



24th April 2017

Written Comments to the California Department of Motor Vehicles in response to the Proposed Regulations associated with the Deployment of Autonomous Vehicles for Public Operation

Renovo is guided by a team with a passion for automobiles and a wealth of Silicon Valley tech expertise. To put it simply, we're focused on the future of moving people and things. Our mission is to drive the innovation and adoption of Automated Mobility on Demand (AMoD) to the greatest scale and highest efficiency, with safety as the number one priority.

The opportunities and benefits of AMoD, especially in a place like California, are numerous. California's renewable energy targets and electric vehicle incentives are among the most aggressive in the country. The activation of automated, on-demand fleets of electrified vehicles has the opportunity to reduce traffic congestion, improve air quality, increase energy efficiency, and most importantly, save lives.

Renovo supports the proactive and consultative approach that the California Department of Motor Vehicles has adopted with respect to automated vehicle testing and deployment. Automation will not only add convenience and improve safety for individually owned and operated vehicles, it has the potential to drastically improve the way people move.

Renovo is strongly supportive of the key provisions in the proposed regulations that allow the testing and deployment of automated vehicles on California roads without the presence of a driver inside the vehicle. It is only through this approach that many of the substantial economic, environmental and social benefits of vehicle automation can be realized. The ability for a vehicle to drive to an appropriate charging location without inconveniencing the owner or operator, increases the adoption of electrified vehicles and accelerates the achievement of California's ambitious renewable energy targets.

We commend the CA DMV for developing regulations that take all voices into consideration and carefully weigh benefits against costs for society at large. As an interoperability platform developer, Renovo is invested in finding the best solutions for all of the industry's stakeholders: community, auto manufacturers and technology companies. Our recommendations for specific provisions that we've outlined below emphasize citizen safety and keep these key interests in mind.

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In regards to 227.38 - the testing of automated vehicles without a human driver - Renovo supports the remote monitoring and operation approach as well as the fail-safe requirement if connection is lost to ensure both safety and control.

Renovo also supports 227.50 concerning disengagement reporting. We believe that recording and reporting the time between disengagement and resumption of vehicle operation is an important stipulation as it indicates potential inconvenience caused to other road users and passengers.

Renovo supports the introduction of Article 3.8 concerning the commercial deployment of automated vehicles on public roads post-testing. Going beyond testing and moving to deployment is key. These pioneering regulations that the State of California continues to develop alongside community and business leaders will ensure safety in testing all the way through deployment.

In addition to these specific elements, Renovo strongly encourages data sharing of the aforementioned measurements as well as those regarding miles tested, simulated miles, and all other recorded statistics which may improve safety. The more information companies like Renovo, other software companies and automotive manufacturers have to learn from, the more confidently we can ensure safety and quickly improve fleets of automated vehicles. Investing time in building these regulations keeps our roads safe today, and sets us up for continued technological advancement and environmental and social benefits in the future.