

## Working Group "Healthcare & Welfare" – Meeting 13

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### Summary of Meeting #13, May 15, 2023

#### Agenda

1. Webinars & Physical events during 2023:
  - a. Follow-up on proposals and ideas from meeting # 12 including additional comments and proposals.
  - b. Proposals for possible speakers
  - c. New themes?
2. Collaborative projects, update of proposals, indication of possible project consortia.
3. News from DSC secretariate
4. A.O.B.

#### Up coming webinars

- **23 May 2023:**  
*"Sound in Robotics"*
- **30 May 2023:**  
*"Mastering the Art of Live Sound"*

## Ad 1: Webinars and other events

#	Subject	Background
7.a	<b>Speech analysis, pathology, speech recognition</b>	<p><b>Timing: October / November 2023</b></p> <p>Dan Sattrup Nielsen offers to participate and will help put together a webinar to be held around October/November 2023.</p> <p>On 15 March 2023, Dan Sattrup confirmed that the CoRal project would like to contribute with a webinar in the area at the end of 2023.</p> <p><b>Contribution from:</b></p> <ul style="list-style-type: none"> <li>• <b>Alexandra (Dan Sattrup and others)</b></li> <li>• <b>Alvenier (Martin Carsten Nielsen)</b></li> <li>• <b>Corti (perhaps Lars Maaløe)</b></li> </ul> <p>Pedro contacts Dan Sattrup Nielsen regarding details of the webinar. Will take place after the summer holidays 2023.</p>
12.a	<b>Practical use of sound in the healthcare system</b>	<p>Postponed to mid-2023, when the Isobel project is expected to have results.</p> <p>Focus on constructive effects – also referred to as a more technical approach than an actual therapeutic approach (see also area 12.c) (relief, use of sound zones)</p> <p>Possible contributions:</p> <ol style="list-style-type: none"> <li>1. Isobel project: 'Development and testing of interactive and dynamic sound zone system'. Bang &amp; Olufsen (Søren Bech), SoundFocus (Kim Rishøj) &amp; Wavecare together with two departments at AAU (Jan Østergaard, Electronic Systems/ Computer Science), Christian Sejer Petersen.</li> <li>2. Helle Nystrup Lund, company "Music Star" regarding the use of an APP for therapy in the area. Kira offers to help contact Helle Nystrup Lund.</li> </ol> <p>No activity since the last meeting.</p>

#	Subject	Background
15	<p>Education in DK: 'Hearing care professionals' (HCP)"</p> <p>With a focus on "Continuing education"</p>	<p>Consensus that we should aim at a physical event for this topic area rather than a webinar. Networking is seen as essential.</p> <p><b>Focus:</b>  <b>"Quality Requirements"</b></p> <p>New Danish national quality requirements for hearing aid treatment for adults are in the process of being instituted. There is a general need for a broader community in the sector to understand how that will impact traditional approaches and operating principles.</p> <p>Current requirements are not seen as strong requirements for speech and noise tests, but still the emerging 'Quality Requirements' are seen as a relatively radical game changer. Continuing education in context of Danish Sound Cluster should not aim at detailed instruction courses in the area, which could better be handled by universities (e.g. SDU) and continuing education organizations.</p> <p>Instead, the event should focus on the fact that Danish hearing-aid patients in future will be fitted in ways that should provide better reference for subsequent re-adjustments. Presentations should not just talk on the topic of e.g. Real Ear Measurements (REM), Speech in Noise Tests (SIN), or Questionnaires, but take ownership of the specifics of the new quality requirements (i.e. focus primarily on what the practical intentions of the new requirements rather than on negative effects of the requirements).</p> <p>It is not the ambition to be a deep R&amp;D focused event (that may follow in another event) but keep focus on more practical issues.</p> <p>The event will have three focus areas:</p> <ol style="list-style-type: none"> <li>1. Real ear measurements', REM</li> <li>2. Speech-Noise tests</li> <li>3. Questionnaires (based on international requirements)</li> </ol> <p><b>Audience:</b></p> <p>Practitioners, hearing care professional, people supporting the hearing care professionals (e.g. supplying equipment, facilities, etc.), general audience in the hearing aid industry that has a need to understand the new direction in public and private supported approaches in the field, etc.</p> <p><b>Program</b></p> <ol style="list-style-type: none"> <li>a) Moderator Tobias Neher, Professor, DTU</li> <li>b) Opening Address: Gert Ravn, FORCE Technologies</li> <li>c) National Health Board ('Sundhedsstyrelsen')?</li> <li>d) REM Sreeram Kaithali Narayanan ?</li> <li>e) Speech in Noise Tests Tobias Neher or alternative SDU person ?</li> <li>f) Questionnaires Jesper Hvass Schmidt? Michael Bille at CBHC ?</li> </ol> <p>We aim at a 2-3 hour event. Possibly hosted at a major Hearing aid manufacturer. The event needs to be coordinated with SoundDay 2023, where there may also be a session on the topic.</p> <p><i>We need more names for potential speakers. If we also include a more R&amp;D angle, Jens Bo Nielsen appears an obvious candidate (Danish Sentence Test, DAST, QuickDAST).</i></p>

#	Subject	Background
16	Selvtest af behov for høreapparater, fjern-test	<p>As a supplement to On-line services, AAU under the BEAR project is currently working on at to produce solutions so that a potential user of hearing aids can sit in their own living room and decide whether there is a need for a hearing aid or not. Among other things. PhD student at Dorte.</p> <p>Suggestions for contributions from:</p> <ul style="list-style-type: none"> <li>• Palle Rye, Ph.D. student with Dorte at AAU, but is late</li> <li>• UAUD project at SDU, Jesper Hvass Schmidt, Teleaudiometry</li> </ul> <p>WHO has, among other things, a self-test APP, "hearWHO", which can be downloaded to mobile phones. Its purpose is to achieve early identification of hearing loss with the aim of e.g. to be able to counter that exposed/predisposed persons are exposed to additional influences which intensify hearing loss. <a href="https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/hearwho">https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/hearwho</a></p> <p>Postponed to autumn 2023 due to delays in Palle Rye's Ph.D and the UAUD project. It is estimated that the UAUD project will still be relevant in autumn 2023 and will have more results. At the same time, Palle Rye's project will, by all accounts, have interesting results at the same time. The UAUD project will form the basis for the event.</p>
18. a	Approval of products, e.g. CE marking of products.	<p>Danish Standard (DS), Søren Storm, guest at the meeting, runs a course, 3 hours long, on CE approval of products. DS is considering whether to make a shorter presentation in a webinar about the challenge in connection with CE marking - and with a focus on SME companies.</p> <p>The DSC event should focus on SMEs, and what strategies to take in conjunction with CE-approval.</p> <p>Danish Standard offers a crash course on CE approval, and it is available for free.</p> <p>Large companies usually have a clear strategy and experience on CE-approval and the also have the financial muscle to include consultants, if required.</p> <p>SMEs are often not in the same 'luxurious situation'. Often, they need to take risks that larger companies would stay away from. However, it is difficult to supervise such strategies openly, given that we are in a grey zone in relation to formal requirements. Danish Standard are not comfortable to support such a strategy. It remains a "stomach based" decision on management in SMEs.</p> <p>"How can a company be prosecuted, if it fails to meet the requirements of CE". IT is a difficult question to answer.</p> <p>Danish Standard has started developing a more project management-oriented approach to CE approval where SMEs should consider what they can afford at a given point in time, balanced with the potential risks. Then, as a company evolves, more and more of the formal CE approval testing/consideration should be included. However, Danish Standard is not yet ready with such material.</p> <p>Birger and Søren will take a follow-up discussion on how to scope an event.</p>

#	Subject	Background
18.b	<b>Approval of Ethics</b>	<p><b>Due to lack of time not handled in the meeting.</b></p> <p>Discussions on the topic have revealed that there are challenges in connection with ethical approval, as there are no clear guidelines. There is a lack of transparency, and the requirements vary from region to region, sometimes even depending on the people involved, who must approve the ethical background in connection with experiments.</p> <p>There is a strong desire from universities and companies to have clearer guidelines, i.e. to clarify the requirements, not least for products in the audio area. Audio products, e.g. hearing aids do not always follow requirements that otherwise exist for medical products. Where the ethics committees for the latter usually have a strong knowledge of the product area and a secure tradition of ethical approval, the situation is often different for audio products.</p> <p>One strategy could be for us to try a panel discussion on the topic, where we get several people who have experienced the challenge themselves to talk about what they have seen as the big challenge - and preferably about how they have solved the challenge. It will be able to give the audience a clearer sense of what the challenge consists of, and how, at least in some cases, they have succeeded in finding a way through today's diffuse area of requirements.</p> <p>In conclusion, we could aim to reach a consensus that clearer guidelines are strongly needed. That conclusion could then be used in a subsequent contact with the ethics committees to seek help for better clarification of requirements and ways in which these can be fulfilled.</p> <p>The challenge is to find people who are willing to share their experiences.</p> <p><b>Birger will approach a few of the people known to have gone through the challenge. The aim is to get them to participate in the panel discussion.</b></p> <p><b>Tobias will try the same with colleagues at SDU. Everyone else in the working group is encouraged to do the same.</b></p> <p><b>We need to decide whether it is realistic that we can do a webinar with that aim. If not, we must let the subject rest until better solutions are proposed.</b></p>
18.c	<p>Approval of products that require medical approval.</p> <p><b>New subject</b></p>	<p><b>Due to lack of time not handled in the meeting.</b></p> <p>Products, e.g. hearing aids, in many cases require approval as medical products, e.g. in relation to FDA in the USA and European requirements, including DS/EN/ISO 13485.</p> <p>It is a jungle for companies, at least many SMEs and start-ups, to understand what the requirements are, where to get assistance, how to complete an approval and what the cost of such approvals typically is.</p> <p>The large companies in the area, not least the hearing aid companies, deal with this challenge as an integral part of the general quality organization. You have the experience of how to attack approval in the individual markets. For an SME, the challenge is often great, because you do not necessarily have the same experience and certainly not a quality organization that supports this.</p> <p>Consensus, that it would be a good strategy to find a person from one of the consulting companies that provide services in the area and get that person to talk about what and how.</p> <p>The challenge is to identify who, if necessary, can contribute - without it becoming a sales pitch.</p> <p><b>Lars, Erik and Jesper will check with their organizations whether good candidates can be identified to contribute.</b></p> <p><b>Pedro will seek to collect this input and make a presentation for a webinar.</b></p>

#	Subject	Background
19	Event about the latest standardization in the field	<p>A webinar focusing on standards broadly is hardly suitable for a webinar. The subject is too dry and boring for most people.</p> <p>But when there are new, often epoch-making standards, e.g. the topic we had about "Bluetooth LE" or the topic, "Sound Quality &amp; Dwellings", which Dans Standard has had a meeting about, then it makes sense to hold a webinar in that specific area.</p> <p>It can be considered whether, preferably in collaboration with DAS, we should create information about standards that are being changed. It must depend on a conversation with DAS, DS and others about what form this kind of information should take, if applicable.</p> <p><b>Topic is transferred to DSC Secretariat.</b></p>
20	<p>Access to data from the hearing care service</p> <p><b>New subject</b></p>	<p><b>Due to lack of time not handled in the meeting.</b></p> <p>Derived from section 15, including discussions at the annual meeting of the Working Group for "Better hearing rehabilitation" (not part of DSC), the subject of researchers' access to the many hearing data that exists in DK, but to which no one, or only a few today, has access, is interesting. Either because systems do not talk to each other, or because of a lack of policy in the area, i.a. who owns the data.</p> <p>The topic is political, and it would be appropriate to secure participants from the established political establishment, from the Regions and others.</p> <p>A way forward could be to provide examples and insight into what we could achieve if we could get access to the said data. It would provide information on the more political circles of lobbyists, politicians, the civil service, etc.</p> <p>It could be a contribution from DSC to also give SME companies better access to results that they could use in their development of products and services.</p>

## Upcoming Events

### Roskilde innovation partner event 26th June, 2023

Please apply if you are working with innovation and would like a partnership with Roskilde Festival

### Danish Sound Day, 7th November, 2023 at The Center for Hearing & Balance

Still in early stages of development, but the themes we are working with now include:

- Sound & Mental Health
- AI in the Clinical Environment
- Hearing Health

New this year, is that we will have a poster session. The event invite and more info will be coming in our next newsletter.

If someone in the group feels that they already know a fantastic topic/research/demo that should be part of our day, please get in touch with me.

## Next Meeting

The next meeting in the Working Group will take place at:

- **Wednesday August 16, 2023, 14:00 – 15:00 hrs.**

## Appendix 1: Attendees in the meeting on May 15, 2023

Abigail Kressner	Hearing Systems, Dept. Health Tech, DTU	Assistant professor
Dorte Hammershøj	Institut for Elektroniske Systemer, AAU	Professor
Kira Vibe Jespersen	AU, 'Music in the Brain'	PhD, MSc
Lars Bramsløw	Eriksholm research Centre	Senior Scientist
Lise Schmidt Aagesen	Dansk Standard	Senior Consultant
Tobias Neher	SDU, Sundhedsvidenskabelig Fakultet, Klinisk Institut	Professor
Birger Schneider	CHAMAJ Consult	Director
Torben Vilsgaard	Danish Sound Cluster	CEO
Pedro Costa	Danish Sound Cluster	Project Manager
Søren Storm	Dansk Standard	Senior Consultant



## Appendix 2: List of potential themes

Addressed or proposed in previous meetings but for now put on list of potential topics. Waiting for the topics to be better matured – or the need better identified.

#	Subject	Background
11	APP and software	Target group: young people with an interest in sound.
12.c	Music therapy	<p>Therapeutic approach to the use of music. Relationship between music therapist and client, the use of music.</p> <ol style="list-style-type: none"> <li>1. Professor Hanne Mette Ridder, AAU (music therapy, among other things in connection with dementia)?</li> <li>2. Artists who use music in therapy as a kind of "music medicine", rather than actual therapy (where there is a relationship between therapist and client), e.g. Niels Eje and Inge Mulvad Eje (CD series "Musicure")</li> </ol> <p>Kira will consider proposals for concretization.</p>

## Appendix 3: Events proposed and developed by the Working Group

Topics that the Working Group has initiated, or indirectly helped to initiate.

#	Title	Comments	Event type	Date
8 & 9	The new Bluetooth LE Audio standard		Webinar	22 June 2021
1	Make listening safe		Webinar	6 October, 2021
10	Online-tjenester til høre-rehabilitering mm.		Webinar	18 January 2022
12.b	Noise and its Effect on our Health"		Webinar	7 April 2022
13	Music interventions in HealthCare	Based upon DSC project updating older "White paper" in the area	Webinar	14 September 2022
7.b.	Speaker Separation		Webinar	23 November 2022
14	" Assessing Real-life User Experience to Improve Hearing Technology"		Webinar	31 January 2023
14	"Sensors, Methods and Tools for Ecological Momentary Assessment"		Webinar	9 February 2023
	"Hearing restauration"			19 April 2023