



Loudness - Part 1

Thursday, the 29th of April 2010, 16h30,
Technopark Zurich, Technoparkstrasse 1, room "Pascal", 3rd floor

SPEAKERS: Thomas Lund, TC electronic A/S, Denmark
Richard van Everdingen, Dutch Broadcast Loudness Committee
Gabriel Leuzinger, AES Swiss Section

ORGANISER: Gabriel Leuzingers

LANGUAGE: English

Loudness jumps between channels, different programs or within the same program are very annoying and still one of the major listener complaints. The problem has increased during last ten years due to the "loudness war", which reached new heights with advanced possibilities of digital signal processing and wrong application of peak metering. Loudness and its measurement and control is therefore of very high international interest, even for regulation. Several standardization organizations like ITU, EBU, ATSC and more are involved in new loudness standards. In Europe, EBU will release the new loudness standard R128 probably this year, which is based on the ITU 1770/1771 loudness measurement standard and will introduce a common target level for loudness, a special EBU mode with gating to avoid silence measurement plus application and distribution guidelines. We have to learn a lot of new things to reach the target of well controlled loudness and to terminate the loudness war. But loudness control doesn't stop at studio output. Only good knowledge of the whole signal chain from production to distribution to end user will enable understanding of all aspects of loudness control. AES Swiss Section is organizing two meetings targeted to loudness topics: Part 1 overviews the current situation, introduces to EBU P/LOUD working group, provides loudness basics and important knowledge of the audio loudness chain. Part 2 will be held after releasing of EBU R128, probably in Q4/2010 and will explain the new standard and its seamless application.

After the presentation, we invite you to a free apéro to get in touch with the speakers for deeper discussions, exchange information or just extend professional

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

About the Speakers

Thomas Lund started his professional career as a musician and recording engineer. From 1985 to 1992, he studied medicine at University of Aarhus, specializing in perception and hearing. Thomas has worked part-time for TC Electronic since 1990, and joined the company fulltime in 1994. His current position is HD Development Manager, where he has been responsible for the development of equipment such as TC System 6000, DB8, LM5, Reverb 4000, and for the technical side of the TC-Dynaudio cooperation. Thomas has published around 30 scientific papers mainly about loudness, distortion in digital audio and spatialization for AES, EBU, SMPTE and NAB; and has taken part in international audio standardization work within AES, ITU and EBU.

Richard van Everdingen started his career as a computer engineer at Getronics. He moved to cable operator Casema, where he specialized in head-end systems. He led the development of a patented measurement system for FM modulated broadcasting, a loudness based levelling system for dedicated rebroadcasting use and a levelling system for DVB distribution, directly operating in the MPEG domain. He is currently working as a consultant in the Netherlands for broadcast companies at NKM, is a member of the Dutch Broadcast Loudness Committee and leads the Distribution Subgroup within the EBU P/LOUD committee.

REPORT ON PREVIOUS MEETING

*A combined meeting of the Diploma Ceremony for
the graduates of the 2009 "Sound Technician" exams and
"An Evening with Steve Dove"*

Thursday, the 25th of February 2010, 16h00
The Kursaal, Kornhausstrasse 3, Bern (Tram 9 from Hauptbahnhof)

SPEAKER: Steve Dove

REPORTER: Terry Nelson

Following on from the successful joint event in 2007, that combined the Diploma Ceremony for the graduates of the "Sound Technician" exams with a Special AES Meeting, it was decided to confirm the new tradition for the 2009 exam graduates.

The combined event was held at the Kursaal in Bern and a record number of 44 "Sound Technician" diplomas were given out by the Chairman and Vice Chairman of the Education Committee, Messrs. Patrick Roe and Walo Hurzeler.

The Swiss pro audio community once again rewarded those graduates with the highest marks and thanks are due to Decibel (Allen & Heath), Dr. W.A. Gunther (Shure) and Bleuel (Sennheiser).

Keynote speakers in the past have dealt with the worlds of film and recording and the speaker for this event was consultant, Steve Dove, who talked about the opportunities and pitfalls of live sound in general and high-end touring in particular. Mr. Dove has enjoyed collaborations with many leading acts and also included working with Clair Brothers as what might be termed 'overall system supervisor and coordinator' for major tours.

The graduates were reminded that tour sound is about 90% human relations and 10% competence – with this 10% being extremely important! Personal organisation and welfare are also vital.

The ceremony was followed by the traditional apéro offered by the Education Committee and the Swiss AES, before going onto the second half of the event, "An Evening with Steve Dove".

In his current position as consultant to Wheatstone, a company making digital systems for broadcast, Mr. Dove is very involved with the questions of Loudness and this is almost the 'flavour of the month' subject at present in the broadcast community. Groups such as P-Loud are hoping to arrive at putting some sanity into the loudness wars and in the USA, there is talk of government intervention if the industry does not put it's house in order.

Steve Dove used a Vorsis FM2000 broadcast processor to illustrate some of his points and to acquaint the less-informed members of the audience what 'loudness' really is. However, these were applicable in general sense and the principles are typical of most processing used in broadcast. An interesting comment was that it is 'only a matter of time before mastering houses start using the same techniques'.

The evening was concluded with an optional buffet dinner and further intensive discussions. However, it is to be regretted that not more AES members participated in the event, so please let us know if the end of February is a bad time!