

## **AES TCAA Web meeting 10/12/22 (<https://www.aes.org/technical/aa/> )**

Thanks to all who joined this meeting. AES reflector issues have made it difficult to get meeting information out since our last meeting and they have seemingly been corrected. Hopefully we will be able to meet more regularly.

Roger opened the meeting giving a brief description of what the TC-AA is about. Not only are audio systems covered by also systems that utilize audio systems to aid in their functions as well. Audio systems are being asked to perform more and more tasks as technology advances and the goal of the TC is to keep up to date on all of them.

### **New Sub-Committee Proposal – Voice and Speech**

At the Automotive Conference in Dearborn last June Roger and Raf were approached by Fabio Cagnetti to discuss the possibility of adding a Voice and Speech subcommittee to TC-AA. The goal of the subcommittee is to foster general communication about the technology and trends regarding:

- Voice commands
  - o On board – native to the vehicle
  - o Off board – Siri, Alexa, etc.
- In-car communication (ICC)
- BTHF/Apple CP/Android Auto calls

As vehicles become more electrified and autonomous there are going to be more voice interactions with the vehicle. Users are getting more and more immersed in how they interact with their phones and this expectation will carry over to the vehicle. Many companies are involved in design and test of such systems and a subcommittee to foster communication would be beneficial to all. Raf mentioned a possible reboot of the TC-AT (Audio for Telecommunications) so may be some synergies between the two. The group was asked if this subcommittee makes sense in AA and Roger thought it was a good fit just like the NVH and Sound Management group started last year as cars will be more voice activated in the future and current systems can use some improvement. Raf has contacted Amazon/Alexa for interest and also asked Fraunhofer if they had any interest in joining.

If interested in joining please contact Rafael Kassier ([Rafael.Kassier@harman.com](mailto:Rafael.Kassier@harman.com) ) or Fabio Cagnetti ([fabio.cagnetti@bdsound.com](mailto:fabio.cagnetti@bdsound.com) ).

### **NVH and Sound Management Subcommittee Update**

Samira mentioned the group started in June 2021 and was heavily involved in providing content for the Automotive Audio Conference in June of this year by providing papers and a workshop. The group holds meetings twice a month, but said don't feel overwhelmed if can't join that frequently, once a month is OK too if interested in joining. She also mentioned the group is interested in producing webinars to help foster knowledge and exchange of information within the industry. Roger said this is encouraged as AES has helped many groups put on such events and the NY Convention

next week will be hybrid. Raf suggested the discussions be more general in nature so as to include as many in the industry as possible without fear of sharing intellectual property.

Dewey then gave an update on the feedback from the conference held in June. He mentioned the 3<sup>rd</sup> day of the conference was focused on NVH and Sound Management with a good amount of interest shown being that it is a relatively new area for automotive. 5 papers were presented (can be found in the AES e-Library searching for AES 2022 International Automotive Audio Conference (6/2022)) as well as a panel discussion lead by Scott Macdonald of Siemens. Dewey said the plan was to continue participation in future conferences/conventions.

Gaurav asked what are roles/responsibilities of the subcommittee members? Raf said it is NVH focused and how sound systems help to achieve NVH performance and how the two groups work together. Also mentioned it is focused on promotion of this topic and to foster intercommunication within the industry. Commitment is anything one is willing to help out with, possibly writing papers, participation in conventions and conferences through workshops, tutorials, master classes, etc.

### **Whitepaper Update/AES Convention, New York, NY Oct 19-20, Online Oct 26-27**

Next week's convention will feature discussion of the whitepaper being created for in-vehicle acoustic measurements. Each of the three areas of interest will be discussed; Frequency Response, Max SPL and Impulsive Distortion. The fundamentals of the paper are mostly complete, working on language and clarity. A Beta Testing program will be promoted to help gauge effectiveness of the whitepaper and get field usage data for further improvements. Plan is to then distribute paper to the TC-AA for further feedback. Timing for this is TBD as new developments seem to be occurring. Raf showed enthusiasm for testing out the Impulsive Distortion portion! The whitepaper is being created as a recommendation and not a standard.

A couple other presentations of interest at the NY Convention are

**Moving Beyond Traditional Measurements** being presented by Steve Temme, Jonathon Gerbet and Jayant Datta on Wed, Oct 19 at 10:45am.

**APEI – It's always the Loudspeaker Designer's Fault!** Being presented by Dan Foley, Roger Shively and Scott Leslie on Wed, Oct 19 at 5:00pm

### **Next Automotive Audio Conference ?**

The goal of the committee is to hold a conference every 2 years which means the next one is targeted for 2024. Usually the conferences rotate between the US and Europe. Since the last one was in Dearborn, MI USA (200 participants, very successful!) the next one is most likely going to be in Europe (last was held at the Audi Customer Experience Center in Germany). If interested in being on the conference committee let Raf or Roger

know as they can use help with Facilities, Communications, Paper Chairs, Treasurer, etc as well as subcommittee participation (NVH & Sound Mgmt and Voice & Speech). If anyone has access to a facility that would greatly help too. OEM participation is highly encouraged! Start thinking about content now.

### **TC-AA Asian Expansion**

Raf has been working with our Asian counterparts on creating a meeting with them as well. The time zone differences make a world committee meeting quite challenging and we are missing a good deal of information by not collaborating with them. Thinking early European time to make it reasonable for Asia. Keep a lookout for developments.