

Minutes of the AES Technical Committee on Coding of Audio Signals

18th Meeting called to order at the 121st AES Convention, San Francisco, at 8:30, Sat 7 Oct 2006, by J. Herre, co-chair.

The agenda was approved, as listed in the annex. Due to other commitments of the TC co-chair Jim Johnston, the meeting is chaired by co-chair Juergen Herre.

The ongoing activities of the committee and other coding-related events were reviewed:

- There are 2 sessions (1 lecture and 1 poster) on Audio Coding at the convention.
- These were complemented by tutorial on audio coding.
- Two workshops on Lossless Audio Compression and MPEG Surround, respectively.

New TC activities for upcoming events were discussed next (specifically for the upcoming 122nd AES convention in Vienna):

1) Following up on earlier discussions within the TC, Markus Erne reported about the successful conclusion of a students' project which put together a complete MP3 encoder and decoder in MATLAB including a GUI showing the algorithmic blocks and enabling easy diagnostic displays. While the coder is not optimized for sound quality, it is an interesting tool for education in audio coding and can be made available to the public for such purposes. Accompanying documentation is under construction. Michael Kelly reported that the TC on Audio in Games prepared a software package for experimentation and education which is published through the online JAES's Internet site for AES members. As an alternative, such material could be made available to the general public through the TC's home page. The TC chairs to investigate about a preferred way of publication. For the Vienna AES convention, a publication of this educational software package by means of a tutorial with an associated paper is proposed.

2) Christof Faller proposed a workshop on "Spatial Audio Processing". This could be conducted in cooperation with either the TC on Multi-Channel Audio or the Signal Processing TC. Markus Erne to contact persons of the Signal Processing TC, Christof to contact Francis Rumsey on this issue.

3) Martin Dietz proposed a workshop to present the results of the recent EBU investigation on multi-channel audio codecs including a presentation of the participating systems and their subjective quality evaluation. Thomas Sporer suggested to include an outlook on the ongoing ITU activities on establishing a multi-channel extension of the popular PEAQ measurement scheme. Kristofer Kjoerling to follow up on this proposal.

The chair announced a revision of the TC's "Emerging Trends Report" which – together with the report of the other TCs – had been published in the May 2003 issue of the AES journal. The existing text was briefly reviewed and an updated version of it will be circulated by the chair based on the result of this discussion.

Finally, under the Any Other Business (AOB) heading, the chair noted that for the new MPEG Surround specification there is still a need to define a carriage over AES3 and IEC 60958-3 interface, similarly to the existing specifications for existing MPEG Audio coders. Thus, it was agreed that a request for a standardization project is to be passed on to AES standards asking for a method of carrying PCM and associated MPEG Surround side information data over these interfaces in a transparent way.

The next meeting will be held in conjunction with the upcoming AES 122nd Convention in Vienna in May 2007.

The meeting was adjourned at 9:40.

Annex I: Agenda

- 1) Approval of Agenda
- 2) Opening Remarks of Chairman
- 3) Review of recent activities for current convention / conference
 - Richard C. Heyser Memorial Lecture Series
 - Other activities
- 4) Review of / proposals for activities at upcoming conventions, conferences, workshops etc.
 - 122nd AES convention Vienna
 - 123rd AES convention New York
- 5) Update to emerging trends report
- 6) Any Other Business
- 7) Next Meeting
- 8) Closing of the Meeting

Annex II: Attendees:

Name	Affiliation
Juergen Herre	Fraunhofer IIS
Thomas Sporer	Fraunhofer IDMT
Markus Erne	Scopein Research
Ralf Geiger	Fraunhofer IIS
Keith Jacobi	Eastman Kodak Co.
Jongkyn Kim	Europe
Michelle Daniels	Groove Mobile
Tilman Liebchen	LG Electronics
Jeroen Breebaart	Philips Research
Jonas Röden	Coding Technologies
Werner Oomen	Philips Applied Technologies
Michael Kelly	Sony Computer Entertainment Europe
Christof Faller	EPFL / Agere Systems
Takehiro Moriya	NTT
Kristofer Kjörning	Coding Technologies
Wolfgang Schildbach	Coding Technologies
Martin Dietz	Coding Technologies
Karlheinz Brandenburg	Fraunhofer IDMT
Gregory Massey	APT Ltd.