

Review of the Weights and Dimensions (W&D) Directive:

How to accelerate the uptake of zero-emission heavy-duty vehicles

November 2023



- In July 2023, the European Commission introduced the Greening Freight Package, including a review of the Weights and Dimensions (W&D) Directive to promote electric and hydrogen trucks and buses. The proposal aims to increase weight limits for zero-emission vehicles but has some concerns regarding its effectiveness in fully promoting zero-emission options.
- The review of the W&D Directive is essential for decarbonizing the heavy-duty vehicle sector and achieving climate neutrality by 2050.
- It's crucial to ensure the full application of zero-emission weight allowances and consider intermodal compatibility. Co-legislators should take action to improve the proposal.

More about the Platform for electromobility

The Platform for electromobility is a unique alliance of over 48 Europe-based producers, infrastructure managers, operators, transport users, cities and environmental civil society organisations from across industries and transport modes. Our overarching goal is to reach a sustainable, multimodal transport system in which people and goods are moved across land, inland waterways, sea and air in Europe using exclusively fossil-free electricity. To reach its vision, the Platform unites all sectors constituting the electromobility ecosystem to pragmatically ensure the conditions for the full electrification of new light-duty vehicles by 2035, and build a sustainable European zero-emission transport system by collectively sharing their expertise, challenges and solutions.

For more information about the platform and its members, please visit: <https://www.platformelectromobility.eu/>

In July 2023, the European Commission published the Greening Freight Package with the purpose of making freight more sustainable and efficient. As part of this Package, the review of the Weights and Dimensions (W&D) Directive aims to promote the uptake of electric and hydrogen trucks and buses.

The Commission proposes to increase the weight and length limits of zero-emission (ZE) heavy-duty vehicles. These provisions are intended to ensure ZE trucks don't have to sacrifice cargo weight on long-haul routes, and ZE buses don't have to decrease the number of passengers, in comparison to a comparable combustion model. However, the proposal fails to ensure the full application of the ZE weight allowance.

Despite noble intentions, the Commission includes several provisions which would keep the EU anchored to diesel trucks. In particular, the proposals on giga-liners¹ and combustion vehicles of 44 tonnes risk steering investment away from the zero-emission sector. Furthermore, the review should pay more attention to road wear and bridges.

The proposal also needs changes to make it truly intermodal and interoperable with other modes like (electric) rail. Such changes cannot be designed without having a perspective on what the Combined Transport Directive (CTD) will look like. This Directive plays an important role in reducing the carbon footprint of the whole logistic sector. For this reason, and as detailed in the Platform's recent [letter](#), we ask the European Commission to present the CTD without further delay. As such both proposals can be truly treated "as a package", as was originally intended.

1. The need for a review of the W&D Directive

The **heavy-duty** vehicle (HDV) sector needs to decarbonize rapidly. In the first half of 2023, diesel trucks accounted for 95.6% of newly registered trucks². While trucks account for just 2% of vehicles on the road, they are responsible for nearly 30% of greenhouse gas emissions from road transport in Europe.

Under current policies, this share is set to grow. According to the European Commission, truck activity will increase by about 40% between 2019 and 2050. Over the same period, bus and coach activity is expected to grow to a smaller but still considerable extent (+10%). Although buses are decarbonising much faster - 30% of new urban bus sales in 2022 were ZE - diesel buses still represented 67.3% of the new sales in Europe in 2022³.

The EU thus needs to rapidly transition to 100% zero-emission HDV sales. As ZE trucks and buses weigh more than their diesel counterparts, a review of the W&D Directive is needed to really incentivise their uptake and set the sector in line with the Union's goal of climate neutrality by 2050.

2. Our shared vision

We welcome the Commission's intention to give zero-emission trucks a 4t weight allowance (as well as 2t to ZE buses). However, co-legislators need to intervene and ensure zero-emission trucks can

¹ Longer and heavier vehicle combination consisting of more modules and with a typical length of 25,25m.

² ACEA (2023). New commercial vehicle registrations: vans +11.2%, trucks +20%, buses +15% in the first half of 2023. [Link](#).

³ This share decreased to 63% in the first half of 2023.

fully use it, so that it is ensured that under no use case long-haul ZE trucks, which require bigger batteries, would have to sacrifice cargo weight. The proposal severely hampers the application of the ZE allowance, leaving road freight across key national borders (e.g. between France and Belgium) largely to diesel trucks.

The Commission requires the use of the ZE weight allowance for cross-border movement only, underestimating the relevance of national transport. Also, the wording of the Annex risks giving the 4t ZE allowance to diesel tractor units only because they pull electric trailers.

An increase in driving axle weight is essential for long-established truck-makers to switch from making fossil vehicles to electric. However, truck-makers don't need the proposed 1t increase (from current 11.5 to 12.5t), which also fails to incentivise them to switch to clean sheet designs (lighter, optimised e-trucks).

The proposed regularisation of the cross-border movement of 44t combustion vehicles and of European Modular Systems (so-called ginaliners) brings them out of their current legal grey area. These longer, heavier vehicles will however only achieve real emission reductions if they are zero-emission. Unfortunately, the Commission does not provide any sunset clause for the cross-border movement of fossil ginaliners, nor does it propose a ZE weight allowance for these vehicles, thereby offering no incentive for the use of ZE ginaliners by fleet operators. Extending the use of 44t combustion vehicles and ginaliners risks delaying the take-up of electric vehicles, particularly during the 2020s. Making internal combustion trucks more attractive for long-haul transport also increases the fossil fuel dependency of the European freight sector, and therefore the EU's dependence on imports.

3. Intermodal logistics system

Enhancing intermodal logistics in Europe is crucial to reach CO₂ reduction objectives. Intermodal compatibility must be ensured throughout the revision process of the W&D Directive (which should not penalise rail freight) and the upcoming Combined Transport Directive.

Therefore, the Platform supports prior assessment for new ginaliner routes / movements so that they do not take traffic from rail or waterway. This prior assessment should also include an analysis of road safety and the need for additional driver training. As Kristian Schmidt, DG MOVE's land transport director, has noted, reform should not promote truck traffic at the expense of rail, or "we're in all kinds of political trouble⁴."

On the whole, we recognise the Commission's good intentions, but we now call on the co-legislators to improve the proposal in a consistent and decisive way. They should:

1. **Require member states to provide, when they bilaterally agree on the cross-border movement of internal combustion trucks above 40t, a zero-emission / intermodal weight allowance of 4t above that agreed weight for internal combustion trucks.**

The Commission proposes +4t for zero-emission trucks, but fails to ensure its full application. Because of the 44t weight limit, ZE trucks heavier than >40t cannot fully use it (without losing payload). This de facto decreases the ZE incentive. Our recommendation would fully keep it.

⁴ Politico, 29 September 2023.

2. **Apply the zero-emission allowance in every EU member state and make sure that only zero-emission trucks and buses get it.**

The proposal only requires the use of the 4t ZE allowance for cross-border movement. Given the relevance of national freight, it should also be applied within each Member State. Also, co-legislators need to make sure that diesel tractor units just pulling e-trailers do not receive the ZE allowance.

3. **Limit the increase of the ZE driving axle to 12 tonnes, apply safeguards, and insert a sunset clause for trucks (January 2029).**

The Commission proposal (1t increase from 11.5 to 12.5t) would increase road wear by ~40%⁵. We propose limiting the increase to 12t, which is enough for manufacturers, and make it conditional on safeguards related to tyres, tyre pressure monitoring and acceleration⁶. The 2029 sunset clause for trucks⁷ will incentivise the use of 3-axle tractor units and clean sheet designs (lighter vehicles).

4. **Ensure that, when crossing borders, all European Modular Systems are zero-emission from 2030.**

Zero-emission / intermodal giga-liners should be guaranteed the 4t ZE allowance proposed for other vehicle combinations. As well as the 2030 phase-out for diesel, conditionality should cover a prior assessment to avoid reverse modal shift from rail, and analysis for road safety & driving training.

5. **Member States can allow the cross-border movement of 5-axle rigid trucks heavier than 32t only when they also grant them the 2t ZE allowance (to be applied at national level too).**

5-axle rigids are short vehicles (max 12m). Currently, their cross-border movement is limited to 32t. The proposal (40t +2t ZE allowance) would damage roads and bridges whereas the recommendation here makes any increase subject to the application of a 2t ZE allowance.

6. **Publish the Combined Transport Directive as soon as possible.**

The Platform for electromobility recently published an open letter to Commissioner Velez urging for publication of the long-awaited CTD. Read full letter [here](#).

7. **Start inter-institutional negotiations as soon as possible, in order to guarantee a swift (1 year) transposition of rules and enable a rapid upscale of battery-electric trucks in the EU.**

⁵ UK Department for Transport (2010). HGV maximum weights. [Link](#).

⁶ More specifically, wide-base high-efficiency single tyres on the steering axle and a dual tyre configuration on the driving axle; the alert threshold of the Tyre Pressure Monitoring system set at 0.6 bar, rather than current 1.2 bar, with a duty to restore under- or over-inflation at the nearest available facility; an acceleration limiter, with 1.2 m/s² as a limit.

⁷ An indicative phase-out date of 2035 should be set for ZE buses.