WEIGHTS AND DIMENSIONS OF COMMERCIAL VEHICLES

Proposal COM(2023) 445 of 11 July 2023 for a **Directive** of the European Parliament and of the Council **amending Council Directive 96/53/EC laying down for certain road vehicles** circulating within the Community **the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic.**

cep**PolicyBrief** No. 16/2023

SHORT VERSION [Go to Long Version]

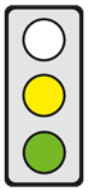
Context | Objective | Interested Parties

Context: The EU wants to reduce its greenhouse gas (GHG) emissions to net zero by 2050 ("climate neutrality"). Heavy duty vehicles (HDVs) - lorries, buses, and their trailers - account for more than 6% of all GHG emissions - most notably CO_2 - and more than 25% of GHG emissions from road transport, and the trend is rising.

Aim: In order to reduce CO_2 emissions in freight transport, an increase in the length, height, and weight of HDVs and HDV-combinations - road trains or articulated lorries - aims to promote zero-emission HDVs and intermodal transport and make transport more efficient. Greater harmonisation is intended to avoid distortions of competition in the internal market.

Affected parties: Freight forwarders, transport companies, shippers, and vehicle manufacturers.

Brief Assessment



Pro

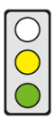
- It is, in principle, appropriate to adapt the requirements relating to the maximum dimensions and weights of HDVs, and to harmonise them across the EU, with a view to preventing potential distortions of competition and providing incentives to increase efficiency and decarbonisation.
- With their additional axle and greater weight of 40 tonnes (t), five-axle lorries enable a higher transport volume per journey without putting more strain on roads and bridges. At the same time, a single lorry is more manoeuvrable than a road train transporting the same quantity.
- The authorisation of 44 t and European Modular Systems (EMS) in cross-border transport between Member States that permit higher weights or EMS nationally, will improve efficiency and competition in road freight transport and contribute to its decarbonisation.

Contra

- The more environmentally friendly "combined transport" by lorry-rail or lorry-ship (CT) risks being cannibalised if CT's forfeited weight privileges – due to higher maximum dimensions and weights – and new competitive disadvantages resulting from EMS are not compensated for elsewhere.

Objective and effect on other modes of transport [Long Version A.2, C.1.1, C.1.3]

Commission proposal: The revision of the maximum dimensions and weights applicable to HDVs aims to provide major incentives for the introduction of zero-emission technologies, increase the efficiency of freight transport, support "intermodal" freight transport using rail, inland waterways, and maritime transport, and avoid distortions of competition.



cep-Assessment: It is, in principle, appropriate to update the EU specifications on the maximum permissible dimensions and weights of HDVs, and to harmonise them across the EU, in order to avoid potential distortions of competition in the EU internal market and create incentives for increasing efficiency and for decarbonising the transport sector. This nevertheless threatens to cannibalise the more environmentally friendly CT if its resulting loss of weight privileges as well as new competitive disadvantages are not compensated for elsewhere.

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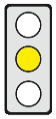
Longer and heavier zero-emission HDVs [Long Version A.5.2, C.1.2.1]

Commission proposal: Zero-emission - battery or hydrogen (H_2) powered - HDVs / HDV-combinations are permitted to be a maximum of 90 cm longer in order to facilitate the installation of zero-emission technology, provided they can move within a specified circular disk and the new length does not increase the loading length. For four-axle HDV-combinations the maximum permitted weight is increased by 2 t, and for five to six-axle vehicles, by 4 t - irrespective of the actual extra weight of the zero-emission technology.

cep-Assessment: The increased lengths ensure a level playing field with conventional HDVs when it comes to loading area. At the same time, the proposal ensures that roundabouts can be passed through without difficulty. The increased weight means that with a lower extra weight of the zero-emission drive the cargo weight can be greater, and this will increase further as batteries get lighter. This incentivises both the purchase of zero-emission HDVs and improvements to aerodynamics - without the need for government spending.

Authorisation of 44 t in international traffic [Long Version A.7.1, C.1.3.1]

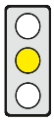
Commission proposal: If a Member State allows five or six-axle HDV-combinations in national transport, which exceed the weight limits, then it cannot prohibit the use of these HDV-combinations in international traffic which comply with the national limits, until the end of 2034, provided that their maximum permissible weight does not exceed 44 t - or the higher weight permitted in that Member State for CT.



cep-Assessment: The authorisation of 44 t in international traffic between Member States that permit higher weights will improve efficiency and competition in road freight transport and contribute to its decarbonisation. However, it threatens to cannibalise the more efficient CT if the latter does not receive sufficient compensation for the new competitive disadvantages.

European Modular Systems (EMS) [Long Version A.7.2, C.1.3.2]

Commission proposal: The Member States may authorise EMS - i.e. HDV-combinations that exceed the maximum permitted lengths and can exceed the maximum weight limits - in national and international traffic after informing the Commission. To this end, they must provide information, authorise cross-border connections and set up a monitoring system to assess the impact of the EMS on road infrastructure, road safety, the environment and "modal interaction".



cep-Assessment: In international traffic between Member States that authorise EMS, it makes sense to link the authorisation of EMS to information, connection, and monitoring requirements. This cross-border EMS traffic strengthens efficiency and competition in road freight transport and contributes to its decarbonisation. However, it also threatens to cannibalise the more efficient CT if the latter does not receive sufficient compensation for the new competitive disadvantages.

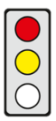
Five-axle trucks with a gross vehicle weight of 40 t [Long Version A.6.1, C.1.2.1]

Commission proposal: For the first time in the EU, five-axle lorries with two steering axles with a permissible weight of 40 t are approved if the drive axle has twin tyres and is equipped with either air suspension or rather suspension recognised as equivalent in the EU, or provided that the maximum axle load of 9.5 t is not exceeded.

cep-Assessment: With their additional axle, five-axle lorries allow for the increased weight of 40 t without putting more strain on roads and bridges. In the construction industry, for example, they will ensure increased efficiency and greater flexibility because the higher transport volume per journey means fewer journeys. At the same time, a single lorry is more manoeuvrable than a road train transporting the same quantity.

Promotion of intermodal transport [Long Version A.6.2, C.1.2.2]

Commission proposal: The permissible height of HDVs used in intermodal transport to transport containers with an external height of 9' 6'' (2.9 m) ("high-cube containers") is increased by 30 cm to 4.3 m. HDV-combinations that transport 45-foot containers or swap bodies intermodally can be 15 cm longer.



cep-Assessment: A height of 4.3 m for the transport of high-cube containers may be advantageous, in particular for forwarders of sea freight from seaports to the hinterland, as these are mainly used in maritime transport. However, whether it would be worthwhile for them to switch to intermodal transport is doubtful as this requires special rail wagons that are often not available in sufficient numbers. The additional height also prevents HDVs carrying containers from being transported by rail.