Opinion of the European Economic and Social Committee on the 'Proposal for a Directive of the European Parliament and of the Council on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay road fees in the Union (recast)'

(COM(2017) 280 final — 2017/0128 (COD))

(2018/C 081/25)

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1. **Conclusions and recommendations**

1.1. The EESC strongly supports the European Commission's proposal of 31 May 2017 on the interoperability of electronic road toll systems, which aims to improve the provisions laid down in the Directive of the European Parliament and of the Council of 29 April 2004. Practical usage of these provisions over recent years has shown that many of them fail to meet modern requirements.

1.2. Electronic road toll systems have already been introduced at national, regional or local level in 20 Member States. However, the poor interoperability of the systems at international level incurs considerable revenue losses for Member States, as well as additional costs for direct road users. The EESC encourages Member States to pursue active cross-border cooperation when developing advanced road tolling mechanisms. A lack of cooperation means that Member States have no way of identifying specific offenders if their vehicles are registered abroad.

1.3. The EESC is strongly convinced that every possible effort should be made to introduce a uniform electronic road toll system throughout the EU, based on advanced technology. The EESC is in favour of a simple, flexible and low-priced system that can quickly be extended to cover a wider range of users and road networks. Such a system would create a favourable basis for implementing the discrimination free tolling practices established by the provisions of the Eurovignette legislation.

1.4. The on-board unit (OBU), which is the key component in an electronic toll system, need not be a single physical device. It could be a number of physically or remotely linked devices, including smart phones and tablets, which together perform the functions of an OBU. The EESC recommends encouraging the development of special IT applications for these purposes, which would significantly reduce costs for road users.

1.5. Some Member States have already been using different road toll collection technologies, and it would be very expensive for them to transfer to a uniform system. The EESC therefore recommends that the European Commission look for flexible financial, technical and legal instruments to encourage Member States to seek to integrate the various existing solutions into one interoperable system. Including a list of technologies used in systems with an OBU in the annex to the directive also would facilitate a quicker response to technological development and help to achieve uniformity.

1.6. The EESC supports the European Commission's initiative to introduce a single contract with the European Electronic Toll Service Provider (EETS) for all EU users. This will help to implement more transparent and user-friendly practices.

1.7. This would allow for an easier and more effective way to retrieve unpaid road usage fees from dishonest and fraudulent road users, independently of their country of registration. The EESC recommends that the Commission consider extending the treaties governing the use of the Eucaris system (the European car and driving license information system). This system already provides infrastructure and software to countries that enables them to share their car and driving licence registration information, thereby helping to fight car theft and registration fraud.

1.8. The social aspects of the European Commission's proposal are also of crucial importance. SMEs and micro-enterprises predominate in the road haulage sector throughout the EU. Electronic tolling for private cars is a very sensitive issue. Solutions in this case should therefore be very carefully balanced.

2. **Background and overview of existing tolling schemes**

2.1. In 2012, road use charges were levied on heavy goods vehicles in 20 Member States, and on private cars in 12. The toll road network was approximately 72 000 kilometres long, 60 % of which was equipped with electronic toll collection (ETC) systems that had been introduced nationally or locally from the early 1990s onwards and to which more than 20 million road users had subscribed. Dedicated short-range communications (DSRC) systems are the most frequently adopted solution for electronic toll collection. New technologies, including satellite-based ones, have also been adopted over the last 10 years. As a result, a number of different and, in most cases, non-interoperable technologies coexist within the European Union.

2.2. Directive 2004/52/EC was adopted to rectify this fragmentation of the market by creating a European Electronic Toll Service (EETS). Under the said directive, the EETS should have been available to heavy goods vehicles from October 2012 at the latest and should have been offered for all other types of vehicles by October 2014.

2.3. To ensure that the various toll systems are technologically compatible and thus can be linked up to this single toll service, the directive specified three technologies that may be used to collect tolls by electronic means: microwave DSRC, satellite (GNSS) and mobile communications (GSM).

2.4. At present, the provisions of Directive 2004/52/EC have not yet been fully implemented in the European tolling market. Tolling schemes still are not homogenous — each Member State and toll charger has its own legislative context, objectives for establishing a scheme, local context and traffic conditions.

2.5. The EESC has underlined the importance of common standards and cross-border interoperability as a way of ensuring efficient cross-border transport and the development of effective EETS in the recommendations that it has put forward in numerous previous opinions ([1]).

2.6. The main charging schemes in the EU are:

2.6.1. Distance-based charging schemes: the charge is calculated on the basis of the distance travelled by the vehicle and then adjusted by other parameters characterising the vehicle (total weight, number of axles, emission class, etc.). This is the most common type of scheme in the EU and uses various technical means to charge a vehicle proportionally, based on its actual usage of the road infrastructure.

2.6.2. Time-based or vignette-based charging schemes: the charge is calculated on the basis of a given period of time, and is again adjusted according to the same vehicle characteristics as referred to above. Such schemes involve purchasing a vignette authorising the use of a certain road network for a specific amount of time (one day, one month or a full year). The fee to be paid is independent of the actual use of the road infrastructure.

([1]) OJ C 32, 5.2.2004, p. 36.
OJ C 277, 17.11.2009, p. 85.
OJ C 291, 4.9.2015, p. 14.
OJ C 173, 31.5.2017, p. 55.
OJ C 288, 31.8.2017, p. 85.

2.6.3. Access-based charging schemes: the charge is principally applied to urban areas and specific infrastructure, where the user is charged a toll for driving in the relevant zone. Such schemes make it possible to reduce traffic and pollution in particularly sensitive parts of the city or other heavily built-up urban areas.

2.7. There are two main technologies used in the EU for electronic toll transactions in 'distance-based' schemes: Global Navigation Satellite System (GNSS) positioning and dedicated short-range communications (DSRC), which is 5,8 GHz microwave technology and has been adopted by the European Committee for Standardisation (CEN):

2.7.1. GNSS technology uses the vehicle's position data received from a network of satellites and measures the distance covered on the road in order to determine the charge. The on-board unit (OBU) identifies its location and collects and processes the necessary information without the aid of roadside units. It is the most convenient system, but also the most expensive.

2.7.2. Dedicated short-range communications (DSRC) technology is based on bidirectional radio communication between fixed roadside equipment (RSE) and a mobile device (OBU) installed in a vehicle. By means of such communication, road users (and their vehicles) are identified by the roadside infrastructure in order to trigger the payment.

2.8. Automatic number plate recognition (ANPR) system is used in access-based charging schemes. This technology uses video cameras to read vehicles' registration plates. It does not require OBUs and involves less costly roadside equipment.

2.9. An overview of the various tolling systems in use in different EU countries is presented in the tables below:

2.9.1. Distance-based tolling systems for heavy-duty vehicles:

Tolling Schemes	**Technology used**	**Country**
Free-flow	GNSS with ANPR and/or DSRC	Hungary, Slovakia, Belgium
Free-flow	GNSS with infrared and/or DSRC	Germany
Free-flow	DSRC	Austria, Czech Republic, Poland, Portugal, UK (Dartford Crossing)
Free-flow	ANPR	UK (Dartford Crossing)
Free-flow	ANPR and DSRC OBU	Portugal (A22, …, A25)
Network with toll plazas	DSRC	Croatia, France, Greece, Ireland, Italy, Poland, Portugal, Spain, UK

2.9.2. Distance-based tolling systems for light vehicles:

Tolling Schemes	**Technology used**	**Country**
Free-flow	DSCR/ANPR	Portugal

Tolling Schemes	Technology used	Country
Individual sections with toll plazas	DSCR/ANPR	Austria (A9, A10 Tauern, A11 Karawanken, A13, Brenner and S16 Arlberg)
Network with toll plazas	DSCR	Croatia, Denmark, France, Greece, Ireland, Italy, Poland, Portugal, Spain

2.9.3. Time-based tolling systems for heavy-duty vehicles:

Tolling Schemes	Technology used	Country
Vignette	e-Eurovignette	Denmark, Luxembourg, Netherlands, Sweden
Vignette	Electronic vignette	UK, Latvia
Vignette	Sticker	Bulgaria, Lithuania, Romania

2.9.4. Time-based tolling systems for light vehicles:

Tolling Schemes	Technology used	Country
Vignette	Sticker	Austria, Bulgaria, Czech Republic, Hungary (e-vignette), Romania (paper vignette), Slovenia, Slovakia
Toll with physical barrier, or free-flow	DSRC, ANPR — differs by scheme	UK

2.9.5. Access-based tolling systems for all vehicles ([2]):

Tolling Schemes	Technology used	Country
Access charge (cordon charge)	ANPR	Sweden (Stockholm)
Access charge (vignette)	ANPR	UK (London Congestion Charge), Milan (Area C charge)

3. **Description of the main problems**

3.1. In its communication of August 2012 on the implementation of the European Electronic Toll Service (COM(2012) 474 final), the European Commission clearly stated that 'failure to implement EETS and to do it in the foreseen timescale is not due to technical reasons', but rather that implementation was 'hampered by a lack of cooperation between the different stakeholders groups' and the limited efforts of the Member States. In its report of April 2013 on a strategy for an electronic toll service and a vignette system on light private vehicles in Europe (A7-0142/2013), the European Parliament took the same position and 'agreed with the Commission that the technology for interoperable systems already exists'.

([2]) Study on 'State of the art of electronic tolling' MOVE/D3/2014-259.

3.2. The majority of tolling systems require road users to install OBUs in their vehicles. While a few offer cross-border interoperability, most do not. This results in costs and burdens for road users, who must equip their vehicles with multiple OBUs to be able to drive unhindered in different countries. The costs are estimated at EUR 334 million a year currently and are expected to fall to just below EUR 300 million a year by 2025.

3.3. Some cross-border interoperability has been achieved, but in Croatia, the Czech Republic, Germany, Greece, Hungary, Ireland, Italy, Poland, Slovakia, Slovenia and the United Kingdom it is still the case that only national OBUs can be used to pay tolls. One of the aims of EETS legislation was to enable OBUs to be integrated with other devices inside vehicles, especially digital tachographs. Integration with tachographs has not proved promising.

3.4. The lack of cross-border interoperability also means costs for authorities, which must procure and service redundant OBUs that work nationally but cannot be used abroad. In just one national system where vehicles' positions are established using satellite positioning, the one-off cost of procuring OBUs amounts to EUR 120 million and servicing costs to EUR 14,5 million per year ([3]).

3.5. There is still no full-scale EETS, and very little progress has been made towards interoperability. Providers face considerable barriers to entry, such as discriminatory treatment by authorities, long and changing acceptance procedures, and technical specificities in local systems that do not comply with established standards. Only a few limited agreements involving more than one EU country have been signed. The main reasons are:

3.5.1. The existing tolling system operator has a privileged position on some national markets. This results in obstacles to the implementation of harmonised and discrimination-free tolling practices in the EU.

3.5.2. EETS legislation imposes hurdles: in particular, there is a requirement that EETS providers must be able to offer EU-wide services within 24 months;

3.5.3. National tolling schemes apply the three technologies allowed under EETS legislation in significantly different ways, which makes it difficult and costly to achieve cross-border interoperability.

3.6. EETS legislation lacks effective provisions on enforcing tolls on vehicles registered in another EU country. In some locations, international traffic represents a significant share of the total revenue from the tolling system, so limiting toll evasion by foreign users is a significant challenge. A Member State that detects a tolling offence by means of automatic enforcement devices cannot identify the offender on the basis of the licence plate number when the vehicle is registered abroad. There is no legal basis at EU level for the exchange of vehicle registration data between Member States for the purpose of toll enforcement. The resulting revenue leakage for national, regional and local tolling schemes amounts to some EUR 300 million a year ([4]).

3.7. There is a great need to promote the exchange of information on toll evasion at EU level and to give greater powers to the various tolling authorities to identify violators and launch enforcement procedures. In terms of enforcement, the Member States have a responsibility to demonstrate that road users are being treated equally and also to guarantee that the penalties are duly applied.

3.8. The mandatory requirement for all EETS providers to cover all vehicle types and every toll domain in Europe is considered to be excessive. It would be more efficient if EETS providers were free to respond to their clients' requirements, instead of having to impose a full but costly service on them.

([3]) Proposal for a Directive of the European Parliament and of the Council on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay road fees in the Union (recast) COM(2017) 280 final.

([4]) Proposal for a Directive of the European Parliament and of the Council on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay road fees in the Union (recast) COM(2017) 280 final.

3.9. The changes to the Interoperability Directive and the EETS Decision proposed by the Commission will bring savings to road users amounting to EUR 370 million (net present value — NPV, 2016-2025). Most of these savings will benefit the trucking industry, which is predominantly composed of SMEs. Managers of road networks will benefit from savings from not procuring redundant OBUs (EUR 48 million NPV) and additional toll revenues resulting from better rules on cross-border enforcement (EUR 150 million per year). EETS providers will experience a reduction in regulatory burden linked to entering national markets (EUR 10 million NPV, for an expected group of 12 EETS providers). Furthermore, they will see their market expand with additional revenues of EUR 700 million per year ([5]).

4. **Key elements of the Commission's proposal on a recast of Directive 2004/52/EC**

4.1. Appropriate cross-border enforcement would be implemented as follows:

4.1.1. A simple automatic mechanism for the exchange of information between Member States must be introduced. New mechanisms and legal agreements will be implemented to deal with the problem of cross-border enforcement of toll evasions. This information would allow Member States to follow up on cases of failure to pay tolls by non-resident drivers.

4.1.2. The system would include all types of vehicles and all types of electronic toll systems, including video-tolling.

4.2. The main proposals in terms of the technologies used and treatment of light vehicles are as follows:

4.2.1. The list of technologies has been moved to the Annex to the Directive. This will make it possible to respond to technological progress more quickly and effectively;

4.2.2. This list of technologies would remain unchanged and could only be amended in the future after thorough testing, standardisation work, etc.;

4.2.3. The Commission proposes separating EETS for heavy-duty vehicles (HDV) and light vehicles (LV) is proposed, such that one can be provided independently of the other;

4.2.4. There will be an exemption allowing EETS providers for LVs to provide customers with DSRC OBUs.

4.3. The definitions of EETS will be unified, and certain clarifications are proposed:

4.3.1. It is clarified that EETS must be provided by EETS providers, not by the toll chargers. EETS providers will be guaranteed equal market access on a par with national tolling service providers. This will increase customer choice of tolling service providers. Member States will not have an obligation to ensure the deployment of EETS by a certain time;

4.3.2. On-board units (OBU) need not be a single physical device, and may comprise several gadgets linked physically or remotely, including equipment already installed in the motor vehicle such as navigation systems, that provide all OBU functions. The same OBU should be applicable to all road toll systems, and portable devices such as smart phones may be used along with fixed OBUs.

5. **Possible obstacles for the implementation of the Commission proposal**

5.1. Achieving cross-border interoperability could require considerable administrative efforts and entail significant costs because of legal, technical and operational differences in individual national tolling schemes, due to the use of different technologies.

5.2. The Commission should consider the possibility of creating a financing mechanism to overcome these difficulties. Allocation of necessary funds would encourage Member States to render their national systems interoperable at the EU level.

5.3. It is important for it to be possible for EETS services to be developed in parallel with national ones, but it is possible that EETS providers would face some form of discriminatory treatment from local authorities in the Member States.

([5]) Commission staff working document: Executive summary of the Impact Assessment (SWD(2017) 191 final).

5.4. The social aspects of this proposal are also of crucial importance. SMEs and micro-enterprises predominate in the road haulage sector throughout the EU and the impact on them is expected to be positive. Extending the application such that a greater proportion of the road network is subject to electronic tolling for private cars might not be well received by the general public, and solutions in this case should therefore be very carefully balanced.

5.5. Costs could be reduced for users by stepping up research and development of technical and IT solutions in electronic toll systems. Fostering innovation in this area is a key point on which the European Commission should focus.

Brussels, 18 October 2017.

The President
of the European Economic and Social Committee
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