European
Automobile
Manufacturers
Association

ACEA

ACEA Position Paper

Road Charging

October 2017

European Automobile Manufacturers Association

KEY MESSAGES

Automobile manufacturers support a review of the Eurovignette Directive if its objective is to improve transparency, clarity, and proportionality, and to address the charging differentiation of the existing system – all with the aim of encouraging the use of cleaner vehicles.

The review should also result in the further harmonisation of the technologies and charging systems used throughout the European Union.

Users have the right to know what they are paying for and why, so transparency and clarity with regard to the collection and use of revenues are vital.

KEY RECOMMENDATIONS

1. **Interoperability:** the technology used for toll systems, as well as charging, should itself be harmonised/standardised across Europe and must be as interoperable as possible.

2. **Encourage fleet renewal:** with the contribution of the latest vehicles to pollution being close to zero and having reduced CO_2 emissions, road pricing should be designed to promote and support the renewal of the existing fleet.

3. **Fairness:** charges should apply to all modes of transport, and the level of the charge should be fair and based on scientifically measurable costs.

4. **Avoid double taxation:** the charges should be made revenue neutral by reducing or removing other taxes or charges.

5. **Scope:** there is no justification for an extension of the system to other roads or to all vehicles.

6. **Earmarking:** all revenues collected should be reinvested in new and existing road infrastructure, including intelligent transport systems (ITS). Cross subsidisation of other transport modes using fees paid by road users is not an option.

7. **Congestion costs are not to be included:** these are already internalised as they are borne by road users in the form of lost time.

8. **Transparency:** the charging system should be as simple and transparent as possible.

9. **Preserve regional cohesion:** any charging of the external costs system should be implemented in a way that strengthens cohesion within the EU.

10. Conduct a sound **impact assessment** that clearly demonstrates the advantages and disadvantages of any of the proposed measures on the economy, in line with the European Commission President's Agenda for Jobs, Growth, Fairness, and Democratic Change.

BACKGROUND AND INTRODUCTION

Internalising the external costs of transport has been an important issue for the development of transport policy in the EU for many years now. The European Commission's White Paper 'Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system'[1], adopted on 28 March 2011, included the chapter 'Getting prices right and avoiding distortions'. The Commission said it would proceed with the internalisation of external costs for all modes of transport and announced a staggered revision of the Eurovignette Directive (Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures amended in 2011[2]).

Vehicle manufacturers consider that improving the environment is essential, and therefore have the opinion that the political goal of any transport measure should be reducing the negative effects that transport may have on society without hindering its economic development. Any system must be simple, stable, transparent, and predictable in order to be suitable for its purpose.

Road users have the right to know what they are paying for and why, so it is vital to provide transparency and clarity with regard to the collection and use of revenues. The European Automobile Manufacturers' Association (ACEA) supports road charging that does not increase the overall burden of existing taxes and fees in the transport sector.

Therefore, the main objective of the Eurovignette and revising the existing system should be to improve transparency, clarity, proportionality, and charging differentiation in order to further encourage the use of cleaner vehicles.

A SUSTAINABLE TRANSPORT POLICY

The overall objective of European transport policy is the provision of sustainable transport systems that meet society's economic, social, and environmental needs. Hence, the political objective of any transport-related measure should be reducing the negative effects that transport may have on society without hindering its economic development. Amending the existing Eurovignette Directive to improve the environmental performance of road transport is one possible option.

[1] European Commission, 'Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system', COM(2011) 144 final, 28.3.2011.

[2] Directive 2011/76/EU of the European Parliament and of the Council of 27 September 2011 amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures.

However, a cost–benefit analysis comparing the strategy of the internalisation of external costs with other types of policies is missing.

European automobile manufacturers believe that road charging has to meet the following criteria, among others, to serve its purpose:

- Charges should apply to all modes of transport and the level of the charge should be fair and based on scientifically measurable costs.
- Charges should be revenue neutral (including the considerable cost of the required equipment) by reducing or removing other taxes or charges.
- The revenue collected should be hypothecated to reduce the external costs for which the charge has been paid. Investing in new and existing road infrastructure is particularly important in order to further reduce the negative impacts of road transport.
- The charging system should be as simple and transparent as possible.
- The collection systems must be as interoperable as possible.

THE AIM OF THE EUROVIGNETTE; FAIRNESS, AND TRANSPARENCY

Whereas the aim of Directive 1999/62/EC was to eliminate the distortion of competition between transport undertakings in the EU member states, the aim of the 2011 revision was the protection of the environment. The European Commission has now proposed a further revision of the directive with the additional aim of generating revenue and ensuring financing for future transport investment[3]. The likely coexistence of these three different aims in a single piece of legislation will certainly not add clarity to an already complex debate, nor will it facilitate its proper future implementation by member states.

Users have the right to know what they are paying for and why. That is why it is vital to provide transparency and clarity with regard to the use of revenues. Transparency is the most basic principle of any charging system. We, as vehicle manufacturers, as well as our customers, should know what a system charges for and how to adapt our products to the charging system. This should also be the main purpose of any internalisation scheme; without transparency, road charging will simply be another tax, like VAT. The Commission's proposal will not bring additional transparency

[3] COM (2017) 275 final, 31.5.2017, page 15, whereas (1).

to the charging system, as it neither guarantees that double taxation will be avoided nor ensures that the additional revenues will be reinvested in road transport infrastructure or in reducing external costs from road transport.

The methodology used to calculate the costs has not always been coherent and understandable, and for that reason, implementation by member states has proved extremely difficult. The valuation of costs has not been based on objective criteria; it has instead been largely the result of broad estimates rather than scientific, accurate valuations of the actual costs. The scientific community is far from having agreed a commonly accepted definition of external costs and their valuation. The current directive is based on the results of the 2008 CE Delft Handbook on External Costs of Transport[4], which does not add transparency to the system[5]. The 2014 update of the CE Delft handbook, undertaken by RICARDO-AEA[6], missed the opportunity to challenge the methodology and the criteria used by CE Delft in 2008.

INTEROPERABILITY

Interoperability is another basic principle that defines a functioning road charging system. There are no common European vehicle regulations that facilitate easy cross-border road transport. This major hurdle forces our customers to have five or more different transponders behind their windscreen. The strength of the original Eurovignette scheme was based on the system's interoperability.

The collection systems must be as interoperable as possible given that two technologies are allowed (DSRC and GPS/GSM), using common interfaces, and sharing as much equipment (boxes, connectors, displays, etc) as possible to deliver a low-cost solution.

NO INCREASED BURDEN

The proposal for the revision of the Eurovignette Directive allows member states to introduce

[4] CE Delft, *Handbook on Estimation of External Costs in the Transport Sector*, 2008.

[5] For a critical report on the CE Delft handbook, see Professor Dr Herbert Baum, *External Costs in the Transport Sector – A Critical Review of the EC-Internalisation Policy*, Institute for Transport Economics at the University of Cologne, May 2008.

[6] RICARDO-AEA, *Update of the Handbook on External Costs of Transport*, 2014.

additional charges for road users. However, the proposal does not introduce mandatory measures to compensate road users by means of vehicle tax reduction for the increased costs linked to the introduction of additional charges. The Commission simply expects that member states will do so, but the competence remains at national level and there is no guarantee that double taxation will be avoided. ACEA, however, supports the Commission's proposal to eventually remove the vehicle tax minima for heavy goods vehicles from the current Directive. This would at least offer an additional possibility to member states to compensate for road charges.

CROSS SUBSIDISATION

ACEA does not support the cross subsidisation of other transport modes using fees paid by road users. The so-called 'imbalance' between modes of transport, which is used as a justification for cross subsidisation, has never been accepted by automobile manufacturers. The fact that a significant percentage of passenger journeys and freight tonne kilometres take place by road is not so much an imbalance but rather the result of a perfectly rational choice by consumers and freight shippers, considering the quality and efficiency of the services on offer for non-road modes of transport. Cross subsidisation to make non-road modes of transport more competitive cannot be justified; the quality and efficiency of these services must be improved through opening up the national markets to greater competition.

EARMARKING

The revenues from internalisation should be earmarked for the transport mode that has been charged or taxed. Not doing so runs contrary to the pricing theories on which the Commission claims its internalisation strategy is based. It is important that revenues from road transport are used to improve road transport, and in particular infrastructure, including the development of connected and automated driving (CAD) technology by allocating the necessary funds for an intelligent road infrastructure and cooperative ITS (C-ITS). Indeed, quality road infrastructure is essential to improving the environment and to the safety of road transport. Under the current directive, the extent to which revenues generated from infrastructure and external costs charges shall be reinvested in road transport is decided by member states. The proposal for revision does not include modifying this. It does, however, introduce an obligation to earmark revenues generated from congestion charges for addressing the problem of congestion. ACEA supports this proposal provided that the revenues are not used to subsidise modes other than road transport.

EXTERNAL COSTS: CHANGES PROPOSED IN THE REVISION

Congestion

The proposal allows member states to introduce a congestion charge on any section of their road network that is subject to congestion. ACEA believes that congestion costs should not be counted as external costs[7]. With traffic density increasing, there is mutual hindrance among road users. Each user contributes the same level of congestion as he/she encounters from other users. Thus, each road user contributes to the burden of the collective of road users and, at the same time, is burdened by this collective. Moreover, road users take congestion into account when making transport decisions. Including congestion costs in an external cost analysis is equivalent to double counting this cost. Users mutually disturb each other, but do not impose extra costs on the rest of society. Delays in freight or business transport, which incur additional production costs for certain industries, shippers, or business travellers, are assumed to account for congestion effects – hence, these costs are not external. Therefore, congestion costs must not be counted with classical externalities, as this would entail double charging and would penalise users for insufficient infrastructure investments. It would also discourage infrastructure providers from investing in road infrastructure.

Air pollution and noise costs charged on heavy goods vehicles

The levels of air pollutant emissions and noise have been significantly reduced over recent years and further progress will be achieved as a result of fleet renewal. The existing Eurovignette legislation allows for charges on heavy goods vehicles, both for infrastructure and for external costs, to be varied according to the emission limits of the vehicle and this has indeed accelerated the fleet renewal rates of trucks. In this context, European vehicle manufacturers do not see the need for the new rules to phase out the possibility of varying the charges for infrastructure costs according to the Euro emission class as proposed by the Commission. Indeed, the present system includes the possibility of introducing differentiated rates, which has proved to highly successful in reducing overall emissions through fleet renewal[8]. The Commission's impact assessment justifies the proposed phase out on the basis that "differentiation according to Euro emission class is losing

[7] See footnote 5.

[8] 'Evaluation of the implementation and effects of EU infrastructure charging policy since 1995', Final Report, Ricardo-AEA, 2014.

its relevance and effectiveness over time as the vehicle fleet is replaced and without a Euro VII standard in sight. The share of Euro VI vehicles on German toll roads increases by about 16% each year and stands already at 47% overall and 51% among vehicles registered in Germany, representing a replacement rate of just over six years. Thus, the share of Euro 0-IV is barely 6% and decreasing every year.[9]" The real situation, however, is that such differentiation is still very much required to speed up the renewal of the existing fleet. Indeed, according to the Commission's transport model PRIMES-TREMOVE, in 2020 only 18% of the expected EU-registered heavy duty vehicles will comply with Euro VI standards.

Heavy goods vehicles (% by Euro class)	2015	2020	2025	2030	2035	2040	2045	2050
Euro I	2%	0%	0%	0%	0%	0%	0%	0%
Euro II	8%	0%	0%	0%	0%	0%	0%	0%
Euro III	40%	27%	9%	0%	0%	0%	0%	0%
Euro IV	19%	15%	11%	4%	0%	0%	0%	0%
Euro V	30%	40%	31%	20%	6%	0%	0%	0%
Euro VI	1%	18%	49%	76%	94%	100%	100%	100%

Source: PRIMES-TREMOVE transport model (ICCS-E3MLab)

CO_2 differentiation of charges for heavy goods vehicles

Introducing CO_2 differentiation into the Eurovignette could be supported by heavy goods manufacturers, provided that any such differentiation is introduced in a 'neutral way', ie with no increase in the total amount of toll revenue collected from the transport industry. Specifically, this would mean that tolls for certain vehicles would be increased, while tolls for other vehicles would decrease. Such a neutral CO_2 differentiation would offer incentives in the same way as the Euro emissions differentiation does, which is currently possible with the Eurovignette.

The European Commission, together with the industry, has put a great deal of effort into developing the Vehicle Energy Consumption Calculation Tool (VECTO). The VECTO computer simulation tool is expected to deliver certified CO_2 values for new trucks, providing a sound basis for CO_2-based toll differentiation. VECTO will gradually be applied to all new registrations;

[9] SWD (2017) 180 final, PART 2/2, page 80.

therefore, it will be some time before it can be used for CO_2 differentiation at the European level and for national road toll systems. Vehicles that are not CO_2 certified might have to be classified in some other way for toll purposes.

The current Euro emission class differentiation should thus be maintained, given that a significant proportion of heavy goods vehicles in the fleet is still below Euro VI. Future development stages of VECTO will also need to cover innovative technologies, such as the use of alternative fuels and electrification.

Given the nature of the elements under consideration, the definition of the reference values for CO_2 emissions and the appropriate categorisation of the heavy goods vehicles concerned should be the object of an implementing act and not of a delegated act as proposed by the Commission.

CO_2 and pollutant emissions charges for light duty vehicles

The Commission proposes using a variation of tolls or charges on the basis of CO_2 and pollutant emissions for light duty vehicles, based on the conformity factors as specified in the revised legislation RDE3. Only vehicles complying with certain conformity factors will benefit from discounted charges, provided that they emit less CO_2 than the fleet average. The proposed Annex VII, which specifies the emission categories according to which tolls and user charges shall be differentiated, is the object of a separate ACEA position paper.

OTHER COSTS

Accidents

Manufacturers of motor vehicles note that accident risks are not related to the distance travelled but mainly to driver behaviour, such as speeding, drinking and the failure to use seat belts; therefore, measures related to road safety might provide the most effective results. Moreover, insurance premiums already cover much of the cost of accidents therefore there would be no transparency if this were a general distance-based charge. The insurance system is much better adapted to providing incentives for safer vehicles, better designed roads, and better drivers than a general distance-based charge.

METHODOLOGY FOR CALCULATION OF EXTERNAL COSTS

The methodology proposed for the calculation of the external costs is based on a report from 2008,

the CE Delft handbook, updated in 2014 by RICARDO-AEA, the shortcomings of which are many and varied. These reports do not provide an independent calculation of external costs, as they are mere compilations of existing third-party studies and do not specify a plausibility test. The considerable spread of cost values compiled in the handbook and its update show a large degree of uncertainty concerning the level and structure of external costs. Moreover, the way in which the values offered for some of the external costs have been calculated is questionable from a methodological point of view.

As a result, the arithmetical averages of the values recommended in the Eurovignette Directive are only broad estimates that result in arbitrary unit values. This approach clashes with the supposed 'scientific methodology' which the Commission claims its road pricing strategy is based upon.

Together with the proposal for the revision of the Eurovignette Directive, the Commission has released an impact assessment[10] that unfortunately fails to challenge any earlier calculation of external costs. Moreover, the impact assessment also refers to studies on external costs commissioned by UIC (Union Internationale des Chemins de Fer). Studies commissioned by organisations representing the interests of rail transport give rise to some concerns over their neutrality towards road transport.

MARK-UPS IN MOUNTAINOUS AREAS

The Commission proposal to extend the possibility of applying mark-ups to regions in addition to those in mountainous regions, and to allow adding mark-ups on the infrastructure charges levied on other road sections throughout Europe, is not supported by ACEA. Since all cost elements, such as infrastructure and external costs, are already covered by other provisions in the directive, the proposal to extend their application is unjustified.

EXTENSION OF THE SYSTEM TO THE WHOLE ROAD NETWORK

The scope of the current directive should not be extended beyond the roads already covered. Indeed, member states are better placed to decide where charging systems should or should not be applied.

[10] SWD (2017) 180 final PART 1/2, 31.5.2017, footnotes 33 and 39.

EXTENSION OF THE SYSTEM TO OTHER VEHICLES: A DISTANCE- OR TIME-BASED SYSTEM

In accordance with the principle of subsidiarity and for the sake of coherence, buses, coaches, and light duty vehicles should remain completely excluded from the scope of application of the proposal. Member states are better placed to decide if and how vehicles other than heavy goods vehicles should be charged for the use of the road infrastructure. Similarly, member states are better placed to decide whether they should use a distance- or a time-based road charging system.

COMPETITIVENESS

The Commission's original motivation for introducing the Eurovignette Directive appeared to be based on the belief that the introduction of charges for external costs would improve the competitiveness of the European economy. However, no justification for this view was offered. The impact assessment of 2008[11] largely confirmed the negative effects of the Commission's pricing strategy on the economy. In 2014, the study prepared by RICARDO-AEA for the Commission on the implementation and effects of EU infrastructure charging policy[12] did not consider the effects that external cost charges had on the European economy or on its competitiveness.

The impact assessment[13] released with the recent Commission proposal confirms that transport costs for road users will increase. How much this increase will be, depends on each member state's current charging system and on the extent to which member states will decide to use the revenues from road charging to reduce vehicle taxation. Contrary to the optimistic interpretation of the data made available by the Commission in its impact assessment, vehicle manufacturers believe that the impact on transport operators and consumers will be significant.

Transport charges, in particular road transport charges, should not be levied in such a way as to adversely affect Europe's competitiveness. Cross subsidisation of other transport modes would not improve Europe's competitiveness. To use the revenues from the Eurovignette to subsidise less efficient modes of transport, which seem unable to offer the quality of service required, will not

[11] 'Impact assessment on the internalisation of external costs', SEC (2008) 2208, 8.7.2008, pages 59-66.

[12] See footnote 9.

[13] 'Transport costs', SWD (2017) 180 final, 31.5.2017, PART 1/2, Chapter 6.1.1..

help achieve the objectives of European transport policy nor will they make Europe the most competitive region in the world. It is certainly the case that the system should be devised so as not to adversely affect Europe's competitiveness, in a sector that already lags behind when compared with other world regions, which is why the criteria to keep the tax/charge burden on industry stable is so important.

Europe's competitiveness could be enhanced by making the necessary improvements to road infrastructure, using the €396 billion (EU15) annually paid by road users to widen the existing network, remove bottlenecks, contribute to the development of CAD[14] by allocating the necessary funds for an intelligent road infrastructure and C-ITS and, where necessary, build additional road capacity.

REGIONAL COHESION

The proposal by the Commission, if implemented, will place an intolerable burden on many peripheral regions already struggling to improve their competitiveness. This is acknowledged in the Commission's impact assessment: "businesses located in peripheral member states can face higher overall costs from road charges[15]".

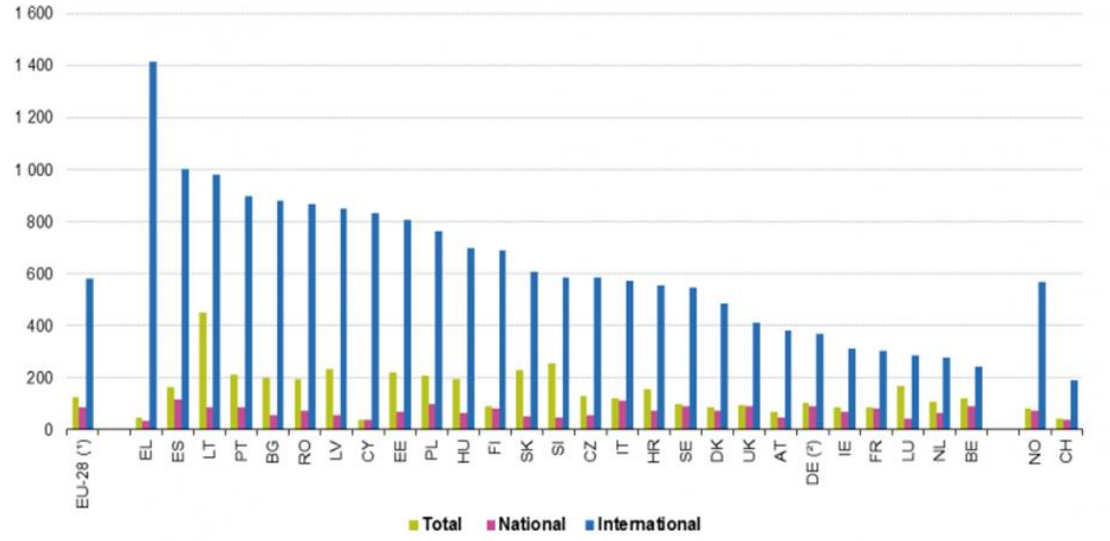
Any charging of the external costs system should be implemented in a way that strengthens cohesion within the EU. There should be no room for discrimination between core and peripheral member states through financial charging.

The chart on the following page illustrates the average distance that goods are carried by road[16], confirming that peripheral regions would suffer more from the negative impact of the new charging system.

[14] See footnote 7.

[15] SWD (2017) 180 final, 31.5.2017, PART 1/2, Chapter 6.1.7., 'Regional distribution of impacts'.

[16] Road freight transport by journey characteristics, Statistics explained, Eurostat, October 2016.



(1) EU-28: provisional data for reference year 2015; Malta: excluded (see chapter 'data sources and availability')
(2) DE: 2014 data was used for reference year 2015.

European Automobile Manufacturers Association

ABOUT ACEA

- ACEA represents the 15 Europe-based car, van, truck and bus manufacturers: BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles, Ford of Europe, Hyundai Motor Europe, Iveco, Jaguar Land Rover, Opel Group, PSA Group, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars, and Volvo Group.
- More information can be found on www.acea.be or @ACEA_eu.

ABOUT THE EU AUTOMOBILE INDUSTRY

- 12.6 million people – or 5.7% of the EU employed population – work in the sector.
- The 3.3 million jobs in automotive manufacturing represent almost 11% of EU manufacturing employment.
- Motor vehicles account for almost €396 billion in tax contributions in the EU15.
- The sector is also a key driver of knowledge and innovation, representing Europe's largest private contributor to R&D, with more than €50 billion invested annually.
- The automobile industry generates a trade surplus of about €90 billion for the EU.

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