ARTIFICIAL INTELLIGENCE, ROBOTICS, AND AUTONOMOUS TRANSPORTATION SYSTEMS
OVERVIEW

Artificial Intelligence (AI), simply put, is the use of science and engineering to create increasingly capable intelligent systems that will benefit society. AI will not supplant human intelligence, rather, it will augment our intellectual reach. In the process, AI will enable the creation of safer, more efficient, and more reliable systems that will, in many instances, drive down societal costs associated with mistakes in human behavior. This is particularly true in the area of autonomous transportation systems – highly autonomous and intelligent systems represent the future of mobility.

We recognize that AI-driven systems touch nearly every aspect of our lives – from smart trains, planes, and automobiles using autonomous transportation systems to cell phone technology and wireless technology using V2V and V2I networks, infotainment and gaming, nano-technology, medical devices, surgical robots, pharmaceuticals, and food. It is impacting the delivery of legal services, manufacturing – robotics, health care delivery (diagnosis and treatment), DNA synthesis sequencing and genomics, banking and finance, online retail sales and customer service, predictive purchasing, and applications for smart homes.

AI is guiding, perhaps driving, these industries into the future and along the way, the companies that are developing the underlying AI technology, as well as the industries utilizing this technology, require the advice of capable legal counsel. Eckert Seamans is a firm of diverse practice groups who work collaboratively across our offices to develop solutions for companies developing or utilizing AI technology. We have represented companies in these industries by providing advice in the following areas:

- Product Liability/Commercial Litigation & Counseling
- Cybersecurity, Data Security, and Privacy
- Insurance/Risk Management
- Regulatory/Government Affairs
- Intellectual Property/Software Technology & Licensing
- Aviation & Unmanned Aircraft Systems
- Transportation/Public Transit
- Telecommunications
- Health Care
- Labor/Employment and Employee Benefits
- Municipal Law & Governance
- Environmental, Health, and Safety
- Alternative Energy/Renewables & Clean Technology

Our primary focus is on providing these services to meet the needs of robotics/software engineering companies developing AI technology and manufacturers that employ this technology in the automotive, trucking, rail, aviation, agricultural, and maritime industries as well as manufacturing companies using AI/robotic technology in the medical device, pharmaceutical, health care, consumer product, food product, and industrial product, chemical and heavy industries.

To learn more about legal developments in the fields of artificial intelligence, robotics and autonomous transportation systems; legal issues on subjects that relate to these fields; and commentary about how the law might impact each of those cutting-edge areas of technology, please subscribe to Eckert Seamans’ Artificial Intelligence Law Blog and follow us on Twitter (@EckertSeamansAI).
AI RESOURCES

- American Association of State Highway Officials: Fast Act Reauthorization
- Insurance Institute for Highway Safety:
  - ADAS Reality Check
  - Headwinds on the Road to Zero: ADAS, crashworthiness and macro effects
- Mobileye: On a Formal Model of Safe and Scalable Self-driving Cars
- National Highway Traffic Safety Administration:
  - 2016 Fatal Motor Vehicle Crashes: Overview
  - 2016 Quick Facts
  - 2017 Fatal Motor Vehicle Crashes: Overview
  - Automated Driving Systems 2.0
  - Cybersecurity Best Practices for Modern Vehicles
  - Fatality Analysis Reporting System Encyclopedia
  - Human Factors Design Guidance for Level 2 and Level 3 Automated Driving Concepts
  - Preliminary Statement of Policy Concerning Automated Vehicles
  - Voluntary Safety Self-Assessment
    - Company VSSA Disclosures: Nuro, Waymo, GM, Ford, Nvidia, and Uber
- New York City Department of Transportation: NYC DOT Connected Vehicle Pilot (Video: Part 1, Part 2, Part 3)
- Pennsylvania Department of Insurance:
  - Letter to U.S. Department of Transportation re: Request for Comment regarding Automated Vehicles 3.0
- Pennsylvania Department of Transportation:
  - Automated Vehicle Testing Guidance
  - Letter to U.S. Department of Transportation re: Request for Comment regarding Automated Vehicles 3.0
- SAE International: Taxonomy and Definitions for Terms Related to On-Road Motor Vehicle Automated Driving Systems
- University of Virginia Center for Transportation: Glossary of Connected and Automated Vehicle Terms
- U.S. Department of Transportation:
  - Connected Vehicle Pilot Deployment Program
  - Notice of Request for Comments – Preparing for the Future of Transportation – Automated Vehicles 3.0
  - Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving Automation
  - Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)
NEWS AND INSIGHTS

Publications

**AI/Robotics/Autonomy**


**Product Liability**


**Trials**


**Speaking Engagements**

- **Dennis P. Ziemba** served as a panelist for “A Design Process for Autonomous Vehicle Decision-making Frameworks,” and **Steven R. Kramer** for “Advanced Driver Assistance Systems” at the Product Liability Advisory Council (PLAC) Fall Conference, November 2018.
- **Edward A. Gray** and **Thomas J. Sweeney** served as panelists during “Autonomous Vehicles and Products Action Group” at the Product Liability Advisory Council (PLAC) Spring Conference, April 2018.