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TEXTS ADOPTED

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**P8\_TA(2018)0063**

**A European strategy on Cooperative Intelligent Transport Systems**

**European Parliament resolution of 13 March 2018 on a European strategy on Cooperative Intelligent Transport Systems (2017/2067(INI))**

*The European Parliament,*

- having regard to the Commission communication of 30 November 2016 entitled ‘A European strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility’ (COM(2016)0766),
- having regard to Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport<sup>1</sup>, and the extension of the timeframe of the mandate to adopt delegated acts,
- having regard to the opinion of the European Committee of the Regions of 11 October 2017 on Cooperative Intelligent Transport Systems (CDR 2552/2017),
- having regard to the opinion of the European Economic and Social Committee of 31 May 2017 on the ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A European strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility’<sup>2</sup>,
- having regard to the reports of the Cooperative Intelligent Transport Systems (C-ITS) Deployment Platform, in particular on C-ITS certificate and security policy,
- having regard to its resolution of 14 November 2017 entitled ‘Saving lives: Boosting car safety in the EU’<sup>3</sup>,
- having regard to the Declaration of Amsterdam of 14 April 2016 on cooperation in the field of connected and automated driving,
- having regard to its resolution of 1 June 2017 entitled ‘Internet connectivity for growth,

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<sup>1</sup> OJ L 207, 6.8.2010, p. 1.

<sup>2</sup> OJ C 288, 31.8.2017, p. 85.

<sup>3</sup> Texts adopted, P8\_TA(2017)0423.

competitiveness and cohesion: European gigabit society and 5G'<sup>1</sup>,

- having regard to Rule 52 of its Rules of Procedure,
  - having regard to the report of the Committee on Transport and Tourism and the opinions of the Committee on the Environment, Public Health and Food Safety, the Committee on the Internal Market and Consumer Protection and the Committee on Civil Liberties, Justice and Home Affairs (A8-0036/2018),
- A. whereas the European strategy on Cooperative Intelligent Transport Systems (the Strategy) is closely linked to the Commission's political priorities, notably its Agenda for Jobs, Growth and Investment, the creation of a single European transport area, the digital single market, climate protection and the Energy Union strategy;
- B. whereas Member States' authorities and the industrial sector must respond to the pressing need to make transport safer, cleaner, more efficient, sustainable, multimodal and accessible for all road users, including the most vulnerable and those with reduced mobility;
- C. whereas the positive trend in road safety that the EU has witnessed over the last decade has slowed down, whereas 92 % of road accidents are due to human error and whereas the use of C-ITS technologies is important for the efficient functioning of certain driver assistance systems; whereas road transport is still responsible for the bulk of space use in cities, accidents and transport emissions in terms of noise, greenhouse gases and air pollutants;
- D. whereas the system of C-ITS will allow road users and traffic managers to share and use information and to coordinate their actions more effectively;
- E. whereas the cyber-security of C-ITS is a key element of their implementation, whereas fragmented security solutions would jeopardise the interoperability and safety of the end user, and whereas there is therefore a clear need for action at EU level;
- F. whereas algorithmic accountability and transparency means implementing technical and operational measures that ensure the transparency and non-discriminatory nature of automated decision-making and of the process of calculating the probability of individual behaviour; whereas transparency should give individuals meaningful information about the logic involved, and the significance of the process and its consequences; whereas this should include information about the data used for training the analytics and enable individuals to understand and monitor the decisions affecting them;
- G. whereas the EU should encourage and further develop digital technologies not only to reduce human error and other inefficiencies, but also to cut costs and optimise the use of infrastructure by relieving traffic congestion, thereby reducing CO<sub>2</sub> emissions;
- H. whereas this cooperative element, thanks to digital and mobile connectivity, will significantly improve road safety, traffic efficiency, sustainability and multimodality; whereas at the same time it will generate huge economic potential and reduce road traffic accidents and energy consumption; whereas C-ITS are fundamental to the

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<sup>1</sup> Texts adopted, P8\_TA(2017)0234.

development of autonomous vehicles and driving systems;

- I. whereas connected and automated driving is an important digital development in the sector and whereas coordination with all new technologies used in the sector, such as the European global satellite-based navigation systems GALILEO and EGNOS, has now reached a high level of technological capacity;
- J. whereas the EU is bound to respect the Charter of Fundamental Rights of the European Union, notably Articles 7 and 8 on the right to privacy and the protection of personal data;
- K. whereas several countries around the world (for example, the US, Australia, Japan, Korea and China) are moving rapidly towards deploying new digital technologies and whereas C-ITS vehicles and services are already available on the market;

### ***General framework***

1. Welcomes the Commission communication on a European strategy on Cooperative Intelligent Transport Systems and the intensive work it has done with experts from both the public and private sectors, which laid the groundwork for the communication; supports the results and calls, therefore, for the introduction of interoperable C-ITS services throughout Europe without delay;
2. Highlights the need for a clear legal framework to support the deployment of C-ITS and welcomes a future delegated act under the ITS Directive (Directive 2010/40/EU) to ensure the continuity of services, deliver interoperability and support backward compatibility;
3. Notes the potential of C-ITS to improve fuel efficiency, lowering the cost of individual transport and reducing the negative impact of traffic on the environment;
4. Highlights the potential of digital technologies and related business models in road transport and recognises the Strategy as an important milestone towards the development of C-ITS and, ultimately, fully connected and automated mobility; notes that cooperative, connected and automated vehicles can boost the competitiveness of European industry, make transport seamless and safer, reduce congestion, energy consumption and emissions, and improve interconnectivity between different modes of transport; points out, with that in mind, that infrastructure requirements must be established to ensure that the systems concerned can function safely and effectively;
5. Notes that EU industries should capitalise on their advantageous position on the global scene in the development and application of C-ITS technologies; underlines the urgent need to establish an ambitious EU strategy that coordinates national and regional efforts, prevents fragmentation, speeds up the deployment of C-ITS technologies that have proven to have safety benefits, and maximises cooperation between different sectors such as transport, energy and telecommunications; urges the Commission to present a specific timetable with clear targets for what the EU needs to achieve between 2019 and 2029, to prioritise the deployment by 2019 of those C-ITS services that have the highest safety potential as set out in the list of services prepared by the C-ITS Platform in its Phase II Report, and to ensure that these services are available in all new vehicles across Europe;

6. Emphasises the need to introduce a coherent framework of social, environmental and safety rules in order to enforce the rights of workers and consumers and guarantee fair competition in the sector;
7. Welcomes the results of the C-ITS Platform Phase II and underlines the importance of the results<sup>1</sup>;
8. Underlines that while the communication constitutes an important milestone towards an EU strategy on cooperative, connected and automated vehicles, there should be no confusion between C-ITS and these different concepts;
9. Urges the need to ensure that the development and deployment of connected and automated vehicles and C-ITS will fully comply with and support the aims of decarbonising the transport system and vision zero in road safety;
10. Recalls that C-ITS are systems allowing different ITS stations (vehicles, roadside equipment, traffic control centres and nomadic devices) to communicate and share information using a standardised communication architecture and that interoperability of the individual systems is therefore essential;
11. Recalls that connected vehicles are vehicles using C-ITS technologies that allow all road vehicles to communicate with other vehicles, with traffic signals, with durable roadside and horizontal infrastructure – which needs to be enhanced and adapted, but which can also provide innovative on-the-go charging systems and communicate safely with vehicles – and with other road users; recalls that 92 % of road accidents are due to human error and that the use of C-ITS technologies is important for the efficient functioning of certain driver assistance systems;
12. Recalls that automated vehicles are vehicles capable of operating and manoeuvring independently in real traffic situations and where one or more of the primary driving controls (steering, acceleration, braking) are automated for a sustained period of time;
13. Highlights the necessity of incorporating safeguard systems during the transition phase of co-existence between connected and automated vehicles and traditional non-connected vehicles, so as not to jeopardise road safety; points out that certain driver assistance systems should be further developed and installed on a compulsory basis;
14. Calls on the Commission to consider how to address the coexistence on the roads of cooperative, connected and automated vehicles and non-connected vehicles and drivers, taking into account that the age of the vehicle fleet and the residual proportion of non-connected people mean that provision needs to be made for a persistently large number of vehicles not being part of the system;
15. Regrets the absence of clear time scheduling for recommended Day 1.5 services and beyond, as well as the absence of a full impact assessment and precise information on the deployment initiatives in developing C-ITS services and potential service extensions;

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<sup>1</sup> Final report of the C-ITS Platform Phase II:  
<https://ec.europa.eu/transport/sites/transport/files/2017-09-c-its-platform-final-report.pdf>.

16. Calls on the Commission to give priority to the C-ITS services providing the highest safety potential and to drawing up the definitions and requirements needed, and to update without further delay the European Statement of Principles on human-machine interface (HMI) for in-vehicle information and communication systems, as interaction between the human driver and the machine is important<sup>1</sup>;
17. Reiterates the key role of connected and automated vehicles, C-ITS and new technologies in meeting climate targets, and the need to ensure that their development and deployment will fully comply with and support the aim of decarbonising the transport system; welcomes the use of C-ITS as a means to improve traffic efficiency, lower fuel consumption and the impact of road transport on the environment (for example, in terms of CO<sub>2</sub> emissions) and optimise the use of urban infrastructure;
18. Stresses the potential of innovative technologies such as automated driving and 'platooning' (grouping diverse vehicles) in road freight transport, which enable better use of slipstream, thereby reducing fuel consumption and emissions; calls for further support for research and development in that area, notably in relation to the requisite digital infrastructure;
19. Underlines the need to provide road users with more choices, more user-friendly, affordable and customised products, and more information; encourages the Commission, in this regard, to facilitate the exchange of best practices aimed inter alia at achieving economic efficiency; urges all Member States to join the C-Roads Platform, as it is intended to play a significant coordination role in implementing the Strategy, provided that it observes technology neutrality which is needed to encourage innovations; underlines the need to ensure that advanced digital tools are deployed widely and in a coordinated manner in Member States, and that they also cover public transport; invites car manufacturers to initiate C-ITS deployment to implement the Strategy;
20. Urges the Commission to develop statistics that complement existing ones, in order to better evaluate the digitalisation progress in different areas of the road transport sector; highlights the importance of further investment in research into sensor systems and stresses that in the development of C-ITS, special attention should be paid to urban driving, which is very different from out-of-town driving; notes that urban driving in particular involves greater interaction with motorcyclists, cyclists, pedestrians and other vulnerable road users, including persons with disabilities;
21. Urges the Member States to make every effort to ensure that vocational training and university courses meet the knowledge needs of the industry that is to develop the ITS strategy; calls for prospective analyses of the new careers and jobs linked to this new approach to mobility, and for the exchange of best practices in the development of models for cooperation between businesses and the education system, geared towards creating integrated areas for training, innovation and manufacturing;
22. Believes that C-ITS services should be integrated into the Space Strategy for Europe

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<sup>1</sup> Commission Recommendation 2008/653/EC of 26 May 2008 on Safe and efficient in-vehicle information and communication systems: update of the European Statement of Principles on human-machine interface (OJ L 216, 12.8.2008, p. 1).

since the deployment of C-ITS is to be based on geolocation technologies such as satellite positioning;

23. Points out that the Member States should take into account the deployment of C-ITS services within a broader perspective of mobility as a service (MaaS) and integration with other modes of transport, in particular in order to prevent any rebound effects such as an increase in the modal share of road transport;

### ***Privacy and data protection***

24. Draws attention to the importance of applying the EU legislation on privacy and data protection with regard to C-ITS and connected ecosystem data, for which reason these data should, as a matter of priority, be used for C-ITS purposes only and not be retained or used for other ends; stresses that smart vehicles should comply fully with the General Data Protection Regulation (GDPR) and related rules, and that C-ITS service providers must offer easily accessible information and clear terms and conditions to drivers, enabling them to give their freely informed consent, in accordance with the provisions and restrictions laid down in the GDPR;
25. Emphasises the need for much greater transparency and algorithmic accountability with regard to data processing and analytics performed by businesses; recalls that the GDPR already foresees a right to be informed about the logic involved in data processing; underlines, furthermore, the need to prevent ‘driving walls’, which would mean that users could not drive their own smart car if they refused to give consent; calls for an ‘offline mode’ option to be made available in smart cars, which would enable the user to turn off transfers of personal data to other devices without hampering their ability to drive the car;
26. Draws attention to the fact that data protection and confidentiality must be taken into account throughout the processing of data; stresses that the implementation of ‘privacy and data protection by design and default’ should be the starting point when designing ITS applications and systems; recalls that anonymisation techniques may increase the trust of users in the services they are using;

### ***Cybersecurity***

27. Points to the importance of the application of high standards of cybersecurity in preventing hacking and cyber-attacks in all Member States, particularly in the light of the critical nature of security of C-ITS communications; notes that cybersecurity is an essential challenge to be tackled as the transport system becomes more digitised and connected; stresses that automated and connected vehicles and the databases in which the data are processed and/or stored are at risk of cyber-attack, and therefore that all weaknesses and risks that are identifiable and conceivable in the light of the stage of development reached should be excluded through the development of a common security policy, including strict security standards, and certificate policy for C-ITS deployment;
28. Underlines that equally high and harmonised standards of security should be applied in the EU and all Member States and in any possible cooperation arrangements with third countries; points out that those standards should not, however, impede the access of third-party repairers to on-board systems, in order to ensure that vehicle owners are not

dependent on car manufacturers to carry out any necessary checks on and/or repairs to on-board software;

### ***Communication technologies and frequencies***

29. Believes that a technology-neutral hybrid communication approach that ensures interoperability and backward compatibility and combines complementary communication technologies is the appropriate approach and that the most promising hybrid communication mix appears to be a combination of wireless short-range communication and cellular and satellite technologies, which will ensure the best possible support for deployment of the basic C-ITS services;
30. Takes note of the mention of the link between connected cars and the European satellite navigation systems, EGNOS and GALILEO; suggests, therefore, that strategies centred around connected cars should be included in space technologies; considers interoperability to be essential for both safety and consumer choice and underlines that vehicles' capacity to communicate with 5G and satellite navigation systems must be included in the hybrid communication mix in the future, as noted in the Commission's 5G Action Plan;
31. Encourages car manufacturers and telecom operators that support C-ITS services to cooperate, inter alia, for the smooth deployment of C-ITS communication technologies, road charging and smart digital tachograph services without interference between these services;
32. Calls on the Commission and the Member States to continue to provide funding for research and innovation (Horizon 2020), in particular to pave the way for the development, in the long term, of infrastructure that is suitable for the deployment of C-ITS;
33. Stresses the importance of sensor systems in providing data on vehicle dynamics, congestion and air quality, for example; calls for more and properly coordinated investment in the Member States to ensure the full interoperability of the sensors used and in their possible usage for applications other than safety, for example remote emission sensing;
34. Calls for the Commission to come forward with proposals to ensure that information on pollutant emissions available through sensors installed in vehicles is collected and made available to competent authorities;

### ***Common European approach***

35. Encourages the Member States and local authorities, vehicle manufacturers, road operators and the ITS industry to implement C-ITS by 2019, and recommends that the Commission, local authorities and Member States designate proper funding under the Connecting Europe Facility, European Structural and Investment Funds and the European Fund for Strategic Investments for the upgrading and maintenance of the future road infrastructure by means of a cross-cutting thematic approach; calls on the Commission and the Member States to continue to provide funding for research and innovation (Horizon 2020) in full respect of the principle of transparency and with the provision of regular information on EU co-financing;

36. Encourages the Member States and the Commission to support initiatives and actions to promote more research and fact-finding on the development and impact of C-ITS in EU transport policy; is of the opinion that if no significant progress is made by 2022, legislative action may be required to introduce ‘minimum rules’ and enforce integration in this respect;
37. Stresses the importance of the quality of physical road infrastructure which should gradually be complemented by digital infrastructure; calls for the upgrading and maintenance of the future road infrastructure;
38. Stresses that a truly multimodal transport system should be created, integrating all modes of transport into a single mobility service using real-time information, taking into account integrated ticketing and shared mobility services as well as walking and cycling, allowing people and freight to travel smoothly from door to door, and enhancing overall transport efficiency, sustainability and durability; calls on the Commission, in this regard, to ensure and promote cooperation and investments at EU level in the field of transport industry digitalisation through existing and new funds, in order to integrate smart transport systems into the various modes of transport (C-ITS, ERTMS, SESAR, RIS<sup>1</sup>); underlines the importance of an integrated approach to information, booking and ticketing tools in establishing attractive door-to-door mobility chains;
39. Calls for this planning process to draw on users’ vision of passenger and goods transport as a basic source of information, in order to broaden the scope of C-ITS application and create business models linked to this new concept of sustainable integrated mobility;
40. Encourages the EU and the Member States to properly enforce the UN Convention on the Rights of Persons with Disabilities (CRPD) and the forthcoming directive on accessibility requirements for products and services, in order to achieve barrier-free accessibility to C-ITS for all citizens;
41. Recommends that the Commission rapidly establish an adequate legal framework to achieve EU-wide cross-border interoperability and a framework laying down rules on liability for the use of the various forms of connected transport; calls on the Commission to publish a legislative proposal on access to in-vehicle data and resources by the end of the year; recommends that this proposal should enable the entire automotive value chain and end users to benefit from digitalisation and guarantee a level playing field and maximum security with regard to storage of in-vehicle data and access thereto for all third-parties, which should be fair, timely and unrestricted in order to protect consumer rights, promote innovation and ensure fair, non-discriminatory competition on this market in line with the principle of technological neutrality; stresses the need to contribute to the modernisation of all urban and rural infrastructure linked to public transport services; calls on the Commission to guarantee that it will, in all cases, ensure full compliance with the GDPR, reporting to Parliament on its monitoring on an annual basis;
42. Calls on the Commission to adopt a global approach to technical harmonisation and

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<sup>1</sup> European Rail Traffic Management System (ERTMS); Single European Sky ATM Research (SESAR); River Information Services (RIS).

standardisation of data, in order to ensure the compatibility of C-ITS, economies of scale for manufacturers and improved consumer comfort;

43. Underlines the importance of opening a dialogue with the social partners and consumer representatives at an early stage in order to establish an atmosphere of transparency and confidence, with a view to finding a proper balance between positive and negative effects on social and employment conditions and on consumer rights; notes that a road map for C-ITS deployment must be established by the eSafety Forum in the same way as for the eCall system;
44. Stresses that in order to fulfil international climate commitments and meet internal EU targets, a comprehensive move towards a low-carbon economy is required; highlights the need, therefore, for the renewal of the allocation criteria of different EU funds so as to foster decarbonisation and energy-efficiency measures, including in C-ITS; considers that EU funding should not under any circumstances be allocated to projects that are not compliant with CO<sub>2</sub> reduction targets and policies;
45. Calls on car manufacturers to provide consumers with sufficient and clear information about their rights and the benefits and limitations of new C-ITS technologies in terms of safety; encourages the use of information campaigns to familiarise current drivers with new C-ITS technologies, to create the necessary trust among end users and to achieve public acceptance; considers that the use of C-ITS can improve the safety and efficiency of the transport system while ensuring compliance with data protection and privacy rules;

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46. Instructs its President to forward this resolution to the Council and the Commission.