



BACKGROUND DOCUMENT FOR THE PUBLIC CONSULTATION ON THE CHARGING OF THE USE OF ROAD INFRASTRUCTURE

1. INTRODUCTION

This document provides some background information for answering the public consultation questionnaire on a possible initiative on road charging foreseen for 2013. The content of this document is purely informative and the views expressed within it are not binding for the Commission.

2. INTERNALISATION OF EXTERNAL COSTS AND INFRASTRUCTURE COSTS IN EU POLICY

In 2008, the Commission adopted the Communication on a Strategy for the internalisation of external costs which established 'marginal social cost pricing' as the general principle for internalising the external costs of transport;¹ the possibility was left to combine it with other approaches to make sure that the construction of infrastructure can be funded. This strategy was confirmed in the 2011 Transport White Paper, which proposes moving towards the full application of the 'user pays' and 'polluter pays' principles with the aim of eliminating distortions, generating revenues and ensuring the financing of future transport investments. This strategy is also based on broad common charging principles for all transport modes based on the transparent calculation of costs. Users should pay at least the marginal costs of the wear and tear of the infrastructure and the main external costs (i.e. noise, pollution and congestion), while for other costs, such as construction costs, the choice of options should be kept wider.

It is generally accepted that the cost of greenhouse gas (GHG) emissions, which for road transport consist mainly of carbon dioxide (CO₂), are best internalised through other tools such as fuel taxes. In the absence of a clear CO₂ component in national fuel taxes, it may be relevant to leave Member States the possibility of applying alternative ways of internalising the cost of GHG emissions through distance-based charges (tolls) or time-based charges (vignettes). A Commission proposal to review the Energy Taxation Directive, currently discussed in the European Council, is however proposing the clear separation of the CO₂ component of fuel taxes.

¹ The principle of marginal social cost pricing for internalising the external costs of transport has actually been already introduced earlier (cf., e.g. COM(1998)466 final).

The level of internalisation of external costs is not the same in the different modes of transport. **Rail transport** pays charges at least at the level of the direct costs, i.e. including the infrastructure wear and tear, on the entire network for both freight and passenger transport, as stipulated by EU legislation. Fuel of rail transport (diesel or electricity) is subject to VAT and excise duty at least in some Member States, and electricity generation is included in the Emissions Trading System (ETS).

By contrast, for **road transport**, charging is voluntary according to EU legislation. Consequently only some TEN-T roads and motorways are subject to distance-based tolls, whereas others are subject to time-based vignettes, and yet others are exempt from tolls and vignettes. Road charging of heavy goods vehicles (HGVs) on the TEN-T and motorway network is regulated at the EU level, while no legislative framework exists for cars, vans and motorbikes at the moment.

Air transport generally pays airport fees as well as en-route charges, regulated at EU level, for both passenger and freight transport.

Maritime and Inland Waterways transport usually pay charges for all vessels entering ports.

The European Parliament and the Council has asked the Commission to present a more detailed report summarising the measures taken to internalise the external costs in all transport modes by October 2012.

3. STATE OF PLAY IN EU LEGISLATION

The charging of HGVs for the use of road infrastructure is governed by Directive 1999/62/EC (called the "Eurovignette" Directive²). The initial goal of the Directive was to avoid abusive road pricing that would discriminate against foreign operators. The Directive put mandatory ceilings on the amounts allowed to be charged through vignettes. The maximum distance-based charges were also *de facto* capped by the common methodology to be applied when calculating the tolls. In 2011, the 'Eurovignette' Directive was amended³ to allow charging for the external costs of noise and air pollution from transport on top of infrastructure charges.

The European Electronic Toll Service (EETS) Directive⁴ puts in place the legislative framework for the provision of EU-wide tolling services that would give unhindered access to all roads subject to electronic tolling. So far, however, only a limited number of functioning interoperability arrangements have appeared across the EU, so international hauliers continue to suffer administrative burden and costs linked to the handling of numerous tolling contracts.

² The name 'Eurovignette' refers in first place to the treaty between SE, NL, BE, LU and DK which establishes a common time-based charge (vignette) for the use of the main road infrastructure of the 5 countries by HGVs. The Directive however regulates all forms of road charging for HGVs: time-based charges such as the 'Eurovignette' or national vignettes, but also distance-based charges (tolls).

³ By Directive 2011/76/EU.

⁴ Directive 2004/52/EC.

While there is no specific European legislation in the field of road charging for cars, the general Treaty principle of non-discrimination must be respected by any national charging system. Following complaints concerning some Member States, the Commission has prepared a Communication⁵ explaining how the non-discrimination principle applies in the context of vignettes for cars. The Communication was adopted on 14 May 2012.

4. PROBLEMS

4.1. Financing gap

In order to remain competitive, Europe needs to complete and maintain an efficient network of transport infrastructure. The Commission has estimated that 1.5 trillion euro over 20 years is the minimum investment needed to keep pace with the increase in transport demand. 500 billion euro will be needed by 2020 to complete the TEN-T network. Without these investments, Europe will progressively lose the asset of efficient transport infrastructure capable of supporting long-term, sustainable economic growth.

In spite of the urgency to increase investment, public spending on transport infrastructure has continued to fall in Europe since the 1970s. As a result, while a significant number of roads and rail lines is still being built – notably in the Member States which joined the EU since 2004 – the spending on the maintenance of the existing network is not sufficient to keep it in a good condition. The problem has been recognised in Germany where a special commission was recently set up to make proposals on the future financing of transport infrastructure.⁶

In times of fiscal consolidation, there is even less justification to call upon the tax payers to finance the maintenance of the transport infrastructure and therefore the network managers have no choice other than to increasingly rely on the users to pay for it (this is called the 'user pays principle'). For roads, this can be achieved by putting in place road charging schemes. Such a solution is usually seen as fairer than financing the infrastructure from taxes, since it allows the infrastructure to be financed by its true beneficiaries rather than the general public. Road charges can also secure the revenue flow for the regular and timely maintenance of the infrastructure. Relying on yearly and irregular budgetary decisions makes it impossible to plan in the long-term the necessary repair work. This lack of optimised planning is said to increase the long term maintenance costs by up to 20%.

With respect to the construction costs of transport infrastructure, there can be wider socioeconomic benefits and positive externalities that justify some level of public funding. It would not be efficient to ask users to bear the entire construction costs when infrastructure is not used at its full capacity. Nevertheless in other cases the recovery of construction costs through road charges may be warranted, for instance to attract private investors in Public Private Partnerships (PPP) which can help to reduce costs. New innovative financial instruments, such as Project Bonds endorsed by the European

⁵ COM(2012) 199 final.

⁶ <http://www.bundesrat.de/DE/gremien-konf/fachministerkonf/vmk/Sitzungen/11-12-02-Umfrage-Kommission-Zukunft-VIF/einsetzungsbeschluss.templateId=raw.property=publicationFile.pdf/einsetzungsbeschluss.pdf>.

Council of 28/29 June 2012, can in particular be used to leverage the private sector's contribution with more secured revenue flows from road charges.

4.2. Fair and efficient use of road transport infrastructure

Price signals play a crucial role in many decisions that have long-lasting effects on the transport system. Road charges modulated according to a vehicle's characteristics, as well as the time and place of use, can be an effective tool for achieving a more efficient use of infrastructure, i.e. re-directing road users to vehicles that cause less damage to infrastructure, to vehicles which are cleaner or to using the roads outside peak hours in order to maximise the use of the available capacity. This would contribute to the greater efficiency of transport and logistics to the benefit of the competitiveness of the overall EU economy.

Distance-based charges should be modulated according to the axle-load of the vehicle (or a proxy of this measure) to adequately reflect the wear and tear of the infrastructure. Furthermore, different toll rates should be applied according to the time of day, type the day (i.e. weekday or weekend) and season to effectively tackle congestion. Finally, road charges should reflect the environmental performance of vehicles to create incentives for the purchase and use of cleaner vehicles.

Other external costs of transport could also be considered to be internalised through road charges if more effective tools are not available. In particular, the question arises whether, in Member States where the CO₂ component cannot be clearly identified in fuel taxes, the cost of GHG emissions could be internalised through distance-based charges.

4.3. Patchwork of road charging systems in place

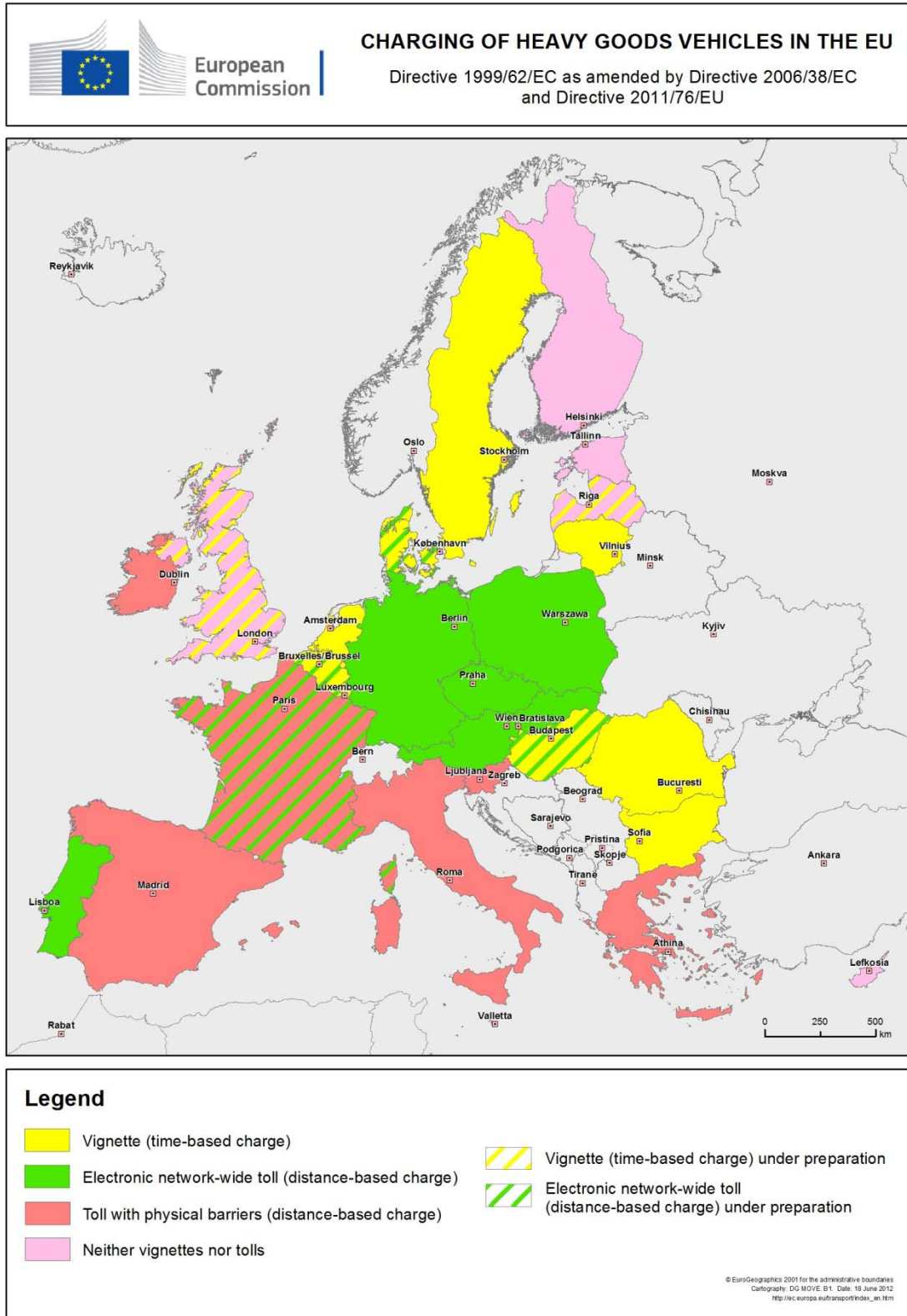
To date, despite some harmonising effects of EU legislation⁷, Member States have put in place many types of road charging systems.

As indicated on Map 1, six Member States still have no system in place for charging HGVs for the use of road infrastructure. In nine Member States, HGVs are subject to time-based charges: national vignettes or the 'Eurovignette'. Six Member States apply tolls, i.e. distance-based charges, with physical barriers on the motorways, generally also offering electronic toll services. Finally, so far six countries have put in place network-wide electronic distance-based charging systems. These are however mostly not interoperable (i.e. the on-board unit delivered in one country cannot be used in another).

Member States also make different choices concerning the coverage of road charges. Vignettes usually apply to a wide network of motorways, expressways and national roads. Tolls (distance-based charges) are generally restricted to motorways. Where motorways are built or operated under a concession contract, users are generally tolled although sometimes the operator is paid by the state (known as 'shadow tolls'). This solution is often used to reduce the costs of mobility in poorer or more remote regions.

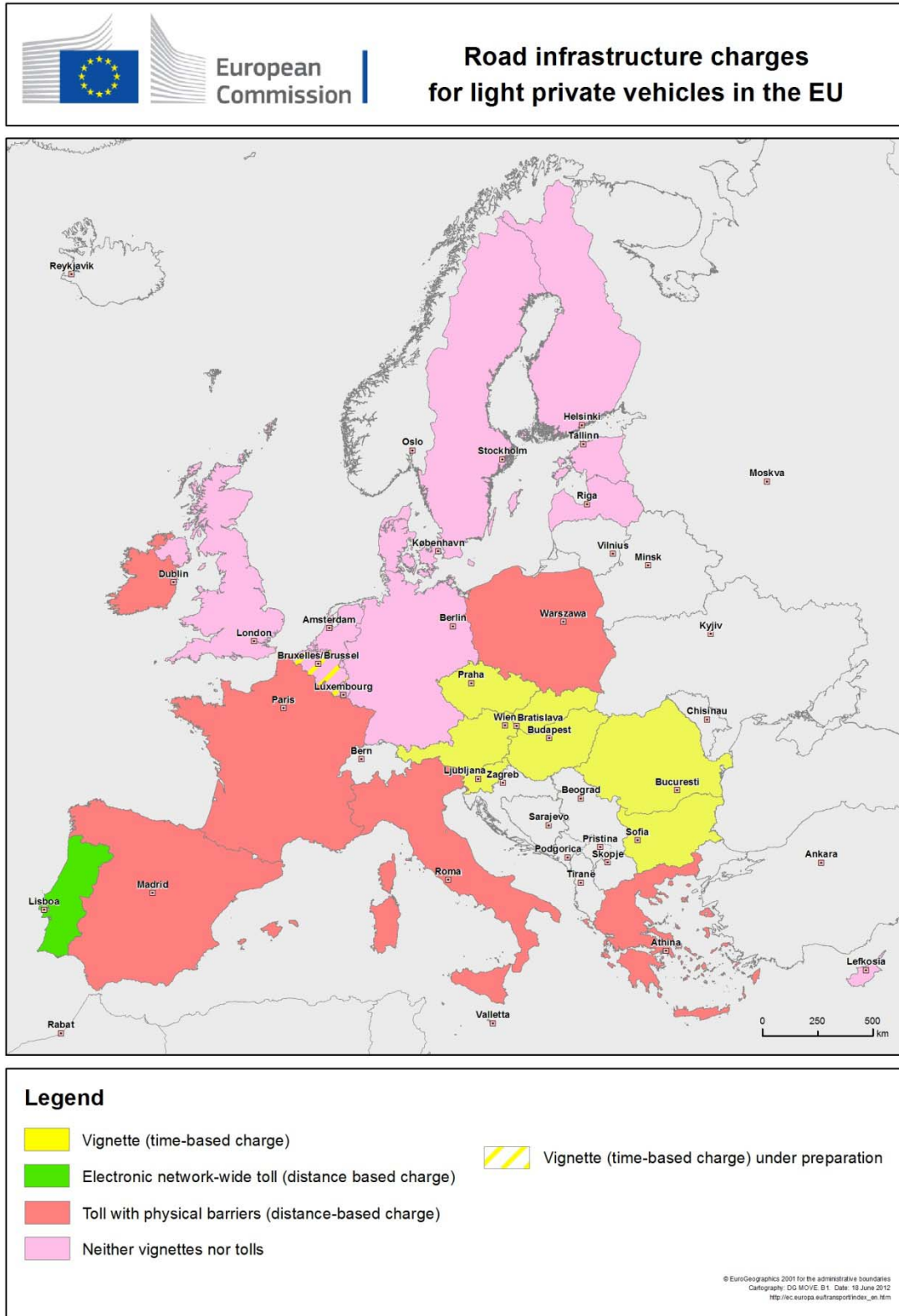
⁷ Notably Directive 1999/62/EC ('Eurovignette' Directive) and Directive 2004/52/EC ('EETS' Directive).

Map 1: Charging of heavy goods vehicles in the EU



Map 2 shows the situation with respect to road charges for cars. Altogether such charges exist in 14 Member States. Seven of these have put in place national vignettes, while the other seven collect tolls with physical barriers on the motorways.

Map 2: Road infrastructure charges for light private vehicles in the EU



The variety of road charging arrangements in Europe means that users do not receive, across the EU, consistent price signals capable of steering them towards a more sustainable use of the infrastructure. For instance time-based charges (vignettes) do not provide incentives for minimising the distance travelled; tolls which are not modulated in time fail to reduce congestion; and, finally, differences in tolling rates on parallel roads can typically lead to traffic diversion.

The lack of harmonisation in both the type of charges (vignettes, tolls differentiated or not) and the type of charge-collecting technologies that are used results in additional administrative burden and costs both for public authorities and users. As an example, international hauliers currently need 11 different on-board units and tolling contracts, as well as 6 vignettes to be able to drive unhindered on European roads.

4.4. Transparency in levying charges and setting tariffs

Another problem is the lack of transparency and the risk of discrimination in the way in which tolls and charges are fixed, updated and levied. While for HGVs the 'Eurovignette' Directive sets a common framework for estimating the level of infrastructure costs and puts ceilings on the environmental cost charges and vignette prices, no such legislation regulates road charges for cars. The already-mentioned Communication on vignettes for cars⁸ showed significant discrepancies in the way short-term and long-term vignette prices are fixed in the different Member States⁹. In the field of distance-based charges, road users are generally not consulted or informed about the rationale behind yearly updates of toll levels. This creates the risk of toll chargers abusing their monopolistic position and making unjustified profits on the tolls.

5. CONCLUSION

In light of the above considerations, the Commission has decided to launch a public consultation on a possible new initiative on road charging. In the attached questionnaire, you will be asked to express your opinion on the problems identified by the Commission (as described above) and on the pros and cons of the range of possible policy measures to address them. You are also invited to address additional comments, information and/or positions on European policy in the field of road charging to the email address MOVE-ROAD-CHARGING@EC.EUROPA.EU.

⁸ COM(2012) 199 final

⁹ The ratio between the average daily price for short-term and long-term vignettes is an indication of a potential discrimination of occasional users. The higher this rate, the higher the probability of occasional users (mainly international users) being discriminated.