

**AES Technical Committee on Game Audio**  
**142<sup>nd</sup> International Convention**  
**Saturday May 20<sup>th</sup>, Salon 15 Paris, Martime Hotel Berlin**

**Minutes**

Attendees

Gavin Kearney, Chair (GK) – University of York, UK

Nuno Fonseca (NF) – Sound Particles

Remi Audfray (RA) – Dolby Laboratories Inc.

Scott Norcross (SN) – Dolby Laboratories Inc.

Jeff Levison (JL)

Andreas Giafe (AG) – Barco

Damian Murphy (DM) – University of York, UK

Bernard Cauilleri (BC) – Xekillton Studio, Malta

Mike Mc Loone (MML) – Native Instruments

Lasse Laaksonen (LL) – Nokia Technologies

Apologies for Absence: Michael Kelly

GK opened the meeting and welcomed the attendees.

Each of the attendees introduced themselves and their area of expertise.

GK gave a brief report on the success of the game audio track at the AES 141 convention in LA.

He highlighted the range of tutorials and workshops that occurred at the convention.

GK invited those committee members who attended the conference to comment on their experience.

NF and RA commented that the content was great, but it was unfortunate that so much clashed with events at the AVAR conference. All those who attended felt that it would have been better if AVAR was offset from the convention by two days.

GK commented that the AES is getting better at scheduling competing talks and seminars, such as when they clash with relevant TCs. The logistical concerns with running co-located conferences/conventions would be relayed to the AES.

GK gave a succinct overview of the convention and commented on the excellent program of events furnished by Linda Gedemeyer and Andres Mayo. Particularly he commented on the excellent keynotes of Philip Lelyveld and George Sanger.

NF commented on the excellent scope of the conference as well as the level of industry engagement. It was felt that scope of workflows and tutorials was broad-ranging and that it felt like a real gathering of a community.

RA commented that there could have been more technical content at the conference.

GK commented that the perception and technical aspects of VR could perhaps have been more represented, but that the conference also covered a lot of ground on sound design for VR.

#### 4. Future Activities

GK mentioned that there is a strong Games and VR audio track of workshops and tutorials building up for AES 142 in NYC. He mentioned that Steve Martz is coordinating the track with the assistance of Andres Mayo, Michael Kelly and himself.

GK outlined that an AES International conference on Immersive Audio is planned for York in 2018. The conference is currently in its final proposal stage, to be discussed at Sunday's conference policy meeting and advertising with begin once AES gives final confirmation. GK and DM will be Co-chairing the event which will be a 3-day conference held at the University of York.

DM mentioned plans for an AES Audio for Games conference in London in 2019.

#### 5. New Realities Subgroup

GK introduced the rationale behind the New Realities subgroup. He mentioned that given the increasing number of AES tutorials and workshops on VR and AR as well as the success of AVAR that the AES feels that this is an area that requires a roadmap.

GK stated that today's conversation was merely a starting point to get the ball rolling. Continued discussion will also be conducted with other members of the group virtually in the near future.

HO asked GK what the outcomes of the group would be.

GK commented that before the group can deliver any outcomes they need to fully understand the questions that face the AES and that we must define the scope. He also stated that whilst this is a technical committee, it is important to have the perspective of sound designers so that we can better understand that the outputs of the committee are meeting the real needs of the industry.

GK asked the committee members what they felt were major challenges that the AES should address.

GK discussed the problems around major workflows, DAW integration and their tie to the distribution platforms.

Several committee members commented on sound design challenges in VR.

GK stated that the TC's perspective is to be able to enable the creation of the content through technical development and recommendation. It is not the place to recommend a 'language' for VR audio. He acknowledged though that there is a distinct lack of a language for linear VR production,

both visually and aurally. Content creators are often at a loss at how to create a distinct emotional impression, without the ability to cut, change camera angles zoom etc. Audio can significantly help with this.

NF mentioned the challenges involved in the extremes of personalised HRTF reproduction and generalised HRTFs and that there needs to be a solution that meets somewhere in the middle.

It was felt by the committee that separate consideration of linear and interactive VR workflows should be done as they are two different beasts, although there may be overlap. It was felt that with interactive VR a lot of ground has already been covered in the gaming world and that the workflows were very similar. Linear VR, in particular cinematic 360 VR, has a lot of challenges and in general sound engineers do not clearly know what to do.

There was also discussion about whether there could be a cross compatible container for delivery.

Metadata was also raised as a production post-production consideration that could aid project compatability.

GK closed the meeting and thanked the attendees. He mentioned a follow-up virtual meeting of the sub-group to be announced soon.