
Changes to legislation: There are outstanding changes not yet made to Regulation (EU) 2019/1242 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO2 emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (Text with EEA relevance)

Changes to legislation: There are outstanding changes not yet made to Regulation (EU) 2019/1242 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

ANNEX II

Adjustment procedures

1. PAYLOAD ADJUSTMENT FACTORS REFERRED TO IN POINT (C) OF ARTICLE 14(1)

Subject to point (a) of Article 11(2), for the purposes of calculating the reference CO₂ emissions referred to in the second paragraph of Article 1, the mission profile weights and payload values applicable in the reporting period when the changes referred to in point (c) of Article 14(1) take effect for all new heavy-duty vehicles shall be used and the CO₂ emissions in g/km of a heavy-duty vehicle ν determined for a mission profile mp referred to in Table 2 in point 2.1 of Annex I shall be adjusted as follows:

$$CO_{2\nu,mp} = CO_{2(RP)\nu,mp} \times \left(1 + PLa_{sg,mp} \times \left(PL_{sg,mp} - PL(RP)_{sg,mp} \right) \right)$$

where:

| | |
|--------------------|---|
| sg | is the vehicle sub-group to which the vehicle ν belongs; |
| $CO_{2(RP)\nu,mp}$ | is the specific CO ₂ emissions of vehicle ν in g/km, as determined on mission profile mp and based on the monitoring data for the reference period as reported in accordance with Regulation (EU) 2018/956; |
| $PL(RP)_{sg,mp}$ | is the payload value, which was attributed to vehicle ν in the vehicle sub-group sg on the mission profile mp in the reference period, in accordance with Table 3 of point 2.5 of Annex I, for the purposes of establishing the monitoring data for the reference period as reported in accordance with Regulation (EU) 2018/956; |
| $PL_{sg,mp}$ | is the payload value attributed to vehicles in the vehicle sub-group sg on the mission profile mp in the reporting period when the changes referred to in point (c) of Article 14(1) take effect for all new heavy-duty vehicles, in accordance with Table 3 of point 2.5 of Annex I; |
| $PLa_{sg,mp}$ | is the payload adjustment factor defined in Table 5. |

TABLE 5

Payload adjustment factors $PLa_{sg,mp}$

| $PLa_{sg,mp}$ (in 1/tonnes) | | Mission profiles mp^a | | | | |
|-----------------------------|-------|-------------------------|-------------|-------------|-------------|-------------|
| | | RDL, RDR | REL, RER | LHL, LHR | LEL, LER | UDL, UDR |
| Vehicle sub-groups (sg) | 4-UD | 0,026 | N.A. | 0,015 | N.A. | 0,026 |
| | 4-RD | | | | | |
| | 4-LH | | | | | |
| | 5-RD | 0,022 | 0,022 | 0,017 | 0,017 | 0,022 |
| | 5-LH | | | | | |
| | 9-RD | 0,026 | 0,025 | 0,015 | 0,015 | 0,026 |
| | 9-LH | | | | | |
| | 10-RD | 0,022 | 0,021 | 0,016 | 0,016 | 0,022 |
| 10-LH | | | | | | |

a See mission profile definitions in point 2.1 of Annex I.

Changes to legislation: There are outstanding changes not yet made to Regulation (EU) 2019/1242 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

2. ADJUSTMENT FACTORS REFERRED TO IN POINT (B) OF ARTICLE 11(2)

Subject to point (b) of Article 11(2), for the purposes of calculating the reference CO₂ emissions referred to in the second paragraph of Article 1, the mission profile weights and payload values applicable in the reporting period when the changes referred to in point (c) of Article 14(1) take effect for all new heavy-duty vehicles shall be used and the CO₂ emissions in g/km of a heavy-duty vehicle v determined for a mission profile mp referred to in point 2.1 of Annex I shall be adjusted as follows:

$$CO_{2v,mp} = CO_{2(RP)v,mp} \times (\sum_r S_{r,sg} \times CO_{2r,mp}) / (\sum_r S_{r,sg} \times CO_{2(RP)r,mp})$$

where:

| | |
|------------------|--|
| \sum_r | is the sum over all representative vehicles r for the vehicle sub-group sg ; |
| sg | is the vehicle sub-group to which the vehicle v belongs; |
| $S_{r,sg}$ | is the statistical weight of the representative vehicle r in the vehicle sub-group sg ; |
| $CO_{2(RP)v,mp}$ | is the specific CO ₂ emissions of vehicle v in g/km, as determined on mission profile mp and based on the monitoring data of the reference period as reported in accordance with Regulation (EU) 2018/956; |
| $CO_{2(RP)r,mp}$ | is the specific CO ₂ emissions of the representative vehicle r in g/km, as determined on mission profile mp in accordance with Regulation (EC) No 595/2009 and its implementing measures in the reference period when $CO_{2(RP)v,mp}$ was determined; |
| $CO_{2r,mp}$ | is the specific CO ₂ emissions of the representative vehicle r , as determined on mission profile mp in accordance with Regulation (EC) No 595/2009 and its implementing measures in the reporting period when the changes referred to in Article 14(2) of this Regulation take effect for all new heavy-duty vehicles. |

The representative vehicle r shall be defined in accordance with the methodology referred to in Article 14(3) of this Regulation.

Changes to legislation:

There are outstanding changes not yet made to Regulation (EU) 2019/1242 of the European Parliament and of the Council. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.

[View outstanding changes](#)

Changes and effects yet to be applied to the whole legislation item and associated provisions

- Annex 2 Pt. 2 words inserted by S.I. 2022/1361 reg. 16(9)
- Art. 3(9) words inserted by S.I. 2022/1361 reg. 16(3)(a)
- Art. 3(10) substituted by S.I. 2022/1361 reg. 16(3)(b)
- Art. 3(11) words inserted by S.I. 2022/1361 reg. 16(3)(c)(i)
- Art. 3(11) words inserted by S.I. 2022/1361 reg. 16(3)(c)(ii)
- Art. 3(16)-(21) inserted by S.I. 2022/1361 reg. 16(3)(d)
- Art. 8(1)(a) sum substituted by S.I. 2020/1402 reg. 8(2)(b)
- Art. 8(1)(b) sum substituted by S.I. 2020/1402 reg. 8(2)(c)
- Art. 11(1)(a) word substituted by S.I. 2020/1402 reg. 11(2)(b)
- Art. 11(1)(b) word substituted by S.I. 2020/1402 reg. 11(2)(c)
- Art. 11(1)(d) word substituted by S.I. 2020/1402 reg. 11(2)(d)
- Art. 11(1)(f) word substituted by S.I. 2020/1402 reg. 11(2)(e)(i)
- Art. 11(1)(f) words substituted by S.I. 2020/1402 reg. 11(2)(e)(ii)
- Art. 15(2)(b) words substituted by S.I. 2022/1361 reg. 16(8)(a)
- Art. 15(2)(d) words inserted by S.I. 2022/1361 reg. 16(8)(b)
- Art. 15(2)(e) words omitted by S.I. 2020/1402 reg. 15(3)
- Art. 15(2)(g) words substituted by S.I. 2022/1361 reg. 16(8)(c)