

Summary: "Creative Sound Solutions" – Meeting #06

Agenda:

1. Webinars:
 - a. Follow-up on proposals and ideas from meeting # 04 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.

Summary

Welcome

The chairman welcomed the two new members of the group:

- Nick Dunkerley, Hindenburg Systems A/S
- Stina Marie Hasse Jørgensen, ITU

Both of which participated in their first meeting in the group.

Ad 1 Proposals for Webinars

| # | Subject | Background |
|----|---|---|
| 1 | 'Sound in virtual/augmented reality' (VR/AR) Follow-up workshop | A hands-on workshop to follow-up on the Webinar, completed September 30th, 2021, is now scheduled. The workshop will take place on February 24 and is already completely booked. Stefania and her group will run the workshop event. |
| 2 | Dubbing challenges | <p>Program fixed, date for the event is still open, but is targeted for end of March 2022. Doodle for fixing the date has been circulated.</p> <p>Speakers (confirmed):</p> <ul style="list-style-type: none"> • Henry John Michaelsen, GiLyd ApS • Morten Green, LydTilFilm • Allan Holm <p>Panelists:</p> <ul style="list-style-type: none"> • Morten Brandstrup, TV2 • Lars Nørretranders, DR • Eddy Bøgh Brixen • The speakers <p>It was referenced that an EBU PTS (Production Technology Seminar) taking place 1 to 3 February 2022 could prove interesting in relation to the planned webinar.</p> <p>Especially: <i>Session 3: QUALITY: 4K In my pocket – Sound crew in the truck!</i>, Tuesday February 1, 2022, 13:10 to 14:45 may be of interest to DSC audience. Eddy Bøgh Brixen will give a presentation in that event, 13:45 – 14:10 "Audio - Why is it so difficult?".</p> <p>Link to the event: https://tech.ebu.ch/events/pts2022?_cldee=bW9ickB0dJlUZGs%3d&recipientid=contact-ce34fa24e45de811813c5065f38a2ba1-d612fe8407134fbc83576babba2c968c&esid=dd11988d-a140-ec11-8c62-6045bd899859</p> |
| 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>"Sound art" requires artists and skilled audio technicians, the latter to create the sound environment needed by the artists. How can we bring the two disciplines together and ensure that sound artists are not lost in using technical solution that are already outdated?</p> <p>The aim is to run a webinar, where the artistic view on sound is in focus, but at the same time the techniques behind are becoming likewise clear, to ensure the balance between technical and artistic values and considerations in producing sound.</p> <p>Potential contributors:</p> <ul style="list-style-type: none"> • Jenny Gräf Sheppard, Kunstakademiet, Leader of the Ambisonics Research Lab. • Stephen Mcevoy, Kunstakademiet, Teaching Assistant, • Yann Coppier. • Stine Lyngedall (contact Finn Agerkvist, DTU) • Nicolas Becker, Academy Award for Best Sound ("Sound of Metal") <p>For example the Royal Danish Academy of Fine Arts have recently opened a new ambisonic room. What will it be used for, what is the technical challenges, how do sound engineers fit into the needs of artists making "audio sculptures", etc.</p> |

| # | Subject | Background |
|----|---|---|
| 5b | Bringing creativity into your engineering work | <p>An additional event on artistic/technical issues is in planning (by DSC secretariat), and where Sound Artist/Engineers are in focus.</p> <p>Planned speakers:</p> <ul style="list-style-type: none"> • Yuri Suzuki • Georges Koutsouris |
| 5c | Mapping of current Danish status of multidimensional sound in education, research, movie generation, theater production, etc. | <p>The event should aim at giving an overview of activity circles in Denmark in relation to use of multidimensional sound in education, research, sound art creation, etc.</p> <p>What is in progress, who will given groups like to interact with, what is missing, etc.?</p> <p>Likely candidates:</p> <ul style="list-style-type: none"> • 'Rytmaskonservatorium' • 'Scenekunstskolen' • 'Sonic College' <p>Each group could have 10-15 minutes to present, where they are today, what they do, what the aim is, what they lack, what future could bring, etc.</p> <p>In Appendix 1 is a list of details that we would like each WG-member to provide ideas for.</p> |
| 6 | Intelligent microphones | <p>Planned for late February or early March 2022</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Eddy Bøgh Brixen (introduction) • Renato Pellegrini (or colleague), Sennheiser • J Keith McElveen, Wave Sciences? Charleston, South Carolina, United States (Eddy will contact) <p>Panelist:</p> <ul style="list-style-type: none"> • Stefan Heise, Jabra • Brian Johansen, GRAS <p>The speakers</p> |
| 7 | Multichannel headphones | 'Completed: 11 January, 2022 |
| 8 | Optimal sound environments for "large room offices" | <p>For background, see Summary of the Meeting #04 of the working group, 5 October 2021.</p> <p>Delayed to H2, the autumn semester of 2022.</p> |

| # | Subject | Background |
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| 9 | Use of sound in museums | <p>Focus: Use of sound in 'story telling' at museums.</p> <p>Time schedule: Webinar in H2 of 2022, and "theme day" later, possibly 2023.</p> <p>For details see meeting summary of meeting #05, 2021-11-24.</p> <p>Lars and Birgitte Folmann will work with DSC in setting up the events.</p> <p>Potential speakers:</p> <ul style="list-style-type: none"> • Anders Jørgensen, Stouenborg • Birgitte Folmann, Researcher at Sonic College • Person from e.g. H.C: Andersen Museum, Odense. • Other candidates as per above. <p>Stina Marie Hasse Jørgensen is involved in sound planning for "Helsingør Museum", and hence would like to be involved in the planning of the activity.</p> |
| 10 | ADM Technology | <p>The Audio Definition Model (ADM) is standardized metadata model for describing the technical properties of audio.</p> <p>We will run two webinar events close to each other, e.g. one week in between. The first webinar, 10A, see below, is a more technical event, i.e. focusing on the engineering part of ADM, while the second webinar on ADM focuses on the creative part of ADM, i.e. using ADM in real work. Both events include hands-on elements, i.e. which tools are available for ADM, and how could they be used.</p> |
| 10a | NGA ADM Immersive delivery | <p>Time Schedule: 8 February 2022</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Matt Firth, BBC • Adrian Murtaza, Fraunhofer <p>Jonas Roden, Dolby or Jan Mueller, Dolby</p> |
| 10b | ADM webinar Mixing/Mastering for streaming services | <p>Time Schedule: 15 February 2022</p> <p>Hands-on event focusing on the creative use of the ADM tools and approaches.</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Frank Grønbæk (popmusik) • Morten Lindberg (klassisk musik) • Eddie Simonsen <p>Leo de Wolf (no answer)</p> |

| # | Subject | Background |
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| 11 | "Beats by girlz" or 'women for sound engineering" | <p>Rather than focus on the young audience addressed by "Beats by girlz", the focus should in general be on getting women engaged in audio.</p> <p>One observation is that audio in e.g. broadcast is controlled by a group of grey-haired men and absence of females. However, in podcast production, the activity is dominated by women that do not necessarily have a deep understanding of the art of sound engineering.</p> <p>One ambition for DSC could be to bring the two groups together and obtain fruitful advances on more fronts:</p> <ul style="list-style-type: none"> • Increase recruiting of females for sound engineering • Improve e.g. podcast production through successful merger of female creativity & ingenuity with male engineering skills. • Enhance female footprint on audio production. <p>Include e.g. Malle Kaas': "Women in live music" (https://womeninlivemusic.eu/member/malle-kaas/) and also eye parallel activities such as: https://risewib.com and https://www.svgeurope.org/women/</p> <p>Frauenhofer also has a special program to support women.</p> |
| 11a | Electronic sound & music, focus on females | <p>For example an event focusing on electronic sound and music, based on inspiration from and in cooperation with:</p> <ul style="list-style-type: none"> • "Det jyske Musikkonservatorium", DJM in Aalborg, www.musikkons.dk, • Syddansk Musikkonservatorium Esbjerg, www.sdmk.dk, • Sonic College, https://soniccollege.org/ <p>Shelley and Stina will follow up.</p> |
| 11b | Podcast tools, approaches, and support with special emphasis on females | <p>Given that a significant part of podcast production today is delivered by females, and where a deeper lack of sound production sometimes lack, it seems an obvious strategy to bring focus on improved production methodology and tools, to some degree also sound engineering support and not least point to bottlenecks, where tools lack, or emerging tools may fill the gap.</p> <p>Shelley and Stina will follow up.</p> |
| 12a | Game audio (for game applications) | <p>Focus: A webinar or a workshop on game audio, including the involvement of game audio companies.</p> <p>Time schedule: not yet in place.</p> <p>Be clear on the objectives. Focus on the technical side of game audio or the creative side of game audio?</p> <p>Proposed speakers:</p> <ul style="list-style-type: none"> • Rob Bridgett, Senior Audio Director, Canada, • Bjørn Jacobsen • Kristian Rømer @ IO Interactive <p>Simon Stevnhoved Rasmussen - Massive</p> |

| # | Subject | Background |
|-----|---|---|
| 12b | Using game audio engine in other applications than gaming | <p>Time schedule: H2 of 2022</p> <p>Gaming engines are extremely powerful and e.g. in broadcast game engines are taking over activities (today primarily in video, e.g. nVidia) that was previously handled by traditional processors.</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, nibor@elektro.dtu.dk)</p> <p>'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> |
| 13 | Dubbing challenges II | <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. 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 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.</p> <p>Area 1) can be broadcast people and people in the pod cast industry to talk about the new approaches</p> <p>Area 2) needs to be people from the tool industry 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, nibor@elektro.dtu.dk) 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>Lars will try to identify possible speakers for area 2</p> |
| 14 | Ethics in audio production | <p>The industry in audio production is, as other sectors, now facing severe issues on ethics in producing content. Modern tools, and tools likely to emerge in coming years, will support generation of audio content far beyond what we are used to, even can imagine today, and significant elements of "Fake content" are likely be present.</p> <p>The audio industry at large, knowledge institutions and others should start discussions on how to face such dramatic changes in content production. We need to start the dialogue on ethics. A theme that we need to nurture further.</p> |

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

DSC is planning to table a new call for collaborative projects around early March of 2022. Now is a good time to start building consortia for upcoming collaborative projects. Experience show that it takes time to form consortia. Often the knowledge institutions are the ones to take the initiative, since they can in contrast to companies obtain funding and thus have the greater incentive. However, a consortium should focus on projects that will be essential for the participating private enterprises.

If seed funding from DSC is seen as important, time is now to get started.

It is recommended to contact the DSC secretariat early on, partly to obtain counselling on what is possible and what needs to be included in an application, partly to obtain assistance in finding partners for a consortium, if that is an issue for establishing a project application.

Ad 4.2 List of ideas for proposals for collaborative projects

| # | Subject | Background |
|---|---|---|
| A | Intelligent microphones | Development of intelligent microphones, 5G, Metadata, *fingerprint' identification, etc. See also Morten Brandstrup's webinar comments in webinar theme #3 |
| B | Training courses | <p>Training courses focusing on optimal recording 'in the field', at an advanced level but also at a more general level to reduce subsequent editing significantly.</p> <p>Needs to be focused, e.g. for broadcast, including how the production works in broadcast.</p> |
| C | Headsets emulating multichannel sound. Alternatively better editing options in headsets (e.g. for TV sound) | <p>Headset with true "room" impression. Today's headsets allow for use of 7.1 sound. However, most solutions appear poor in emulating e.g. "front" sound. "Rear" sound appears OK, but most headsets basically still only offer "mono" in the ear.</p> <p>Necessary to obtain better headset technology, if multichannel sound in headset should have a future. Essential to obtain an impression of "Dolby ATMOS in a big room".</p> <p>Multichannel sound has been around for 30 years, but users are still only exposed to stereo in headsets.</p> <p>A huge potential could exist, if "true room" perception emerges, hence avoiding the need for huge rooms with ATMOS conditions.</p> <p>In TV broadcast, the need is more towards a stable "center-sound picture". Currently the challenges are that basically all TV sounds are edited in huge rooms, where may be 40 people are sitting side-by-side editing, and hence are forced to using headsets during editing. However, during the editing, they need to arrive at a good sound as experienced by a viewer on a traditional TV set.</p> <p>The next generation of young people will only see TV on an iPad or an iPhone and obtain sound through earpieces or simple headsets. Believes that the need for true "room sound" thus may diminish significantly.</p> <p>The real challenge is that you no longer obtain the sound from huge "B&O speakers" pointing towards the viewer/listener, when watching TV. Instead sound comes from small loudspeakers at the back of the TV set pointing away from the viewer/listener. Hence, there is a need for a calibration unit that could simulate and adapt the sound in a room, that is far from ideal in a sound context and where the TV set is placed incorrectly from a sound perspective.</p> |
| D | Optimal sound environments for "large room offices" | <p>Current sound designs of "big offices" aims at a workspace with good acoustical damping, low background noise, low reverberation time, no ventilation noise, etc. As a result, basically an in-humane environment is obtained, where no one dares just to drop a clip on the table (too noisy ☺).</p> <p>Possible pre-project based on the challenges outlined under webinar theme #8</p> |

The above list is just a set of early ideas expressed in the working group. Collaborative project can focus on a variety of other themes.

Next meeting

Tuesday March 15, 2022 13:00 to 14:00

Appendix 1: “Multidimensional art of sound - Landscape”

The use of sound in relation to art including a multitude of domains is of growing ponderance.

Danish Sound Cluster, DSC, plans to map the multidimensional landscape of Denmark in relation to use of sound in an artistic context, not least multichannel sound

- Who are active?
- What is in progress?
- What focus is driving the developments?
- What curricula in education exists?
- etc.?

Players include a multitude of organizations and individuals, and not least several institutions in education and research seem to be active, and with increasing levels of activity in the area. Players in the domain may include, but not be limited to:

- “Rytmask Musikonservatorium”: RMC
- ”Det Kongelige Danske Kunstakademis Skoler for Arkitektur, Design og Konservering”
- ”Den Danske Filmskole”
- ”Statens Scenekunstskole”
- “Sonic College”
- Universities: DTU, AAU, AU, SDU
- Etc.

Use can be broad including even broadcast, gaming, sound landscaping, etc.

DSC plans to use the details of identifying the multidimensional landscape of sound in relation to art to create more awareness about this domain of activity. First in line is a webinar, where we intend to have as many of the players air their activities, including sharing details to a broader community of their activities, ambitions and direction, plans for future developments, whom they would like sparring with, etc.

You can be of help in the mapping exercise by sharing details of the players in the field that you know of. Help answer the details:

1. Name of institution, company or individual:
 - a. Name and address
2. Contact details:
 - a. Person
 - b. Email
 - c. Cell phone
3. Short description of activity (as you know it)

If you only have answers to some of the details, it is also OK.

Send you input to, using the subject: “Multidimensional art of sound landscape”:

- Birger Schneider: birger.schneider@chamaj.com

Appendix 2: Participants in the meeting

| | | |
|-----------------------------|--------------------------------|----------------------------------|
| Birger Schneider | CHAMAJ Consult ApS | Director/owner |
| Cheol-Ho Jeong | DTU Electro, Electrotechnology | Assistant professor |
| Eddy Bøgh Brixen | ebb-consult | Consultant, owner |
| Lars Nørretranders | DR | Area Manager |
| Morten Brandstrup | TV2 Danmark A/S | Head of News Technology |
| Nick Dunkerley | Hindenburg Systems A/S | Creative Director |
| Rune Palving | Den Danske Filmskole | Head of "tone meister" education |
| Stina Marie Hasse Jørgensen | ITU | PostDoc Researcher |
| Shelley Uprichard | Danish Sound Cluster | Project Manager |