

Minutes of the AES Technical Committee on Coding of Audio Signals

The meeting was called to order at the 140th AES Convention, Paris, at 13:00, Sunday June 5, 2016 by Jürgen Herre, co-chair.

The agenda was approved, as shown in Annex 1. The chair welcomed attendees, shown in Annex 2, and thanked them for participating in the TC meeting.

The minutes of the last TC meeting at New York had been posted on the TC email reflector and then uploaded to the TC web site.

The Chair noted the activities at the 140th convention that were in some sense relevant to this TC:

- EVS Codec Workshop (W16, Tue 8:45-9:45)– sponsored by the Coding TC
- A considerable number of audio coding related papers in the sessions on Signal Processing, Audio Formats, Audio Content Management and Immersive Audio

It was noted that – again, like in several preceding conventions - the audio coding papers at this convention have been assigned to other headlines rather than dedicated audio coding sessions. For whatever reason it appears that audio coding has disappeared from the list of standard topics at AES conventions. Participants noted that when they submitting their papers for recent AES conventions they were not offered audio coding as a preferred session. Jürgen Herre will talk to Francis Rumsey to investigate what could be done to re-install audio coding in the list of standard topics, Christof Faller will ask in the context of JAES.

This convention's Heyser Lecture speaker was Rozenn Nicol, the first female Heyser lecturer and expert in binaural audio.

Then, the committee discussed about events that the TC might sponsor or contribute to at the upcoming convention (141st in Los Angeles, 29Sept-20Oct, 2015). Based on this, the following activities were planned or envisaged for the Coding TC:

- A repetition of the workshop on the EVS codec for the US audience appears to be a good idea. Jürgen Herre will follow up on this.
- In past, the TC had produced a very successful series of tutorial materials (CD ROM, JAES article, workshop) on “Audio Codecs – What To Listen For” which explained the nature of several categories of coding artifacts and provided example sound excerpts for listener training. Since this effort, a number of new coding tools and technologies have evolved (bandwidth extension, parametric stereo/MPEG Surround, etc). Thus, an update for these new components would be in order (it was noted that there are still people that attempt to listen to the difference signal for evaluation such techniques which is totally inappropriate). At this time there was no driver found for the project, so it will be continued at a later point in time.
- A workshop on “State of the art in modern parametric (hybrid) audio coding” was proposed encompassing techniques like bandwidth extension and

parametric multi-channel/multi-object coding. Jürgen Herre and Frederik Nagel will find a driver for this effort.

- Frederik Nagel reported that the TC on Perceptual Evaluation has planned two workshops for the upcoming convention, one on “State of the art of objective testing” and one on “Cultural differences in artifact perception”
- The idea of conducting a workshop on perceptual biases (e.g. listening to differently looking equipment, tasting wine that is known to be cheap, using extremely expensive cables) was found to be more appropriate for the TC on subjective evaluation and will be brought there by Frederik Nagel.

The TC meeting was adjourned at 13:45.

ANNEX 1 – Agenda

AES TC on Coding of Audio Signals

Room 363, Palais des Congres, 13:00-14:00, Sunday June 5, 2016

140th AES Convention

Paris

- 1) Approval of Agenda
- 2) Review of recent activities for current convention / conference
 - EVS Codec Workshop
 - Richard C. Heyser Memorial Lecture Series
 - Other activities
- 3) Review of / proposals for activities at upcoming conventions, conferences, workshops etc.
 - 141st AES Convention, Los Angeles
- 4) Any Other Business
- 5) Next Meeting
- 6) Closing of the Meeting

ANNEX 2 – Participants

Name	Company
Jürgen Herre	International Audio Laboratories Erlangen / Fraunhofer IIS
Karlheinz Brandenburg	Fraunhofer IDMT / TU Ilmenau
Christof Faller	Illusonic
Bert Van Daele	Auro Technologies
Frederik Nagel	Fraunhofer IIS
Heiko Purnhagen	Dolby Sweden AB
Anibal Ferreira	University of Porto
Lasse Laaksonen	Nokia Technologies
Daniel Zimmermann	Intel
Nils Peters	Qualcomm