

MONITORING OF WEIGHTS AND DIMENSIONS OF LOADING UNITS  
IN INTERMODAL TRANSPORT

Impact of “mega-trucks” on intermodal transport and on European roads

Transmitted by the International Road Federation (IRF)

This statement provides feedback from private sector IRF member organizations on the issue of introduction of mega-trucks on European roads, in particular on its impact on the road infrastructure.

The use of mega-trucks with a maximum length of 25.5 m and weights of up to 60 tonnes has clear benefits in increasing the efficiency of road transport not only on long-haul operations, but also on hauls of less than 60 km. As road transport will be the dominant mode of transport in the foreseeable future, it seems expedient to explore any means of increasing its efficiency and interoperability with intermodal solutions with the modular concept. To ensure that the introduction of mega-trucks does not have an adverse impact on the modal split the costs for service will need to be adapted in accordance with the costs borne by the service providers and the costs of upgrading the existing infrastructure where required.

1. The road construction industry feels that there are immediate benefits in that thousands of tonnes of excavation materials and other products need to be transported to large road construction sites, therefore the use of larger trucks will allow to reduce costs and the environmental impact. However, these benefits may be counterbalanced by additional investments required to adapt parking areas, curves and roundabouts, as well as strengthen bridges, retaining systems and guardrails. If adequate load per axle requirements for mega-truck vehicle regulations are set, the road maintenance costs should decrease as the strain on the roads would be lower than for vehicles of a higher axle loading. The technologies for infrastructure upgrading are available, therefore thorough studies need to be carried out to determine the exact upgrading needs.

2. Solutions for traffic of mega-trucks in city centers and on secondary roads will require massive investments. If mega-trucks were limited to interurban traffic on major road arteries between large distribution centers these costs could be reduced to a minimum. This would require the availability of dry ports where goods could be transshipped on to smaller units for local delivery. A database of road arteries and dry ports would need to be set up to enable transport planners to make efficient use of these possibilities.

3. The existing roads which were not designed to accommodate traffic of mega-trucks and would require substantial investments in terms of bridge reinforcement and parking area upgrading to do so, raise strong opposition from road concessionaires to the introduction of mega-trucks. There is a need to establish who will bear the additional investments required to accommodate mega-trucks.

4. There is a fear that tunnel safety will be affected by the increased permissible weight as it increases the fire load. This would require structural changes to the tunnel cross-sections, increasing the construction and maintenance costs.

Bearing in mind the above, we feel that studies should be carried out in order to establish the exact infrastructure investments required for the introduction of mega-trucks, followed by more on-road tests.

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