Agenda ULC Committee on Highly Automated Vehicles

First Meeting – June 9-10, 2017 Gwen Hotel - Renaissance – 8th floor 521 North Rush St. Chicago, IL 60611

I. Introductions

II. ULC Process Overview

- A. ULC Drafting Process and Role of Participants
- B. Study Committee Recommendations
- C. Drafting Committee Charge

III. Highly Automated Vehicles Orientation

- A. Technologies, Applications, and Business Cases
- B. Key Technical Terms
- C. Project Scope
- D. Laws Enacted to Date

IV. Outline for Initial Discussion of Uniform State Law for Highly Automated Vehicles

- A. Part One: Key Legal Rules
 - 1) What legal obligations should the registrant of an automated vehicle have?
 - a) Registrants might include individual vehicle owners or lessors, vehicle manufacturers that continue to own the vehicles they produce, automated driving system developers that continue to own the vehicles they retrofit, fleet managers that are associated with a vehicle manufacturer or automated driving developer, and fleet managers that are not associated with a vehicle manufacturer or automated driving developer, among others
 - 2) What legal obligations should the final manufacturer of an automated vehicle have?
 - a) The federal framework for motor vehicle safety already imposes obligations on manufacturers

- 3) What legal obligations should the provider of automated driving technical services have?
 - a) Services might include ongoing software updates, current roadway data, and driving support (such as remote monitoring)
 - b) The provider of these services may or may not be the same as or associated with a vehicle registrant, fleet manager, vehicle manufacturer, or automated driving developer
- 4) What obligations should an automated ride facilitator have?
 - a) The ride facilitator for an automated vehicle (e.g., Uber) may or may not be the same as or associated with a vehicle registrant, fleet manager, vehicle manufacturer, or automated driving developer
- 5) What legal obligations should the passenger in an automated vehicle have?
 - a) Some automated driving systems may permit a passenger to intervene in automated operation by actively driving, directing the vehicle to stop when practical, or directing the vehicle to stop immediately
 - b) Level 3 automated driving systems (only) may need a human to be available to actively drive upon timely request because these level 3 systems do not promise to achieve a "minimal risk condition"
 - c) Some vehicles may not have any passengers (at certain times or ever)
- 6) What legal obligations should the remote operator of an automated vehicle have?
 - a) Some implementations of automated driving systems may use remote monitors to make certain driving decisions
 - b) These monitors may be located nearby or even thousands of miles away
- 7) What legal obligations and powers should relevant state agencies have with respect to automated driving?
 - a) Key agencies might include departments of motor vehicles, departments of insurance, and state highway patrols
 - b) Powers might include rulemaking, interpretation, enforcement, exemption/waiver
- 8) What role should municipal governments play with respect to automated driving?
 - a) Some municipalities have taken an active role in encouraging or regulating automated driving, while some states have sought to preempt all municipal regulation

- 9) What technical requirements should apply to automated vehicles?
 - a) Unlike the legal persons identified above, automated vehicles are not legal subjects
 - b) Technical requirements are likely beyond the expertise of this drafting committee
 - c) The federal framework for motor vehicle safety specifies technical standards for new vehicles (and preempts inconsistent state requirements), although these standards do not specifically address automated driving
 - d) USDOT-NHTSA has also identified a range of other relevant current and potential regulatory tools
 - e) Federal legislation may also address federal regulation of automated vehicles and automated driving
- B. Part Two: Relationship with Existing Law
 - 1) How should the uniform law be reconciled with the 1949 Geneva Convention on Road Traffic?
 - a) The Convention requires all vehicles to have a driver who are at all times able to control their vehicles
 - b) States can advance good-faith interpretations of this language consistent with automated driving
 - 2) How should the uniform law interact with federal law?
 - a) Federal motor vehicle safety standards preempt inconsistent state standards
 - b) In 2016 USDOT-NHTSA released quasi-voluntary guidance for automated vehicle developers (that was intended to and likely will be revised this year)
 - c) Some states have considered whether to condition certain approvals on a developer's compliance with this federal guidance
 - 3) How should the uniform law interact with existing state law?
 - a) Some key issues within existing law
 - i) Driver/operator and drive/operate
 - ii) Obligations on the operator (and occasionally the owner) to attend a vehicle, to not abandon a vehicle, to not leave children unaccompanied, to refrain from certain

distracting activities such as texting, to exercise due care, to report crashes, to properly maintain a vehicle, etc.

- iii) Implementing obligations and powers of actors discussed above.
- iv) Reasonable (as opposed to absolute) compliance with rules of the road
- b) Should the obligations with respect to automated driving be the same as, higher than, or lower than those with respect to conventional driving?
- c) Possible approaches
 - i) Revise existing law for both automated and conventional driving
 - (1) Example: Should any vehicle be permitted to cross a yellow line to provide additional space when reasonably overtaking a cyclist
 - ii) Map existing law onto automated driving
 - (1) Example: Who/what is the "driver" or "operator" of an automated vehicle? Who "drives" or "operates" such a vehicle?
 - iii) Exempt automated vehicles from existing law subject to a wholly separate framework
 - (1) Example: Transportation network company (TNC) laws that supplanted taxi regulations
 - iv) Other Approaches?
- 4) How should the uniform law interact with municipal law?
- 5) How should the uniform law facilitate regulatory cooperation among states?
- 6) How should the uniform law interface with existing technical guidance such as SAE J3016's definitions?