AUDIO ENGINEERING SOCIETY
TC-Audio for Cinema
Committee Meeting
October 19, 2018
12 pm – 1 pm
145th AES, NY

Attendees

- * Kurt Graffy, Arup Acoustics
- * Douglas Greenfield, Independent
- * David Weinberg, Boston Audio Society
- Luciene Abdelnur, VCA Music NY
- Bruce Black, Media Rooms Tech
- David Brown, Student Michigan Technological University
- Sarah Calvert, Student Michigan Technological University
- Victor Chicni, VCA Music NY
- Bert van Daele, Auro Technologies
- Laurie Finehan, THX Ltd.
- Nuno Fonseca, Sound Particles
- Eelco Grimm, HKU University of the Arts, Utrecht
- Kevin Gross, Independent
- Allen Harrison, Student Michigan Technological University
- Rob McDonagh, IATSE
- David Murphy, Knx Loudspeakers
- Scott Norcross, Dolby
- Charles Robinson, Dolby
- Carlos Ronconi, Globo Studios Brazil
- Neil Shaw, Menlo Scientific
- Matt Willoughby-Price, IATSE

Unable to connect

- Julian Pinn (chair) – Julian Pinn Ltd [JP: 'comments added post meeting']
- Tamás Székely

Apologies

- none

Agenda

1. **Welcome and roll call**
2. **Appointment of secretary to minute-take**
3. **Loudness update**
4. **Education: SMPTE liaison documents share and Mr Vessa presentation share**
5. **AOB**
6. **Next meeting reminder: Jan 30th 2019.**

Minutes

1. **Welcome and roll call**

- Of the attendees listed, * would like to become TC-AC member, Julian please add them to the reflector
  [JP: Messrs. Greenfield and Graffy were already members of TC-AC; Mr. Weinberg has been added using his @bostonaudiosociety.org email address, which was already existing at aes.org.]

2. **Appointment of secretary to minute-take**

- Eelco Grimm takes notes for the minutes.
- Charles Robinson is chair for this meeting due to Julian Pinn due to the failure of the conference wifi system.

3. **Loudness update:**

- Charles Robinson: Last 3 months I've been visiting cinemas to find out what's happening with playback levels. I asked the cinema operators. They appeared to not really be in touch with what's happening at the projector. So I did screen by screen checking. I asked for fader settings, but there's also other things to check like room calibration. So I checked cal levels, physical size etc. I asked the local operators how they are making their decisions, and why they do what they do.
- Nothing to report yet. The calibration is generally close but occasionally not close. It turns out calibration is an important aspect. The project work is probably done in a month. The next two things to do are:
  - Statistics on playback level.
  - Correlate these to other characteristics of the room to understand why it does vary.
- Q: which noise did you use to test the calibration, from a file or the processor?
- A: I used a SMPTE pink noise file on DCP. Same file in all rooms, which is important.
- Q: Did you check the frequency response?
- A: Yes.
- Q: Do you interview the operators and managers about the fader setting?
- A: Yes. The common answer is "I don't know". Mark that I met the guy who is present in the morning, not necessarily the one in charge during the show.
- Q: Do they respond to feedback from end users at cinemas?
- A: Yes.
- Q: Do they have any logs of that?
- A: no.
- Q: Is the fader setting level automated?
- A: That is rare, usually it is done by human operation. [JP: automated faders are much more common in Europe]
- Q: Is the fader setting logged for QC?
- A: No. Generally they are in steady state, no corrections. The features get the same settings as trailers and all movies are played the same. Adjustments are only done after complaints (often softer), and then stay there.

- Q: Where did you do your research?
- A: In the west of the US.
- Q: Were you surprised?
- A: Overall it is consistent with what we knew: cinemas don't play at ref level, and there's quite a bit of variability. During the Atmos development I walked from screen to screen within a few large complexes. Some theaters were good. But often every cinema of the theatre had a different fader setting. Even with the same movie playing. It looks like these levels were 'organically set'.
- Q: How often do the cinemas receive calibration?
- A (from group): One chain does it every 6 months, another chain visits each screen once a year (4000 screens each). It is a lot of work.
- Q: What will we do if we find that the fader is low everywhere?
- A: Revise the standards?
- Q: Would we like to do interviews with engineers to check their master level? We get new signs that US directors also want the engineers to use lower fader levels during mastering to compensate for lower fader levels in the cinemas.
- A: I prefer to limit my project to just cinemas. My impression is that the circle has not yet been closed in the US. What is it we want to prove?
- Q: All trailers are mastered at the standard LeqM level. The loudness is not a technical issue, everyone stays within the approved limits.
- A: The rules are indeed met. The question is: do we need to improve the rules? So that the recommendation is closer to what the customers expect?
- Q: We need to define our goals. What do we want to be the end result of publishing the cinema levels?
- A: At least it will be better than the status quo where we are in the dark. Let's first wait for the results and take it from there.
- Q: SMPTE is also looking at trailer levels. The suggestion comes up that trailers have gotten louder over time. It needs to be subjectively checked if that is true or not. Ioan Alan is involved.
- A: I participated in a listening session. However I do not know who is in charge on that SMPTE project.
- Q: Is there any progress at NATO? John Fithian participated in the panel last year.
- A: For the first time NATO acknowledged that not all movies were played back at reference level, which was important. But I did not hear back from him since.
- Douglas Greenfield: they are working on it but are evaluating it on their own.

4. SMPTE liaison documents

- SPMTE Liaison documents: https://secure.aes.org/techcouncil/documentDownloads.cfm?docID=615
- Brian Vessa SMPTE B-Chain Study Group presentation: https://secure.aes.org/techcouncil/documentDownloads.cfm?docID=616
- ~~Neil Shaw: SMPTE testing documents are open access. There is a whole suite of tests available, like the pink noise standard SMPTE ST2059. It can be added to the AES document space. The VP of SMPTE has to sign for sharing the docs, Rich Cabot can help.~~
- ~~[Todo] Neil Shaw will follow up.~~ [JP: no need; as per the first bullet of this section 4 of these minutes, they are already approved, sent, and uploaded to AES—and for use strictly for AES purposes only; they are not open access but copyrighted to SMPTE.]
- Q: The AES TC technical document upload site seems difficult to deal with. Julian has said he has problems with this AES repository. [JP: it now works and I understand its layout.]
- David Murphy: Remember you have to log in two times, first for AES and then the TC group.
- [Todo] Kevin Gross: I will let the group know how to use links, which will improve the interface somewhat.

5. **AOB**

- What could the TC-AC role be compared to SMPTE?
- Is there anything going on in the TC-AC apart from loudness?
- A: It depends completely on what the members contribute. AES TC's are a volunteer organization.

6. **Next meeting:** January 30th 2019 conference call at 15:00 – 16:30 GMT

Summary and approval of tasks / action items

- Julian, please add three new members to the reflector. [JP: 1 added, 2 already members.]
- Charles Robinson to finish his survey and report to us.
- Kevin Gross to inform us about how to use the AES repository for document sharing in a convenient way.
- ~~Neil Shaw to follow up on document sharing between SMPTE and AES (Julian, please check if this is necessary).~~ [JP: it is not necessary]

Minutes by Eelco Grimm