

IEEE AV Decision Making Working Group

February 2024 Status Report



Current Activities

The IEEE AV Decision Making Working Group continues to hold monthly virtual meetings. In addition, the working group held two hybrid virtual/in-person meetings concurrent with the TRB Automated Road Transportation Symposium (ARTS) in July 2023 and the SAE Government/Industry Meeting in January 2024.

The IEEE AV Decision Making Working Group has made substantial progress on two new documents:

- IEEE P2846a, [Standard for Assumptions in Safety-Related Models for Automated Driving Systems Amendment: Additional scenarios and road users](#), will provide minimum sets of assumptions for several additional scenarios and road user types to augment the base IEEE 2846-2022 standard. The draft for this addendum is nearing completion and will be presented to the working group for formal review and commenting.
- IEEE P3321, [Recommended Practice for the Application of Assumptions on Reasonably Foreseeable Behavior of Other Road Users](#), intends to aid the implementation of IEEE 2846-2022 by ADS developers and other industry stakeholders. Specifically, the recommended practice provides practical multi-step guidance for applying the IEEE 2846-2022 standard. This document is under formal review and commenting within the working group.

Each project task force meets on a bi-weekly basis. The current task force leads are Qiming Zhao (Denso, for P2846a) and Scott Schnelle (Waymo, for P3321).

The IEEE AV Decision Making Working Group is strengthening its relationships with other related standard development activities. The working group is exploring formal liaison agreements with:

- SAE On-road Automated Driving Committee
- ISO/TC 22/SC 33
- IEEE Automated Driving Working Group
- IEEE AV Standards Committee

Wrap-Up & More Information

The working group is targeting submitting both the IEEE P2846a and P3321 documents for balloting with the IEEE Standards Committee in the first half of 2024, with the goal of publishing both documents before the end of 2024. As the IEEE AV Decision Making Working Group nears the end of these activities and begins planning for new work items, entities interested in the working group's activities are encouraged to reach out to the Working Group officers. Contact information and more information on the working group's upcoming meetings are available on our [public site](#).

Several IEEE AV Decision Making Working Group members will also be hosting and participating in a live [panel discussion](#) as part of the SAE World Congress Meeting in April 2024. The panel discussion will include progress updates on the P3321 task force. This is an excellent opportunity to learn more about the task force and meet some of our IEEE AV Decision Making Working Group members.

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Past Accomplishments (2023)

Following publication of the [IEEE 2846-2022 Standard for Assumptions in Safety-Related Models for Automated Driving Systems](#), the IEEE AV Decision Making Working Group published a second white paper in February 2023. This white paper, titled [Example Applications of IEEE Std 2846-2022 to Formal Safety-Related Models](#), provides examples for how the reasonably foreseeable assumptions defined in IEEE 2846-2022 are used in three safety-related models.

