

## **Orientation Paper**

Brussels, 18 September 2023

# **Weights & Dimensions of Road Vehicles**

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# Road Vehicles Weights & Dimensions

## Executive Summary

The Commission amendment proposal – if passed into law – will ultimately benefit road transport only. The principles of technology neutrality, energy efficiency enhancement and pollution reduction are secondary, while addressing enforcement effectiveness only in a superficial manner.

The opportunity to rely on **transport modes' integration** to reduce externalities and drastically enhance the energy-efficiency of the transport system as a whole has been totally overlooked. Therefore, **CER suggests** that the **EU co-legislators**:

1. **DELIBERATE** on the Weights & Dimensions directive **IN COMBINATION WITH** and **AT THE SAME TIME AS** they consider the (upcoming) revision proposal of the **COMBINED TRANSPORT DIRECTIVE**.
2. **REJECT** the **cross-border circulation of oversized and overweighted trucks, i.e. :** ginaliners and 44tons combustion vehicles.
3. **CALL** for **moderation in the increase of batteries sizes**, considering that a tolerance of 2 tons has already been granted in the 2015 revision of the directive that is amply sufficient for Combined Transport.
4. **INSIST** on the absolute need to **truly boost intermodal interoperability** between road and the more externality- and energy-efficient modes (rail & inland navigation) by setting requirements in Directive 96/53 on road vehicles'
  - a. **cranability,**
  - b. shape and size,
  - c. foldability or retractability of protruding devices,
  - d. resistance to rail transport air pressures,
  - e. etc...... and to mandate the Commission to adapt the Type Approval regulation 1230-2012 accordingly.

## 1. Introduction

CER takes note of the Commission's Greening Freight Package of legislative proposals, which includes the amendment of the Road Vehicle Weights & Dimensions Directive (96/53/EC).

The main objectives of the proposal, according to CER analysis, are essentially:

1. To **increase weight and length allowances** for (so-called) "Zero Emissions Vehicles" in order to allow them to **accommodate larger & heavier batteries**.
2. To allow the **cross-border circulation of certain oversized trucks** between two adjacent countries which allow them to circulate on their respective territories.

The amendment proposal – contrary to its claim – does NOT address the enhancement of intermodal transport:

1. It does **NOT address road-vehicles' interoperability with rail**, i.e. rail and terminal compatibility of vehicles in terms of size, shape, resistance to rail air pressure and **cranability** !
2. It does **NOT address the promotion of the use of trucks on the road leg** of energy- and CO<sub>2</sub>-efficient transport chains like rail-road combined transport.

Moreover, the amendment proposal...

1. Does **NOT strengthen** enforcement checks on the roads beyond the sporadic weight check points already foreseen in the revision of the TEN-T regulation.
2. Does **NOT contribute** to the emergence of a Single European Transport Area. Rather, it will reinforce bilateral deals between members states who chose to increase weights & dimensions taking away the last bits of power that European co-legislators still hold in defining road vehicles' weights & dimensions at EU Level.
3. Does **NOT address** the real costs related to road investments and maintenance and the increased safety risk. Rather, it makes these problems worse by promoting the use of heavier and longer vehicles.

## 2. CER Comments

While seemingly tackling climate change, the proposed text falls short of addressing the actual need to create a truly CO<sub>2</sub>- & energy- efficient (integrated) transport system, minimizing external costs (congestion, air pollution, damage to road infrastructure,...). As we are talking about "**Greening Transport**", it is important to understand how the proposed directive will affect both the competitiveness of road & rail and the intermodal complementarity of the two modes. From the Commission's own impact assessment (Chapter 6.1.5), the proposal rather goes **against the promotion of intermodality** and will even elicit a **reverse modal shift** of 0.7%<sup>1</sup> from rail and inland navigation back to road if not also supported by measures to promote combined transport. There is indeed very little in the proposal that suggests that intermodal transport (let alone rail) has anything to gain from it. The road sector, on the other hand, is set to benefit from:

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<sup>1</sup> Figure based on only 2 sources... whereas the [2011 Fraunhofer Institute Ex-ante Study](#) predicted up to -38% loss in Single Wagonload and up to -13% loss in Combined Transport. The prediction of Fraunhofer was confirmed ex-post, when the 44tons allowance was introduced in France in 2013, where CFL Cargo recorded a loss of respectively -11% and -13% on the intermodal routes from Luxembourg to Spain and to Italy.

**Extra payload**, initially to compensate for the volume and weight of batteries, but in reality allowing for heavier lorries, to be used across Europe. This, despite the fact that independent studies<sup>2</sup> have shown the adverse effect that heavier lorries have on our already congested road infrastructures.

- **Cross-border circulation of oversized trucks** ("Gigaliners" and "44tons Combustion Vehicles") between and across member states that allow them on their national territories – thus increasing the competitiveness of road against rail on long distances and eliciting a reverse modal shift from rail to road as high as –38% on the Single Wagonload segment and –13% on the Combined Transport segment<sup>3</sup>. For example, CFL Cargo has recorded a loss of respectively -13% and -11% on the intermodal routes from Luxembourg to Spain and Italy since France allowed 44tons in 2013.
- **Increased length of car transporters**, a sector where the competitiveness of rail versus road is already fragile.
- **Allowance of high cube containers** to foster combined transport is well intentioned, but not goal-orientated. To allow high cube containers to be used in rail-road combined transport, full roll-out of loading gauge P400 or the use of special rolling stock with smaller wheels is indeed needed. Failing that, high cube containers will run on roads only, cannibalizing rather than fostering combined transport.

The arguments used to justify these amendments are that they make road transport greener. But they totally disregard their detrimental impact on intermodal and rail transport leading to exactly the opposite results, i.e. **an overall increase of transport-related CO2 emissions, and increased external costs**. In this respect, the use of oversized and overweighted road vehicles ("gigaliners" and "44tons") can only be justified if limited to the road leg of truly CO2-efficient rail-based transport chains (like intermodal / combined transport), an indispensable provision that the current proposal totally misses.

Also, we need to look further than the simple case of reducing CO2 emissions. In times of severe energy crisis, the real goal for Europe has to be the overall reduction of energy consumption. **"Steel wheel on steel rail" will always be much more energy efficient than "rubber tire on asphalt"**. We need to keep the **fundamental laws of physics** at the front of our minds when setting transport policies for the coming years if we really want to make a difference not only in CO2 emissions but also in reducing **Europe's dependence on external energy imports**.

Some propositions appear, on a first analysis, to help the rail sector, and increasing the frequency of weight checks across Europe appears to be a good move. But why not go further than simple "on-road" checks, and oblige the **fitment of weight sensors on all semi-trailers** (connected to the already mandatory tachograph) to really fight against overloading of lorries?

Finally, we would like to express our real disappointment that the publication of the revised Combined Transport Directive has been disconnected from this proposal. Combined Transport has been the growth sector of rail freight over the past 20 years, and

<sup>2</sup> [PIARC study](#): Overweight Vehicles: Impact On Road Infrastructure And Safety (2022)

<sup>3</sup> [FRAUENHOFER Institute & K+P Study](#): Effects of the Introduction of LHVs on Combined Road-Rail Transport and Single Wagonload Rail Freight Traffic (2011)

**a full analysis of the proposed Weights and Dimensions Directive can only be done in combination with (or after) the to-be-proposed Combined Transport Directive.**

### 3. CER Suggestion

While only paying lip services to intermodality, the Weights & Dimensions Directive seems to have been revised from a road-only “silo” perspective. The directive makes the European transport system excessively reliant on batteries with no consideration of how this technology itself makes use of rare materials whose extraction will further drag on Earth’s resources (energy and water), plus cause extra labour exploitation, destruction of ecosystems, pollution, emissions, congestion, and infrastructure damages around the world. While it makes sense to use electric trucks on the pick-up and delivery legs of (otherwise) multimodal transport chains, a **recent revision of the Directive (2015-2019) has already allowed an extra 2-tons for batteries, which provides trucks with more than enough autonomy to cover the road legs of combined transport operations.** In any case, independent from the risks of reverse modal shift, neither 44tons combustion vehicles nor gigaliners should be allowed in conventional transport, if the co-legislators really wish to accelerate the take up of batteries on roads.

Considering that the proposed revision of the Directive **fails to adopt an “INTEGRATED transport SYSTEM perspective”** and misses the potential deriving from the environmental and energy benefits that such an approach would entail (especially in the context of climate emergency and of Europe increasing dependence on energy), CER calls on the European Parliament and Council to **discuss and deliberate on the Weights & Dimensions Directive at the same time** with a view to **optimizing the potential of transport modes’ integration** (rather than marginally optimize road ONLY). In this respect, an “integrated” revision of the Weights & Dimensions Directive claiming to curb external costs and to reduce Europe’s energy dependence should be primarily based on the following principles (either inadequately or not at all addressed in the current proposal):

- a. **Promote operational and business compatibility** with inland navigation and rail, e.g. limit the use of oversized vehicles to intermodal transport, only allow the use of unit sizes that are compatible with rail. Today, longer trailers are already no longer compatible with rail (e.g.: 14.90m trailers may be loaded on wagons but with restrictions on a maximum 2,70m loading height);
- b. **Promote intermodal interoperability**, i.e. the technical compatibility of trucks and trailers with rail transport, with short sea shipping and inland waterway transport (cranability, compatible dimensions, foldability or retractability of protruding devices; resistance to rail transport air pressures, etc...)
- c. **Privilege stability of technical specifications:** in the USA the rules on truck weights and dimensions have not changed since 1984, which provides a robust foundation to investments into complementary transport modes operating longer lifetime technologies like railways. Also, see the Association of American Railroads (AAR) best practices (<https://www.aar.org/wp-content/uploads/2020/08/AAR-Truck-Size-Weight-Fact-Sheet.pdf> and <https://www.aar.org/issue/truck-size-weight/>).

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### **About CER**

The Community of European Railway and Infrastructure Companies (CER) brings together railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 78% of the rail network length, 81% of the rail freight business and about 94% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe. For more information, visit [www.cer.be](http://www.cer.be) or follow us on Twitter [@CER\\_railways](https://twitter.com/CER_railways) or [LinkedIn](https://www.linkedin.com/company/cer).

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