

MEETING LOG

SUBJECT: UL Standards Technical Panel (STP) for Evaluation of Autonomous Products (Artificial Intelligence), STP 4600.

LOCATION: Teleconference call

DATE: June 8th and June 9th, 2022

LOG ENTRY SOURCE: Simon Lee, Jr., Electrical Engineering and Fire Sciences (ESEF)

COMMISSION ATTENDEES:

Simon Lee, Jr., ESEF

Doug Lee, EXHR

NON-COMMISSION ATTENDEES:

For a complete list of attendees, please contact Deborah Prince at UL.

MEETING SUMMARY:

The goal of UL 4600 is to, "...to help ensure that an acceptably thorough consideration of safety for an autonomous product has been performed during the design process and will continue to be done throughout the system lifecycle. It does so by emphasizing repeatable assessment of the thoroughness of a safety case."

The last STP 4600 meeting was April 2020 and focused on drafting the initial version of the standard. UL relayed to the STP members back in March that their UL 4600-2 (Evaluation of Autonomous Trucking) would be consolidated and incorporated into the baseline UL 4600 document, thus eliminating UL 4600-2. Accordingly, the majority of the June 8th and 9th STP discussions were on autonomous trucking considerations.

Day 1 started with discussion on topics such as: For "Section 1.2: Scope" to not limit the autonomous road vehicle definition by not adding the specific term autonomous trucks to allow for applicable regulations for other specific vehicles. And to incorporate the term platoon of vehicles in "Section 2.1.1: Scope Summary" for autonomous truck or vehicle requirements. CPSC staff commented that the autonomous products portion of the 4600 was their main interest and jurisdiction, and UL acknowledged those concerns. UL also had an action to re-word the scope and present it to the STP on Day 2. When discussion centered on the use of risk models in Section 6.4.3.2, from "Section 6.4: Risk Evaluation", CPSC staff questioned if wording should be added to not limit that section's Risk Evaluation list, by adding proposed wording such as: "use one of these risk models or an equivalent, acceptable, agreed upon risk model not listed". The STP disagreed with CPSC staff's comment proposal, and their conclusion was if another risk model or evaluation technique needed to be added to that list, or even a new example safety case, then it could be proposed through the UL Standards development and STP process.

Day 2 discussed topics, for example: as mentioned, UL re-introduced wording describing the scope of the document to make the statement broad enough to incorporate other possible vehicles such as autonomous trucks. CPSC staff again requested clarification that non-road worthy autonomous products are also under the scope of the document, and the UL program manager stated the agreed upon scope wording does not specifically exclude autonomous products or systems since that scope also states: "Many of the prompts will apply to other autonomous ground vehicles and even other types of autonomous systems...".

NEXT STEPS:

A new Task Group (TG) was identified to review and update sections 10.6.6 and 10.6.7.2 for incident response details such as for loss of power and training for safe handling after incidents. That new TG was to update those mentioned sections NLT June 30th, and the STP would review those proposals by the UL Collaborative Standards Development System (CSDS) at the end of July. The STP manager declared that a July ballot would then occur with the goal to close that ballot in August.