

Summary: "Creative Sound Solutions" – Meeting #10

The working Group meeting #10 took place on Monday, October 10, 2022, 14:00 – 15:00

Agenda:

1. Webinars:
 - a. Follow-up on proposals and ideas from meeting # 06 including additional comments and proposals.
 - b. Proposals for possible speakers
2. Physical events during 2022
 - a. Meetings? Workshops? Others?
3. Collaborative projects, update of proposals, indication of possible project consortia
4. Other ideas for Danish Sound Cluster activities
5. A.O.B.

Ad 1 Proposals for Webinars

#	Subject	Background
4	AI-based solutions	Postponed.
5a	Across boundary solutions, i.e. involve artistic perspectives in audio technical solutions. (the border region of sound of art and technical facilitation)	<p>Estimated time for webinar: May 2023</p> <p>Approach: webinar 1 in May, a follow up webinar late 2023.</p> <p>Situation today:</p> <p>Several R&D environments in music are currently building ambisonic sound facilities (full-sphere surround sound laboratory rooms). Approaches taken in the building of rooms vary somewhat. However, it is the opinion of the working group that the focus of events should not so much be the 'scientific approach', i.e. how are these rooms implemented, but rather the use of such room in the R&D and production school environments.</p> <p>Use of the ambisonic sound facilities is still in its infancy and not much experience is obtained for now. For example, at Sonic College in Kolding students have started using the ambisonic sound environment, but Lars estimates that it will take a year, before solid results are available.</p> <p>Some of the work is funded through the project KUV ("Kunstnerisk Udviklings Projekt)</p> <p>Therefore, we plan to adopt a tiered strategy, where early results are presented around May of 223, and then follow up with a second event ½ year later, when more mature results are available and more R&D sites have gained traction.</p> <p>For now, the DSC secretariat should approach 3-4 of the environments and start having a dialogue aiming at running the first event in May 2023.</p> <p>Potential contributors:</p> <ul style="list-style-type: none"> • Sonic College, <i>Lars Tirsbæk</i> • Kunstakademiet, <i>Jenny Gräf Sheppard</i> • Rytmisk Musikkonservatorium, <i>Søren Kjærgaard</i> <i>Sharin Foo</i> <i>Louise Foo</i> • Cujo Sound, <i>Bjørn Jacobsen</i> • Audio Design, AU, <i>Morten Breinbjerg</i> • Det Jyske Musikkonservatorium, ?
5c	Mapping of current Danish status of multidimensional sound in education, research, movie generation, theater production, etc.	<p>Recommendation to create a worksite including a shortlist of the organizations identified by the Working Group.</p> <p>Status and plans will be processed by the DSC secretariat but not until after Danish Sound Day in November.</p>

#	Subject	Background
8	Optimal sound environments for "large room offices"	<p>Estimated time for conference: February 2023</p> <p>Approach: Physical event, conference, 50-100 participants.</p> <p>Duration: about 4-5 hours</p> <p>Target audience: Architects ('Dansk arkitektforening'), engineering companies, sound technicians and others (we may use other clusters for marketing as well)</p> <p>Venue: Aalborg University, CPH ?, DTU ?</p> <p>A preliminary program has been identified and most of the potential speakers have been contacted:</p> <ul style="list-style-type: none"> • Jens Holger Rindel (will fly down from Norway) • Marianne Lykkesfelt, architect • Ander Jørgensen, Stormgaard (Meyer Sound, acoustical zones offering privacy using a 'sound carpet' to separate acoustically) • Morten Roar, Saint-Gobain (involved in standardization in the area) • Lars Back, Jabara (intelligent headsets that increase sound level, when one raises own voice during conversation, controls one's voice level) • "Arbejdstilsynet" (not yet contacted) • Plans also to include some large companies (HR or facility management) that are in the process of planning large office environments, e.g. Ole Abildgaard, Novo. • Sonic College ?
9	Use of sound in museums	<p>Focus: Use of sound in 'story telling' at museums.</p> <p>Time schedule: Webinar in H11 of 2023. Sonic also plans a full day "theme day" later, an international conference, possibly end of 2023 (with Alcina Cortez, Portugal).</p> <p>Situation today:</p> <p>Sound in museums is today used in many 'flavors' and with quite different approaches. Often the background and understanding for adopting a sound strategy is not well founded, sometimes just based on a concept "that someone offers for sale". No real R&D basis seems available today. Results in implementation are of rather varying effects.</p> <p>For example: should we go for '<i>headphone-based approaches</i>' or instead for '<i>speaker-based approaches</i>'?</p> <p>One result to expect from an event is a basis for common learning, including directions of successful usage – and directions we should not take. Today, even a simple manual for adopting sound in museums do not seem to exist. Which software to use, which audio formats, how to trigger sound, etc. In at least the recent conference on "Audio augmented and virtual reality", some papers appeared, but in essence much is still ideas rather than evidence based.</p> <p>A working subgroup for establishing the first webinar was decided:</p> <p><i>Lars Tirsbæk, Birgitte Folmann, Nick Dunkerley, Birger Schneider. Birger calls a zoom meeting.</i></p> <p>Potential speakers:</p> <ul style="list-style-type: none"> • Anders Jørgensen, Stouenborg Mobil: 6172 8098, Email: anders@stouenborg.dk • Birgitte Folmann, Researcher at Sonic College (anthropologist and Ph.D. from Aarhus University) • Person from e.g. H.C: Andersen Museum, Odense. <p>Other candidates as per above.</p> <p>To be continued on next page.....</p>

#	Subject	Background
9	Use of sound in museums continued from previous page.	The webinar should be garnered with case stories, e.g.: <ul style="list-style-type: none"> • Varde Museum, Varde • H.C. Andersen Museum, Odense • Viborg Museum, Viborg • Søfartsmuseet, Helsingør • Tirpitz Museet, Blåvand
11a	"Women for sound engineering" Electronic sound & music, focus on females	Background for theme: General challenge that we have a poor gender balance in audio areas, i.e. too few females. Events will be inclusive/open to everyone but have an all-female focus/i.e. those who identify as female program. Include female students. The topic will be postponed until Shelley is back from maternal leave. For financing, we will need to find financing from other sources than DEB and UFS. See details in meeting summary of Meeting #09, 2022-08-30
11b	Podcast tools, approaches, and support with special emphasis on females New subject title: Podcast tools, approaches, and support with emphasis also on 'gender'	A significant part of podcast production today is delivered by females, whereas the technical support is frequently provided by males. The current gender division is seen as an obstacle, i.e. an unbalanced situation, which ripples down to become an obstacle in recruiting e.g. females in sound engineering. It is an observation by some that females seem to dominate in audiology, whereas it is completely opposite in sound engineering. But why are females dominating 'creativity' and 'organizing' activities whereas as 'males dominate 'technology'?' Sonic College tried to address the issue in a panel discussion at the recent 'Sonic Days' in September. However, the approach was not well taken by at least the female part of the audience. One take from the Sonic attempt to address the issue is that to circumvent the situation, it seems more important to establish role models, where females are actually seen as important parts of also the technology side, i.e. sound engineering. One way ahead could be that e.g. Danish Sound Cluster in future events always ensure to have females take an active part in events to obtain good role models and a more balanced approach. Awaits more discussion at next meeting. And we still need to define contents to e.g. a webinar addressing the original theme of "Podcast tools, approaches, and support", and possibly suppress the gender issue somewhat.
12a	Game audio (for game applications)	Focus: A webinar or a workshop on game audio, including the involvement of game audio companies. Time schedule: 2023 H1 (when the DSC secretariat overcomes current workload) Be clear on the objectives. Focus on the technical side of game audio or the creative side of game audio? Proposed speakers: <ul style="list-style-type: none"> • Rob Bridgett, Senior Audio Director, Canada, • Bjørn Jacobsen • Kristian Rømer, IO Interactive • Simon Stevnhoved Rasmussen – Massive • Eddy's contact to a game audio company (Viborg & Copenhagen) that makes game audio in mono (for use in mobile phones) Discussion postponed until next meeting.

#	Subject	Background
12b	Using game audio engine in other applications than gaming	<p>Time schedule: H2 of 2022 or H1 of 2023</p> <p>Gaming engines are extremely powerful and e.g. in broadcast activities, game engines are taking over activities (today primarily in video, e.g. nVidia) that was previously handled by traditional processors.</p> <p>However, still an issue that only few people have experience with the obvious possibilities of using game engines for audio applications.</p> <p>Use applications: e.g. in audio walk, creating virtual exhibitions (e.g. Yann Copier), etc.</p> <p>DTU has activities in the area based on machine learning (Nikolas Borrel-Jensen, 'Den Danske Filmskole' (Rune) has launched activities this semester, but use is still in its infancy.</p> <p>May be the Microsoft soundscape 3D audio experience (Soundscape App for iPhone) that enriches a blind person's perception of surroundings when walking in a city) fits the theme, https://blogs.microsoft.com/accessibility/soundscape/</p> <p>The theme is postponed until 2023. Awaits e.g. progress in a project at 'Den Danske Filmskole'.</p>
13	Dubbing challenges II	<p>Lars reports that it has not been possible to locate people that are willing to talk about the future. Adobe for example is willing to contribute, but they will contribute with salespeople, and not persons that are able to talk about trends. At present, we are reluctant to involve sales pitches in our webinars, since we aim at more neutral assessments of technology and its use.</p> <p>Also, it has not been possible to identify person from DR and TV2 that are willing to stand up.</p> <p>Situation today:</p> <p>Dubbing is undergoing radical changes in current years. For example, in broadcast DR is now focusing heavily on podcast production, i.e. simple and fast production of content. Many people producing podcasts have no strong sound engineering backgrounds, they just want to be able to produce podcast easily and with a minimum of technical skills in the sound technology.</p> <p>Efficient tools are available and the market for such tools develops fast in current years, supporting improvement of even poor-quality audio raw material.</p> <p>However, the entire scene of production is changing rapidly, and a webinar could focus on:</p> <ol style="list-style-type: none"> 1. The entire work process using new tools such as Adobe Premier, Avid Media Composer, Black Magic editing, etc. 2. Trends in support tools: Getting inputs from major suppliers of tools on what the trends are in tool technology and what can we expect for the coming years from the suppliers. <p>The first area could possibly be presented by people from e.g. DR or TV2 or podcast companies, since they are already in a process of change, have experience and can enlighten others on, what the changes in working processes mean.</p> <p>The second area is also for people in broadcasting and other audio generating industries, i.e. podcast producers, trying to understand trends, i.e. what the tool developers are likely to bring to market in the next few years (enlighten us on their 'crystal ball' visions).</p> <p>Future trends may also be aired by people from university, e.g. DTU (Nikolas Borrel-Jensen, or others).</p> <p>The industry of traditional audio content suppliers faces significant changes in working processes, markets, and uses of tools. That is what the Webinar should try to address.</p> <p>We will keep the topic and see, if we are able to achieve a breakthrough at a later point in time.</p>

#	Subject	Background
14	Ethics in audio production	<p>Pedro will try to locate some of the potential contributors to assess, if we can establish a webinar with sufficient quality content on the theme.</p> <p>It is obvious that AI already now are supporting use of e.g. deceased peoples voice, which could produce ethics challenges. What are we up against?</p> <p>Situation today:</p> <p>Ethics is becoming more and more important – also in relation to audio generation (risk of “deep fake” exists). Several cases of restricted sound exist. In general, if sound in relation to documentation is compromised through reconstruction, “hell breaks loose”.</p> <p>One angle to the theme could be to involve do documentarists in radio/TV production. In a metaverse world, we might imagine a fully immersive, hyper-realistic virtual world that caters to all our senses.</p> <p>General agreement that challenges related to ethics in sound will become a more and more vital issue over the coming years. Various types of AI support will allow creation of virtual sound, for example creation of voices of deceased people or other types of virtual sound creating. Ethical challenges follow naturally in the wake of many technological developments, and the use of AI in sound is no exception in this regard. It is crucial to start the debate early in this development, so that the area does not develop into a Wild West area</p> <p>In a previous meeting, we outlined some possible contributors:</p> <ul style="list-style-type: none"> • ETHOS lab, ITU, • Morten Holm, tonemeister (sound in film in India) • Kyogu Lee, Professor, Principal Investigator, see also http://marg.snu.ac.kr/marg_people/ • Thomas Damkjær Petersen, Chairman, IDA Member of SIRI commission) <p>In sound engineering education, the theme does not yet seem to serve a major role.</p>
15	Indoclimate	<p>No discussion in the meeting. Awaits next meeting, where Cheol-Ho is present.</p> <p>DTU is submitting a Horizon 2022 application together with Royal Institute of Fine arts.</p> <p>The topic is indoclimate, which focuses on sound monitoring, ventilation, CO2, acoustics, etc.</p> <p>If the project receives funding, there may be content for a webinar.</p>
16	Women in sound	<p>No discussion in the meeting. Awaits next meeting.</p> <p>Additional focus on “Women in Sound”, see also point 11. a.</p> <p>In the UK there is an organization “WICE” (Women in sound) that may serve as an example (Morten Brandstrup), see also 11.a.</p>
17	Jawbone headset technology	<p>New theme.</p> <p>Major progress seems to take place in jawbone-based headset applications – not least in military and critical mission application.</p> <p>Also, in more classical use of headsets, e.g. in TV & radio production, where people use headsets basically all-time during workdays, the technology is becoming more of interest. Even classic headset manufacturers like Jabra are seen to move into this domain.</p> <p>Potential speakers:</p> <ul style="list-style-type: none"> • Bo Håkansson, Chalmers, S <p>Pedro will suggest names for our next meeting.</p>

#	Subject	Background
18	Use of sound by artists	<p>An event, where artists are talking about how they use sound, what tools they use for creation of sound, and what challenges they face in doing so.</p> <p>Still early in preparation and the topic may be covered by other events. For new we want to collect names to see, if there is enough material for an event on its own right.</p> <p>Possible contributors:</p> <ul style="list-style-type: none">• Joelle McGovern (Eddy Bøgh Brixen) <p>Them will be discussed in more depth at our next meeting.</p>

Ad 2.: Physical Events (H1 of 2022)

- **Sound Day 2022**
Will take place on:
November 9, 2022,
at DTU SkyLab, Centrifugevej 374, 2800 Kongens Lyngby

Ad 3 Collaborative projects, update of proposals, indication of possible project consortia

A new round of projects was offered with a "deadline" in August 2022. The received project proposals are basically all evaluated and some already kicked-off.

The next round of project calls has a deadline of December 9, 2022 and is expected to start by January 2023.

Ad 4 4. Other ideas for Danish Sound Cluster activities

Inquiry by SLUSH, <https://fmhslush.events.vrt.be> if DSC is willing to help promote an upcoming event in Finland organized by SLUSH:

“Slush is coming up soon and together with Yle, Storytek, The Exit Academy and Flanders Investment & Technology, we are hosting a side event at Slush. On November 17th (2.30 – 5 pm) the Audio Networking Event will take place where we focus on the latest topics and innovations in the European AUDIO ecosystem.”

DSC secretariat will look into this.

Next meeting

Wednesday November 23rd, 2022, 14:00 to 15:00

Appendix 1: Participants in the meeting

Birger Schneider	CHAMAJ Consult ApS	Director/owner
Eddy Bøgh Brixen	ebb-consult	Consultant, owner
Lars Nørretranders	DR	District Manager
Lars Tirsbæk	Sonic College	Assistant profesor
Morten Brandstrup	TV2 Danmark A/S	Head of News Technology
Nick Dunkerley	Hindenburg Systems A/S	Creative Director
Stefania Serafin	AAU-CPH	Professor
Stina Marie Hasse Jørgensen	ITU	
Pedro Costa	Danish Sound Cluster	Project manager
Torben Vilsgaard	Danish Sound Cluster	CEO

Appendix 2: Completed events, proposed and developed by the working group and

#	Title	Comments	Event type	Date
1	Creating sound for VR applications		Webinar	September 30, 2021
1	'Sound in virtual/augmented reality' (VR/AR)	Workshop at AAU-CPH	Workshop	February 24 2022
2	Dubbing challenges		Webinar	March 29, 2021
3	5G technology in Proaudio		Webinar	September 2, 2021
4	Audio AI – State of the art and perspectives in spoken document understanding		Webinar	June 16, 2021
5b	Bringing creativity into your engineering work		Webinar	April 26, 2022
6	Intelligent microphones		Webinar	February 23, 2022
7	Multichannel headphones		Webinar	January 11, 2022
10a	NGA ADM Immersive delivery			February 8, 2022
10b	ADM Technology			February 15, 2022