



INFORMATION ON NEXT MEETING

Generation 2 Audio Networks and General Meeting

Tuesday, 24th of May 2011, 1745h (regular meeting starts at 1830h),
Hotel Ador, Laupenstrasse 15, 3001 Bern

SPEAKERS: Kieran Walsh, Audinate
Gints Linis, Telos Systems
Claude Cellier, Merging Technologies
Attila Karamustafaoglu, Studer Professional Audio GmbH

ORGANISERS: Patrick Boehm and Attila Karamustafaoglu

LANGUAGE: English

Audio networks have a long history. Soon after computer network technology became affordable, it was also utilized to transport audio. Some of these technologies have been very successful and did penetrate the market remarkably, such as CobraNet™ and Ethersound™ to mention just two. But although very revolutionary, most of these networks had some drawbacks, being in channel count, channel granularity, topology or latency. With Gigabit Ethernet technology being very affordable for some time now, new audio networks have developed which overcome most of the just mentioned disadvantages.

In this meeting, four different speakers will present the four technologies Dante, Livewire, AVB and RAVENNA. All these network technologies are based on Gigabit Ethernet and in the course of displacing this first generation of networks. For each technology a technical overview is presented as well as the advantages and the target market and its penetration. After these presentations there will be time for discussion and questions

allowing obtaining a good overview of these technologies.

Agenda

1730h Doors open
1745h – 1815h General meeting
1815h – 1830h Break
1830h – 1950h Presentations
1950h – 2020h Discussion
2030h Optional dinner at nearby restaurant

Please subscribe as usual at the web address:
www.swissaes.org/programme.

You can also sign-in for the optional following dinner (at your own expenses) in a nearby restaurant.

REPORT ON PREVIOUS MEETING

Variable Acoustics

27th of January 2011

Conservatoire cantonal de musique et la Haute Ecole de Gestion (CMN & HEG),
Neuchâtel.

SPEAKERS: Dipl. Ing. Bernd Noack, proAV Consulting

REPORTER: David Norman

For the first meeting in 2010 organized by the AES Swiss section, more than 30 people gathered in the auditorium of at Conservatoire cantonal de musique et la Haute Ecole de Gestion (CMN & HEG) in Neuchâtel.

Dipl. Ing. Bernd Noack explained the need for and the theory of variable acoustics.

Many rooms are designed as multipurpose rooms but the acoustical environment is often not optimal for all uses of the room. One can certainly say that there is no such thing as a good or bad acoustic! It depends on the use of the room. Mr. Noack explained how we hear the reflections in rooms and how this influences speech intelligibility or how we perceive sound in a concert hall. Several acoustical parameters can be measured and need to be considered, the RT60 alone is not sufficient.

Multipurpose rooms can be designed using passive acoustical changes such as changing the volume, adding curtains or reverb chambers etc. But these methods are expensive and often cannot be retrofitted.

Adding an active variable acoustics can often be the solution. However, simply adding a reverb to the room is not sufficient. The system has to recreate the reflections that the listener would expect from a real room.

Over the years many differ systems have been developed and Mr. Noack gave a historical overview of the development of such systems. The first systems were passive and used for example resonating jars in Greek stone-built

theatres. As electronics progressed assisted resonance systems using relatively simple electronics were installed for example at the Royal Festival Hall London in 1964. Later with the development of digital electronics many different systems were developed.

Mr. Noack then explained some of the problems which can arise and also how a well designed active variable acoustics system can correct acoustical errors in rooms.

After a pause with an aperitif offered by Avidec AG some small ensembles from the music school played various pieces of music. Whilst the music played the reverb time was changed so that the audience could judge the effect.

After the official event, the several members of the audience as well as those involved in organising the meeting moved on to a nearby restaurant, where discussions continued. Many thanks to Bernd Noack for their interesting presentations and to Jörg Steiger and Pascal Hügli Avidec AG for the organisation and aperitif. Also thanks to Robi Hersberger from WSDG-e GmbH for the loan of the omnidirectional loudspeaker.

The PDF of the presentation can be downloaded from the web site of the Swiss AES.

