

December 2022

ACEA Position Paper REVIEW OF THE WEIGHTS AND DIMENSIONS DIRECTIVE

BACKGROUND

The European Commission plans to revise Council Directive 96/53/EC on the maximum weights and dimensions of heavy-duty vehicles ('Weights and Dimensions Directive') with the aim of aligning it with targets set for the reduction of greenhouse emissions from transport. ACEA welcomes the revision as it provides the opportunity to address several shortcomings in the directive, including removing inconsistencies and barriers that hinder an accelerated market uptake of zero-emission vehicles.

RECOMMENDATIONS

In general, ACEA recommends that the structure of the current regulation is simplified as much as possible, as it currently includes a range of different provisions for several very specifically defined vehicle segments, eg road trains, articulated vehicles, motor vehicles, buses and coaches.

In particular, ACEA recommends that the revision is focused on two key elements:

- Specific provisions on vehicle dimensions, total weights and axle weights to accelerate the market uptake of zero-emission vehicles.
- Longer and heavier vehicle combinations: European Modular System (EMS).

PROVISIONS ON VEHICLE DIMENSIONS, TOTAL WEIGHTS AND AXLE WEIGHTS TO ACCELERATE THE MARKET UPTAKE OF ZERO-EMISSION VEHICLES

Commercial vehicle manufacturers have repeatedly expressed their commitment to meeting climate neutrality targets, and to decarbonisation by 2050 at the latest. Achieving climate neutrality in road transport by 2050 implies that all new commercial vehicles sold must be fossil-free by 2040. This will require a fundamental shift in powertrain technologies – moving away from diesel as the dominant energy carrier, towards low- and especially zero-emission vehicles.

Zero-emission vehicles (ZEVs), namely battery-electric and hydrogen-powered vehicles, will have to become the backbone of road transport if the sector is to reach its decarbonisation targets. These new powertrain technologies come with additional requirements with respect to available space in the vehicles, total vehicle weight and axle weights. These differences to conventionally powered vehicles should be addressed in the review to enable and support the market uptake of zero-emission vehicles. The objective of ACEA's recommendations is to remove barriers that hinder the market uptake of zero-emission vehicles with respect to payload etc. The proposals are specifically not aimed at increasing the loading capacity of vehicles. With this in mind, the review of the Weights and Dimensions Directive should address the following:

acea

For trucks

- With respect to weight and axle load provisions for zero-emission vehicles, ACEA recommends that:
 - When setting out additional weight allowances for zero-emission vehicles, any reference to conventional vehicles should be removed
 - All low-emission vehicles should be granted at least an additional 1 ton.
 - All zero-emission vehicles should be granted at least an additional 2 tons.
 - Additional weight allowances for ZEVs should not be taken into account when calculating road charging rates, irrespective of whether or not they are differentiated by CO2 according to the Eurovignette. This is to avoid ZEVs being subject to higher tolls/user charges, or granted discounts that are calculated based on a reference value that is too high.
 - The axle load of the driven axle and driven axle combinations should be increased by at least 0.5 tons, ideally 1 ton.
 - For all ZEVs, the additional weight allowance should be increased by up to 4 tons, instead of the current additional ZEV allowance of 2 tons.
 - The additional allowances (2 tons) that have been granted to date support the design and market uptake of vehicle segments that can relatively quickly be adapted to zero-emission powertrains. However, despite foreseeable technology improvements, it has become clear that this additional allowance is insufficient, especially for vehicles in particularly demanding use cases. Thus, to fully eliminate any payload disadvantages and ensure sufficient performance and range, the additional weight allowance for ZEVs should be increased to 4 tons, rather than the current 2 tons.
- New powertrain technologies require more space (eg for batteries and tanks) than is currently provided for under the Weights and Dimensions Directive. Therefore, ACEA requests that all zero-emission vehicles (category N) are granted additional length of up to 1.5 m. These vehicles would still comply with turning-circle requirements and meet all safety-related requirements (eg Direct Vision, General Safety Regulation etc).

In addition to the proposals relating to zero-emission vehicles set out above, and irrespective of a specific powertrain technology, for 3-axle vehicle/3-axle trailer combinations (articulated vehicles and road trains) ACEA recommends that the gross combination weight (GCW) should be set at 42 tons.

- Annex I Art. 2.2.1 and 2.2.2 a b already sets the maximum authorised vehicle weight for road trains and articulated vehicles with 5 or 6 axles at 40 tons.
- Despite the additional axle in vehicle combinations of 3-axle motor vehicles and 3axle trailers, which effectively reduces the individual axle load, the maximum weight



is set at only 40 tons. The revision should include an adjustment of the combination weight for the above-mentioned vehicle combinations to 42 tons.

• Should the recommendation to adjust the GCW for 3-axle vehicle/3-axle trailer combinations for all powertrain technologies not be followed, an additional weight allowance of up to 6 tons would be necessary for zero-emission powertrains in this vehicle combination.

For buses

ACEA's recommendations for buses are also focused on removing technological disadvantages that hinder the deployment and market uptake of zero-emission powertrain vehicles. With respect to buses and coaches, total registration numbers stand at 25,000–30,000 vehicles per year in the EU. Thus, their impact on road wear and tear is very limited. Moreover, due to varying utilisation rates of buses and coaches, maxed out axle loads are usually limited to short peak times only.

- All zero-emission vehicles should be granted an additional 1 ton axle load for the driven axle.
 - Should the driven axle load not be adjusted as recommended, the number of passengers for 2-axle buses would have to be reduced by up to 40%.
- No additional weight allowance is currently in place for zero-emission 2-axle buses. The additional allowance should be set at 1 ton.
- For 3-axle articulated buses, the axle load for non-driven, twin-tyre axles should be adjusted to 11.5 tons (from 10 tons) to allow more flexibility for the distribution of passengers in the vehicle.
- Values for the length and weight of 4-axle articulated buses are not currently defined and should be set at 21 m and 32 tons (GVW). At these values the vehicles would continue to meet turning circle requirements.
- The additional weight allowance for 4-axle articulated buses should be set at 2 tons for hybrids, and 4 tons for ZEVs.

LONGER AND HEAVIER VEHICLE COMBINATIONS: EUROPEAN MODULAR SYSTEM (EMS)

With respect to longer and heavier vehicle combinations, the review of the Weights and Dimensions Directive should address the following for all powertrain technologies:

- Align the weight and length threshold of EMS combinations for international (crossborder) operations to at least 60 tons and at least 25.25 m.
- Explicitly allow EMS cross-border use between member states.



• Harmonise technical criteria and procedures for all types of EMS and all types of road operations, including combined transport.

ACEA would also like to point out that the review of the Weights and Dimensions Directive needs to be carried out in the context of the wider regulatory framework. In particular, it needs to be accompanied by revisions (ideally made simultaneously) to other relevant regulations, eg (EU) 2021/535, Annex XIII.

As a final remark, ACEA would also recommend that the text and structure of the Weights and Dimensions Directive is thoroughly analysed, clarified and simplified to reduce complexity and minimise potential confusion and contradictions

B0000

ABOUT THE EU AUTOMOBILE INDUSTRY

- 13.0 million Europeans work in the auto industry (directly and indirectly), accounting for 7% of all EU jobs
- 11.5% of EU manufacturing jobs some 3.4 million are in the automotive sector
- Motor vehicles are responsible for €374.6 billion of tax revenue for governments across key European markets
- The automobile industry generates a trade surplus of €79.5 billion for the European Union
- The turnover generated by the auto industry represents almost 8% of the EU's GDP
- Investing €58.8 billion in R&D per year, automotive is Europe's largest private contributor to innovation, accounting for 32% of the EU total

ACEA REPRESENTS EUROPE'S 14 MAJOR CAR, VAN, TRUCK AND BUS MANUFACTURERS

ACEA

European Automobile Manufacturers' Association +32 2 732 55 50 info@acea.auto www.acea.auto

