



MEETING LOG

SUBJECT: Samsung Electronics America to discuss and observe a demonstration on Artificial Intelligence in consumer products

FY 24 OP PLAN ENTRY: Artificial Intelligence (AI)

DATE OF MEETING: February 15, 2024

LOCATION OF MEETING: Samsung Electronics America, 700 Pennsylvania Avenue, Washington, DC

CPSC STAFF FILING MEETING LOG: Douglas Lee, Office of Hazard Identification and Reduction (EXHR)

FILING DATE: March 06, 2024

CPSC ATTENDEE(S): Douglas Lee (EXHR)

Simon Lee, Engineering Sciences, Division of Electrical Engineering and Fire Sciences (ESFS)

Matthew Barzola, Engineering Sciences, Division of Human Factors (ESHF)

Vineed Dayal, Laboratory Sciences, Division of Mechanical Engineering

Stephen Harsanyi, ESHF (virtual)

Joanna Matheson, Health Sciences (virtual)

NON-CPSC ATTENDEE(S): Rehan Ehsan, Samsung Electronics America

And other Samsung Electronics America staff

Summary of Meeting:

CPSC staff met with Samsung Electronics America staff to discuss and observe a demonstration on AI in consumer products. CPSC staff discussed goals of making AI consumer products safe given that devices have limitations (potential for product and human error), have software algorithms that evolve, and may lead to potential hazards. Samsung staff discussed some of the product safety standards that they are involved with and provided examples of AI/Machine Learning (ML) used to enhance product usability as well as improve product safety. Samsung staff demonstrated some of the AI technology added to their robotic vacuum to avoid certain obstacles while cleaning and mapping obstacles. They discussed the benefits of adding a video camera to the robotic vacuum system to enhance the safety of vulnerable consumers (seniors, children, or those with disabilities) in a home. They also discussed the benefits of adding cameras to an oven to aid in baking and to prevent oven cooking fires. Refrigerator and washing machine enhancements with AI were also discussed. One feature highlighted by Samsung staff was the ability of the refrigerator to create a digital inventory and the ability of a user to add product expiration dates. The washing machines have sensors that monitor soil level, fabric sensitivity to adjust the detergent levels and mechanical wash forces.

Next Steps:

Staff will continue to participate in AI/ML product voluntary safety standards to improve the safety of products using this technology.