AES SWISS SECTION NEWSLETTER

126th Issue

INFORMATION ON NEXT MEETING

Variable Acoustics

(Joint meeting with the Swiss Acoustical Society SSA/SGA)

Thursday, the 27th of January 2011, 17h00,
Conservatoire cantonal de musique et la Haute Ecole de Gestion (CMN & HEG).
Espace de l'Europe 21, 2000 Neuchâtel

SPEAKER: Dipl. Ing. Bernd Noack, proAV Consulting

ORGANISERS: David Norman, Jörg Steiger Avidec AG

LANGUAGE: English

We have all often heard the sentence: "This room has a good acoustic". An acoustician automatically answers: "good for what"?

As many rooms are multipurpose, the acoustics may be often acceptable for some uses of the room and simply not acceptable for other ones. Some well known mechanical methods are at acoustician disposal to modify room acoustics, as for example curtain addition, etc…

A very interesting alternative is to use electronics to change the room reverberation, allowing the acoustics to be modified at one single button touch. Various methods have been proposed and tested but there are very few successful projects in Switzerland. The aim of this meeting is to show one of them and demonstrate the quality which can be achieved.

The AES Swiss section is very pleased to welcome Dipl. Ing. Bernd Noack. He is going to speak about the acoustic variation method implemented in the auditorium of the Conservatoire cantonal de musique (CMN) in the Haute Ecole de Gestion (HEG) Neuchâtel.

The following subjects will be discussed:

- Multipurpose halls and acoustic deficits (from user perspective)
- What is the 'correct' acoustic for a multipurpose hall?
- Changing room acoustic: what and how
- Different approaches for one goal
- One goal but different results
- Future prospects

After the lecture, the auditorium variable acoustics will be demonstrated with an acoustical source as well as with live musicians.

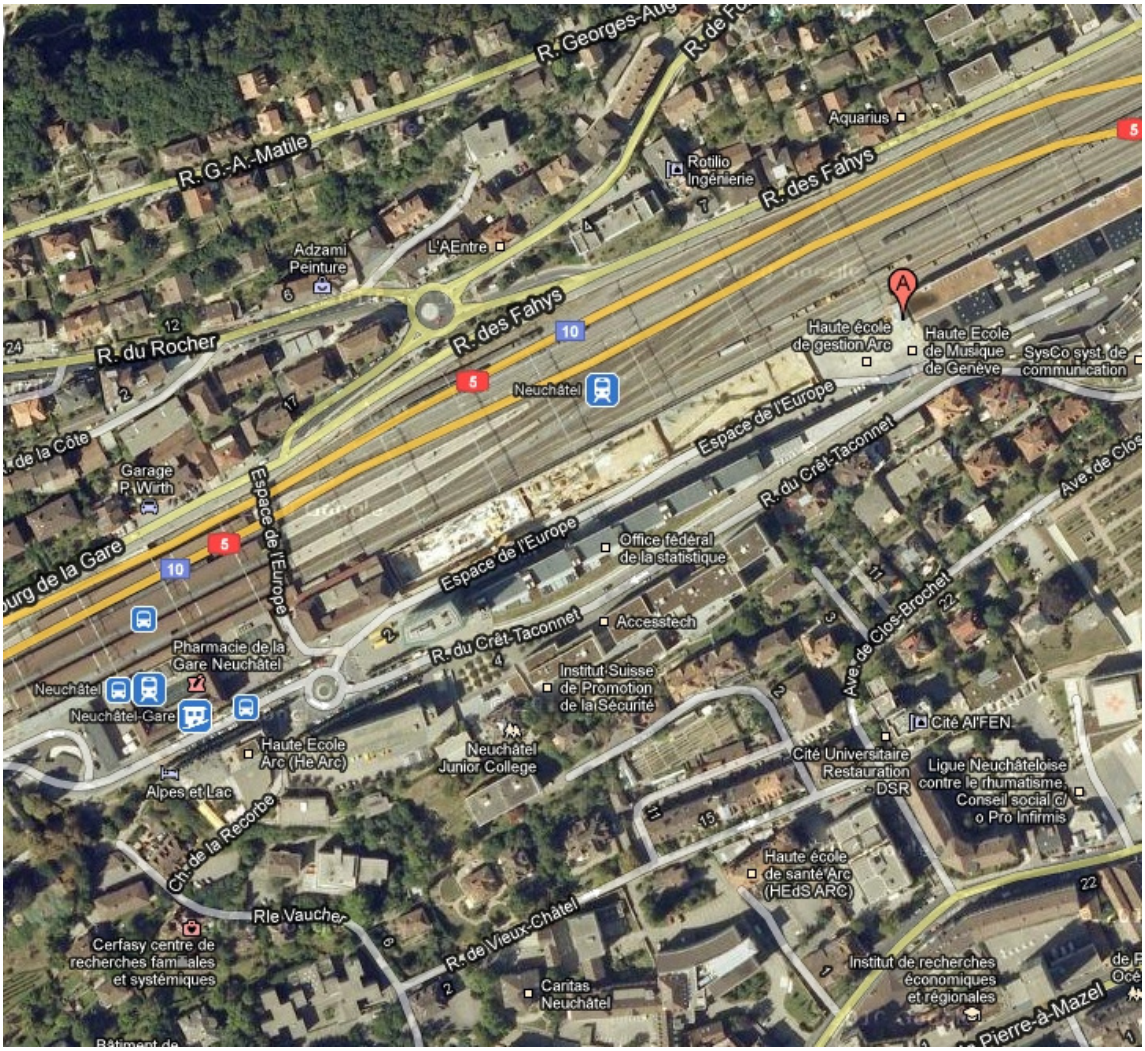
Please subscribe as usual at the web address: www.swissaes.org /programme.
You can also sign-in for the optional following dinner (at your own expenses) in a nearby restaurant.

SPEAKER BIOGRAPHY

Bernd Noack was educated and graduated from the Friedrich-Schiller-University in Jena. After some time as a development engineer he was then a freelance sound engineer (live sound mixer for touring productions). After the political changes in Germany he was also a freelance sound engineer and started his consulting company office.
His planning office for media technology, proav Consulting, has a focus on Variable Acoustics and Digital media, HDMI, HD-SDI, networking and control. Within the last 10 years he is involved in about 15 electronic variable acoustics projects, with the latest installation at the Tchaikovsky Hall of the Moscow Philharmony.
Bernd Noack is a member of the VDE (Association of German Engineers) and the DEGA (German Association for Acoustic)."

MAP

The Haute Ecole de Gestion is only about 500m from the main railway station at Neuchâtel.



REPORT ON PREVIOUS MEETING

Loudness - Part 2

30th of September 2010
Radio Television Suisse (RTS), Geneva

SPEAKERS: Florian Camerer, ORF
Yannick Dumartineix, RTS (former TSR)

REPORTER: Gabriel Leuzinger

For the second loudness meeting in 2010 organized by the AES Swiss section, a little more than 20 people gathered at RTS (former TSR) in Geneva.

Despite the speakers announced in the invitation, who would concentrate more on the practical implementation of the recently released EBU standard R128, the majority of the audience was part of the engineering side and only two participants were representing the production and mixing side.

Florian Camerer is the chairman of PLOUD, a very huge and active working group, which stands behind the new R128 standard recently released at IBC 2010. Currently 3 of the total 5 documents of R128 have been released and Florian is very busy all over the world with presenting the papers personally or writing articles about loudness for magazines. We are very happy the enthusiastic chair of PLOUD has found some time to present the whole concept of loudness normalization directly to the AES members.
He started with a repetition of the idea behind the concept and a general overview of the recommendation. He then focused on the practical consequences for mixers and planning engineers and presented examples of peak normalized and loudness normalized program material. Florian also explained the differences to other standards like ATSC A/85 and to the Dolby Dialnorm measurement procedure. All important aspects are part of the (currently outstanding) Practical Guidelines of R128, which will probably be published in early 2011. Finally, he encouraged all mixers to gain experience with loudness metering and mixing simultaneously to the current peak metering, even if loudness normalization has not been implemented yet.

Yannick Dumartineix started his presentation with an overview of the problems and complaints a broadcaster typically faces today and how the situation emerged historically. Due to a new playout centre in Geneva, RTS is currently in front of the process within the SRG group: moving from peak normalization to loudness normalization.
He explained the current (old) and the new workflows, including the already filebased workflows of the ads provided by Publisuisse. One of the difficulties in Switzerland is always the requirement to provide different languages simultaneously at playout outputs, in the future also in stereo and multichannel at the same time. The only solution to manage program and interstitial loudness transitions when crossfading is to normalize and quality control all sources already at the input of the playout. That includes ingest process, live events, ad clips archive, studio productions, post production, etc. Automatic audio processing is only used in case of unexpected overloads, while correct program material will pass unprocessed. The current signal workflow at RTS is based on all 16 embedded audio channels provided by serial digital video signals. One of the major problems

today is routing of metadata through a playout. That's why metadata is not transmitted from source to playout output, but is set to default values adapted to genre at playout output. In any case, available metadata of sources is used for the normalization process at playout input. Afterwards Yannick guided a tour through the new playout centre of RTS, which will be set in hot operation very soon.

After the official event, the majority of the audience moved on to a nearby restaurant, where discussions with the speakers continued till late night. Many thanks to both speakers for their interesting presentations and to Patrick Boehm and RTS for organizing/providing the facility for this event.

Due to licensing problems of pictures, we are not able to provide a download of Florian Camerers presentation on our AES Swiss section website.

There is a free download of the EBU webinar recording available, which is similar to the presentation of Florian in Geneva:

http://tech.ebu.ch/events/webinar_loudness1

All documents of recommendation R128 can be downloaded for free as well:

http://tech.ebu.ch/groups/ploud

Florian Camerer

Yannick Dumartineix

Yannick Dumartineix explains the new playout of RTS to AES members