Chamber Technology Engagement Center (C_TEC)

AUTOMATED VEHICLE POLICY PRINCIPLES



Automated Driving Systems (ADS) and ADS-equipped vehicles, colloquially known as autonomous vehicles, have the vast potential to increase road safety, enhance mobility for the elderly and people with disabilities, and improve transportation efficiency across the nation. To meet this potential, we must focus on developing appropriate public policies as well as common industry safety standards and technology-neutral safety performance benchmarks. Also, public-private consortia, broad-based consumer education coalitions, and global standards bodies can play a critical role in building the trust necessary to test and deploy ADS-equipped vehicles at scale, and save thousands of lives in the United States.

C_TEC encourages U.S. legislators and regulators to consider the principles below in order for America to assume a leadership position and invest in this globally competitive sector. These principles were developed by C_TEC's Autonomous Vehicle Working Group, which consists of a broad and diverse set of leading companies and trade associations, including original equipment manufacturers (OEMs), technology companies, transportation network companies, insurers, telecommunications providers, automotive suppliers, trucking, and retail.

The following policy principles will ensure that the United States remains a leader in automated vehicle (AV) innovation and that America's policy framework can be a model for other countries worldwide.

ENSURE A SAFETY FIRST APPROACH

As an industry and nation, our first and foremost collective goal must be safety. The safe development, testing, and deployment of ADS and ADS-equipped vehicles are essential to build and retain public trust in order to realize the multifold benefits that these vehicles will deliver for society. Therefore, safety is C_TEC's top priority.

PRESERVE EXISTING DELINEATION OF REGULATORY ROLES

For America to be at the forefront of innovation, policymakers must create an environment for ADS technology to advance. Clarity and certainty of regulatory roles are crucial to spur investment in the United States amid the global race among nations to lead in this sector. C_TEC believes that policymakers should preserve the existing clear delineation of traditional federal, state, and local roles for motor vehicle regulation, as well as interstate commerce, in the context of automated vehicles.

Absent federal clarity, the current patchwork of regulations creates uncertainty, which hinders economies of scale and continued ADS development and testing in the United States. In short, preserving existing federal authority over testing and deployment regarding the design, construction, and performance of ADS and ADS-equipped vehicles and components is critical to ensure American leadership in this highly competitive global industry.







PROMOTE TECHNOLOGY AND STAKEHOLDER NEUTRALITY

The transportation industry is undergoing a rapid transformation. Consistent with this evolution, the AV industry includes a breadth of stakeholders from traditional original equipment manufacturers (OEMs) and suppliers to technology companies and other new entrants. To ensure a level playing field that facilitates safety and innovation and increases new investment and jobs in the United States, all stakeholders' testing and/or deploying ADS and ADS-equipped vehicles should be subject to the same testing and deployment policies under a uniform federal framework.

C_TEC also supports ongoing proactive industry collaboration in leading standards bodies to develop a technology and stakeholder-neutral ADS safety validation approach, which may set forth consensus-based minimum safety performance requirements, guidelines, or benchmarks. These efforts must be open to all AV industry stakeholders to ensure that the United States benefits from diverse expertise, as well as wide acceptance and adoption of the approach. Any new U.S. Department of Transportation (USDOT) ADS working group should ensure similar composition.

ADVANCE SAFE AUTOMATED VEHICLE DEVELOPMENT, TESTING AND DEPLOYMENT

Testing is essential to advancing ADS performance and thus strengthening motor vehicle safety. To demonstrate that an ADS-equipped vehicle is at least as safe as a human driver, C_TEC recognizes the need for metrics beyond vehicle miles traveled and disengagements. Therefore, policymakers should encourage the broad AV industry to collaboratively develop a technology-neutral and transparent performance-based model for ADS safety decision-making in conjunction with leading standards bodies.

Also, to increase consumer trust, C_TEC supports a comprehensive test of the safety of a vehicle's decision-making and perception systems. Consistent with the USDOT recognition that on-road testing is one of several aspects for ADS safety assurance, C_TEC recognizes that ADS/AV safety testing can be performed along multiple paths, for example, (i) on-road testing; (ii) verification of the vehicle's decision-making to an industry accepted, performance-based safety model; and (iii) testing of the vehicle's perception system using data sets.

MODERNIZE FEDERAL MOTOR VEHICLE SAFETY STANDARDS AND REGULATIONS

ADS-equipped vehicles may include unconventional designs that are incompatible with some existing Federal Motor Vehicle Safety Standards (FMVSS). Therefore, some FMVSS may need to be modernized to encompass advances in ADS technology. As the USDOT considers which regulations may need to be modernized, USDOT's existing temporary exemption authority allows the introduction of new motor vehicle features or designs where the petitioner's data supports that those innovations provide a safety level at least equal to the safety level of the standard. This data-intensive exemption process provides a valuable opportunity to demonstrate the safety benefits of ADS technologies and inform future rulemakings.

C_TEC supports making this exemption process available to all petitioners (e.g., traditional OEMs, suppliers, tech companies, and new entrants) on a level playing field. To ensure that the United States continues to lead in this sector and reduce barriers to deployment, C_TEC supports increasing the number of ADS-equipped vehicles that may be exempted and lifting the current cap of two years for each exemption.



For more information, please contact:

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