



**European Committee
of the Regions**

COTER-VI/043

133rd plenary session, 6-7 February 2019

OPINION

Road safety and automated mobility

THE EUROPEAN COMMITTEE OF THE REGIONS

- emphasises that the proposal to extend the scope of the RISM to roads beyond the TEN-T must provide for a multi-level governance approach to ensure that the competences of LRAs are respected; considers that safe road transport should be accessible in all European settlements and regions, and that targeted financial sources should be made available in regions that do not have the required financial resources;
- highlights the potential contribution of connected and automated mobility to EU cohesion objectives, noting in particular that such services could reduce intraregional disparities and make longer distance commuting more convenient, thus helping to mitigate saturation of major urban areas as well as depopulation of peripheral areas;
- draws attention to the impact of automated driving on regional spatial planning and emphasises the need to combat urban sprawl and rethink the relationship between cities and their surrounding areas; it also emphasises the need to ensure protection of vulnerable road users and to take mixed traffic into account;
- stresses the need for a robust legal and regulatory EU framework as for semi-automated driving as soon as possible and multi-level governance approach; it also underlines the need for appropriate access to vehicle data for LRAs as the largest operator of road networks in the Union;
- reiterates the importance of assessing the social and environmental impacts of automated mobility by means of pilot projects and the need for particular support for regions where the socio-economic impact is likely to be greatest.

Rapporteur

József Ribányi (HU/EPP), Vice-President of the County Council of Tolna Megye

Reference document

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions – On the road to automated mobility: An EU strategy for mobility of the future
COM(2018) 283 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Europe on the move. Sustainable Mobility for Europe: safe, connected, and clean
COM(2018) 293 final

Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/96/EC on road infrastructure safety management
COM(2018) 274 final

Opinion of the European Committee of the Regions– Road safety and automated mobility

I. RECOMMENDATIONS FOR AMENDMENTS

Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/96/EC on road infrastructure safety management (COM(2018) 274 final)

Amendment 1

Recital 5

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
<p>A large proportion of road accidents occur on a small proportion of roads where traffic volumes and speeds are high and where there is a wide range of traffic travelling at different speeds. Therefore the <i>limited</i> extension of the scope of Directive 2008/96/EC to motorways and <i>primary</i> roads beyond the TEN-T network should contribute significantly to the improvement of road infrastructure safety across the Union.</p>	<p>A large proportion of road accidents occur on a small proportion of roads where traffic volumes and speeds are high and where there is a wide range of traffic travelling at different speeds. Therefore the extension of the scope of Directive 2008/96/EC to motorways and <i>other primary</i> roads beyond the TEN-T network should contribute significantly to the improvement of road infrastructure safety across the Union <i>and the same high level of safety for all road users. It is essential to get local and regional stakeholders involved in the implementation of the extended scope of the directive, especially with regard to determining which roads are covered by its provisions. Such an approach would enable the Commission's proposal to be considered compliant with the subsidiarity and proportionality principles.</i></p>

<i>Reason</i>
<p>The extension of the Directive's scope is limited to motorways and other primary roads, according to the national classification.</p> <p>Since regional and local stakeholders know their area, their involvement ensures that the extension of the scope of the directive to certain sections of road is truly warranted. If this approach is based on multi-level governance and complies with the principles of subsidiarity and proportionality, the proposed extension of the scope will facilitate the harmonisation of safety requirements for all EU citizens.</p>

Amendment 2

New recital after Recital 5

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
	<i>In order to ensure that such extension of scope has the intended effect, it is logical that other primary roads should include at least those roads that connect major cities or regions belonging to the highest category of road below the category ‘motorway’ in the national classification.</i>

Reason

The Directive should focus primarily on roads of European value, i.e. roads connecting major cities and regions.

Amendment 3

Recital 6

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
Further, the mandatory application of the procedures of Directive 2008/96/EC to any road infrastructure project outside urban areas which is completed using Union funding should ensure that Union funds are not used to build unsafe roads.	Further, the mandatory application of the procedures of Directive 2008/96/EC to any road infrastructure project outside urban areas which is completed using Union funding should ensure that Union funds are not used to build unsafe roads. <i>Similarly, attention should also be paid to the situation of existing unsafe roads. In this area regional transport development programmes have four times as much funding as the Connecting Europe Facility; in both cases financial envelopes are open for planning and establishing new road sections. Therefore, adequate funds should be allocated to upgrading of existing roads. When delivering this, measures should be considered to enable smaller regions and towns to afford the investments required for RISM.</i>

Reason

Safe road transport should be accessible in all European settlements and regions; this needs targeted financial sources for road planning, establishment and operation, especially in regions that do not have the required financial resources and means for such purposes. Given the fact that new road sections are subject to higher road safety authorisation standards, existing roads require systematic overhaul so as to meet the RISM criteria in force.

Amendment 4

Recital 7

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
<p>Risk-based network-wide road assessment has emerged as an efficient and effective tool to identify sections of the network that should be targeted by more detailed road safety inspections and to prioritise investment according to its potential to deliver network-wide safety improvements. The entire road network covered by this Directive should therefore be systematically assessed to increase road safety across the Union.</p>	<p>Risk-based network-wide road assessment has emerged as an efficient and effective tool to identify sections of the network that should be targeted by more detailed road safety inspections and to prioritise investment according to its potential to deliver network-wide safety improvements. The entire road network covered by this Directive should therefore be systematically assessed to increase road safety across the Union. <i>As safe road transport should be accessible in all European settlements and regions, the methodology of risk-based network-wide road assessment should take due account of multi-level governance. Higher level territorial units should be given RISM coordinating functions, while the functions that are held by the state and the municipalities should be synchronised.</i></p>

Reason

As road safety is part of the future vision of settlements and regions, the relevant territorial units should contribute to that in accordance with their level of competence. This makes synchronisation of the functions carried out by municipalities and the state essential.

Amendment 5

Recital 10

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
<p>The safety performance of existing roads should be improved by targeting investment to the road sections with the highest accident concentration and the highest accident reduction potential.</p>	<p>The safety performance of existing roads should be improved by targeting investment to the road sections with the highest accident concentration and the highest accident reduction potential. <i>When doing so, the physical and digital infrastructure of public roads targeted by the Directive should be developed in parallel. In this regard, automated vehicles equipped with adaptive cruise control and transport support systems should contribute to enabling safe and effective operation of road traffic. Care must be taken that also smaller, demographically challenged and outermost regions are enabled to</i></p>

	<i>ensure universal availability of digital infrastructure.</i>
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Reason
Road safety being a complex issue, it also has economy of scale aspects to be considered. In this regard targeting investments where accidents and fatalities are the most frequent should involve complex physical and digital infrastructure developments, as well as the facilitation of extended use of automated vehicles equipped with adaptive cruise control and transport technologies to be applied.

Amendment 6

Recital 12

Text proposed by the European Commission	CoR amendment
Vulnerable road users accounted for 46% of road fatalities in the Union in 2016. Ensuring that the interests of these users are taken into account in all RISM procedures should therefore improve their safety on the road.	Vulnerable road users accounted for 46% of road fatalities in the Union in 2016. Ensuring that the interests of these users are taken into account in all RISM procedures should therefore improve their safety on the road. <i>The objective of avoiding or managing traffic emergencies involving pedestrians, cyclists, motorcyclists should be addressed by education and training tools, as well as by developing quality requirements for an infrastructure that supports pedestrians' and cyclists' mobility and safety, i.e. establishing road markings, road signs and sufficient pedestrian crossings, especially adjacent to public transport stops and public buildings in parallel, as well as constructing elevated, separate bike zones and pavements along all road stretches.</i>

Amendment 7

Recital 13

Text proposed by the European Commission	CoR amendment
The design and maintenance of road markings and road signs is an important element in ensuring road infrastructure safety, especially in light of the development of vehicles equipped with driver assistance systems or higher levels of automation. In particular, it is necessary to ensure that road markings and signs can be easily and reliably recognised by such vehicles.	The design and maintenance of road markings and road signs is an important element in ensuring road infrastructure safety, especially in light of the development of vehicles equipped with driver assistance systems or higher levels of automation. In particular, it is necessary to ensure that road markings and signs can be easily and reliably recognised by such vehicles. <i>Similarly, smart roads with smart road markings and road signs support road safety in European regions</i>

	<i>and cities. Attention should also be paid to the climate conditions in these regions and cities, as, for example, installing pavement sensors and signals is subject to the local climate. Care must further be taken that these sensors also perceive vulnerable road users and non-connected road users.</i>
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Reason
Safe road transport should involve installing road markings and road signs and signals recognisable in all climatic conditions.

Amendment 8

Add a new recital after Recital 18:

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
	<i>Carrying out network-wide road assessment and road safety inspections should have realistic implementation deadlines set, taking into consideration the administrative and financial capacities of national, regional and local actors involved in RISM planning and delivery, especially in rural, mountainous, remote and lagging European regions.</i>

Amendment 9

Article 1 (1) 2.

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
This Directive shall apply to roads which are part of the trans-European network, to motorways and to primary roads, whether they are at the design stage, under construction or in operation.	This Directive shall apply to roads which are part of the trans-European network, to motorways and to <i>other</i> primary roads, whether they are at the design stage, under construction or in operation.

Reason
The extension of the Directive's scope is limited to motorways and other primary roads, according to the national classification.

Amendment 10

Article 1(1) new paragraph after paragraph 2:

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
	<i>Each Member State shall designate primary roads within its territory according to its existing road classification and after duly consulting the</i>

	<i>competent local and regional authorities. Each Member State shall notify the Commission of the primary roads within its territory at the latest 24 months following the entry into force of this Directive. Member States shall notify any subsequent change thereto.</i>
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Reason
In accordance with the principle of subsidiarity, the decision on the classification of the road network should lie with the individual Member State.

Amendment 11

Article 1, add a new paragraph after paragraph (2)

<i>Text proposed by the European Commission</i>	<i>CoR amendment</i>
	<i>(2a) in Article 4 the following paragraph 6 is added: The Commission shall set up guidelines with precise technical characteristics for the provision and maintenance of “forgiving roadsides” (roads laid out in an intelligent way to ensure that driving errors do not immediately have serious consequences) building on the experience of all national, regional and local transport authorities and promote them amongst auditors and transport planners. The Commission shall provide technical and financial assistance to support the competent authority in the implementation of the guidelines.</i>

II. POLICY RECOMMENDATIONS

THE EUROPEAN COMMITTEE OF THE REGIONS

"On the road to automated mobility" – technology, infrastructure and cohesion

1. acknowledges that while connected and automated mobility is a road infrastructure issue, it is also a vehicle issue; highlights that in rural areas priority should be given to the development of smart vehicles, while in urban areas more emphasis should be given to the development of smarter roads;
2. draws attention to the harmonisation of temporal and spatial transport that requires the use of automated mobility to be extended. The importance in mixed traffic (human-, assisted- and automated driven vehicles) of establishing designated traffic zones is emphasised to avoid major congestion;

3. highlights the potential contribution of automated mobility to EU cohesion objectives, noting in particular that such services could reduce intraregional disparities and make longer distance commuting more convenient, thus helping to mitigate saturation of major urban areas;
4. points to the fact that the feeder capacity of automated vehicles helps transport hubs to be reached as a part of integrated transport. The CoR emphasises the benefits of extending self-driving solutions to rural areas in order to provide flexible feeder road transport for coaches or trains;
5. notes also in this respect that public transport is largely a competence of LRAs and calls on the Commission to provide a framework and appropriate guidance for regions and communities that desire to integrate their ticketing systems and timetables as well as their feeder systems for private vehicles on a higher administrative level (regional, national or European), in line with the practices followed by market operators;
6. notes that in peak and quiet traffic periods, automated mobility can offer flexible pricing and pre-orders, enabling a more even use of capacities. Adds that with integrated ticketing, guarantees against delays/cancellations of connected automated transport services prevent late arrival or non-arrival. Believes it paramount that this increased flexibility be used to improve public transport thus not only reducing emissions and noise from vehicle traffic, but also improving accessibility for all and equality in the transport system;
7. considers that while in automated freight transport the platooning of trucks can be used in tunnels, it is not suitable for urban transport with its complex interaction of road users. The regions should be given the opportunity to influence the decision-making process concerning more extensive trials with automated vehicles, and special arrangements may be necessary;
8. stresses the significant potential of decentralised renewable energy sources for powering automated vehicles and recommends that the energy required for the operation of smart road infrastructure be supplied by local smart grids;
9. points to the challenges regarding interoperability of different types of self-driving and highlights that harmonisation of the different self-driving levels currently applied on different continents will be required for safe use of the relevant assisted or automated technologies inside the European continent. The CoR also emphasises the ethical issues arising in connection with European driverless cars (level 5), while for semi-automated or assisted driving (levels 1-4), the additional costs and complexity of driving should be dealt with. Specific attention should be paid to the impact on road safety of a large proportion of the fleet comprising semi-automated vehicles or vehicles with assisted driving technologies;
10. proposes that the training for a driving licence should cover the technology of assistance systems. In this regard the automotive industry, together with municipalities, could offer training courses and training areas for private and professional drivers; recalls the important contribution of infrastructure construction and modernisation to territorial cohesion and economic convergence, while noting that investment in infrastructure in the EU continues to be

significantly below pre-crisis levels. Emphasises the importance in this context of ensuring appropriate financial resources are made available for infrastructure modernisation and road safety measures over the years ahead, including to support smaller and lagging regions and capacity building. In the context of the 2021-2027 MFF as proposed, the need to make full use of opportunities under all funding instruments available and to optimise synergies will be particularly critical (post-2020 CEF, Horizon Europe, proposed Digital Europe Programme etc.);

Ensuring a European single market for automated mobility – the role of LRAs

11. welcomes the timely presentation of the EU agenda on Connected and Automated Mobility (CAM) and the gradual completion of the legal and policy frameworks to support the deployment of safe CAM;
12. emphasises the importance of close cooperation between legislators in the field of self-driving vehicles and stakeholders in the area of transport organisation/operation and vehicle development; the CoR calls for a multi-level governance approach in this context, recalling that mobility and transport are a competence of LRAs, who are in charge of designing and implementing mobility policies and of providing public transport in their territory;
13. notes the increasing availability of semi-automated driving solutions over the short-term time horizon and emphasises the need for a robust legal and regulatory framework for such technologies as soon as possible;
14. confirms its support for improved cross-border cooperation on CAM testing and recommends that future cooperation fora ensure appropriate LRA participation;

Impacts on society and the economy

15. highlights that automated mobility makes public transport more competitive by means of non-timetabled, demand-based, personalised, shared, high-quality, energy efficient mobility services within and outside of settlements. In order to make further progress in this direction, the technology and the regulatory environment will need to be developed in concert;
16. notes that in underdeveloped, peripheral and outermost European regions, car-sharing and ride-sharing and -sourcing services with digital solutions enable local residents to reach more distant centres with a lower environmental impact, whilst avoiding depopulation of such areas; highlights particularly the potential of automated mobility to provide access and reduce the cost of mobility in dispersed and demographically challenged communities; notes, however, that the needs of elderly users should be taken into consideration when designing, developing and testing user-friendly systems;
17. reiterates the importance of assessing the social and environmental impacts of automated mobility by means of pilot projects. Proposes that such passenger and freight road transport trials should be implemented progressively and under controlled conditions, in order to secure public acceptance for automated vehicles. Attention is also drawn to the need to envisage

particular support for regions where the socio-economic impact of the transition to automated mobility is likely to be greatest;

18. draws attention to the fact that education and awareness-raising play a crucial role in the promotion and acceptance of automated mobility. In particular, the basic principles and the operation of artificial intelligence, which plays a key role in automated mobility systems, should be taught to all road users in addition to drivers;
19. emphasises that the feeder and "last mile" functions of automated road freight transport within and among settlements result in profound changes in supply chain concepts;
20. highlights that in the multi-ethnic European Union, widely and easily comprehensible automated transport solutions, including universal signage, should be applied;
21. advises that urban-interurban planning and regional spatial planning practices of European towns and cities should include the designation of areas for automated transport and mobility, as well as the re-evaluation of planning practices based on non-assisted or non-automated mobility. Proposes a prior study of the consequences of automated mobility in terms of urban and regional planning in metropolitan areas – for example, effective use of automated mobility will result in increased availability of parking spaces, calling for re-thinking of urban planning methodologies as well. It is important to improve accessibility for pedestrians and cyclists, especially at public transport stops, to provide safe and attractive spaces and parking facilities available to all (pedestrians, cyclists), and to include potential bike-sharing schemes at transport hubs in regional planning instruments. Emphasises that using automation to improve public transport networks and boost their social and economic efficiency and their use is a necessity;
22. underlines nonetheless that urban mobility problems cannot be solved with a sectorial approach only, and that account has to be taken of the link between the urban dimension of transport policy and the broader concept of spatial planning, not only to improve urban transport and infrastructure, but also to combat urban sprawl and rethink the relationship between cities and their surrounding areas;
23. agrees that the highest possible quality standards are advised to be applied to automated mobility. Adds that although safety is always paramount, it is very much connected to efficiency issues also;
24. welcomes the increased involvement of local and regional authorities in devising road safety measures and policies; believes that this greater involvement should be accompanied by clarification of the form that strategies, programmes and measures will take, particularly in terms of funding to allow regions to implement them;
25. notes that in urban regions, automated driving may significantly increase road traffic and increase use of public transport. One important element in the implementation of a competitive public transport system is that the development of the "mobility as a service" approach should keep pace with that of automated vehicle technology. Automated vehicles should be seen as one

element in a wider mobility concept based on a vision of how mobility as a service can address the challenge of sustainability within the local, regional and national context;

26. notes further that to date the Commission has devoted much attention to road transport by car, but that automated systems are also under development in several forms of public and private transport;
27. proposes that links and interoperability with public transport and between the different modes be promoted through targeted measures;

Evolving digital environment – opportunities and challenges

28. notes that 5G technology is not available everywhere yet, and 3G and 4G solutions effectively connect road transport vehicles. Proposes that existing widespread connection technologies between vehicles should be supported;
29. notes that some financial or implementation barriers to physical road infrastructure development can be remedied by digitalisation. Recommends its use, as upgrading digital infrastructure is less expensive, provides for better and more up-to-date digitalised images, and has the potential to connect public and private sector developments;
30. advises simpler and universal connection of smart road systems and vehicles (Waze, Google traffic data, etc.);
31. eagerly awaits smartphone-smart device communication and operation being able to extend assisted-automated mobility and to help to scale up traffic operation methods, realizing also how data collected in this network would enable urban authorities to better understand urban logistic requirements, help to improve the efficiency of movements and identify more appropriate routes for vehicles resulting in lower emissions;
32. recalls that when updating maps and databases used for automated mobility, priority should be given to using solutions of European origin and encourages an EU-wide approach in this area;
33. points out that, because of external factors such as snow, fog and rain, it is not always possible to guarantee that road markings and road signs can be easily and reliably recognised by both human drivers and vehicles equipped with driver assistance systems or higher levels of automation. In the event of heavy snow, it is not possible to guarantee, for example, that roads are kept free of snow round the clock, even where full road clearing is targeted, i.e. measures aimed at clearing roads almost entirely of ice and snow. When the aim is partial road clearing, where new snow is for the most part pushed to the roadside and the remaining snow is flattened by passing vehicles, such that a hard layer is built up, by definition the visibility of any road markings cannot be guaranteed. As a consequence, steps should be taken to ensure that the bodies responsible for road maintenance are not made responsible for any accidents due to misinterpretations by driver assistance systems or higher levels of automation, since if that were the case the risk of failure of driver assistance systems would be passed on from the motor industry to those bodies responsible for road maintenance;

34. emphasises the need for communication between vehicles, as well as the development and harmonisation of road markings and road signs, including name signage of public spaces. It is also anticipated that automated vehicles will require local traffic regulations and cartographical data to be very clear and unambiguous;
35. notes that many road users, thereunder vulnerable road users such as cyclists and pedestrians might remain disconnected from the network and that any legal, digital and physical framework for smart vehicles will need to take mixed traffic into account;
36. highlights that public authorities and fleet operators should be prepared to manage electric smog generated by automated mobility;
37. notes that fair and direct access to vehicle data should empower drivers to determine its use and provide business opportunities for other operators and service providers, without, however, impacting road users' rights to privacy and data protection. The CoR underlines the need for appropriate access to such data for LRAs as the largest operator of road networks in the Union. In that connection, it will be important for the public sector to facilitate and support the trials being undertaken, to prevent barrier effects and to make data available;
38. calls, therefore, for measures providing proper protection of personal data and data of users which is a determining factor for the successful deployment of cooperative, connected and automated vehicles;

39. calls for more far-reaching measures to be taken in order to tap the full potential of automated mobility and vehicle to vehicle communication and meet the longer-term goals: low-emission fully-automated multimodal transport, mobility as a service, and door-to-door transport, particularly to promote social inclusion.

Brussels, 6 February 2019

The President
of the European Committee of the Regions

Karl-Heinz Lambertz

The Secretary-General
of the European Committee of the Regions

Jiří Buriánek

III. PROCEDURE

Title	Road safety and automated mobility
Reference(s)	COM(2018) 283 final COM(2018) 293 final COM(2018) 274 final
Legal basis	Article 307 TEFU
Procedural basis	Rule 41(a) of the CoR Rules of Procedure
Date of Council/EP referral/Date of Commission letter	– Letter from the Commission dated 17 May 2018 – Council referral letter dated 8 June 2018 – EP referral letter dated 6 June 2018
Date of Bureau/President's decision	3 July
Commission responsible	Commission for Territorial Cohesion Policy and EU Budget (COTER)
Rapporteur	József Ribányi (HU/EPP), Vice-President of the County Council of Tolna Megye
Analysis	19 October 2018
Discussed in commission	25 October 2018
Date adopted by commission	14 December 2018
Result of the vote in commission (majority, unanimity)	majority
Date adopted in plenary	6 February 2018
Previous Committee opinions	<ul style="list-style-type: none">• Europe on the Move: promoting seamless mobility solutions (COR-2017-03560)• A European Strategy on Cooperative Intelligent Transport Systems (COR-2017-02552)• A European Strategy for Low-Emission Mobility (COR-2017-0018)• An EU Roadmap for Cycling (COR-2016-01813)
Date of subsidiarity monitoring consultation	N/A