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CONTRIBUTION

From:	General Secretariat of the Council
To:	Working Party on the Environment
Subject:	Revision of CO2 standards for heavy duty vehicles: follow-up to the WPE meeting on 26 May 2023 - comments from delegations

Following the call for comments (WK 7004/23), delegations will find attached the contributions received from the CZ and FI delegations.

22 June 2023

Proposal for amendments - Revision of CO_2 standards for heavy duty vehicles

CZECH REPUBLIC

General comments:

The Czech Republic recognises the importance of submission of this proposal in the context of efforts to achieve the EU 2030 and 2050 climate target and in terms of other possible positive impacts on the reduction of pollutant emissions and generally supports the reduction of CO2 emissions in the heavy-duty vehicle segment. However, the Czech Republic considers the proposal to be too ambitious from the perspective of vehicles producers, impacts on the dependence on imports of components and resources for low-emission mobility, especially in the short term, a slower development of charging and filling infrastructure for this vehicle segment and, last but not least, impacts on access to mobility and prices of goods and services for citizens.

Also, it is necessary to perceive this proposal in the context of other legislative proposals currently being discussed or recently finalised, which aim to reduce emissions in the transport sector (e.g. new EURO 7 emission standards, Regulation on the deployment of infrastructure for alternative fuels), while all interrelated legislation should be coherent so that development and production can be planned and necessary investments allocated in an efficient and cost-effective manner.

We support the use of renewable and synthetic fuels in heavy-duty vehicles, especially long haul trucks. Their inclusion in the proposal could encourage necessary investments, help decarbonise the existing fleet and have a positive overall impact on the environment. Related legislation, such as the obligations under the Renewable Energy Directive, should be taken into account.

1. The scope

We support the proposed exemptions, e.g. for off-road and special purpose vehicles, also with regard to their use in emergency situations and difficult road conditions and their very small share of CO2 emissions from the HDVs.

Annex I, point 1.2. Vocational vehicles – coherence of the text

We propose to add body work code “17 Timber” according to (EU) No 678/2011 to Annex, point 1.2 in order to be in line with recital 21 where vehicles for forestry are stated to be exempted from having to meet the CO2 targets (“As for certain vehicle groups, which are type-approved, CO2 emissions are not determined yet for technical reasons, these vehicles do not have to meet the CO2 targets set by this Regulation. These are for example special purpose vehicles, such as mobile cranes, carriers of hydraulic multi-equipment or exceptional load transport vehicles, off-road vehicles, such as certain vehicles used for mining, **forestry** and agricultural purposes”).

Annex I, point 1.2. Vocational vehicles are defined by the following criteria:					
Text proposed by the Commission			*Amendment*		
Vehicle category	Chassis configuration	Criteria for vocational vehicles	Vehicle category	Chassis configuration	Criteria for vocational vehicles
N	Rigid	One of the following digits, as listed in Appendix 2 of Annex I to Regulation (EU) 2018/858, is used to supplement the code for bodywork indicated in entry 38 of the certificate of conformity: 09, 10, 15, 16, 18, 19, 20, 23, 24, 25, 26, 27, 28, 31;	N	Rigid	One of the following digits, as listed in Appendix 2 of Annex I to Regulation (EU) 2018/858, is used to supplement the code for bodywork indicated in entry 38 of the certificate of conformity: 09, 10, 15, 16, **17,** 18, 19, 20, 23, 24, 25, 26, 27, 28, 31;

2. The CO2 emission targets

Article 1 – paragraph 4 – new Article 3a

We would like to propose adjustments to the emission targets for 2030 and beyond. We consider the proposed emission target for 2030 (45% reduction compared to the reporting period of the year 2019) to be too ambitious, also in view of the extension of the scope of the Regulation to other vehicle categories. A CO2 reduction emission target close to the low scenario according to the impact assessment of the Commission seems to be more realistic, while still being ambitious. The same applies for the CO2 reduction emission targets for 2035 and 2040. For the years 2035 and 2040, we see setting targets only in the 2027 revision as a possible solution as well.

Article 1 – paragraph 4 – new Article 3a	
Text proposed by the Commission	*Amendment*
(4) the following Articles 3a to 3c are inserted: 'Article 3a CO2 emission targets 1. The average CO2 emissions of the Union fleet of new heavy-duty motor vehicles, other than special purpose, off-road, off-road special purpose, and vocational vehicles shall be reduced by the following percentages compared to the average CO2 emissions of the reporting period of the year 2019: (a) for vehicle sub-groups 4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH for the reporting periods of the years 2025 to 2029 by 15 %,	(4) the following Articles 3a to 3c are inserted: 'Article 3a CO2 emission targets 1. The average CO2 emissions of the Union fleet of new heavy-duty motor vehicles, other than special purpose, off-road, off-road special purpose, and vocational vehicles shall be reduced by the following percentages compared to the average CO2 emissions of the reporting period of the year 2019: (a) for vehicle sub-groups 4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH for the reporting periods of the years 2025 to 2029 by 15 %,

(b) for all vehicle sub-groups for the reporting periods of the years 2030 to 2034 by ***45 %,***	(b) for all vehicle sub-groups for the reporting periods of the years 2030 to 2034 by ***35%,***
(c) for all vehicle sub-groups for the reporting periods of the years 2035 to 2039 by ***65 %,***	(c) for all vehicle sub-groups for the reporting periods of the years 2035 to 2039 by ***50%,***
(d) for all vehicle sub-groups for the reporting periods of the years 2040 onwards by ***90%.***	(d) for all vehicle sub-groups for the reporting periods of the years 2040 onwards by ***70%.***

Annex I – point 4.3.1.

Apart from the comments above on the new article 3a, we propose to distinguish between the vehicles currently in scope of the Regulation (EU) 2019/1242 and the newly covered categories and segments of vehicles. Therefore, for currently regulated classes (4, 5, 9, 10) and new vehicle classes for which CO2 certification and declaration is already in place, a target of -35% in 2030 is proposed. For new vehicle classes for which CO2 declaration will be only possible as of 2025 (53, 54, coaches and their primary vehicles) as per CO2 certification regulation (EU) 2017/2400, a target of -15% in 2030 is proposed. This proposal would be consistent with the proposed reduction pathway for the currently regulated classes for the years 2020-2025 (i.e. around 3% yearly reduction trajectory). For all the vehicles classes, targets of -50% in 2035 and -70% in 2040 are proposed in line with the low scenario of the impact assessment.

Only vehicles with urban mission profiles shall be subject to the zero-emission CO2 target for urban buses (Art 3b) - please, see justification in the respective parts of this document.

As for trailers, the required CO2 reduction targets (-7.5% for drawbar and central axle trailers and -15% for semi-trailers) cannot be calculated with the current state of the “VECTO for trailer” methodology and cannot be reached via all trailer groups with all previously permissible technical solutions in the trailer. The proposed target values require further clarification. The possible influence parameters of weight, rolling resistance and air resistance for trailer optimisation cannot be reduced endlessly, since the trailer, on the one hand, must fulfil a transport operation and, on the other hand, forms under real conditions a unit with the towing vehicle. Consequently, with the revision of the (EU) 2019/1242, the mandate for a regular and timely revision of the “VECTO for Trailer” simulation tool must also be issued in order to directly incorporate new technologies that go beyond the current topics of lightweight construction, tires, rolling resistance and aerodynamics (e.g. recuperation axles, driven axles, energy storage systems for the optimisation of auxiliary units, etc.). It is ineffective to disregard new technologies in the simulation. We propose that the respective subgroups of trailers are evaluated according to their potential for improvement, which can be determined in the “VECTO for Trailer” calculation method, with well-adjusted CO2 fleet limits per subgroup and not with a “flat rate” of -7.5% or -15%. Furthermore, trailers must be brought up stepwise to a final CO2 target. This would offer trailer manufacturers the opportunity to gradually introduce new technologies (e.g. trailers with generator and/or drive axles or devices for energy storage) and at the same time to develop them further after the year 2030. These new technologies cannot be brought onto the market in the short term and therefore cannot initially contribute to achieving the CO2 reduction targets, since validations and implementation of the approval process are still required. E.g. the e-axles cannot be currently type-approved. Furthermore, they are very expensive, have an influence on payload and can only be used for certain transport operations. Therefore, we propose setting a 5% CO2 reduction target for all trailers in 2030, based on the potential that can currently be represented in “VECTO for Trailer”, and increasing this target for individual trailer subgroups to 7.5% in 2040.

Annex I, point 4.3.1.

Text proposed by the Commission

CO2 reduction targets *rfsg* and *rfpsg*						
	Sub-group sg	Reporting period of the years			
		2025 – 2029	2030 – 2034	2035 – 2039	As from 2040
Medium lorries	53, 54	0	***43%***	***64%***	***90%***
Heavy lorries > 7,4t	1s, 1, 2, 3	0	***43%***	***64%***	***90%***
Heavy lorries > 16t with 4x2 and 6x4 axle configurations	4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	15%	***43%***	***64%***	***90%***
Heavy lorries > 16t with special axle configurations	11, 12, 16	0	***43%***	***64%***	***90%***
Coaches (*rfsg*)	32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD	0	***43%***	***64%***	***90%***
Primary vehicles of coaches (*rfpsg*)	32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD	0	***43%***	***64%***	***90%***
Trailers		0	7,5%	7,5%	7,5%
Semi-trailers		0	15%	15%	15%

Amendment

CO2 reduction targets *rfsg* and *rfpsg*					
	Sub-group sg	Reporting period of the years			
		2025 – 2029	2030 – 2034	2035 – 2039	As from 2040
Medium lorries	53, 54	0	***15%***	***50%***	***70%***
Heavy lorries > 7,4t	1s, 1, 2, 3	0	***35%***	***50%***	***70%***
Heavy lorries > 16t with 4x2 and 6x4 axle configurations	4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	15%	***35%***	***50%***	***70%***

	Heavy lorries > 16t with special axle configurations	11, 12, 16	0	***35%***	***50%***	***70%***
	Coaches ***and interurban buses*** (*rfsg*)	32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD ***31-L2, 33-L2***	0	***15%***	***50%***	***70%***
	Primary vehicles of coaches (*rfpsg*)	32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD	0	***15%***	***50%***	***70%***
	Trailers		0	***5%***	***5%***	7,5%
	Semi-trailers		0	***5%***	***5%***	***7,5%***

3. The zero-emission vehicle target for urban buses

The Czech Republic cannot agree with a 100% reduction of CO2 emissions for urban buses as from 2030, as it would put enormous pressure on public transport operators, increase in the costs and therefore price of public transport and endanger access to mobility for citizens. Also, it could lead to disruptive pre-buy effects with negative impact on the environment and the EU decarbonisation efforts. In addition, this requirement will be in contrast with those laid down in the Directive (EU) 2019/1161 on the promotion of clean and energy-efficient road transport vehicles, which are based more on the principle of technological neutrality, provide national authorities and transport operators with a wider portfolio of technological options and set a more realistic pathway. For all the above reasons, it is preferable to set the 2030 target at 80% and to postpone the 100% at least to 2035, as considered by the Commission in its impact assessment.

Moreover, we do not support that the 2030 CO2 reduction target should also apply to Class II buses (vehicles designed for interurban operations with reduced passenger flow), not least because of the higher mileage, often more challenging route profile and lower availability of charging and filling infrastructure.

Article 1 – paragraph 4 – new Article 3b

Article 1 – paragraph 4 – new Article 3b	
Text proposed by the Commission	*Amendment*
(4) the following Articles 3a to 3c are inserted: Article 3b Zero-emission vehicle target for urban buses 1. For vehicles referred to in point 4.2 of Annex I, manufacturers shall comply with the minimum shares of zero-emission vehicles in their fleet of new heavy-duty vehicles as laid down in point 4.3 of Annex I. For new urban buses the share of zero- emissions vehicles shall be ***100%*** as from the reporting period of the year 2030.; 2. Member States may decide to exclude from the obligation under this Article a limited share of the	(4) the following Articles 3a to 3c are inserted: Article 3b Zero-emission vehicle target for urban buses 1. For vehicles referred to in point 4.2 of Annex I, manufacturers shall comply with the minimum shares of zero-emission vehicles in their fleet of new heavy-duty vehicles as laid down in point 4.3 of Annex I. For new urban buses the share of zero- emissions vehicles shall be ***80%*** as from the reporting period of the year 2030 ***and 100% as from the reporting period of the year 2035***. 2. Member States may decide to exclude from the

urban buses registered in each reporting period, confirming that the purpose of the vehicle cannot be equally served by a zero-emission vehicle and it is thus in the public interest to register a non-zero emission vehicle to fulfil that purpose, due to socio-economic cost-benefit in view of specific territorial morphology or meteorological circumstances. The Commission is empowered to adopt delegated acts in accordance with Article 17 to define the maximum share of vehicles that a Member State can exclude, and the socio-economic cost-benefit in view of territorial morphology and meteorological circumstance justifying the exclusion referred to in the previous paragraph. 3. Regarding the use of vehicles referred to in this Article, the Commission shall be empowered to adopt delegated acts in accordance with Article 17 to provide with common technical specifications, including standards, regarding: (a) the technical and open interoperability between the recharging and refuelling infrastructure and the vehicles, in terms of physical connections and communication exchange. (b) the safe and secure sharing and use of the data generated.	obligation under this Article a limited share of the urban buses registered in each reporting period, confirming that the purpose of the vehicle cannot be equally served by a zero-emission vehicle and it is thus in the public interest to register a non-zero emission vehicle to fulfil that purpose, due to socio-economic cost-benefit in view of specific territorial morphology or meteorological circumstances. The Commission is empowered to adopt delegated acts in accordance with Article 17 to define the maximum share of vehicles that a Member State can exclude, and the socio-economic cost-benefit in view of territorial morphology and meteorological circumstance justifying the exclusion referred to in the previous paragraph. 3. Regarding the use of vehicles referred to in this Article, the Commission shall be empowered to adopt delegated acts in accordance with Article 17 to provide with common technical specifications, including standards, regarding: (a) the technical and open interoperability between the recharging and refuelling infrastructure and the vehicles, in terms of physical connections and communication exchange. (b) the safe and secure sharing and use of the data generated.

New Recital (27a)

Text proposed by the Commission	*Amendment*
	Low-entry buses which are registered only in class II are designed for interurban operations and can be clearly identified. With their interurban mission profiles, they should not be subject to the zero-emission target for urban buses. Instead, class II low entry vehicles should be treated as high floor interurban vehicles and coaches .

Annex I - point 4.2.

Annex I, point 4.2.	
Text proposed by the Commission	*Amendment*
The following sub-groups *sg* shall be included in the calculation of the specific CO2 emissions *CO2(X)*,, specific emissions targets *T(X)* and CO2 emissions trajectory *ET(X)Y*:	The following sub-groups *sg* shall be included in the calculation of the specific CO2 emissions *CO2(X)*,, specific emissions targets *T(X)* and CO2 emissions trajectory *ET(X)Y*:

(continued)	(continued)

X = 2025	X= NO	X = MCO2	X= MZE
vehicle sub-groups, subject to CO2 emissions targets according to Article 3a paragraph 1 (a)	sub-groups of transport of goods vehicles, subject to CO2 emissions targets according to Article 3a paragraphs 1(b), 1(c) and 1(d) and paragraph 3	sub-groups of transport of persons vehicles, subject to CO2 emissions targets according to Article 3a paragraphs 1(b), 1(c) and (1d)	sub-groups of transport of persons vehicles, subject to zero-emissions vehicle targets according to Article 3b
4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	All vehicle sub-groups referred to in points 1.1.1 and 1.1.3.	32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD,	31-LF, 31-L1, ***31-L2,*** 31-DD, 33-LF, 33-L1, ***33-L2***, 33-DD, 35-FE, 39-FE

X = 2025	X= NO	X = MCO2	X= MZE
vehicle sub-groups, subject to CO2 emissions targets according to Article 3a paragraph 1 (a)	sub-groups of transport of goods vehicles, subject to CO2 emissions targets according to Article 3a paragraphs 1(b), 1(c) and 1(d) and paragraph 3	sub-groups of transport of persons vehicles, subject to CO2 emissions targets according to Article 3a paragraphs 1(b), 1(c) and (1d)	sub-groups of transport of persons vehicles, subject to zero-emissions vehicle targets according to Article 3b
4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	All vehicle sub-groups referred to in points 1.1.1 and 1.1.3.	***31-L2***, 32-C2, 32-C3, 32-DD, ***33-L2***, 34-C2, 34-C3, 34-DD	31-LF, 31-L1, 31-DD, 33-LF, 33-L1, 33-DD, 35-FE, 39-FE

Annex I - point 4.3.1.

Annex I, point 4.3.1.

Text proposed by the Commission	*Amendment*
4.3.1. The following CO2 emissions reduction targets *rfsg* and *rfpsg* pursuant to Article 3a shall apply to vehicles in the sub-group *sg* for different reporting periods:	4.3.1. The following CO2 emissions reduction targets *rfsg* and *rfpsg* pursuant to Article 3a shall apply to vehicles in the sub-group *sg* for different reporting periods:

Text proposed by the Commission:

CO2 reduction targets *rfsg* and *rfpsg*					
Sub-groups *sg*		Reporting period of the years			
		2025 – 2029	2030 – 2034	2035 – 2039	As from 2040
Medium lorries	53, 54	0	43%	64%	90%
Heavy lorries > 7,4t	1s, 1, 2, 3	0	43%	64%	90%
Heavy lorries > 16 t with 4x2 and 6x4 axle configurations	4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	15%	43%	64%	90%
Heavy lorries > 16 t with special axle configurations	11, 12, 16	0	43%	64%	90%
Coaches (rfsg)	**32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD**	0	43%	64%	90%

Amendment:

CO2 reduction targets *rfsg* and *rfpsg*					
Sub-groups *sg*		Reporting period of the years			
		2025 – 2029	2030 – 2034	2035 – 2039	As from 2040
Medium lorries	53, 54	0	43%	64%	90%
Heavy lorries > 7,4t	1s, 1, 2, 3	0	43%	64%	90%
Heavy lorries > 16 t with 4x2 and 6x4 axle configurations	4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	15%	43%	64%	90%
Heavy lorries > 16 t with special axle configurations	11, 12, 16	0	43%	64%	90%
Coaches ***and Interurban Buses*** (*rfsg*)	***31-L2***, 32-C2, 32-C3, 32-DD, ***33-L2***, 34-C2, 34-C3, 34-DD	0	43%	64%	90%

<table><tr><td>**Primary vehicles of coaches (*rfpsg*)**</td><td>**32-C2, 32-C3, 32-DD, 34-C2, 34-C3, 34-DD**</td><td>0</td><td>43%</td><td>64%</td><td>90%</td></tr><tr><td colspan="2">Trailers</td><td>0</td><td>7,5%</td><td>7,5%</td><td>7,5%</td></tr><tr><td colspan="2">Semi-trailers</td><td>0</td><td>15%</td><td>15%</td><td>15%</td></tr></table>	<table><tr><td>Primary vehicles of coaches ***and interurban buses*** (*rfpsg*)</td><td>***31-L2,*** 32-C2, 32-C3, 32-DD, ***33-L2***, 34-C2, 34-C3, 34-DD</td><td>0</td><td>43%</td><td>64%</td><td>90%</td></tr><tr><td colspan="2">**Trailers**</td><td>0</td><td>7,5%</td><td>7,5%</td><td>7,5%</td></tr><tr><td colspan="2">**Semi-trailers**</td><td>0</td><td>15%</td><td>15%</td><td>15%</td></tr></table>

Annex I - point 4.3.2.

Annex I, point 4.3.2.	
Text proposed by the Commission	*Amendment*
Vehicle sub-groups included in the calculation of average specific CO2 emissions and specific emissions targets of manufacturers 4.3.2. The following sub-groups sg shall be included in the calculation of the specific CO2 emissions CO2(X),, specific emissions targets T(X) and CO2 emissions trajectory ET(X)Y:	Vehicle sub-groups included in the calculation of average specific CO2 emissions and specific emissions targets of manufacturers 4.3.2. The following sub-groups sg shall be included in the calculation of the specific CO2 emissions CO2(X),, specific emissions targets T(X) and CO2 emissions trajectory ET(X)Y:
<table><tr><td colspan="6">Zero-emission vehicle mandates *zevMsg*</td></tr><tr><td colspan="2">Sub-groups *sg*</td><td colspan="4">Reporting period of the years</td></tr><tr><td colspan="2"></td><td>before 2030</td><td>2030 – 2034</td><td>2035 – 2039</td><td>As from 2040</td></tr><tr><td>Urban heavy buses</td><td>31-LF, 31-L1, 31-DD, 33-LF, 33-L1, 33-DD, 35-FE, 39-FE, ***31-L2, 33-L2***</td><td>**0**</td><td>***100%***</td><td>**100%**</td><td>**100%**</td></tr></table>	<table><tr><td colspan="6">Zero-emission vehicle mandates *zevMsg*</td></tr><tr><td colspan="2">Sub-groups *sg*</td><td colspan="4">Reporting period of the years</td></tr><tr><td colspan="2"></td><td>before 2030</td><td>2030 – 2034</td><td>2035 – 2039</td><td>As from 2040</td></tr><tr><td>Urban heavy buses</td><td>31-LF, 31-L1, 31-DD, 33-LF, 33-L1, 33-DD, 35-FE, 39-FE</td><td>**0**</td><td>***80%***</td><td>**100%**</td><td>**100%**</td></tr></table>

4. The review

New Recital (12a)

We would like to supplement the text with a reference to the condition of availability of charging and filling infrastructure. A comprehensive review only in 2028, as proposed by the Commission, is too late and risks being delayed further due to the change of EU legislature in 2029. The review should therefore not take place later than by 31 December 2027. The state of the most important enabling conditions should be thoroughly assessed and in case their development is not in line with the approved CO2 targets, the targets should be reviewed.

New Recital (12a)	
Text proposed by the Commission	*Amendment*
	The market adoption of zero-emission heavy-duty vehicles depends on the enabling conditions, including the availability of charging and filling infrastructure, allowing road haulers and bus operators to operate their vehicles seamlessly and in a cost-effective manner. Therefore, the state of the most important enabling conditions and impact on the automotive sector and citizens should be thoroughly monitored. If they are found to be not in line with the CO2 targets for vehicle manufacturers, the targets should be reviewed.

Article 1 – paragraph 18 – "updated" Article 15

Article 1(18)	
Text proposed by the Commission	*Amendment*
Article 15 is replaced by the following: Article 15 Review The Commission shall, ***in 2028***, review the effectiveness and impact of this Regulation and submit a report to the European Parliament and to the Council with the result of the review. The report shall, where appropriate, be accompanied by a proposal for amending this Regulation.	Article 15 is replaced by the following: Article 15 Review ***and report*** ***1. By 31 December 2026, the Commission shall report to the European Parliament and to the Council, on the state of the enabling conditions for the market adoption of zero-emission heavy-duty vehicles in the Union. In this report, the Commission shall assess in particular, but not limited to, the following elements:*** ***(a) registrations of zero-emission heavy-duty vehicles in Member States,*** ***(b) the deployment of charging and filling infrastructure suitable for heavy-duty vehicles in Member States,*** ***(c) the impact of the implementation of road user charges,*** ***(d) the impact of the level of the average price of allowances under the new the emissions trading system covering road transport,*** ***(e) other measures that support the uptake of zero-emission heavy-duty vehicles,***

	f) the progress in the energy efficiency and affordability of zero- and low-emission vehicles, ***g) impacts on citizens in Member States,*** ***h) impacts on employment in the automotive sector, especially on micro, small and medium-sized enterprises (SMEs), and the effectiveness of measures to support retraining and upskilling of the workforce,*** ***i) the potential contribution of innovation technologies and sustainable alternative fuels, including synthetic fuels, to reach climate neutral mobility.*** ***2. By 31 December 2027 at the latest***, the Commission shall review the effectiveness and impact of this Regulation and submit a report to the European Parliament and to the Council with the result of the review. The report shall, where appropriate, be accompanied by a proposal for amending this Regulation.

5. Flexibilities for zero- and low-emission vehicles

Market penetration of zero-emission technologies in the heavy-duty vehicle sector is still very low and uncertain, being connected to the availability of enabling framework conditions and acceptability from customers. The Regulation should continue to foresee some flexibilities encouraging the vehicle manufacturers in the promotion and selling of the new zero-emission vehicles. For these reasons, the ZLEV factor should be extended alongside the entire period of this Regulation and the cap to the maximum contribution from the ZLEV factor should be raised.

Recital (28)

Recital (28)	
Text proposed by the Commission	*Amendment*
(28) The zero- and low-emission factor should last be applied for the reporting period of the year ***2029, because it is no longer considered necessary after that time as an incentive to promote*** the market entrance of zero-emission vehicles.	(28) The zero- and low-emission factor should last be applied for the reporting period of the year ***2039, in order to continue promoting*** the market entrance of zero-emission vehicles ***in the heavy-duty sector***.

Article 1 – paragraph 6 – point a

Article 1 – paragraph 6 – point a	
Text proposed by the Commission	*Amendment*

(6) Article 5 is amended as follows: (a) paragraph 1 is replaced by the following: ‘1. Starting from 1 July 2020 and for each subsequent reporting period ***until the reporting period of the year 2029***, the Commission shall determine for each manufacturer the zero- and low-emission factor for the preceding reporting period. The zero-emission and low-emission factor shall take into account the number and the CO2 emissions of all zero- and low-emission heavy-duty vehicles in the manufacturer’s fleet.’;	(6) Article 5 is amended as follows: (a) paragraph 1 is replaced by the following: ‘1. Starting from 1 July 2020 and for each subsequent reporting period **[..]**, the Commission shall determine for each manufacturer the zero- and low-emission factor for the preceding reporting period. The zero-emission and low-emission factor shall take into account the number and the CO2 emissions of all zero- and low-emission heavy-duty vehicles in the manufacturer’s fleet.’;

Article 1 – paragraph 6 – point c

Article 1 – paragraph 6 – point c	
Text proposed by the Commission	*Amendment*
(6) Article 5 is amended as follows: (c) paragraph 4 is replaced by the following: ‘4. The zero-emission and low-emission factor shall reduce the average specific CO2 emissions of a manufacturer by a maximum of ***3 %***. The contribution to that factor of the zero-emission vehicles of category N, other than those in vehicles sub-groups 4- UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH, shall reduce the average specific CO2 emissions of a manufacturer by a maximum of ***1,5 %.***’;	(6) Article 5 is amended as follows: (c) paragraph 4 is replaced by the following: ‘4. The zero-emission and low-emission factor shall reduce the average specific CO2 emissions of a manufacturer by a maximum of ***5 %***. The contribution to that factor of the zero-emission vehicles of category N, other than those in vehicles sub-groups 4- UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH, shall reduce the average specific CO2 emissions of a manufacturer by a maximum of ***3%.***’;

Annex I – point 2.3.2.

Annex I, point 2.3.2.	
Text proposed by the Commission	*Amendment*
2.3.2. Reporting periods from 2025 ***to 2029*** […]	2.3.2. Reporting periods from 2025 ***onwards*** […]

Annex I – point 2.3.3.

Annex I, point 2.3.3.	
Text proposed by the Commission	*Amendment*
2.3.3 Reporting periods as from 2030 **ZLEV = 1**	**Deleted**

6. Baseline

Annex I - point 3.2.

A solid baseline and sufficient lead time are crucial for reaching the reduction targets. CO_2 data for several of the vehicle segments that are now proposed to be included in the scope of the Regulation has already been reported by manufacturers and Member States to the European Commission. Therefore, where possible, an earlier baseline than proposed in the draft Regulation can and should be established. This is specifically the case for medium and heavy lorries in vehicle sub-groups 1s, 1, 2, 3, 11, 12, 16. Based on the data available to the European Commission (and the European Environment Agency) a new baseline can be established for the reference period 2020 (1 July 2020 – 30 June 2021). This would allow for significantly more lead time for manufacturers and an ambitious reduction target.

Annex I, point 3.2.

Text proposed by the Commission

3.2. Reference periods applicable to sub-groups

The following reporting periods shall be applied as reference periods to vehicle sub-groups:

Vehicle sub-group sg	Reporting period of the year applicable as reference period
4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	2019
All others	2025

Amendment

3.2. Reference periods applicable to sub-groups

The following reporting periods shall be applied as reference periods to vehicle sub-groups:

Vehicle sub-group sg	Reporting period of the year applicable as reference period
4-UD, 4-RD, 4-LH, 5-RD, 5-LH, 9-RD, 9-LH, 10-RD, 10-LH	2019
1s, 1, 2, 3, 11, 12, 16	***2020***
All others	2025

7. Credit/debt mechanism

We would like to add text that allows more flexibility in transferring credits and debts. Vehicle manufactures have a debt limit of 5% of the current year's target. Due to persisting uncertainties of the enabling conditions of the transition to zero-emission vehicles, especially the charging and filling infrastructure, in the years of the transition between 2027 and 2038, vehicle manufactures would need a relaxation of this debt limit, especially during the early years when higher targets apply (2030, 2035). Also, a flexibility should be given to manufacturers to carry over not only credits but also debts, without imposing a mandatory 5-years clearance of the debts.

Article 1 – paragraph 9 – point d

Article 1 – paragraph 9 – point d	
Text proposed by the Commission	*Amendment*
(d) in paragraph 1, the fourth subparagraph is replaced by the following: 'Emission credits and emission debts acquired in the reporting periods of the years 2025 to 2039 shall, where applicable, be carried over from one reporting period to the next reporting period. ***However, any remaining emission debts shall be cleared in the reporting periods of the year 2029, 2034 and 2039***.'	(d) in paragraph 1, the fourth subparagraph is replaced by the following: 'Emission credits and emission debts acquired in the reporting periods of the years 2025 to 2039 shall, where applicable, be carried over from one reporting period to the next reporting period. **[..]**

Article 1 – paragraph 11 – point c

Article 1 – paragraph 11 – point c	
Text proposed by the Commission	*Amendment*
(11) Article 8 is amended as follows: (a) in point (a) of paragraph 1, "to 2029" is replaced by "onwards"; (b) point (b) of paragraph 1 is deleted; (c) paragraph 2 is replaced by the following: '2. A manufacturer shall be deemed to have excess CO_2 emissions in any of the following cases: (a) where, in any ***of the*** reporting periods ***of the years 2025 to 2028, 2030 to 2033, 2035 to 2038*** the sum of the emission debts reduced by the sum of the emission credits exceeds the emission debt limit referred to in Article 7(1), third subparagraph; ***(b) where, in the reporting period of the years 2029,***	(11) Article 8 is amended as follows: (a) in point (a) of paragraph 1, "to 2029" is replaced by "onwards"; (b) point (b) of paragraph 1 is deleted; (c) paragraph 2 is replaced by the following: '2. A manufacturer shall be deemed to have excess CO_2 emissions in any of the following cases: (a) where, in any reporting period**s** **[..]** the sum of the emission debts reduced by the sum of the emission credits exceeds the emission debt limit referred to in Article 7(1), third subparagraph; **(b) deleted** (c) where, from the reporting period of the year

2034, 2039 and 2040 the sum of the emission debts reduced by the sum of the emission credits is positive; (c) where, from the reporting period of the year 2041 onwards, the manufacturer's average specific CO_2 emissions exceed its specific CO_2 emissions target.';	2041 onwards, the manufacturer's average specific CO_2 emissions exceed its specific CO_2 emissions target.';

8. Delegated acts

The proposed delegation of powers to amend important criteria in Annex I affects core elements of the Regulation and entails major uncertainties for manufacturers. Changes to these criteria would directly affect the compliance strategies of manufacturers as they relate to the definition of subgroups, weighting factors, the operational range, payload, passenger numbers, annual mileage, VECTO cycles, cycle allocation, ZEV definition and definition of vocational vehicles and their allocation. According to Article 290, paragraph 1, subparagraph 2, sentence 2 of the TFEU "the essential elements of an area shall be reserved for the legislative act and accordingly shall not be the subject of a delegation of power". The delegation of powers to change these important parameters of the regulation should be therefore deleted.

Article 14 (1)

Article 14 (1)	
Text proposed by the Commission	*Amendment*
Article 14 is replaced by the following: 'Article 14 **Amendments to the Annexes** ***1. The Commission is empowered to adopt delegated acts in accordance with Article 17 with a view to amending the following elements in Annex I to take into account technical progress, the evolution of freight transport logistics, necessary adjustments based on the application of this Regulation and amendments of the underlying type-approval legislation, in particular Regulations (EU) 2018/858 and (EU) 595/2009:*** ***(a) the criteria defining vehicle sub-groups set out in point 1.1;*** ***(b) the criteria defining vocational vehicles set out in point 1.2;*** ***(c) the criteria for the operational ranges of different powertrain technologies set out in point 1.3;***	Article 14 is replaced by the following: 'Article 14 **Amendments to the Annexes** ***Deleted***

(d) the list of mission profiles set out in point 1.4; ***(e) the weight of mission profiles set out in point 2.1;*** ***(f) the payloads, passenger numbers, passenger masses, technically permissible maximum payloads, technically permissible maximum passenger number and cargo volumes of vehicle sub-groups sg set out in point 2.5;*** ***(g) the annual mileage values set out in point 2.6.***	

9. Other

Annex I – point 1.1.2.

This amendment corrects a typo. Vehicle group 35c in Annex I of Regulation (EU) 2017/2400 would be wrongly attributed to two different sub-groups, 35-FE and 39 FE, in this Regulation. Instead, vehicle group 39c should be only attributed to vehicle sub-group 39-FE.

Annex I (1.1.2)			
Text proposed by the Commission		*Amendment*	
For vehicles of category M the sub-group *sg* is defined as follows: Vehicle group pursuant to Annex I to Regulation (EU) 2017/2400	Vehicle sub-group (sg) attributed for the purposes of this Regulation	For vehicles of category M the sub-group *sg* is defined as follows: Vehicle group pursuant to Annex I to Regulation (EU) 2017/2400	Vehicle sub-group (sg) attributed for the purposes of this Regulation
31a, 31d	**31-LF**	31a, 31d	31-LF
31b1	**31-L1**	31b1	31-L1
31b2	**31-L2**	31b2	31-L2
31c, 31e	**31-DD**	31c, 31e	31-DD
32a, 32b	**32-C2**	32a, 32b	32-C2
32c, 32d	**32-C3**	32c, 32d	32-C3
32e, 32f	**32-DD**	32e, 32f	32-DD
33a, 33d, 37a, 37d	**33-LF**	33a, 33d, 37a, 37d	33-LF
33b1, 37b1	**33-L1**	33b1, 37b1	33-L1
33b2, 37b2	**33-L2**	33b2, 37b2	33-L2
33c, 33e, 37c, 37e	**33-DD**	33c, 33e, 37c, 37e	33-DD
34a, 34b, 36a, 36b, 38a, 38b, 40a, 40b	**34-C2**	34a, 34b, 36a, 36b, 38a, 38b, 40a, 40b	34-C2
34c, 34d, 36c, 36d, 38c, 38d, 40c, 40d	**34-C3**	34c, 34d, 36c, 36d, 38c, 38d, 40c, 40d	34-C3
34e, 34f, 36e, 36f, 38e, 38f, 40e, 40f	**34-DD**	34e, 34f, 36e, 36f, 38e, 38f, 40e, 40f	34-DD
35a, 35b1, 35b2, 35c	**35-FE**	**35a, 35b1, 35b2, 35c**	**35-FE**
39a, 39b1, 39b2, ***35c***	**39-FE**	39a, 39b1, 39b2**, *39c***	**39-FE**

Annex I - point2.1.1.

Mission profile weights (Wsg,mp) of groups 53 (medium lorries of cab type) and 54 (medium lorries of van type) are changed to better reflect the typical usage of these vehicles. Data from field show in fact that regional distribution profiles have a higher share compared to the time that these vehicles spend on urban distribution cycles.

Annex I, point 2.1.1.

Text proposed by the Commission

Vehicle sub-group (sg)*	Mission profile (mp)**									
	RDL	RDR	LHL	LHR	UDL	UDR	REL, RER, LEL, LER	MUL	MUR	COL	COR
53	0,25	0,25	0	0	0,25	0,25	0	0	0	0	0
54	0,25	0,25	0	0	0,25	0,25	0	0	0	0	0

Amendment

Vehicle sub-group (sg)*	Mission profile (mp)**										
	RDL	RDR	LHL	LHR	UDL	UDR	REL, RER, LEL, LER	MUL	MUR	COL	COR
53	0,08	0,79	0	0	0,02	0,11	0	0	0	0	0
54	0,08	0,79	0	0	0,02	0,11	0	0	0	0	0

Annex III – point 1.

This amendment corrects a typo. The definition of reportCO2_v_mp of Annex III should refer to the completed vehicle only. The CO2 emissions of primary vehicles are not corrected for their passenger numbers, since all primary vehicles of a given sub-group are simulated with the same passenger numbers. This is also visible from the definitions of the CO2p_v_mp in point 2.1 of Annex I, which does not refer to Annex III for a correction.

Annex III, point 1. – Normalisation of specific CO2 emissions	
Text proposed by the Commission	*Amendment*
reportCO2_(v,mp) are the CO2 emissions in g/km ***of the primary vehicle*** of ***a*** new heavy-duty vehicle v determined for a mission profile mp and reported in accordance with Articles 13a and 13b;	reportCO2_(v,mp) are the CO2 emissions in g/km of ***the*** new heavy-duty vehicle v determined for a mission profile mp and reported in accordance with Articles 13a and 13b;

FI questions related to the Article 3c, *Public procurement procedures*

Related to the public procurement requirements for urban buses in Article 3c, we find it vital that the wordings of the requirements are clear and unambiguous. Commission guidance on assessing the contribution of an offer to the security-of-supply-criteria set out would in our view be necessary.

We would like some further clarification from the Commission to the following questions:

1) How are the requirements of the article to be evaluated? Should they all be met or would just one be enough as a basis for evaluating the tender's contribution to security of supply? In the article 3c (2) it states that "The tender's contribution to the security of supply shall be assessed, inter alia, based on :" Is the "inter alia" to be interpreted so that the points a-e are indicative and not obligatory for the contracting authority/entity?
2) In weighting of the award criteria, is it enough if the points a-e contribution are in total 15% or should the minimum contribution be for each point a-e individually 15%?
3) Why is the requirement for taking into account security of supply set as criteria that would be evaluated as part of the procurement procedure and not as an obligation?
4) Could the Commission specify what exactly is meant with the wording "in compliance with relevant international law" in Article 3c(1)? Is it referencing for example GPA's or bilateral agreements?