manufacturer in the relevant calendar year
	TM_0	is the value de	termined in accordance with Article 13(1)(d)
6.2.2	6.2.2 2030 onwards		
The specific emissions reference target = EU fleet-wide target ₂₀₃₀ + a_{2030} · (TM-TM ₀)			
Where,			
EU fle	eet-wide target ₂₀₃₀	is as d	etermined in accordance with point 6.1.2
a ₂₀₃₀		is	a ₂₀₂₁ ·EU fleet-wide target ₂₀₅₀ Average emissions ₂₀₂₁
	where,		
	a ₂₀₂₁	applyi test m emissi	slope of the best fitting straight line established by ng the linear least squares fitting method to the ass (explanatory variable) and the specific CO_2 ons (dependent variable) of each individual e in the 2021 EU fleet

average emissions ₂₀₂₁	is the average of the specific emissions of CO_2 of all newly registered vehicles in 2021 of those manufacturers for which a specific emissions target is calculated in accordance with point 4
	s the average test mass in kilograms of all newly registered rehicles of the manufacturer in the relevant calendar year
TM ₀ is	s the value determined in accordance with Article 13(1)(d)

6.3 The specific emissions target from 2025 onwards

Specific emissions target = specific emissions reference target · ZLEV factor

Where,

V

х

Specific emissions reference target	is the specific emissions reference target of CO_2 determined in accordance with point 6.2.1 for the period 2025 to 2029 and 6.2.2 for 2030 onwards
ZLEV factor	is (1+y-x), unless this sum is larger than 1.05 or lower than 1.0 in which case the ZLEV factor shall be set to 1.05 or 1.0 as the case may be
Where,	

is the share of zero- and low-emission vehicles in the manufacturer's fleet of newly registered passenger cars calculated as the total number of zero- and low-emission vehicles, where each of them is counted as ZLEV_{specific} in accordance with the formula below, divided by the total number of passenger cars registered in the relevant calendar year

$$ZLEV_{specific} = 1 - \left(\frac{specific\ emissions}{50}\right)$$

is 15% in the years 2025 to 2029 and 30% in 2030 onwards.

✓ 510/2011 (adapted)
 ⇒ new

ANNEX I

<u>PART B.</u> SPECIFIC CO₂ EMISSIONS TARGETS Some FOR LIGHT COMMERCIAL VEHICLES <

1. \Rightarrow In 2020 \Leftrightarrow \mp the indicative specific emissions of CO₂ for each light commercial vehicle, measured in grams per kilometre, shall be determined in accordance with the following formulae:

(a) from 2014 to 2017:

Indicative specific emissions of $CO_2 = 175 + a \times (M - M_0)$

where:

M = mass of the vehicle in kilograms (kg)

₩₀	=	1706,0
a	=	0,093;

↓ 748/2017 Art. 1

(b) from 2018:

Specific emission of $CO_2 = 175 + a \times (M - M_0)$

Where:

M	=	mass of the vehicle in kilograms (kg)
₩₀	=	1766,4
a	=	0,093;

from 2020:

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Indicative s Specific emissions of CO_2 = 147 + a \cdot (M - M_0)
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where:

М	=	mass ⇒ in running order ⇔ of the vehicle in kilograms (kg)
M ₀	=	the value adopted pursuant to Article $\frac{13(5)}{1}$ \Rightarrow 1 766.4 \Leftrightarrow
a	=	0 <u>₹</u> 096.

↓ 510/2011	
⇒ new	

2. The specific emissions target for a manufacturer in $\frac{a \text{ calendar year}}{a \text{ calendar year}} \Rightarrow 2020 \Leftrightarrow$ shall be calculated as the average of the indicative specific emissions of CO₂ of each new light commercial vehicle registered in that calendar year of which it is the manufacturer.

3. The specific emission reference target for a manufacturer in 2021 shall be calculated as follows:

WLTP specific emission reference target = WLTP_{CO2} $\cdot \left(\frac{\text{NEDC}_{2020185981}}{\text{NEDC}_{CO2}} \right)$

Where:

WLTP _{CO2}	is the average specific emissions of CO_2 in 2020 determined in accordance with Annex XXI to Regulation (EU) 2017/1151 without including CO_2 savings resulting from the application of Article $\frac{12}{11}$ of this Regulation;
NEDC _{CO2}	is the average specific emissions of CO_2 in 2020 determined in accordance with Implementing Regulation (EU) 2017/1152, without including CO_2 savings resulting from the application of Article $\frac{12}{11}$ of this Regulation;
NEDC _{2020targ}	et is the 2020 specific emissions target calculated in accordance with point $1(e)$ and 2 of this Annex.

4. Starting from \Rightarrow For the calendar years \Leftrightarrow 2021 \Rightarrow to 2024 \Leftrightarrow , the specific emissions target for a manufacturer shall be calculated as follows:

Specific emissions target= WLTP_{reference target} + a [$(M_{\emptyset}-M_0) - (M_{\emptyset2020} - M_{0,2020})$]

Where:

WLTP _{reference target}	is the 2021 \boxtimes WLTP \bigotimes specific emission reference target calculated in accordance with point 3; is <u>0.096</u> a as defined in point 1(c);
Mø	is the average of the mass \Rightarrow in running order \Leftrightarrow (M) as defined in point 1 of the new registered light commercial vehicles in the relevant target year in kilograms (kg);
M ₀	is $\frac{M_0}{2}$ as defined in point 1(c) \Rightarrow 1 766.4 in 2020 and, for the period 2021, 2022 and 2023, the value adopted pursuant to Article 13(5) of Regulation (EU) No 510/2011, and for 2024 the value adopted pursuant to Article 13(1)(b) of this Regulation \Leftrightarrow ;
M_{o2020}	is the average of the mass \Rightarrow in running order \Leftrightarrow (M) as defined in point 1 of the new registered light commercial vehicles in 2020 in kilograms (kg);
M _{0,2020}	is \Rightarrow 1 766.4 \Leftarrow the M ₀ -value applicable in the reference year 2020.

5. For a manufacturer that has been granted a derogation with regard to a specific NEDC based emissions target in 2021, the WLTP based derogation target shall be calculated as follows:

Derogation target₂₀₂₁ = WLTP_{CO2} $\cdot \left(\frac{NEDC_{BOBIOT arget}}{NEDC_{COB}}\right)$

Where:

WLTPC02is WLTPC02 as defined in point 3;NEDCC02is NEDCC02 as defined in point 3;NEDC2021targetis the 2021 specific emissions target granted by the Commission pursuant to Article 11 of this Regulation.

[₽] new

6. From 1 January 2025, the EU fleet-wide targets and the specific emissions target of CO₂ for a manufacturer shall be calculated as follows:

- 6.1 The EU fleet-wide targets for 2025 and 2030
- 6.1.1 EU fleet-wide target for 2025 to 2029

EU fleet-wide target₂₀₂₅ = EU fleet-wide target₂₀₂₁ \cdot (1- reduction factor₂₀₂₅)

- Where,
- EU fleet-wide target₂₀₂₁ is the average, weighted on the number of newly registered light commercial vehicles of each individual manufacturer, of the specific emissions targets determined for each individual manufacturer in 2021 in accordance with point 4
- Reduction factor₂₀₂₅ is the reduction specified in Article 1(4)(b)
- 6.1.2 EU fleet-wide target for 2030 onwards

EU fleet-wide target₂₀₃₀ = EU fleet-wide target₂₀₂₁ × (1- reduction factor₂₀₃₀)

Where,

- EU fleet-wide target₂₀₂₁ is the average, weighted on the number of newly registered light commercial vehicles of each individual manufacturer, of the specific emissions targets determined for each individual manufacturer in 2021 in accordance with point 4
- Reduction factor₂₀₃₀ is the reduction specified in Article 1(5)(b)
- 6.2 The specific emissions reference target from 2025 onwards
- 6.2.1 2025 to 2029

The specific emissions reference target = EU fleet-wide target₂₀₂₅ + α · (TM-TM₀)

Where,

EU fleet wide target ₂₀₂₅	is as determined in accordance with point 6.1.1
α	is a_{2025} where the average test mass of a manufacturer's newly registered vehicles is equal to or lower than TM ₀ determined in accordance with Article 13(1)(d) and a_{2021} where the average test mass of a manufacturer's newly registered vehicles is higher than TM ₀ determined in accordance with Article 13(1)(d),
where,	
a ₂₀₂₅	$\frac{a_{2021}-EUflest-widetarget_{2025}}{Averageemissions_{2021}}$
a ₂₀₂₁	is the slope of the best fitting straight line established by applying the linear least squares fitting method to the test mass (explanatory variable) and the specific CO_2 emissions (dependent variable) of each newly registered vehicle in the 2021 EU fleet
average emissions ₂₀₂₁	is the average of the specific emissions of CO_2 of all newly registered vehicles in 2021 of those manufacturers for which a specific emissions target is calculated in accordance with point 4
ТМ	is the average test mass in kilograms of all newly
	registered vehicles of the manufacturer in the relevant calendar year
TM ₀	is the value determined in accordance with Article $13(1)(d)$
6.2.2 2030 onwards	

The specific emissions reference target = EU fleet-wide target₂₀₃₀ + α · (TM-TM₀)

EU fleet wide target ₂₀₃₀	is as determined in accordance with point 6.1.2
α	is a_{2030} where the average test mass of a manufacturer's newly registered vehicles is equal to or lower than TM ₀ determined in accordance with Article 13(1)(d) and a_{2021} where the average test mass of a manufacturer's newly registered vehicles is higher than TM ₀ determined in accordance with Article 13(1)(d),
where,	
a_{2030}	IS <i>a₂₀₂₁-EU fleet—wide target₂₀₃₀</i> <i>Average emissions₂₀₂₁</i>
a ₂₀₂₁	is the slope of the best fitting straight line established by applying the linear least squares fitting method to the test mass (explanatory variable) and the specific CO_2 emissions (dependent variable) of each newly registered vehicle in the 2021 EU fleet

average emissions ₂₀₂₁	is the average of the specific emissions of CO_2 of all newly registered vehicles in 2021 of those manufacturers for which a specific emissions target is calculated in accordance with point 4	
ТМ	is the average test mass in kilograms of all newly registered vehicles of the manufacturer in the relevant calendar year	
TM ₀	is the value determined in accordance with Article 13(1)(d)	
6.3 Specific emissions targets from 2	2025 onwards	
6.3.1 From 2025 to 2029		
The specific emissions target = (spe	ecific emissions reference target – $(\emptyset_{targets} - EU$ fleet-wide target ₂₀₂₅)) · ZLEV factor	
Where,		
Specific emissions reference target	is the specific emissions reference target for the manufacturer determined in accordance with point 6.2.1	
Ø _{targets}	is the average, weighted on the number of newly registered light commercial vehicles of each individual manufacturer, of all the specific emissions reference targets determined in accordance with point 6.2.1	
ZLEV factor	is (1+y-x), unless this sum is larger than 1.05 or lower than 1.0 in which case the ZLEV factor shall be set to 1.05 or 1.0 as the case may be	
Where,		
У	is the share of zero- and low-emission vehicles in the manufacturer's fleet of newly registered light commercial vehicles calculated as the total number of zero- and low-emission vehicles, where each of them is counted as ZLEV _{specific} in accordance with the formula below, divided by the total number of light commercial vehicles registered in the relevant calendar year	
$ZLEV_{specific} = 1 - \left(\frac{specific\ emissions}{50}\right)$		
X	is 15%	

6.3.2 From 2030 onwards

The specific emissions target = (specific emissions reference target – ($\emptyset_{targets}$ – EU fleet-wide target₂₀₃₀)) · ZLEV factor

Where,

Specific emissions reference target	is the specific emissions reference target for the manufacturer determined in accordance with point 6.2.2
Ø _{targets}	is the average, weighted on the number of newly registered light commercial vehicles of each individual manufacturer, of all the specific emissions reference targets determined in accordance with points 6.2.2
ZLEV factor	is $(1+y-x)$, unless this sum is larger than 1.05 or lower than 1.0 in which case the ZLEV factor shall be set to 1.05 or 1.0 as the case may be
Where,	
У	is the share of zero- and low-emission vehicles in the manufacturer's fleet of newly registered light commercial vehicles calculated as the total number of zero- and low-emission vehicles, where each of them is counted as ZLEV _{specific} in accordance with the formula below, divided by the total number of light commercial vehicles registered in the relevant calendar year
$ZLEV_{specific} = 1 - \left(\frac{specific\ en}{50}\right)$	nissions)
Χ	is 30%

 \checkmark 397/2013 Art.1 and Annex (adapted)

<u>ANNEX II</u>

$\begin{array}{ccc} \textit{MONITORING} & \textit{AND} & \textit{REPORTING} & \textit{EMISSIONS} \boxtimes \textit{FROM} & \textit{NEW} & \textit{PASSENGER} \\ & \textit{CARS} & \boxtimes \end{array}$

PARTA — Collection of data on new passenger cars and determination of CO₂ monitoring information

✓ 2017/1502 Art. 1 and Annex pt.
 2(a) (adapted)
 ⇒ new

1. Member States shall, for each calendar year, record the following detailed data for each new passenger car registered \Rightarrow as an M1 vehicle \Leftrightarrow in their territory:

- (a) the manufacturer;
- (b) the type-approval number with its extension;
- (c) the type, variant, and version (where applicable);
- (d) make and commercial name;

- (e) category of vehicle type-approved;
- (f) total number of new registrations;
- (g) mass in running order;
- (h) the specific emissions of CO₂ (NEDC and WLTP);

(i) footprint: the wheel base, the track width steering axle and the track width other axle;

- (j) the fuel type and fuel mode;
- (k) engine capacity;
- (l) electric energy consumption;

(m) code for the innovative technology or group of innovative technologies and the CO₂ emissions reduction due to that technology (NEDC and WLTP);

- (n) maximum net power;
- (o) vehicle identification number;
- (p) WLTP test mass;
- (q) deviation and verification factors referred to in point 3.2.8 of Annex I to Implementing Regulation (EU) 2017/1153;
- (r) category of vehicle registered =:

↓ new

- (s) vehicle family identification number;
- (t) electric range, where applicable.

 \checkmark 2017/1502 Art. 1 and Annex pt. 2(a) (adapted)

However, for the calendar year 2017, the data referred to in point (g) as regards WLTP CO2 emissions values, and in point (l), as regards WLTP eco-innovation savings, as well as the data referred to in points (n), (o) and (q) may be reported on a voluntary basis.

Starting from calendar year 2018, Member States shall make available to the Commission, in accordance with Article $\$\underline{7}$ all parameters listed in this point as specified in the format in Section point 2 of Part \underline{CB} .

Member States shall make available the data referred to in point (f) for calendar years 2017 and 2018.

↓ 397/2013 Art. 1 and Annex (adapted)

2. The detailed data referred to in point 1 shall be taken from the certificate of conformity of the relevant passenger car. $\frac{1}{2}$ or be consistent with the certificate of conformity issued by the manufacturer of the relevant passenger car. Where the certificate of conformity is not used, Member States shall put the necessary measures in place to ensure adequate

accuracy in the monitoring procedure. Where both a minimum value and a maximum value are specified for the mass or footprint values referred to in point 1(i) for a passenger car, Member States shall use only the maximum figure for the purposes of this Regulation. In the case of bi-fuelled vehicles (petrol/gas), the certificates of conformity of which bear specific CO₂ emissions figures for both types of fuel, Member States shall use only the figure measured for gas.

3. Member States shall, for each calendar year, determine:

(a) the sources used for the collection of the detailed data referred to in point 1;

 (\underline{ba}) the total number of new registrations of new passenger cars subject to EC type-approval;

 (\underline{eb}) the total number of new registrations of new individually approved passenger cars;

 $(\underline{\mathbf{dc}})$ the total number of new registrations of new passenger cars approved nationally in small series;

(c) the percentage of all fuel filling stations on their territory providing E85.

PART B — Methodology for determining CO2 monitoring information for new passenger cars

Monitoring information which Member States are required to determine in accordance with points 1 and 3 of Part A shall be determined in accordance with the methodology in this Part.

1. Number of new passenger ears registered

Member States shall determine the number of new passenger cars registered within their territory in the respective monitoring year divided into vehicles subject to EC type-approval, individual approvals and national approvals of small series.

2. The distribution by version of new passenger cars

For each version of each variant of each type of new passenger ear, the number of newly registered passenger ears and the detailed data referred to in point 1 of Part A shall be recorded.

3. The fuel stations in their territory that supply E85 fuel shall be indicated in accordance with Article 6 of Commission Regulation (EU) No 1014/2010⁴.

✓ 2017/1502 Art. 1 and Annex pt.
 2(b) (adapted)
 ⇒ new

$PART \in \underline{B}$ — Format for the transmission of data

For each year, Member States shall report the information specified in points 1 and 3 of Part A in the following formats:

Section 1 - Aggregated monitoring

Member State²

OJL 293, 11.11.2010, p. 15.

1

Year	
Data source	
Total number of new registrations of new passenger cars subject to EC type-approval	
Total number of new registrations of new individually approved passenger cars	
Total number of new registrations of new passenger cars approved nationally in small series	

Reference to Point 1 of Part A	Detailed data per vehicle registered
	Manufacturer name EU standard denomination
(a)	Manufacturer name OEM declaration
	Manufacturer name in Member State registry ¹
(b)	Type approval number and its extension
	Туре
(c)	Variant
	Version
(d)	Make and commercial name
(e)	Category of vehicle type approved
(f)	Total number of new registrations (for 2017 and 2018)
(g)	Mass in running order
(h)	Specific CO ₂ emissions (combined)
	NEDC value ⇒ until 31 December 2020 except for vehicles that fall within the scope of Article 5 for which the NEDC value shall be determined until 31 December 2022 in accordance with Article 5 of Implementing Regulation (EU) 2017/1153 ⇔
	Specific CO ₂ emissions (combined) WLTP value (from 2019)
(i)	Wheel base
(i)	wheel base

Section 2 Detailed	monitoring data	ana vahiala raaard
Section 2 – Detailed	monitoring uata –	· one venicle record

² ISO 3166 alpha-2 codes with the exception of Greece and the United Kingdom for which the codes are 'EL' and 'UK' respectively.

	Track width steering axle (Axle 1)
	Track width other axle (Axle 2)
	Track width other axie (Axie 2)
(j)	Fuel type
	Fuel mode
(k)	Engine capacity (cm ³)
(1)	Electric energy consumption (Wh/km)
	Code of the eco-innovation(s)
(m)	Total NEDC CO ₂ emissions savings due to the eco- innovation(s) \Rightarrow until 2020 inclusive \Leftarrow
	Total WLTP CO_2 emissions savings due to the eco- innovation(s) (from 2019)
(n)	Maximum net power
(0)	Vehicle identification number (from 2019)
(p)	WLTP test mass (from 2019)
(q)	Deviation factor De (where available)
(r)	Verification factor (where available)
(r)	Category of vehicle registered
<u>(s)</u>	⇒ Vehicle family identification number ⇔
<u>(t)</u>	\Rightarrow electric range, where applicable \Leftrightarrow

Notes:

¹ In the case of the national small series approvals (NSS) or the individual approvals (IVA), the manufacturer name shall be provided in the column "Manufacturer name in Member State registry" whilst in the column "Manufacturer name EU standard denomination" either of the following shall be indicated: "AA-NSS" or "AA-IVA" as the case may be.'.

↓ 510/2011 (adapted)

<u>Annex H III</u>

MONITORING AND REPORTING OF EMISSIONS ▷ FROM LIGHT COMMERCIAL VEHICLES ⊲

A. Collection of data on light commercial vehicles and determination of CO₂ monitoring information

↓ 404/2014 Art. 1 and Annex pt.1(a)
 →1 2017/1499 Art. 1 and Annex pt.2(a)(i)
 →2 2017/1499
 ⇒ new

1. Detailed data

1.1. Complete vehicles registered as N₁

In the case of EC type-approved complete vehicles registered as N_1 , Member States shall, for each calendar year, record the following detailed data for each new light commercial vehicle the first time that it is registered in their territory:

- (a) the manufacturer;
- (b) the type-approval number with its extension;
- (c) the type, variant, and version;
- (d) make;
- (e) category of vehicle type-approved;
- (f) category of vehicle registered;
- (g) the specific emissions of $CO_2 \rightarrow_1$ (NEDC and WLTP) \leftarrow ;
- (h) mass in running order;
- (i) technically permissible maximum laden mass;

(j) footprint: the wheel base, the track width steering axle and the track width other axle;

- (k) the fuel type and fuel mode;
- (l) engine capacity;
- (m) electric energy consumption;
- (n) code of the innovative technology or group of innovative technologies and the CO₂ emissions reduction due to that technology \Rightarrow_2 (NEDC and WLTP) \Leftarrow ;
- (o) the vehicle identification number.

✓ 2017/1499 Art.1 and Annex pt.
 2(a)(i) (adapted)

(p) WLTP test mass;

(q) Deviation and verification factors referred to in point 3.2.8 of Annex I to Implementing Regulation (EU) 2017/1152;

(r) Vehicle family identification number determined in accordance with point 5.0 of Annex XXI to Regulation (EU) $2017/1151_{\frac{1}{2}}$

[₽] new

(s) electric range, where applicable.

 \checkmark 2017/1499 Art. 1 and Annex pt. 2(a)(ii) (adapted)

For the calendar year 2017, the data referred to in point (g), as regards WLTP CO2 emissions values, and in point (n), as regards WLTP eco-innovation savings, as well as the data referred to in points (p) and (r) may be reported on a voluntary basis.

Starting from calendar year 2018, Member States shall make available to the Commission, in accordance with Article $\frac{\$}{2}$, all parameters listed in this point as specified in the format of Section 2 of Part C of this Annex.

↓ 404/2014 Art. 1 and Annex pt. 1(a)

The format set out in Section 2 of Part C shall be used.

1.2. Vehicles approved in a multi-stage process and registered as N₁ vehicles

In the case of multi-stage vehicles registered as N_1 vehicles, Member States shall, for each calendar year, record the following detailed data with regard to:

(a) the base (incomplete) vehicle: the data specified in points (a), (b), (c), (d), (e), (g), (h), (i), (n) and (o) of point 1.1, or, instead of the data specified in (h) and (i), the default added mass provided as part of the type-approval information specified in point 2.17.2 of Annex I to Directive 2007/46/EC;

(b) the base (complete) vehicle: the data specified in points (a), (b), (c), (d), (e), (g), (h), (i), (n) and (o) of point 1.1;

(c) the completed vehicle: the data specified in points (a), (f), (g), (h), (j), (k), (l), (m) and (o) specified in point 1.1.

Where any of the data referred to in points (a) and (b) of this point cannot be provided for the base vehicle, the Member State shall provide data with regard to the completed vehicle instead.

The format set out in Section 2 of Part C shall be used for completed N_1 vehicles.

The vehicle identification number referred to in point (o) of point 1.1 shall not be made public.

↓ 510/2011 (adapted) → $_1 205/2012$ Art. 1 and Annex pt.1(a)

2. \rightarrow_1 The details referred to in point 1 shall be taken from the certificate of conformity or be consistent with the certificate of conformity issued by the manufacturer of the relevant light commercial vehicle. Where the certificate of conformity is not used, Member States shall put the necessary measures in place to ensure adequate accuracy in the monitoring procedure. \leftarrow Where the certificate of conformity specifies both a minimum and a maximum mass for a light commercial vehicle, the Member States shall use only the maximum figure for the purpose of this Regulation. In the case of bi-fuelled vehicles (petrol/gas) the certificates of conformity of which bear specific CO₂ emission figures for both types of fuel, Member States shall use only the figure measured for gas.

↓ 404/2014 Art. 1 and Annex pt.
 1(b) (adapted)

3. Member States shall, for each calendar year, determine:

(a) the sources used for the collection of the detailed data referred to in point 1;

 (\underline{ba}) the total number of new registrations of new light commercial vehicles subject to EC type-approval;

 (\underline{eb}) the total number of new registrations of new light commercial vehicles subject to multi-stage type-approval, where available;

 $(\underline{\mathbf{dc}})$ the total number of new registrations of new individually approved light commercial vehicles;

 (\underline{ed}) the total number of new registrations of new light commercial vehicles approved nationally in small series.

↓ 404/2014 Art. 1 and Annex pt.
 2(a)

B. Methodology for determining CO₂ monitoring information for new light commercial vehicles

Monitoring information which Member States are required to determine in accordance with points 1 and 3 of Part A of this Annex shall be determined in accordance with the methodology in this Part.

1. Number of new light commercial vehicles registered

Member States shall determine the number of new light commercial vehicles registered within their territory in the respective monitoring year divided into vehicles subject to EC typeapproval, individual approvals and national approvals of small series and, where available, the number of multi-stage vehicles.

$\neq \underline{2}$. Completed vehicles

In the case of multi-stage vehicles, the specific emissions of CO_2 of completed vehicles shall be allocated to the manufacturer of the base vehicle.

In order to ensure that the values of CO_2 emissions, fuel efficiency and mass of completed vehicles are representative, without placing an excessive burden on the manufacturer of the base vehicle, the Commission shall come forward with a specific monitoring procedure and shall \Rightarrow where appropriate \Rightarrow review and make the necessary amendments to the relevant type-approval legislation by 31 December 2011 at the latest.

When defining such a procedure, the Commission shall, if appropriate, determine how the mass and CO₂ values are monitored, based on a table of CO₂ values corresponding to different final inertia weight classes or based on only one CO₂ value derived from the base vehicle mass plus a default added mass differentiated by N₄ class. In the latter case, this mass would also be taken for Part C of this Annex.

The Commission shall also ensure that the manufacturer of the base vehicle has timely access to the mass and to the specific emissions of CO₂ of the completed vehicle.

↓ 404/2014 Art. 1 and Annex
 pt.2(c) (adapted)
 ⇒ new

Notwithstanding that \Rightarrow for the purpose of the calculation of the 2020 target in accordance with point 1 of Part B of Annex I \Leftrightarrow the default added mass shall be taken for Part C of this Annex, where that mass value cannot be determined, the mass in running order of the completed vehicle may be used for the provisional calculation of the specific emissions target referred to in Article $\underline{\$2}$ (4).

Where the base vehicle is a complete vehicle, the mass in running order of that vehicle shall be used for the calculation of the specific emissions target. However, where that mass value cannot be determined, the mass in running order of the completed vehicle may be used for the provisional calculation of the specific emissions target.

↓ 404/2014 Art. 1 and Annex pt.3 (adapted)
 →1 2017/1499 Art. 1 and Annex pt. 2(b)(i)
 →2 2017/1499
 ⇒ new

C. Formats for transmission of data

For each year, Member States shall report the information specified in points 1 and 3 of Part A in the following format:

Section 1 - Aggregated monitoring data

Member State ³	
Year	
Data source	
Total number of new registrations of new light commercial vehicles subject to EC type-approval	
Total number of new registrations of individually approved new light commercial vehicles	
Total number of new registrations of new light commercial vehicles approved as national small series	
Total number of new registrations of new light commercial vehicles subject to multi-stage type-approval (where available)	

Section 2 — Detailed monitoring data — one vehicle record		
Reference to Section 1.1 of Part A Detailed data per vehicle registered ⁽¹⁾		
(a)	Manufacturer name EU standard denomination ⁽²⁾	
	Manufacturer name OEM declaration COMPLETE VEHICLE/BASE VEHICLE ⁽³⁾	
	Manufacturer name OEM declaration COMPLETED VEHICLE ⁽³⁾	
	Manufacturer name in Member State registry ⁽²⁾	
(b)	Type-approval number and its extension	
(c)	Туре	
Variant		
	Version	
(d)	Make	
(e)	Category of vehicle type-approved	
(f)	Category of vehicle registered	
→ ₁ (g) ←	• \rightarrow_1 Specific CO ₂ emissions (combined)	

³ ISO 3166 alpha-2 codes with the exception of Greece and the United Kingdom for which the codes are 'EL' and 'UK' respectively.

	NEDC value ← ⇔ until 31 December 2020 ⇔
	 →1 Specific CO2 emissions (combined) WLTP value (from 2018) ←
(h)	Mass in running order BASE VEHICLE
	Mass in running order COMPLETED VEHICLE/COMPLETE VEHICLE
(i) ⁽⁴⁾	Technically permissible maximum laden mass
(j)	Wheel base
	Axle width steering axle (Axle 1)
	Axle width other axle (Axle 2)
(k)	Fuel type
	Fuel mode
(1)	Engine capacity (cm ³)
(m)	Electric energy consumption (Wh/km)
\Rightarrow_2 (n) \Leftarrow	→ ₂ Code of the eco-innovation(s) ←
	→ ₂ Total NEDC CO2 emissions savings due to the eco- innovation(s) ← \Rightarrow until 31 December 2020 \Leftrightarrow
	→ ₂ Total WLTP CO2 emissions savings due to the eco- innovation(s) (from 2018) ←
(0)	Vehicle identification number

	 ✓ 2017/1499 Art. 1 and Annex pt. 2(b)(iii)
(p)	WLTP test mass
(q)	Deviation factor De (where available)
	Verification factor (where available)
(r)	Vehicle family identification number

[↓] new

	(s)	electric range, where available
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Point 2.17.2 of Annex I to	Default added mass (where applicable in the case of
Directive 2007/46/EC ⁴	multi-stage vehicles)

Notes:

- (1) Where, in the case of multi-stage vehicles, data cannot be provided for the base vehicle, the Member State shall as a minimum provide the data specified in this format for the completed vehicle.
- (2) In the case of the national small series approvals (NSS) or the individual approvals (IVA), the manufacturer name shall be provided in the column 'Manufacturer name in Member State registry' whilst in the column 'Manufacturer name EU standard denomination' either of the following shall be indicated: 'AA-NSS' or 'AA-IVA' as the case may be.
- (3) In the case of multi-stage vehicles indicate the base (incomplete/complete) vehicle manufacturer. If the base vehicle manufacturer is not available indicate the manufacturer of the completed vehicle only.
- (4) In the case of multi-stage vehicles indicate the technically permissible maximum laden mass of the base vehicle.
- (5) In the case of multi-stage vehicles, the mass in running order and the technically permissible maximum laden mass of the base vehicle may be replaced by the default added mass specified in the type-approval information in accordance with point 2.17.2 of Annex I to Directive 2007/46/EC.

⁴

In the case of multi-stage vehicles, the mass in running order and the technically permissible maximum laden mass of the base vehicle may be replaced by the default added mass specified in the type-approval information in accordance with point 2.17.2 of Annex I to Directive 2007/46/EC.

ANNEX IV

↑

ANNEA IV Repealed Regulations with lists of their successive amendments				
Regulation (EC) No 443/2009 of the European Parliament and of the Council	(OJ L 140, 5.6.2009, p. 1)			
Commission Regulation (EU) No 397/2013	(OJ L 120, 1.5.2013, p. 4)			
Regulation (EU) No 333/2014 of the European Parliament and of the Council	(OJ L 103, 5.4.2014, p. 15)			
Commission Delegated Regulation (EU) 2015/6	(OJ L 003, 7.1.2015, p. 1)			
Commission Delegated Regulation (EU) 2017/1502	(OJ L 221, 6.8.2017, p. 4)			
Regulation (EU) No 510/2011 of the European Parliament and of the Council	(OJ L 145, 31.5.2011, p. 1)			
Commission Delegated Regulation (EU) No 205/201	(OJ L 072, 10.3.2012, p. 2)			
Regulation (EU) No 253/2014 of the European Parliament and of the Council	(OJ L 084, 20.3.2014, p. 38)			
Commission Delegated Regulation (EU) No 404/201	(OJ L 121, 24.4.2014, p. 1)			
Commission Delegated Regulation (EU) 2017/748 Commission Delegated Regulation (EU) 1499/2017	(OJ L 113, 29.4.2017, p. 9) (OJ L 219, 25.8.2017, p. 1)			

ANNEX V

CORRELATION TABLE

	CORRELATION TABLE	
Regulation (EC) No 443/2009	Regulation (EU) No 510/2011	This Regulation
Article 1, first subparagraph	Article 1(1)	Article 1(1)
Article 1, second subparagraph	Article 1(2)	Article 1(2)
Article 1, third subparagraph	_	Article 1(3)
_	_	Article 1(4)
Article 2(1)	Article 2(1)	Article 2(1)
Article 2(2)	Article 2(2)	Article 2(2)
Article 2(3)	Article 2(3)	Article 2(3)
Article 2(4)	Article 2(4)	Article 2(4)
Article 3(1), introductory wording	Article 3(1), introductory wording	Article 3(1), introductory wording
Article 3(1), points a and b	Article 3(1), points a and b	Article 3(1), points a and
_	Article 3(1), points c, d and e	Article 3(1), points c, d ar e
Article 3(1), points c and d	Article 3(1), points f and g	Article 3(1), points f and g
Article 3(1), point e	Article 3(1), point j	_
Article 3(1), points f and g	Article 3(1), points h and i	Article 3(1), points h and
_	-	Article 3(1), points j, k an 1
Article 3(1), point k	-	_
Article 3(2)	Article 3(2)	Article 3(2)
Article 4(1)	_	_
_	-	Article 4(1), introductory wording
_	_	Article 4(1), point a
_	Article 4, first subparagraph	Article 4(1), point b

	1	1
_	_	Article 4(1), point c
_	Article 4, second subparagraph	Article 4(2)
Article 4, second subparagraph	Article 4, third subparagraph	Article 4(3)
Article 5	Article 5	-
Article 5a	_	Article 5
Article 6	Article 6	-
Article 7(1)	Article 7(1)	Article 6(1)
Article 7(2), points a, b and c	Article 7(2), points a, b and c	Article 6(2), points a, b and c
_	_	Article 6(2), point d
Article 7(3)	Article 7(3)	Article 6(3)
Article 7(4)	Article 7(4)	Article 6(4)
Article 7(5)	Article 7(5)	Article 6(5)
Article 7(6)	Article 7(6)	Article 6(6)
Article 7(7)	Article 7(7)	Article 6(7)
Article 8(1)	Article 8(1)	Article 7(1)
Article 8(2)	Article 8(2)	Article 7(2)
Article 8(3)	Article 8(3)	Article 7(3)
Article 8(4), first and second subparagraphs	Article 8(4), first and second subparagraphs	Article 7(4), first and second subparagraphs
Article 8(4), third subparagraph	-	Article 7(4), third subparagraph
Article 8(5), first subparagraph	Article 8(5)	Article 7(5) first subparagraph
Article 8(5), second subparagraph	Article 8(6)	-
Article 8(6)	Article 8(7)	_
Article 8(7)	_	Article 7(6), first subparagraph

_	_	Article 7(6), second subparagraph
_	Article 8(8)	_
Article 8(8)	_	_
Article 8(9)	Article 8(9)	Article 7(7)
_	-	Article 7(8)
-	Article 8(10)	Article 7(9)
Article 9(1)	Article 9(1)	Article 8(1)
Article 9(2), first subparagraph, introductory wording	Article 9(2), first subparagraph, introductory wording	Article 8(2)
Article 9(2), first subparagraph, point a	Article 9(2), first subparagraph, point a	_
Article 9(2), first subparagraph, point b	Article 9(2), first subparagraph, point b	Article 8(2)
Article 9(2), second subparagraph	Article 9(2), second subparagraph	Article 8(2), second subparagraph
Article 9(3)	Article 9(3)	Article 8(3)
Article 9(4)	Article 9(4)	Article 8(4)
Article 10(1), introductory wording	Article 10(1), introductory wording	Article 9(1), introductory wording
Article 10(1), points a, b, c, d and e	Article 10(1), points a, b, c, d and e	Article 9(1), points a, b, c, d and e
-	-	Article 9(1), point f
Article 10(2)	Article 10(2)	Article 9(2)
Article 11(1)	Article 11(1)	Article 10(1)
Article 11(2)	Article 11(2)	Article 10(2)
Article 11(3)	Article 11(3)	Article 10(3)
Article 11(4), first subparagraph	_	Article 10(4), first subparagraph
Article 11(4), second subparagraph,	_	Article 10(4), second subparagraph, introductory

introductory wording		wording
Article 11(4), second subparagraph, point a	_	Article 10(4), second subparagraph, point a
Article 11(4), second subparagraph, point b	_	_
Article 11(4), second subparagraph, point c	-	Article 10(4), second subparagraph, point b
Article 11(4), third and fourth subparagraphs	_	Article 10(4), third and fourth subparagraphs
Article 11(5)	Article 11(4)	Article 10(5)
Article 11(6)	Article 11(5)	Article 10(6)
Article 11(7)	Article 11(6)	Article 10(7)
Article 11(8)	Article 11(7)	Article 10(8)
Article 11(9)	Article 11(8)	Article 10(9)
Article 12(1), first subparagraph	Article 12(1), first subparagraph	Article 11(1), first subparagraph
Article 12(1), second subparagraph	-	Article 11(1), second subparagraph
Article 12(1), third subparagraph	Article 12(1), second subparagraph	Article 11(1), third subparagraph
_	_	Article 11(1), fourth subparagraph
Article 12(2)	Article 12(2)	Article 11(2)
Article 12(3)	Article 12(3)	Article 11(3)
Article 12(4)	Article 12(4)	Article 11(4)
_	_	Article 12(1)
_	_	Article 12(2)
_	-	Article 12(3)
Article 13(1)	-	_
_	-	Article 13, title
_	-	Article 13(1), first

		subparagraph, introductory wording
Article 13(2), first subparagraph	_	Article 13(1), point a
_	Article 13(2)	Article 13(1), points b
		Article 13(1), points c and d
Article 13(2), second subparagraph	-	-
Article 13(2), third subparagraph	_	Article 13(2)
_	Article 13(1)	Article 14(1)
-	Article 13(4)	-
_	Article 13(5)	-
Article 13(3)	Article 13(6)	Article 14(2)
Article 13(4)	_	-
Article 13(5)	-	-
Article 13(6)	Article 13(3)	-
Article 13(7)	_	Article 14(3)
Article 14(1)	Article 14(1)	Article 15(1)
Article 14(2)	Article 14(2)	Article 15(2)
Article 14(3)	Article 14(3)	Article 15(3)
Article 14a(1)	Article 15(3)	Article 16(1)
Article 14a(2)	Article 15(1)	Article 16(2)
Article 14a(3)	Article 16	Article 16(3)
Article 14a(4)	Article 15(2)	_
Article 14a(5)	Article 17	_
_	_	Article 17
Article 15	_	Article 17
Article 16	Article 18	Article 18
Annex I	-	Annex I, part A

Annex II, part A Annex II, parts B Annex II, part C –

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Annex IAnnex I, part B-Annex II, part A---Annex II, part BAnnex IIAnnex III-Annex IV-Annex V