

March 2017

## The Eurovignette and the framework to promote a European electronic toll service (EETS)

### Main instrument

[Directive 1999/62](#) on the charging of heavy goods vehicles for the use of certain infrastructures (Eurovignette); and [Directive 2004/52](#) on the interoperability of electronic road toll systems in the Community

*This briefing is one of a series of 'Implementation Appraisals', produced by the European Parliamentary Research Service (EPRS), on the operation of existing EU legislation in practice. Each briefing focuses on a specific EU law which is, or will shortly be, subject to an amending proposal from the European Commission, intended to update the current text. 'Implementation Appraisals' aim to provide a succinct overview of material publicly available on the implementation, application and effectiveness of an EU law to date - drawing on available inputs from, inter alia, the EU institutions and advisory committees, national parliaments, and relevant external consultation and outreach exercises. They are provided to assist parliamentary committees in their consideration of the new Commission proposal, once tabled.*

<b>EP committee responsible</b> at time of adoption of the EU legislation: Committee on Transport and Tourism (TRAN).
<b>Date of adoption</b> of original legislation in plenary: <a href="#">7 May 1999</a> (Eurovignette) and <a href="#">20 April 2004</a> (EETS).
<b>Implementation deadline:</b> Transposition by 1 July 2000 (Eurovignette). The (EETS) Directive specifies that a decision on the definition of the European electronic toll service must be taken by the Commission by 1 July 2006, <sup>1</sup> if not, a new date needs to be set according to the procedures specified in the directive.
<b>Planned date for review of legislation:</b> According to Directive 2011/76 which amends the Eurovignette (Directive 1999/62), an implementation report should be produced by October 2015, particularly looking at the 'the effectiveness of the provisions on the recovery of the costs related to traffic-based pollution, and on the inclusion of vehicles of more than 3, 5 and less than 12 tonnes'. For EETS - no specific review clause but the Commission, in liaison with the Electronic Toll Committee, must draw up a report by 31 December 2009. This report will include a study of use of each of the technologies mandated by the legislation, as well as a cost-benefit analysis.
<b>Timeline for new amending legislation:</b> Proposals amending the legislation related to these two directives are expected in the second quarter of 2017. (See the Commission's 2017 work programme, <a href="#">new initiatives</a> ).

## 1. Background

The EU has set ambitious goals to combat climate change, aiming to reduce greenhouse gas (GHG) emissions by 20 % in 2020, and by 40 % by 2030.<sup>2</sup> In general, emissions have decreased, but in the area of transport they have been on the increase since 1990. In fact, GHG from transport (including aviation) is the second largest emission source by sector.<sup>3</sup> In 2014, they represented 25 % of total emissions, with almost three quarters coming from road transport. Passenger cars were responsible for most emissions (44 %), while 18 % came from heavy-duty vehicles.<sup>4</sup>

<sup>1</sup> The Commission Decision on the EETS definition was adopted on 6 October 2009, [Commission Decision 2009/750](#).

<sup>2</sup> I.e. a 20 % or 40 % reduction in greenhouse gas emissions compared with 1990, see Eurostat [GHG emissions statistics](#).

<sup>3</sup> [GHG emissions by sector](#), Eurostat ([env air gge](#)), European Environment Agency.

<sup>4</sup> [GHG from transport](#), European Environmental Agency, 2016.

In terms of inland freight, three quarters was transported by road (75 %) while 18 % was transported via rail in 2013. There were some variations between Member States. In Ireland, Greece and Spain, over 90 % of inland freight transport was by road, while in the Baltic States this figure was around a third or lower. In some countries the majority of road freight transport was national, this was the case in Sweden and in the UK, for example, while international transport dominated in Latvia, Slovakia, Slovenia, Luxembourg and Lithuania (80 % or above).<sup>5</sup> In terms of costs, fuel made up around a third of costs for freight operators, while road user charges only represented about two percent of the total operating costs.<sup>6</sup> Road charges are more common in the case of heavy goods vehicles (HGVs), with 22 Member States applying charges to these types of vehicles, while only twelve EU countries did the same with private light vehicles in 2012.<sup>7</sup>

The 2011 [White paper on transport](#)<sup>8</sup> sets out a framework for building a competitive transport system while also reducing GHG emissions. The paper outlined various aims, such as ensuring that 30 % of road freight over 300km shift to other modes, like rail or waterways, by 2030, and for there to be a move towards full implementation of the 'user pays' and 'polluter pays' principles. More recently, in July 2016, the Commission published its [low emission mobility strategy](#),<sup>9</sup> setting out ways of reducing emission in the transport sector.

It is in this context that the European Commission is planning to put forward proposals in relation to amending the Eurovignette ([Directive 1999/62](#)), which deals with road charges for HGVs, and the framework to promote European electronic tolling service ([Directive 2004/52](#)). These pieces of legislation were not initially focused on contributing to reducing GHG emissions. However, with time, this aspect has become more important. In November 2016, an [inception impact assessment](#), setting out the main objectives around the revision of the Eurovignette, was published. These objectives were: 1) ensuring that road charging can become an effective tool in reducing CO2 emissions and traffic congestion; 2) making sure that road pricing reflects appropriately the cost and frequency of use; and 3) guaranteeing that the quality of roads is improved in line with the user charges. The initiative is part of the decarbonisation theme within the [Road transport strategy for Europe](#), with future actions also planned in the areas of the internal market, workers' rights and digital technologies.

Related proposals, on the Clean Vehicles Directive and post-2020 CO2 emissions, are also expected in the second quarter of 2017, according to the [Commission's 2017 work programme](#). Other initiatives related to transport include the recently published [proposal](#) on renewables after 2020 which looks at broader issues, such as renewable fuels and electric cars.

## 2. The legislation

When the Eurovignette ([Directive 1999/62](#)) was adopted in 1999, it aimed primarily to enhance the functioning of the internal market, harmonise the road charge systems, and prevent Member States from applying discriminatory charges to favour national transport above international. It sets tolls and user charges for vehicles with a weight of at least 12 tonnes. Charge setting should take into account infrastructure construction, operation and maintenance costs. However, it did not oblige countries to introduce road charges. The legislation was subsequently amended in the form of [Directive 2006/38](#) which facilitated the introduction of different tolls and linked these closer to environmental aims. It also extended charges to vehicles over 3.5 tonnes.<sup>10</sup> The need to ensure that transport costs reflect the pollution and congestion it causes has become increasingly important. [Directive 2011/76](#) reflected this by allowing Member States to charge for external cost related to pollution as well as infrastructure costs.

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<sup>5</sup> [Freight transport statistics](#), Eurostat Statistics Explained, January 2016.

<sup>6</sup> [SWD \(2013\) 1](#).

<sup>7</sup> [Technology options for the European Electronic Toll Service](#), prepared for the European Parliament's Committee on Transport and Tourism, 2014.

<sup>8</sup> COM (2011) 144.

<sup>9</sup> COM (2016) 501.

<sup>10</sup> Countries with vignette system generally only apply the 12 tonne limit.

The current legislation allows for two types of payments: vignettes and tolls. Vignettes are time-based charges that users buy for a set amount of time, i.e. daily, monthly or annual for example. Tolls, on the other hand, are charged depending on the distance travelled. Regardless of the system, charges should vary depending on the amount of emissions from the vehicle. To this end, there are currently six classes of EU emission standards for heavy duty vehicles, from Euro class I to VI, with the latter being the cleanest. The legislation applies to non-urban roads on the [trans-European transport network](#)<sup>11</sup> (TEN-T) and to motorways. Member States are, however, free to apply charges to other roads too. Most Member States finance their road infrastructure via their general budgets, although those with concession motorways use income from these contracts towards infrastructure too. The legislation allows Member States to earmark the income from road charges to cover transport related costs; despite being voluntary, many countries do make use of this possibility.<sup>12</sup>

As can be seen in the table below, most Member States now operate distance-based toll charges for heavy duty vehicles. Several of the countries below use different systems depending on the vehicle. Denmark and Sweden for example, use a time-based system (Eurovignette) for vehicles over 12 tonnes, but a distance-based one for vehicles over 3.5 tonnes.

Table 1: Type of road charge systems

Road charge systems for HGV	Country
Eurovignette	Denmark*, Luxembourg, the Netherlands and Sweden*
Vignette	Romania, Bulgaria, Latvia, UK
Network-wide electronic tolls	France, Austria, Germany, Czech Republic, Slovakia, Poland, Hungary*, Belgium and Lithuania
Concession motorway tolls	Portugal, Italy, Spain, Slovenia, Greece and Ireland

Source: Evaluation of the implementation and effects of EU infrastructure charging policy since 1995, p31 with updates from <https://www.eurovignettes.eu/portal/> and [DKV euroservice.com](http://DKV.euroservice.com)

\* More than one payment system in operation, generally depending on the weight of the HGV.

The Eurovignette [inception impact assessment](#) (IIA) notes that, while Member States are now able to use the revised Eurovignette Directive to differentiate charges so they can tackle congestions, this is rarely used. The IIA puts this down to the restrictive conditions of the provisions in the legislation.<sup>13</sup> It also notes that charges for external costs, such as air and noise pollution, have not been used much either.

[Directive 2004/52](#) 'lays down the conditions for the interoperability of electronic road toll systems in the European Union. The legislation is related to the tolling of all types of vehicles. The Directive requires that all new electronic toll systems brought into service shall use one or more of the following technologies: satellite positioning (GNSS); mobile communications (GSM-GPRS); and microwave technology (DSRC)'.<sup>14</sup> It also establishes a European Electronic Toll Service (EETS) to allow road users to register once with an EETS provider and then be able to pay for any road charging scheme across Europe using a single on-board equipment. The legislation was intended to complement local electronic toll services, not to replace them. At present, there is a variety of operational systems across the EU, but DSRC is the most used technology.<sup>15</sup> The detailed technical issues are set out in the [Commission Decision 2009/750](#).

<sup>11</sup> The trans-European transport network (TEN-T) is a network which comprises roads, railway lines, inland waterways, inland and maritime ports, airports and rail-road terminals throughout the 28 Member States.

<sup>12</sup> Evaluation of the implementation and effects of EU infrastructure charging policy since 1995, prepared for the European Commission by Ricardo-AEA, January 2014.

<sup>13</sup> See, for example, Article 7g paragraph 2 of the [Directive 2011/76](#).

<sup>14</sup> See [Electronic Pricing and Payment](#), European Commission, Directorate-General Mobility and Transport.

<sup>15</sup> [Technology options for the European Electronic Toll Service](#), study prepared for the European Parliament's Committee on Transport and Tourism, 2014.

It had been stipulated that a fully interoperational EETS would be available, offering electronic toll collections services to HGV users by October 2012 and all vehicles by 2014, but this was not achieved.<sup>16</sup> A Commission [communication](#)<sup>17</sup> from August 2012 sets out the progress so far and the remaining challenges. (For more details, see the next section on implementation).

### 3. Implementation and evaluation

#### 3.1 Implementation

In its 2013 [evaluation](#) of the Eurovignette Directive (1999/62), the Commission stated that all countries have communicated the steps they have taken to transpose the legislation and that only in one case has action been taken so far.

The Commission's externally contracted evaluation of the Eurovignette, published in early 2014, reviewed the level of implementation of the legislation and concluded that 'Most EU Member States have transposed the 1999 Directive and its amendment in 2006. However, only a few Member States have systematically implemented and applied all the provisions of the Directive.'<sup>18</sup> For example, some countries have left concession tolls outside the scope of the legislation or not implemented all provisions systematically.

A review of infringement notices since 2014 shows that only a few procedures related to road transport and road charges for heavy goods vehicles (HGVs) have been started by the Commission, including the implementation of the Commission decision on the definition of the European Electronic Toll Service, i.e. ensuring that national systems of electronic toll collection have been put in place. More information was also requested in one case related to charges for non-resident HGV vehicles. (See [April 2016 European Commission infringement notice](#)).<sup>19</sup>

In terms of Directive 2004/52 on EETS, as seen in the section above, the implementation suffered delays. The Commission's 2012 report<sup>20</sup> concluded that while some progress had been made, most electronic toll systems were being put in place without considering a future European dimension, and there was a general lack of cooperation between different stakeholder groups. Most Member States had yet to complete national frameworks so that potential electronic toll service (ETS) providers could register. In some cases, toll chargers' contracts had included restrictive clauses which discouraged potential ETS providers from taking on the work. To ensure progress, the Commission proposed a stepwise approach, concentrating first on implementation at cross-border regional levels in those Member States with the most traffic.

#### 3.2 Evaluations

The two evaluations of the Eurovignette (Directive 1999/62) were conducted in 2013. They both conclude that distance-based charges, which vary depending on how much the vehicles pollute, are the most effective way of using road charges to tackle emissions. The reviews observed that the flexibility in the directive had led to diverging road charge solutions being implemented across the EU, which made comparison difficult. The two reports occasionally draw different conclusions from the available evidence, for example, the Commission's own report is more positive about the impact of modal changes (from road to rail) caused by road charges than is the external report.

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<sup>16</sup> EETS [evaluation roadmap](#) 2015.

<sup>17</sup> COM (2012) 474.

<sup>18</sup> [Evaluation of the implementation and effects of EU infrastructure charging policy since 1995](#), prepared for the European Commission by Ricardo-AEA, January 2014. See page 113 of the report for additional details.

<sup>19</sup> The case related to private vehicle charges and non-nationals, which was recently settled by the Commission, is out of scope of this briefing.

<sup>20</sup> COM (2012) 474.

In terms of EETS (Directive 2004/52), a Commission [roadmap](#) from September 2009 announced a forthcoming evaluation that would look at the accuracy of the implementation of the legal framework and to what extent the objectives were relevant and whether they had been achieved. The reports available to date also noted the lack of harmonisation between the different systems used and the vehicles included, and showed that the different technologies currently used in electronic tolling have different strengths and weaknesses. Below are the summaries of the two evaluations.

[Evaluation of the implementation and effects of EU infrastructure charging policy since 1995](#), prepared for the European Commission, January 2014

This report serves both as an evaluation of EU road-user charging policies since 1995 up to and including the effects of the amending Directive 2006/38, and as a base for analysing the potential ex-ante impacts of the more recent revision of the Eurovignette via Directive 2011/76. In terms of methodology, the report does not specifically outline its approach; nor does it identify the stakeholder groups cited. However, it appears that the report is based mainly on desk research, a survey and qualitative analysis. The report highlights some caveats, particularly due to insufficient data, and it notes that Member States' varying approaches to road charges also made assessment difficult. As some EU countries considered certain data, such as non-payment of charges, confidential, this information could not be included in the report.

The report also outlines the difficulty of linking legislative changes to behavioural changes, as a number of factors can influence operators in the transport sector. In particular, speed and reliability can be more influential in their decision-making than the price of road charges. The 2008 recession contributed to a reduction in road transport, which again makes it difficult to assess the impact of specific policies attempting to do the same.

The evaluation concludes that most EU countries have implemented some type of road user charge and that charges are generally differentiated by euro class. It reports that all countries, apart from those under the Eurovignette agreement, clearly ensure that at least some income from road charges are re-invested back into the transport system. Even so, many stakeholders felt that more effort was still needed in this area to ensure complete transparency. The review also found no evidence of excessive minimum charges for vignettes, but noted the potential for daily high rates to discriminate against international users. Frequent user discounts, though, were only found in one country. The report also observed that road charges had not led to a modal change.

In general, toll-based systems were more effective than vignette systems because charges based on distance were more likely to reduce pollution than time-based charges. The report also found some evidence that network-wide HGV tolls generated more revenue than HGV vignette systems and that drivers avoiding payments were less frequent.

In terms of Directive 2004/52, it noted that, despite initial resistance, public support for electronic tolling was relatively high; for cross-border tolling to be successful, however, required decisive political commitment and further harmonisation.

The report highlights two priority areas for improving air quality, namely more frequent use of the higher euro class vehicles and transport efficiency improvements. However, it adds that the most important policy instrument to address environmental concerns relating to transport is to consider direct regulation of air quality pollutants from HGVs.

Finally, the report makes a series of recommendations: 1) implement measures to encourage a switch from vignette systems to electronic tolls; 2) remove soft barriers hampering the use of charges that vary based on the time of the day; 3) increase the interoperability of Member States' systems; and 4) work to harmonise the road charging systems so that the 'polluter pay' principle is consistent across all Member States.

[Ex-post evaluation of Directive 1999/62, as amended, on the charging of heavy goods vehicle for the use of certain infrastructure](#), European Commission Staff Working Document (SWD (2013) 1), 2013

The report outlines the current state of play as of 2013 in terms of the implementation and impact of the legislation. The review did not specify any methodology and provided only brief information about the sources used to draw conclusions. The report found that the directive provided an effective framework which allowed Member States to apply road charges without discriminating against non-national users. However, it also stated that due to the diverging charging systems and technologies used, the legislation had not led to a fully integrated market. The different systems represented an additional cost to transport users. It also stated that on an EU aggregated level, the benefits of road charging in terms of increased net welfare were clear. The benefits could vary though on a regional level. Areas with high traffic could benefit from the road charge income while those located in more peripheral regions saw their road connections improved. The report argued that distance-based tolls offered the best solution as it provided more opportunities to charge vehicles differently and were therefore more sensitive to price signals. It had been expected that the move towards electronic tolling would be fast, as this had not been the case, many national differences had remained.

#### **4. Other EU-level reports, evaluations and studies**

[State of the Art of Electronic Road Tolling \(ETS\) Acts](#), prepared for the European Commission, October 2015

This report is based on case studies and interviews with 32 toll chargers and operators, ETS providers, and technology providers. The main aim of this report is to provide an overview of current and future electronic tolling solutions and to identify the barriers to achieving EU-wide interoperability between the different electronic toll schemes. Currently, electronic toll schemes (ETS) vary considerably across the EU. The report notes that the road charge method, types of vehicles charged and the length of the road network included are all factors that will affect the design of a scheme and the choice of technology. The report argues that it is also important to take into account wider transport developments such as driverless cars or the increase in urban tolling and other technological advances. The report reviews the different schemes and costs to make a series of recommendations. These include: harmonise the schemes and introduce a system based on GNSS OBU/Proxy<sup>21</sup>; extend the list of specific technologies to use for charging in the legislation; provide guidance on data protection and privacy in relation to electronic tolling; ensure relevant legislation (including the Eurovignette) is interpreted in the same way so as not to place onerous requirements on toll suppliers; and cooperate more effectively on enforcement across borders.

[Expert Review of the EETS Legislative Acts](#), prepared for the European Commission, September 2015

This review of EETS covers Directive 2004/52 and Decision 2009/750. In effect, this is a review of the legislative texts of the two pieces of legislation with some remarks about the appropriateness of those texts. The report does not appear to contain a specific methodology or draw from any available data but is 'an independent opinion on such [legal] provisions based principally on experience with the implementation of electronic tolling systems in Europe'. The report is connected to the study above which was authored by the same external provider.

[Technology options for the European Electronic Toll Service](#), prepared for the European Parliament's Committee on Transport and Tourism, 2014

This study reviews future options for the EETS and assesses the strength and weaknesses of six technologies currently in use. Three are included in the EETS legislation: 1) dedicated short-range communications (DSRC); 2) global navigation satellite systems technology (GNSS); and 3) mobile communications (GSM and smartphones). The other technologies assessed are not considered compliant with EETS: 1) automatic number plate recognition (ANPR); 2) radio frequency identification (RFID); and 3) tachograph-based tolling. These technologies differ in terms of accuracy, cost, interoperability and enforcement possibilities. Some also

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21 A global navigation satellite systems technology (GNSS) on-board unit (OBU)

carry wider privacy concerns due to the data collected. The potential for a technology to quickly become obsolete is assessed, with DSRC, GNSS and ANPR not presenting any signs of becoming out-of-date. GSM/GPRS technology carries more risks and is likely to become superseded by 3G and 4G technology which is on the increase. The DSRC is the most used technology in Europe, although it requires costly roadside equipment and lacks flexibility. GNSS and GSM are the most flexible solutions, but less developed and used. Although none of the technologies are seen to be able to increase interoperability in the EU. The report sees a clear need to harmonise the system and to work towards making the electronic toll system the default option in Europe. To achieve this, the report recommends that all vehicles are fitted with electronic toll devices, that the market is liberalised but that coherent standards are followed. A robust enforcement policy is also needed that is best achieved with the sharing of data and a pan-European registration database with non-payers' details.

[Study on Impacts of Application of the Vignette Systems to Private Vehicles](#), prepared for the European Commission, February 2012

This study reviews how the vignette system has worked in practice for private vehicles. Vignettes for this type of vehicles exist in Austria, Bulgaria, the Czech Republic, Hungary, Romania, the Slovak Republic and Slovenia. There is no specific EU legislation aimed at this system as is the case for HGVs. The report is mainly based on qualitative evidence and looks at some shortcomings in the application of the system. For example, diverging product pricing which is not based on objective pricing criteria. This typically means that daily rates were disproportionately costly and therefore impacted negatively on short-term users which tended to be non-national users. The report also noted a lack of advance signage to warn road-users of the risk of enforcement actions and some evidence that enforcement activities target foreign users more aggressively. The report concluded that introducing vignette discounts to reduce polluting road users could have a positive impact. However, to be effective it should be considered along with other policies to promote the use of environmentally-friendly vehicles, such as subsidies or parking privileges.

[Study on economic and social impact of the implementation of Directive 2004/52/CE on interoperability of Electronic fee collection in Europe](#), prepared for the European Commission, 2007

This report looks at the socio-economic impacts of electronic toll services (ETS) on various stakeholders such as the ETS service providers, transport companies and on-board unit producers. The report draws on interviews with various stakeholder groups as well as desk research. Reviewing the current implementation, the report concludes that electronic tolling systems vary considerable across Member States but that the use of ETS is growing although this is not necessarily related to the directive but more to the advantages with the system and to technological improvements. The report forecasts that the use of electronic toll systems will continue to increase across all vehicles.

## **5. European Parliament position**

### **5.1. Parliament resolutions**

#### **[Resolution of 9 September 2015 on the implementation of the 2011 white paper on transport](#)**

In this resolution, the Parliament calls for the EU to continue to be a world leader in promoting decarbonisation in the transport sector. It supports a wider application of the 'user pay' and 'polluter pay' principles, to ensure a level playing field between transport modes by, for example, removing environmentally harmful tax subsidies. It calls for sufficient funding to ensure that the TEN-T core road network can be completed by 2030. It requests the Commission to undertake an assessment of whether the different road charging schemes currently in existence for passenger cars are compatible with the EU Treaties, and to ensure that they do not discriminate road users on the basis of residency. It also calls for initiatives to be presented in the areas of interoperability of electronic road toll systems and in setting post 2020 mandatory CO2 emission limits for cars and vans. In terms of heavy-duty vehicles, it calls for the timely completion of a simulation tool that can reliably measure the fuel consumption and CO2 emissions by these

vehicles. Once this has been done, it asks that new mandatory CO2 emission limits be considered if appropriate. The resolution also asks the Commission to consider creating a European Road Transport Agency.

The Commission's [follow-up](#) notes that several initiatives regarding instruments to boost funding have been undertaken, such as the [Connecting Europe Facility Regulation](#) to encourage private investments. Other types of activities include an expert report on 'New financial schemes for European transport infrastructure projects' published in June 2015.<sup>22</sup> While an action plan to promote alternative fuels is forthcoming, the Commission is not planning a systematic evaluation of passenger car road-charging schemes in Member States, although it is possible that the revision of the Eurovignette Directive, which is aimed at heavy goods vehicle, could become broader in scope to include other vehicles too. The Commission confirms that new testing procedures for CO2 emissions for heavy goods vehicles are under development and that a legislative proposal is under consideration.

#### [Resolution of 25 April 2013 on a strategy for an electronic toll service and a vignette system on light private vehicles in Europe](#)

The Parliament calls for drastic action to address the lack of progress related to a European electronic road toll service (EETS), and regrets the lack of interest among Member States in progressing with EETS and calls for strong political action to remedy the situation as the Commission's market approach has proved unsuccessful. It also expresses concern about the regional approach suggested by the Commission to improve implementation. It calls for a continued EU-wide approach, and for infringement proceedings to be started against any non-compliant Member States. It asks the Commission to conduct a review of the available evidence to suggest options for an EETS based on best practice and to do so by the end of 2013, and requests that, if necessary, new proposals to address any issues identified by this review be put forward.

In its [follow-up](#), the Commission outlines that a new road pricing initiative is being considered that could potentially promote EETS as a road financing tool. It is also considering a mandatory approach for EETS implementation. In terms of its regional approach, the Commission will ensure that solutions can be scalable to full EU coverage and it does not think that the approach will delay a Europe-wide system. It adds that it is already taking actions against non-compliance via EU-pilots, a voluntary action that can precede and prevent infringement measures being taken. In terms of a review, the Commission agrees that this would be useful but states that more time would be needed to do this. In terms of operational systems, it already recommends the use of GPS/GPRS rather than DSRC.

## 5.2 Members' questions

### [Written question by Renaud Muselier \(EPP, France\), November 2015](#)

This question relates to the Eurovignette and possible future revisions of the directive. The question mentions issues around traffic on motorways that do not count as Alpine crossings and which have seen HGV traffic increase to carry half of this traffic between France and Italy. It asks whether, in order to encourage modal change, the Commission should prioritise introducing distance-based charging on motorways for HGVs of more than 3.5 tonnes.

### [Answer given by Ms Bulc on behalf of the Commission, February 2016](#)

The Commission stated that it is generally in favour of charging schemes based on user and 'polluter pay' principles, and that this was reiterated in its 2016 work programme where it stated that it would 'promote the use of non-discriminatory road charging schemes based on the polluter-pays and user-pays principle'. In terms of the specifics on the crossing between France and Italy, the Commission refers to a [previous answer](#) which specified that while the revised Eurovignette has provisions for adding road charges to congested roads in exceptional circumstances, an agreement between the two countries in question would first be needed.

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<sup>22</sup> See the resulting action plan: [Making the best use of new financial schemes for European transport infrastructure projects](#).

### [Written question by Mercedes Bresso \(S&D, Italy\), February 2015](#)

This question enquires about the reasons why there has been a lack of progress in the implementation of the European road toll system (Directive 2004/52), and also seeks additional information about which Member States have fully implemented the directive in question and what if any, new initiatives the Commission is planning in relation to the EETS.

### [Answer given by Ms Bulc on behalf of the Commission, April 2015](#)

The Commission answered that it had set out some key reasons for lack of progress in its 2012 communication. It was also undertaking further actions by launching an evaluation into the legislation to get more detailed information. In terms of implementation, all Member States had transposed the directive, but few had done so correctly, and infringement procedures had therefore been initiated against some Member States. Once the evaluation was finalised, the Commission would consider proposing legislative changes to the directive, or potentially consider funding the deployment of EETS via the Connecting Europe Facility programme.

## **6. European Commission stakeholder consultations**

A [consultation](#) of a review of the Eurovignette (Directive 1999/62) was held between July and October 2016. The consultations sought views on how the legislation has been working so far, for example around the financing of road infrastructure, the treatment of different vehicles and diverging road charge systems across the EU. The consultation also covered policy options for addressing the weaknesses identified in the current legislation. This involved options to include lighter vehicles in the legislation, introduce mandatory distance-based charges, include all road freight transports above 3.5 tonnes without exceptions and replace the Euro class system with one that closer reflects the external cost of air and noise pollution. The EU's legislative remit was also covered, i.e. should the EU deal with all road vehicles charges, and what about congestion charges? A [summary](#) of the results showed that 135 responses were received, with a high proportion (36 answers) being coordinated as many standardised answers were received. Most respondents welcomed an increased legal harmonisation, and a majority felt that the legislation should not solely focus on HGVs, and supported the polluter and user pay principles. Consumer organisations and citizens were most likely to support linking pricing to pollution. There was relatively little support to extend charges to all main roads.

In parallel, a [consultation](#) was also held on the review of the European Electronic Toll Service (Directive 2004/52 and Decision 2009/750). The consultation covered some of the weaknesses identified in the Commission's implementation report from 2012.<sup>23</sup> It sought feedback on issues such as the requirements for EETS providers to offer universal coverage and whether any actions were needed when the toll charger and the toll service provider is the same entity. Other areas covered included costs of EETS, interoperability between systems, barriers to better cooperation between Member States, and the possibilities to exchange information across borders about toll offenders as well as using new technologies such as smart phones for tolling.

The resulting report covered responses from the above consultation as well as a previous one conducted in 2015 as part of the work to evaluate EETS. The [results](#) showed that a total of 35 responses were received for the 2016 consultation and 22 for the 2015 evaluation.

## **7. The European Economic and Social Committee**

The European Economic and Social Committee (EESC) has an established programme related to transport. More recent events in the area of road transport include a [conference](#) in October 2016 on the future of the European core network corridors (TEN-T). Presentations from around the network were made, with speakers sharing their experience of stakeholder engagement as well as other issues.

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<sup>23</sup> COM (2012) 474

In an EESC [opinion](#) from May 2016, it welcomed the Commission's intention to harmonise the road charging system and to move to a clearer polluter-pay principle. It also noted that the responsible Commissioner had stated that they were planning to propose 'a European system for trucks and private cars by the end of 2016 that would involve uniform rules on toll collection in all the EU Member States based solely on the number of kilometres covered'. The opinion recalled that additional measures would be needed to meet the COP21 commitments, for example increasing energy efficiency, promoting electric cars and promoting public transport.

EESC held a joint [hearing](#) with the TRAN Committee in April 2016 on the impacts of the UN Climate Change Conference (COP21) on EU transport policy. The hearing warned that as transport was a sector where emissions were still growing, it was particularly important that action was taken here, especially in urban areas which are suffering the most.

## 8. The European Court of Auditors

### [Are EU Cohesion funds well spent on roads?](#) Special Report n° 5, 2013

The European Court of Auditors (ECA) conducted an audit of road infrastructure spending via the European Regional Development Fund (ERDF) and the Cohesion Fund, between 2000 and 2013. It chose to review 24 investment projects in Germany, Greece, Poland and Spain as these countries had received the highest funding allocations over this time period. The total cost of the projects audited exceeded three billion euro. The audit used various cost calculations to review the projects - i.e. total project costs, construction costs (all material and work needed to deliver the project), and roadway construction costs (cost of building road surface only).

The report concluded that these projects had in part fulfilled their objectives, in that time savings and road safety had been improved, but that they had fallen short in other areas. Not all projects delivered the planned returns forecasted and not enough had been done to ensure that the projects were cost effective. Many projects had inaccurate traffic forecasts or chosen the wrong type of road, i.e. costlier motorways were favoured over express roads even though there were no real need for them. Generally, projects tended to over-run and become more expensive than when first budgeted. The report made several recommendations including ensuring that the Commission should investigate the reasons for price differences in road construction between Member States; the Commission should proactively promote and disseminate best practice; and any EU funded projects should be fully competitive and have clear indicators of success.

### [Have the Marco Polo Programmes been effective in shifting traffic off the road?](#) Special Report n° 3, 2013

The increase in multi-modal transport has been an important EU objective for many years. As part of the effort to shift freight transport from roads to rail, inland waterways and sea shipping, the Marco Polo programmes were set up in 2003. The initial programme had a budget of just over 100 million euro while Marco Polo II that ran from 2007 until 2013 had a budget of 450 million euro. These projects were directly managed by the Commission and the audit looked at how effective it had been in managing and supervising the projects. The review covered 16 projects up until July 2012. Together they represented more than 19 million euro in commitments and 11 million euro in payments.

The ECA found that the programmes were ineffective and had little impact on shifting freight away from roads. In addition, too few project proposals were made due to barriers in the entry conditions. In addition, the report also found that most projects would have gone ahead anyway without EU funding. Given the disappointing results, the ECA recommended to discontinue any transport project following the same design as the Marco Polo programmes, i.e. top down, but should they continue, any future projects should be preceded by an analysis assessing the EU added value.

In a related area, namely train transport, a special report on [rail freight transport](#)<sup>24</sup> was published in 2016. In it, the ECA concludes that rail had failed to effectively compete with road transport. The speed of freight trains and the lack of cooperation between Member States also contributed to it losing out. In fact, the ECA pointed out that it had seen no evidence of a significant increase in rail freight transport over the last decade. The report also notes that in three out of the five countries audited, a higher proportion of EU funded infrastructure spending was allocated to road than rail. Better targeted support is needed to ensure that rail transport becomes more reliable and flexible, better oriented to customers and that transport time and price are more competitive.

## 9. Conclusion

The various reports and assessments show that there are considerable differences in the way vehicle road charges have been implemented across Member States. This means that a fully integrated market is yet to be reached. This is partly due to the flexibility contained in the various legislations which allowed Member States to apply systems that first and foremost fitted with their needs. As transport policy has increasingly become more interlinked with reducing emissions, these differences have become more problematic. The available evidence shows that there are qualitative differences between the road charging systems with distance-based charges being the most effective option. Indeed, it is clear that a move towards this system has been happening for some time now, and that road charges generally vary depending on emissions. The reviews did not find evidence of discrimination against any HGV users.

In the area of electronic tolling, substantial variations can also be found. While dedicated short-range communications (DSRC) is the most used system, significant challenges around inter-operability remain. In fact some argue that none of the current systems in use under EETS will increase operability. Technological advances are nevertheless making harmonising these services easier. Although some argue that the gradual harmonisation seen to date has more to do with new technologies than with EU legislation.

While a harmonised system is important for the internal market, road charges have also become closely linked with the reduction in emissions according to the 'polluter pay' principle. Following that logic, it would be difficult not to consider road charges for all vehicles. Especially since passenger car emissions make up a higher proportion of GHG emissions than HGVs. Indeed, the Commission's consultation on the topic confirms that wide ranging options are being considered. A broader scope raises more challenges, and as road charges get more sophisticated, i.e. time-based for example, more care needs to be taken that rates do not discriminate against some road users, in particular non-nationals.

However, road charges currently make up only a very small proportion of the total costs for the transport sector, which means that behavioural changes solely based on these charges are likely to be limited. To significantly reduce transport emissions, much broader actions will be required.

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<sup>24</sup> ECA: Rail freight transport in the EU: still not on the right track, Special Report no 8, 2016

## 10. Other sources of information

**Eurostat data on transport** - see <http://ec.europa.eu/eurostat/web/transport/statistics-illustrated>

### European Commission

- Studies on roads, see [https://ec.europa.eu/transport/modes/road/studies/road\\_en](https://ec.europa.eu/transport/modes/road/studies/road_en)
- Expert Group reports on EETS technologies  
[https://ec.europa.eu/transport/themes/its/studies/eets\\_en](https://ec.europa.eu/transport/themes/its/studies/eets_en)

**EPRS** – see <http://www.europarl.europa.eu/thinktank/en/home.html>, including material such as:

- [The Cost of Non-Europe in the Single Market in Transport and Tourism: Road transport and railways](#)

**European Environmental Agency data on transport** - see <http://www.eea.europa.eu/themes/transport>

**OCED** – see <http://www.oecd-ilibrary.org/> (includes access to IEA publications)

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