



ECG – The Association of European Vehicle Logistics

Response to the document issued on 18/04/2008 by the consortium of consulting companies on ‘Weights & Dimensions of Heavy Commercial Vehicles – Study on the effect of adapting directive 96/53/EC’

Executive summary

We have read your document on the study on the effect of adapting directive 96/53/EC currently carried out for the European Commission. Here is a summary of our main points on the issue.

Problem:

Directive 96/53/EG of July 25, 1996, which stipulates the weights and dimensions of a vehicle does not lay down any general prescriptions regarding maximum dimensions of loaded vehicles. Uniquely vehicle logistics industry is able to load outside of the unloaded dimensions criteria and therefore the growing dimensions of new car models means that less cars can be loaded today compared to 10 years ago.

Recent movements of car production to the lower cost regions of Eastern Europe have led to longer supply chains as demand is still in the traditional Western regions. Therefore new vehicles are being transported across two or three countries with differing loaded dimension rules.

As a result it has become increasingly inefficient for car carriers to carry out cross- EU movements.

Moreover, the enforcement of the EU directive 96/53 is often subject to local interpretation which leads to unjust penalties by local law enforcement officials.

Our solution:

ECG, speaking in the name of its 100 members that represent more than 80 percent of the finished cars logistics business supports the proposed **scenario B (Adapt directive: EC defines restrictions and maximums for longer and/or heavier vehicles in international traffic)** and advocates for the following amendments to the directive 96/53/EC:

- Length: setting the **maximum authorized length** at, **at least**, 20,75 m;
- **abandon of all restrictions on front and rear overhangs**; instead, ECG proposes that the length of the overhangs be included in the total authorized length of the vehicle;
- height: **flexibility on consideration of height**

ECG advocates the revision of **Directive 96/53** to allow for harmonization of maximum dimensions in all EU member states. However it is important to note that ECG wants the **harmonization in international traffic only**. Each individual member state should be free to decide on its national dimensions.

Benefits of the solution:

- **Road safety:** there will be no significant changes to the braking, overtaking or swept path of the vehicles at 20.75 meters. On the other hand harmonization at 20.75 meters will reduce the number of trucks on the roads and hence the collision risk may be reduced
- **Energy efficiency and CO2 emissions/Noxious emissions (PM and NOx levels):** harmonisation should lead to the reduction in the number of truck loads by over **200 000 or 4.3% on average across Europe**, this shall translate into **18.5%** reductions of CO2 emissions and noxious emissions per each vehicle/km
- **Road infrastructure:** no or beneficial effects on the road wear due to reduction of trucks on the roads; no effects on bridges due to the vehicles being a light type of cargo, (total weight of vehicle of 20.75 meters = 32.33 tonnes)
- **Effect on combined transport and other intermodal combinations:** no effect on combined transport, it will only help to optimize the use of the current fleet of trucks; no effect on intermodal combinations because there will be no technical changes made to the existing fleet of trucks
- **Effect on meeting current and future freight transport demand:** In a short run harmonization will help to meet the current challenge of the transport sector: shortage of drivers and lack of trucks or rail wagons. In the long run it will help to contain the growing demand for transport

Modular concept:

Although ECG's focus is to solve the current bottleneck in the transport of cars through the harmonization of the allowable maximum length for loaded car carriers at 20.75 meters, it is also important to mention that ECG supports the creation of the legal framework for the use of the modular concept at EU level (25,25 meters). Such concept has a potential to increase the loading factor of trucks and hence significantly reduce the number of trucks on the road and as a result the CO2 emissions. However this is not a focus of this paper.

I. Current legal background

As mentioned already car transporters are different from the other trucks, as their loaded and unloaded dimensions significantly differ. Indeed, cars can be loaded not only on the transporter itself (up to a height depending on the size of the cars and the way they are loaded), but also on extendable overhangs above the driver's cabin and behind the trailer. Thus, Council directive 96/53/EC, that, among other provisions, sets the maximum height of a road train at 4 m and its maximum length at 18,75 m, doesn't concern loaded transporters. It has been left to the discretion of the Member States to decide on the maximum authorized dimensions of the latter.

As a consequence each Member State developed its own legislation in the field. There are now, across Europe, **10 different maximum lengths** ranging from 18,75 m to 25,25 m and **5 maximum heights** ranging from 4 m to no limit. Overhangs are also strongly regulated with 4 different front and 12 different back overhangs. Moreover, Member States have their own complicated and obviously different ways of measuring the maximum dimensions. For example, front overhang, depending on the country, can be measured either from the steering wheel or from the edge of the cabin, and up to the end of the extension or to the end of the transported car. Finally, in some countries, exceptional authorizations are granted on a case by case basis, and subject to much discretion.

As a result, the regulations on the authorized dimensions of car transporters have grown so complex, that they have largely become difficult to understand not only for transport professionals, but also for enforcement bodies, which result in the police interpreting the law erroneously and imposing unjustified penalties.

II. Recent Developments

The Directive 96/53 is now over 10 years old. As a consequence it does not take an account of two major recent developments which reduce the loading capacity of car carriers and which are beyond the control of car transporters:

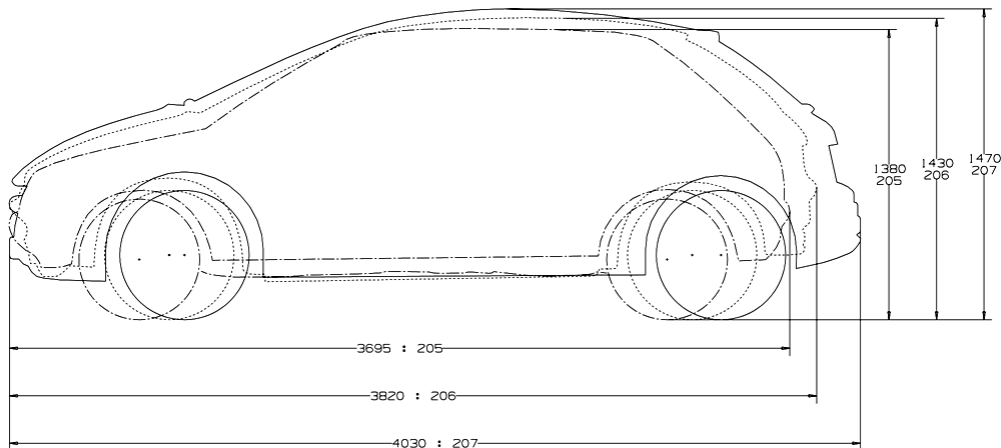
1. Two major EU enlargements took place that substantially **shifted car production towards the East, changed and lengthened the routes from manufacturers to end users**. Currently, a car produced in Trnava (the new PSA plant in Slovakia), for example, might have to cross as many as seven countries before it reaches a final consumer in Portugal. Currently due to different maximum dimensions laws in each country, the Slovak transport company has to run inefficiently with 7 cars, although it could transport 9 should the legislation be harmonized.

The table below shows how many medium-sized cars (4,48 m long) a car transporter can take on-board in every of these countries if conforming to their respective legislations:

Country	Number of medium-sized cars
Slovakia	7
Austria	9
Germany	9
Switzerland	9
France	10
Spain	9
Portugal	10

These figures are purely indicative, as they are based on the assumption that all the cars are 4,48 m long. Although Austrian, German, Swiss, French, Spanish and Portuguese rules make it possible to transport at least 9 cars at a time, these 9 cars have to be differently distributed on the transporter in each single country because of the divergent specific regulations on overhangs, height and length. As a result, even though national regulations in most countries are such that allow close to optimal use of transport space (9 to 10 cars/transporter), because of the time it takes to change their distribution and the risk of paying a fine in case of a mistake, most companies will prefer to load less and thus run inefficiently.

2. The other major development is **the growing size of vehicles**. The following picture shows how the popular 205/206/207 Peugeot car grew over the time:



The growing size of most car models makes it impossible to load as many cars on a transporter as before. Till now, however, not many Member States have changed their legislation so as to take account of this development. The transport business had to adapt itself to the changing economic environment by increasing the number of transporters used, the alternative being a shortage on transport capacity with a detrimental impact on the whole automobile industry.

3. Finally recent increase in transport demand (and expected further growth in the future) on the one hand and lack of transport capacity in terms of shortage of drivers or lack of trucks on the other hand, put an even greater pressure on the transport operators. One of the solutions to the problem is the optimization of current fleet use by the harmonization of maximum dimensions across Europe and hence reduction of the need for trucks and drivers.

III. Proposed solutions

Given those arguments, ECG, which represents 80% of the car transport sector in Europe, decided to take a position in favor of a gradual harmonization of the rules on maximum dimensions of loaded car transporters in Europe. According to the ECG, this harmonization should result in:

1. Length: setting the **maximum authorized length** at, **at least**, 20,75 m;
2. **Abandon of all restrictions on front and rear overhangs**; instead, ECG proposes that the length of the overhangs be included in the total authorized length of the vehicle;
3. Height: **liberalisation of height for transport across different European states**

This proposal is based on the findings of the ECG Maximum Dimensions Task Force, which is the focal point for the exchange of information, ideas and reactions on maximum dimensions between the major car transport companies in Europe.

IV. Possible effects of harmonisation

Harmonisation of maximum dimensions should bring substantial benefits. Should the length of loaded vehicles be fixed in a clear and relatively uniform terms, trucks running on transcontinental routes could be loaded in a much more efficient way. This would result in fewer runs being necessary to ship the same number of cars to their final destination.

It is currently estimated that the average number of cars transported by a car transporter has gone down to 7 cars. A degree of harmonization that would allow the transporters to be loaded back again with 9 cars on average would mean a **20%** increase in capacity and the reduction in the number of truck loads by over **200 000** or **4.3% on average across Europe**.

The expected benefits from such a change can be as follows:

1. Road safety

Increasing the allowed max length of car carriers to 20.75 meters does not require any change to the technical aspects of the existing fleet. The length can be extended by ₅

loading the cargo on the front and rear overhangs. Hence there should be no significant changes as regards road safety.

Braking:

The permitted load axles as well as the weight per axle will not significantly change therefore there will be no negative effect on braking.

Overtaking:

According to the Swedish National Road and Transport Research Institute which studied overtaking, there are no significant differences between 18 m and 24 m vehicles.

Swept path:

There should no changes to the swept path or turning circle.

Collision risk:

Harmonising maximum dimensions would reduce the number of trucks on the road. And fewer trucks on the roads reduce accident risk and hence increase road safety.

2. Energy efficiency and CO2 emissions/Noxious emissions (PM and NOx levels)

The reduction of truck loads by at least 4.3 % would mean fewer trucks on the roads and hence less fuel consumption. Less fuel consumption in turn means a significant contribution to CO2 emissions reduction. This reduction is very much in line with European Commission's overall objective of reducing CO2 emissions by 20% by 2020. The study carried out by Friends of the Earth for ECG shows that adopting a minimum of 20.75 m as maximum length for intra European transport, **would result in 18.5% saving in CO2 emission, fuel and noxious emissions per each vehicle/km.**

This translates into:

- **31 trucks less every 1,000 cars transported**
- **31.2 kg cut in CO2 emissions per each car every 1000 km (Euro 3)**
- **9.8 kg diesel fuel saved per each km every 1,000 cars transported**
- **30.05 kg cut in CO2 emissions per each car every 1,000 km (Euro IV – Euro V)**
- **9.4 kg diesel fuel saved per each km every 1,000 cars transported**

3. Road infrastructure

Road wear:

Harmonisation of maximum length at 20.75 meters should not have any significant effect on the road wear. Technical parameters of the current road infrastructure in Europe in principle allow for their use by vehicles of 20.75 meters. An analysis of the national legislations in Europe shows that only 8 out of 29 States (EU + Norway and Switzerland) still keep 18,75 m as the upper limit for the length of a loaded car transporter. A majority of the others have adopted maxima between 20 m and 20,75 m.

Road wear is an inevitable effect of traffic. However harmonisation of max length of car carriers at 20.75 meters should even have a beneficial effect on the road wear due to reduction of number of trucks needed to transport the same amount of load.

Bridges:

Weight:

Permitted axle load will not change therefore harmonisation of length at 20.75 meters should not have any significant effect.

Vehicles are a relatively light type of cargo, therefore the weight of the fully loaded 20.75 m does not differ much from 18.75 m transporter and does not exceed the current allowed average weight of 40 tonnes.

	Cars	Maximum load per 18,75 m		Maximum load per 20,75 m	
		Market mix	Cargo weight	Total weight	Cargo weight
	%	tons	tons	tons	tons
Small cars	31.9%	9.57	29.57	0,46042	30.63
Medium cars	54.8%	10.05	30.05	0,56389	32.92
Large cars	13.3%	10.51	30.51	14.02	34.02
Weighted average	100.0%	9.95 t	29.95 t	12.33	32.33 t

Height:

Permitted height of more than 4 meters could pose problems for bridges and tunnels in certain countries. However given the importance of potential efficiency gains, with positive spillovers on the society (less congestion and pollution), the flexibility on height in transport across different member states should be permitted. Currently many

electronic devices exist which help truck drivers to plan their journey according to the height of tunnels or bridges and to avoid those which are too low.

The effects of even a small increase in the maximum height would be significant. For instance, all other maximum dimensions (loaded length and overhangs) being roughly equal between Italy and Denmark, a maximum authorized height of 4,20 m instead of 4 m allows car transporters in Italy to load on average one more car.

4. Effect on combined transport and other intermodal combinations

There should be no effect on combined transport because where alternative modes can be used they are used already now. The harmonization of the maximum dimensions will not take away transport from rail or shipping, on the contrary it will help to optimize the use of current fleet of trucks and to contain the future demand of transport, which considering the current lack of capacity poses a huge challenge to the economy. All modes of transport need to be optimized in order to meet it.

There should be no effect on intermodal combinations because there will be no technical changes made to the existing fleet of trucks.

5. Effect on meeting current and future freight transport demand

Short-run:

In 2006 a number of truck loads needed to transport vehicles to their customers amounted to over **5,000,000**. Harmonising maximum dimensions at 20.75 will help to reduce this amount by over **200,000** truck loads. This should help to meet the current challenge of the transport sector: shortage of drivers and lack of trucks or rail wagons.

Long-run:

Using the J.D. Power data of the vehicle sales in 2014, it is possible to predict that in 2014 the number of truck loads necessary to distribute all the new vehicles will amount to over **6,000,000**.

Both road and rail transport sectors are already overstretched and find it hard to cope with the current work load. An additional growth in transport will strain the situation even further. Harmonisation of max dimensions at 20.75 meters will help to contain the increasing demand on transport and reduce the number of trucks on the roads. The harmonization will not solve the problem, but can contribute to meeting the future demand with practically no additional cost.

VI. Conclusion and recommendations

This proposal approaches the problem of maximum dimensions of loaded car transporters in Europe from different perspectives. Based on the conclusions of the ECG's Maximum Dimensions Task Force and using the findings of the study prepared by the Friend of the Earth Italy, it takes into account the interests of the industry, of the Member States and of European citizens.

The analysis showed that a simplification and harmonization of the laws on maximum dimensions at 20.75 meters across the European Member States will be beneficial for the industry by increasing their efficiency and meeting the challenge of lack of capacity, and for the European societies, by limiting air pollution, meeting the increasing freight transport demand, reducing road damage, congestion and improving road safety.

ECG, taking into account the said benefits, but also the political feasibility of the amendments, proposes the following changes to the directive:

- Maximum loaded length: **at least 20,75 m**
- Maximum loaded height: **consideration of flexibility on height**

Abandon of all specific legislation on the length of overhangs

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Established in 1997 in Brussels, *ECG* represents more than *2/3rds of the European Finished Vehicle Logistics industry*. ECG Members operate in the field of outbound logistics for the Automotive sector, including quality control at the end of the assembly line, storage in special compounds, transport in all modalities – rail, road and sea – removing of car distribution protection, accessories fitting, Pre-Delivery Inspections (PDI), customising, workshop activities and the refurbishing of former fleet vehicles. *ECG* has 100 *members* from *24 countries*, with an aggregated direct turnover in excess of *12 billion euros* and *30 billion euros* of indirect turnover. Members represent *over 61,000 direct employees*. In terms of equipment, the *ECG members operate 18,000 trucks, 22,000 rail wagons, 360 car carrying ships; 41 river barges; more than 64 million square meters of compounds; about one million square meters of workshops.*