European Parliament
2014-2019

Committee on Industry, Research and Energy

2018/2089(INI)

7.11.2018

OPINION

of the Committee on Industry, Research and Energy

for the Committee on Transport and Tourism

on autonomous driving in European transport
(2018/2089(INI))

Rapporteur: Hans-Olaf Henkel

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SUGGESTIONS

The Committee on Industry, Research and Energy calls on the Committee on Transport and Tourism, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

A. whereas the Commission aims to halve the number of annual road fatalities in the EU by 2020 compared to 2010, in line with the Vision Zero objectives; whereas progress in reducing the total numbers of fatalities and injuries seems to have stagnated recently, considering that in 2016 more than 25 000 people lost their lives on roads in the EU while a further 135 000 were seriously injured; whereas our cities are facing major mobility problems that are being compounded by pollution and climate change;

B. whereas advanced driver assistance systems such as lane departure warning and automatic emergency brakes have already proven to contribute to road safety and to reducing the numbers of severe accidents;

C. whereas the safe development of autonomous driving is crucial for accepting this technology in our society; whereas human error is estimated to play a decisive role in the majority of road accidents, and hence automated and autonomous vehicles are expected to improve road safety substantially; whereas our cities are facing major mobility problems that are being compounded by pollution and climate change; whereas autonomous vehicles could bring mobility to those who are unable to drive, stimulate the use of public transport and car-sharing schemes, and optimise the use of infrastructure by relieving traffic congestion, since autonomous vehicles will need less proximate urban parking, while also increasing fuel efficiency and facilitating alternative energy sources, thereby contributing to meeting the 2030 climate and energy targets and the EU's commitments under the Paris Agreement; whereas automated mobility could contribute to realising the EU's ambitions by making its industry more powerful and competitive, creating jobs and stimulating economic growth;

D. whereas transport was listed by the Commission in its communication of 23 November 2017 on strengthening Europe's energy networks[1] as being among those sectors in which electricity will be crucial for decarbonisation; whereas, therefore, electric mobility based on renewable energy sources is to be fostered while phasing out fossil fuels, with a view to speeding the transition to a net-zero GHG economy by 2050 at the latest;

E. whereas the ethical issues surrounding the use of these technologies make it necessary to develop guidelines for the deployment of artificial intelligence, together with systems to ensure that these ethical issues are addressed coherently;

F. whereas the Commission expects the new market for automated and connected vehicles to grow exponentially, with revenues estimated to exceed EUR 620 billion by 2025 for the EU's automotive industry and EUR 180 billion for its electronics sector;

G. whereas other countries such as the US, the UAE, China and Japan are progressing quickly in the development of autonomous driving and are already adopting strategies

[1] COM(2017)0718

for automated vehicles and attracting investment in this field; whereas the economic impact of automated mobility in the EU will be strongly dependent on the ability of European industry to keep pace with international competitors; whereas Europe accounts for 23 % of global motor vehicle production, but needs to invest more in the development and application of safe connected and automated mobility systems; whereas automated mobility offers economic potential for many sectors, including start-ups, SMEs and industry, and the EU's vision must be to become a world leader for fully autonomous safe mobility;

1. Stresses that autonomous driving will represent a major paradigm shift that will significantly alter current models of mobility and ownership of vehicles; considers that if well framed, autonomous driving can represent a major improvement in vehicle-use efficiency, as well as contributing significantly to reducing congestion and, consequently, also reducing CO_2 emissions and other pollutants, for instance by means of solutions like platooning;

2. Considers that non-existent, incomplete or different national legislative approaches still form a major obstacle on the path to the market introduction of automated and especially autonomous vehicles; considers that regulatory changes will have to follow, so as to ensure consistency between national traffic regulations, avoid conflicts over vehicle regulations at EU level, and build a future-proof framework enabling cross-border automation; calls on the Member States to offer sufficient flexibility to accommodate innovation and necessary testing;

3. Calls on the Commission, in view of the global nature of the automotive industry, to urgently accelerate negotiations at UN level and to present future regulatory changes in line with UN Economic Commission for Europe (UNECE) outcomes and within the current legal framework of the 1968 Vienna Convention; calls on the Commission to devote particular focus to common standards on vehicle safety, type approval, fair and equal access to in-vehicle generated data, and cybersecurity;

4. Stresses that in order to contribute to the fulfilment of our transport policy goals, autonomous driving should be implemented in a way that significantly contributes to a sustainable transport system that takes into account factors including the environment, climate, road safety, noise and good accessibility for all;

5. Emphasises the fact that once available on the market, automated vehicles will have a deep impact on the distribution and consumption of goods; considers, therefore, that there is an urgent need to assess this impact and ensure measures to support the affected sectors and people;

6. Notes that some autonomous vehicles have caused a limited number of serious or fatal accidents; believes it is therefore essential that such vehicles are always fitted with a central human override function; calls on the Commission to take the current infrastructure and age of the vehicle fleet in the Member States into consideration, and to address the coexistence of connected, automated and autonomous vehicles with non-connected vehicles, drivers, cyclists, motorcyclists, pedestrians and any other road users;

7. Considers the current procedure of EU exemptions granted on the basis of a national

ad hoc safety assessment to be insufficient, because it constitutes an excessive investment risk and jeopardises the introduction of vehicle automation technologies; calls on the Commission to initiate work on EU type approval legislation for automated and autonomous vehicles in line with UNECE outcomes, with particular reference to Working Party 29; underlines that market surveillance procedures related to automated vehicles throughout their lifetime should be as standardised, transparent and verifiable as possible, including cross-border testing performed on open roads and in real driving conditions as well as periodic roadworthiness tests;

8. Declares that cybersecurity must be guaranteed and that all data transfers between the in-vehicle system, the manufacturer's central server, other vehicles and road infrastructure must be protected from unauthorised disclosure and manipulation; recalls that in its resolution of 13 March 2018 on a European strategy on Cooperative Intelligence Transport Systems[2], Parliament urged the Commission to submit a legislative proposal on access to in-vehicle data and resources by the end of the year; calls on the Commission to propose a common policy on security based on backend server systems and cybersecurity standards harmonised at European level, taking UNECE norms into account; calls in this regard for clear rules ensuring a level playing field on access to in-vehicle data, offering protection with regard to problems of cybersecurity and protection of personal data as well as promoting innovation and fair competition;

9. Highlights the importance of also having a climate perspective in research and technological development in this industry, with a special focus on increasing renewable energy use in the sector.

10. Underlines that the liability of manufacturers and operators of automated and autonomous vehicles needs to be clearly regulated, and that both users and third parties need to have proper rights and redress mechanisms; welcomes the initiative of the Commission to regulate data recorders for automated vehicles, and calls on the Commission to present a broader liability framework for damage caused by accidents in which autonomous and automated motor vehicles are involved;

11. Calls on the Commission and the Member States to ensure and facilitate the necessary investments needed, in particular for SMEs, to develop the relevant technologies, to create the necessary infrastructure support, and to foster greater public acceptance for automated mobility; stresses that road infrastructure will play a key role in supporting automated vehicles; calls on the Member States to invest in unambiguous road signs, road markings, street furniture, safety measures and communication enablers, as well as to revise national traffic rules systems and reporting in order to support converging approaches across the EU;

12. Calls on the Commission, the Council and the Member States to ensure an efficient use of the European GALILEO satellite technology and connectivity technologies and to finalise digital high-speed network coverage, thus providing better guarantees of interoperability between services and greater systems security, as gaps in digital coverage, especially in border regions, make the cross-border operation of automated

[2] Texts adopted, P8_TA(2018)0063.

and connected vehicles impossible;

13. Calls on the Commission and the Member States to make present and future drivers more aware of the development of driver assistance applications through information campaigns and driver training complementing standard driving lessons with specific instruction in the functionality and limitations of the new technologies, including informed consent rules regarding in-vehicle systems, data sharing and eco-driving guidelines, and also encouraging the use of electric vehicles with renewable energy charging systems;

14. Calls on all relevant actors, Member States and authorities to show collaborative leadership and coordinate and cooperate in order to promote innovation, safeguard investments in automated mobility infrastructure and facilitate cross-border testing; urges Member States and regions to use the opportunities offered by EU regional policy and the European Structural and Investment Funds to cofinance investment in research, innovation and the implementation of autonomous driving in European transport; welcomes the financial support from the EU's Horizon 2020 framework programme for research and innovation allocated to automated vehicles, and highlights the need for research on artificial intelligence with the aim of making future autonomous systems smoother and more efficient; asks the Commission to further expand research and innovation programmes for automated vehicles, within the Multiannual Financial Framework 2021-2027 and Horizon Europe 2021-2027 and in line with the Open Science principle;

15. Calls on the Member States to set up national observatories to monitor automated mobility and related developments, encourage debate among stakeholders, help formulate national strategies that are in line with Union strategy, promote international debate, and raise awareness of both the opportunities and the hazards of automated driving systems; also calls on the Member States to collect and analyse data through appropriate platforms for the ongoing and effective monitoring of accidents involving automated or semi-automated vehicles;

16. Stresses that the deployment of connected and automated mobility technologies in commercial road traffic has structural effects on the labour market, in particular in the transport sector; calls on the Commission and the Member States to actively facilitate a dialogue with and between stakeholders, including the social partners, on how to manage and mitigate this structural change; believes it is essential to ensure a just transition for potential workers whose jobs may be transformed or disappear due to automation, offering them every opportunity, e.g. through upskilling and retraining initiatives, to acquire the skills and knowledge they need to master new technology, as well as to support them during labour market transitions;

17. Acknowledges that autonomous transport covers all forms of piloted, automated and autonomous means of road, rail, air, sea and inland waterway transport; calls on the Commission and the Member States to enlarge their policies on autonomous driving so as also to include collective transport, as well as to expand their vision to cover all modes of transport.

INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

Date adopted	5.11.2018
Result of final vote	+: 46 –: 1 0: 4
Members present for the final vote	Zigmantas Balčytis, Bendt Bendtsen, José Blanco López, Jonathan Bullock, Cristian-Silviu Buşoi, Jerzy Buzek, Jakop Dalunde, Pilar del Castillo Vera, Ashley Fox, Theresa Griffin, Rebecca Harms, Seán Kelly, Jeppe Kofod, Jaromír Kohlíček, Peter Kouroumbashev, Miapetra Kumpula-Natri, Paloma López Bermejo, Edouard Martin, Tilly Metz, Dan Nica, Morten Helveg Petersen, Miroslav Poche, Carolina Punset, Massimiliano Salini, Neoklis Sylikiotis, Dario Tamburrano, Patrizia Toia, Evžen Tošenovský, Vladimir Urutchev, Kathleen Van Brempt, Lieve Wierinck, Anna Záborská, Flavio Zanonato, Carlos Zorrinho
Substitutes present for the final vote	Amjad Bashir, Mario Borghezio, Rosa D'Amato, Jens Geier, Benedek Jávor, Werner Langen, Marian-Jean Marinescu, Rupert Matthews, Gesine Meissner, Clare Moody, Markus Pieper, Sofia Sakorafa, Giancarlo Scottà, Davor Škrlec, Pavel Telička
Substitutes under Rule 200(2) present for the final vote	Michael Gahler, Ulrike Rodust

FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

46	+
ALDE	Gesine Meissner, Morten Helveg Petersen, Carolina Punset, Pavel Telička, Lieve Wierinck
ECR	Amjad Bashir, Ashley Fox, Rupert Matthews, Evžen Tošenovský
EFDD	Rosa D'Amato, Dario Tamburrano
ENF	Mario Borghezio, Giancarlo Scottà
PPE	Bendt Bendtsen, Cristian-Silviu Buşoi, Jerzy Buzek, Pilar del Castillo Vera, Michael Gahler, Seán Kelly, Werner Langen, Marian-Jean Marinescu, Markus Pieper, Massimiliano Salini, Vladimir Urutchev, Anna Záborská
S&D	Zigmantas Balčytis, José Blanco López, Jens Geier, Theresa Griffin, Jeppe Kofod, Peter Kouroumbashev, Miapetra Kumpula-Natri, Edouard Martin, Clare Moody, Dan Nica, Miroslav Poche, Ulrike Rodust, Patrizia Toia, Kathleen Van Brempt, Flavio Zanonato, Carlos Zorrinho
VERTS/ALE	Jakop Dalunde, Rebecca Harms, Benedek Jávor, Tilly Metz, Davor Škrlec

1	-
EFDD	Jonathan Bullock

4	0
GUE/NGL	Jaromír Kohlíček, Paloma López Bermejo, Sofia Sakorafa, Neoklis Sylikiotis

Key to symbols:
+ : in favour
- : against
0 : abstention