Autonomous Vehicles: The Innovation Hub For Cross Industry Disruption

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The past five years have been marked by tremendous growth in the autonomous vehicle industry. While many jurisdictions continue to jostle for leadership in the space, an even greater number of original equipment manufacturers, technology companies and start-ups are fast-tracking new Connected and Autonomous Vehicle (CAV) technology with an eye to the huge profits to be made.

Regulators Balancing Innovation With Public Protection

Moving forward, legislators will be tasked with balancing several competing needs: protecting the public, safeguarding data and privacy, ensuring safety standards and creating regulatory certainty, while leaving room for innovation in this highly competitive industry.

Following the 2018 introduction of testing guidelines from Transport Canada and the Canadian Council of Motor Transport Administrators, a new and robust regulatory framework will assist in the safe development and deployment of CAVs on Canadian roads.

In Ontario, as of January 1, 2019, the ban on operating CAVs in Ontario has been lifted in respect of vehicles equipped with SAE Level 3 automation. A Level 3 vehicle is in full control of all driving functions in some situations, monitors the road and traffic, and will inform the driver when he or she must take control.

Testing, Testing — Levels 1, 2, 3, 4, 5

Many cities, provinces/states and countries are vying to be AV-friendly and a big piece of that is providing support and infrastructure to test this new technology.

In just the last year, autonomous shuttle buses have been tested in the provinces of Alberta and Québec and there are plans for similar tests in Ontario. As of January 1st, the framework for AV testing in Ontario changed significantly, allowing for the possibility of testing fully driverless Level 4 and Level 5 vehicles on Ontario's roads without a driver (or even a passenger) and introducing guidelines for tests in truck platooning, a potential game-changer in the freight industry. Meanwhile, the City of Ottawa has been aggressively promoting the Ottawa AV Cluster and recently announced L5, a 1,866 acre CAV test environment unique in North America.

These regulatory and policy changes illustrate that many Canadian jurisdictions are paving the way for more rapid testing and deployment of CAVs.

A Growing Need to Address Insurance Solutions

The introduction of CAVs is forcing insurers and governments everywhere to reconsider their approach to automobile liability. Notably, the Insurance Bureau of Canada endorsed the UK approach when it recently proposed a single policy to cover both human error and automated-technology malfunction, including cybersecurity breaches. If Canada is to adopt an approach similar the UK model in 2019, collaboration between government, insurers and manufacturers will be key.

Keeping Up with Privacy and Cybersecurity Issues

The more autonomous the vehicle, the more data that it uses and gathers to learn how to drive better. CAVs are equipped with multiple cameras, radar, LIDAR (a radar-like system using lasers), sonar and GPS. The amount of data generated by a self-driving vehicle is astounding – its per-second volume is equivalent to that generated by 10,000 internet users. As the level of automation increases, so too do the data demands of CAVs. This leads to big questions, like what type of data is being collected? Where and how is it being stored? Who has access to the data and what are they using it for? Do drivers have access to or control over any of the data?

These are critical questions and not just for privacy, but for the continued development of CAV technology. The artificial intelligence at the core of CAV learns from the data so this data is crucial as the technology evolves. In the event of accidents, insurers and relevant parties involved in such disputes, will most likely require information on what the various systems of the CAV and the driver were doing at the time of the accident to understand and apportion responsibility.

CAVs and Litigation

Litigation involving CAVs is another area that demands close monitoring, as parties could begin to assert intellectual property rights over related technology. Wider testing and deployment of CAVs could also lead to collisions which will undoubtedly attract attention. While there may be some push to resolve such disputes at the outset these early cases may provide a glimpse of the issues that will face those who proceed to trial on the merits.

Looking Down the Road

With the imminent arrival of autonomous vehicles, stakeholders in this industry will be faced with new legal questions. At BLG, our Autonomous Vehicles Group is at the forefront of this evolving space to better assist our clients in answering these questions.

For more information on how autonomous vehicles may impact your organization, please contact a member of BLG's Autonomous Vehicles group.

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