Modifications to J3016 in the Update from June 2018 to May 2021

The May 2021 update of J3016 retains the fundamental concepts and structure of the June 2018 version, but has been expanded in several ways, increasing its length from 35 to 41 pages and incorporating inputs from international participants in the joint working group activity with ISO TC204. These expansions include definitions of several additional terms, further explanations of some concepts that have been misunderstood by readers of the previous version, and some restructuring of the definitions into more logical groupings.

The most important expansion is the addition of definitions for two distinct remote support functions: remote assistance and remote driving (and the users who perform those functions: remote assistant and remote driver). The term "conventional driver" has been replaced with "in-vehicle driver" to reinforce the distinction from the remote driver, and the fallback-ready user has been defined for both in-vehicle and remote locations.

Other new definitions are provided for:

- Failure mitigation strategy
- Fleet operation functions
- Routine/normal operation
- Specific categories of driving automation features based on their scope of operation: maneuver-based, sub-trip and full-trip.

The Level 1 and 2 driving automation systems have been given the name "driver support systems" as a counterpart to "Automated Driving Systems" for Levels 3-5.

The Scope statement has a more detailed introduction to the levels of automation and the three primary actors involved (the driving automation system, user and vehicle).

The definitions for vehicle types have been grouped together (conventional vehicle, dual-mode vehicle and ADS-dedicated vehicle).

Several concepts have been given more detailed explanations than in the previous version:

- More examples have been provided to explain the meaning of Operational Design Domain
- The Operational Design Domain boundary has been recognized to be soft, so that it could be crossed temporarily without immediately requiring fallback action.
- The subtleties of the differences between Level 3 and 4 have been explained further, including the role of the fallback-ready user, the possibility of some automated fallback at Level 3 and the possibility of some alerts to in-vehicle users at Level 4.
- The reasons for not including warning and momentary driving intervention systems in the classification of levels of driving automation are explained
- Explanation is provided for how the J3016 classifications of sustained driving automation fit into the broader context of driver assistance and active safety features.