WHO-ITU

Consultation on the Make Listening Safe initiative

2025

Meeting Report

World Health Organization

ITU

Contents

Executive Summary

The WHO–ITU Consultation on the Make Listening Safe initiative was held from 1 to 3 July 2025 at ITU Headquarters in Geneva, Switzerland.

This high-level, multi-stakeholder meeting brought together over 70 participants from national governments, UN agencies, academia, civil society, industry, and the health, education, and entertainment sectors.

The consultation marked ten years since the launch of the Make Listening Safe initiative and served as a platform to assess progress, share success stories, and co-develop strategies for the future of safe listening.

The objectives of the meeting included:

- Reflect on progress made over the past decade of the Make Listening Safe initiative.
- Help define priorities and future directions to guide the next phase of global action.
- Contribute to implementation strategies in areas such as personal devices, video gameplay and esports, musicians' health, live events, research, and school-based awareness.
- Strengthen cross-sectoral partnerships and identify practical steps to amplify, implement and seek safe listening strategies worldwide.

Introduction

Launched by the World Health Organization (WHO) in 2015, the **Make Listening Safe initiative** aims to reduce the risk of hearing loss caused by recreational exposure to loud sounds. This includes listening to music or other audio content through personal devices, attending loud entertainment venues, and participating in high-risk recreational activities.

The initiative addresses a growing global concern: more than 1 billion young people are estimated to be at risk of permanent, avoidable hearing loss due to unsafe listening practices.

The MLS initiative adopts a comprehensive approach, combining technical standards, policy advocacy, education and awareness, and cross-sectoral partnerships—to promote safe listening behaviours. Central to this approach is ongoing consultation with stakeholders.

To this end, WHO and the International Telecommunication Union (ITU) have jointly convened a series of consultation meetings over the past decade. These meetings have helped shape the direction of the initiative, informed the development of tools and resources, and identified emerging issues relevant to listening safety at a global public health level.

The 2025 Consultation marks the ten-year anniversary of the initiative, an important milestone not only for reflection and celebration, but also as a point of departure for setting new goals. With 2035 on the horizon, this meeting was an opportunity to reaffirm commitments, scale up impact, and define the next chapter of action.

Summary of Proceedings

Opening Session

Speakers:

- Guy Fones (WHO)
- Bilel Jamoussi (ITU)

Key Points:

- Guy Fones opened the consultation with a warm welcome to all in-person and remote participants.
- Emphasized the high prevalence of hearing loss globally (1.5 billion people), particularly amongst youth, driven by preventable causes such as exposure to loud sounds.
- Reaffirmed WHO's commitment to the Make Listening Safe (MLS) initiative, launched a decade ago, and the need to reframe listening culture: *"Louder is not better."*
- Highlighted the importance of inclusive, multi-stakeholder collaboration and the new phase of action needed to realize safe listening as a public health norm.
- Bilel Jamoussi welcomed attendees on behalf of ITU and acknowledged the decade-long partnership with WHO.
- Discussed the growing scope of ITU-WHO standards, now covering personal listening devices, venues, and most recently video gameplay and esports.
- Reiterated ITU's commitment to working with WHO and partners to scale innovation and ensure safe listening technologies are globally adopted.

Ten years of Make Listening Safe: progress, challenges, and opportunities

Presenters:
Shelly Chadha (WHO)
Simão Campos (ITU)

Highlights from WHO (Shelly Chadha):

- Reflected on the original vision and "dream" of a world where all people enjoy listening without risk to hearing.
- Outlined the foundational motivations: high exposure risks amongst youth, low public awareness, and limited access to hearing care.
- Described a decade of action: campaigns, awareness materials, partnerships with musicians and influencers, and development of global standards.
- Emphasized that the groundwork has been laid, but the vision for 2035 now requires collective, sustained action.

Highlights from ITU (Simão Campos):

- Provided technical overview of the development of ITU-WHO safe listening standards, including H.870 (devices) and H.872 (video gameplay/esports).
- Explained the dual publication process (ITU technical standard and WHO user-oriented version).
- Stressed the need for robust compliance testing programmes and greater adoption by device manufacturers and regulators.
- Advocated for further advocacy and toolkits to drive standard implementation.

Introductions

Moderated by: Guy Fones

- Participants (in-person and virtual) briefly introduced themselves and shared how and when they became involved in the MLS initiative.
- Represented sectors included: UN agencies, national governments, academia, civil society, youth groups, industry (including Apple, Sony, and video gameplay companies), healthcare providers, and individuals with lived experience of hearing loss.

Key Themes:

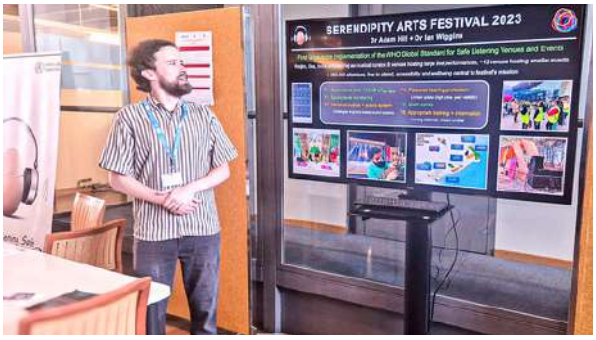
- Longstanding commitment: Many participants have been engaged since 2015.
- Personal connections: Several shared experiences with hearing loss or passion for music and sound technology.
- Diversity: Representation across disciplines and geographies reinforced the MLS initiative's inclusive, multisectoral ethos.

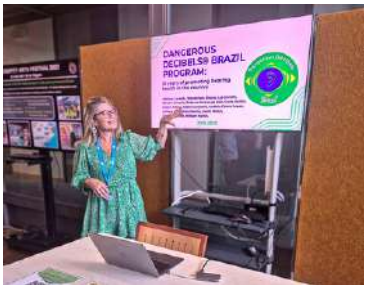
Making Listening Safe across the world: snapshots

Making Listening Safe across the world: snapshots highlighted six real-world initiatives selected from over 60 global submissions received through a call for abstracts, each illustrating diverse efforts over the past decade to promote safe listening practices.

Each presenter showcased a distinct approach to making listening safer, including public health strategies, standards implementation, advocacy, and awareness-raising:

- Adam Hill presented the implementation of the WHO Global Standard for Safe Listening in Venues at the Serendipity Arts Festival in Goa, India (2023),
- Teresa Amat and Antonio Morant shared a decade of advocacy and educational work by Federación AICE.
- Adriana Lacerda highlighted the adaptation of the Dangerous Decibels Program in Brazil.
- Anita Gáborján presented evidence-based public health recommendations from Hungary targeting safe listening at events.
- Mark Laureyns described the development and global reach of the Make Listening Safe LinkedIn group, a virtual hub for professionals committed to hearing conservation.
- Andreas Thulin, on behalf of Katya Friere, introduced Brainland, an animated content series developed to engage young audiences on safe listening through creative storytelling.





Panel discussion: success stories

Moderator: Rana Sadani

This session featured a moderated panel discussion designed to showcase examples of successful implementation and advocacy related to safe listening. Panelists from different sectors shared personal and professional experiences demonstrating how individual leadership and institutional commitment can contribute to the advancement of hearing health.

Panelists and Contributions:

- **Raphael Elmiger (Federal Office of Public Health, Switzerland)** shared insights on the development and enforcement of national sound exposure legislation in Switzerland. Drawing from his background as a musician, he emphasized the importance of balancing artistic freedom with public health priorities.

- **Brian Schmidt (President, GameSoundCon)** reflected on the personal experience of his father's hearing loss, which motivated his engagement with the Make Listening Safe initiative. He described efforts to raise awareness amongst game developers and integrate safe listening practices into the audio design of digital games.

- **Tatjana Sachse (Global Video Game Coalition)** highlighted the coalition's work in bridging the gaming industry with international health bodies. She discussed how the adoption of the WHO-ITU standard on safe listening for video gameplay and esports (H.872) is being positioned as part of broader digital well-being strategies.

- **Raj Desai (Apple Inc.)** outlined Apple's leadership in integrating WHO/ITU safe listening standards into personal audio products. He emphasized the importance of early-stage design considerations and multi-stakeholder collaboration to ensure effective implementation.

- **Jörn Nettingsmeier (Amadeus / Verband Deutscher Tonmeister)** described his experience applying the safe listening standard for venues. He advocated for a culture shift within the sound engineering profession, promoting safe levels as a component of quality and professionalism rather than as a restriction. He also discussed innovative mixing approaches that maintain emotional impact at lower volumes.

Looking ahead: 2035 ambitions

Facilitator: Shelly Chadha (WHO)

This session invited participants to envision what success could look like for the Make Listening Safe initiative by the year 2035. Contributors from the MLS community presented their ambitions, offering both visionary predictions for how safe listening could be embedded in daily life, culture, technology and policy over the next decade.

- **Mark Laureyns** proposed a future in which global safe listening benchmarks specifically 80 dBA for 40 hours a week, are universally recognized and adopted. He envisioned that the safe listening movement would be celebrated through awards like the "Safe Listening Grammys" and integrated into global education systems via WHO smart-school programmes.

- **Sara Rubinelli** framed 2035 as a time when safe listening is not only about protecting ears but also about empowering minds. She called for a Listening Society; one that values attentive, empathetic, and reflective listening as part of digital and human dignity, and in which safe listening is part of broader audio and health literacy.

- **Michael Santucci** envisioned a "golden age of conservation" by 2035, where hearing health is an integral part of public health. He described a future where AI, adaptive technologies, and tactile enhancements make safe listening intuitive and desirable, and where children educated today become the advocates and professionals leading the next wave of change.

- **Andreas Thulin** concluded the session with a creative and engaging video contribution. In a personal and futuristic reflection, he imagined a world in which hearing preservation is not only normalized but considered cool. He illustrated how safe listening could become mainstream, desirable, and culturally embedded—moving beyond technical standards to shape social identity.

Participants from the floor and online emphasized the importance of:

- A generational shift where young people grow up with safe listening as second nature.
- Inclusive implementation, ensuring standards and messaging reach low-resource settings.
- Seamless integration of hearing protection into devices and digital ecosystems - removing the need for users to calculate risks themselves.

This session helped set the tone for the call for commitments and thematic discussions that followed, offering an inspiring vision of what sustained collective action could achieve by 2035.

How do we get there: introduction to call for commitments

Presenter and Facilitator: Shelly Chadha (WHO)

This session marked the formal launch of **WHO's draft Call for Commitments**, a strategic appeal to stakeholders across sectors to pledge measurable actions that support the Make Listening Safe initiative. The session aimed to transition from vision to action by inviting participants to shape, refine, and take ownership of the proposed framework.

Presentation of the Draft Call for Commitments

Shelly Chadha opened the session by presenting the rationale and structure of the proposed Call for Commitments. Building on the 2035 ambitions discussed earlier in the day, the Call invites stakeholders from across sectors to voluntarily commit to concrete actions that support the MLS initiative.

The Call is designed to:

- Encourage broad ownership across government, civil society, private sector, education, health, and youth organizations.
- Focus on SMART commitments – Specific, Measurable, Achievable, Relevant, and Time-bound (2–5 years).
- Provide a platform to publicly share commitments on the WHO website and to report on collective global progress.

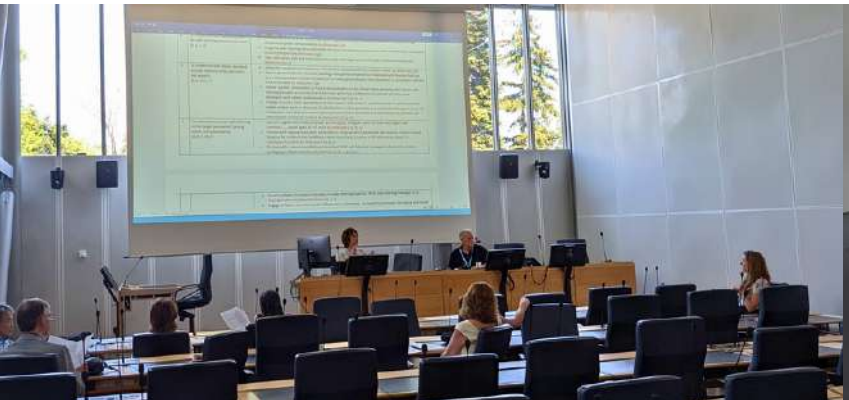
Proposed commitments were organized by stakeholder group and accompanied by examples of feasible actions relevant to each domain.

Working Session: Group Review and Feedback

Participants were then divided into small groups for a working session to review and provide input on the draft Call. Each group received a structured reporting template and was asked to:

- Evaluate existing commitments.
- Identify gaps.
- Propose mechanisms for ownership.

Participants submitted written feedback at the close of the session.



Group Work: summary of results

1. Clarity and Feasibility of Commitments

- The majority of proposed commitments were broadly clear and relevant. However they could still benefit from clearer wording, inclusion of concrete examples and greater specificity regarding responsible actors and implementation timelines.

2. Identified Gaps and Missing Stakeholders

Groups highlighted several areas where commitments or stakeholder categories were missing or underrepresented, for example:

- Youth organizations and influencers.
- Educational institutions at local and national levels.
- Industry associations (beyond individual companies).
- Local governments and municipalities, especially in urban planning and event licensing.
- Manufacturers of white noise machines, toys, and non-traditional audio products.

3. Suggestions for Additional Commitments

New or revised commitments were proposed across several domains. Examples included:

- Commitments targeting primary and secondary school integration of safe listening education.
- Specific actions to engage streaming platforms and content creators.
- Public health authorities pledging to integrate hearing protection into national awareness campaigns.
- Developers of personal listening devices to include pre-installed safe listening dashboards and parental control features.

4. Ownership and Promotion

Groups emphasized the importance of sector champions to promote and advocate for commitments within their fields. Suggestions included:

- Partnering with trade unions, artists, and sports organizations to support uptake
- Leveraging existing award programmes and certification systems to incentivize action.
- WHO and ITU to provide recognition and visibility for committed stakeholders via annual reports or online dashboards.

5. Reflections on Uptake and Accountability

Some concern was expressed around ensuring follow-through once commitments are published. Recommendations included:

- Establishing a voluntary reporting mechanism.
- Encouraging stakeholders to define interim milestones or indicators.
- Providing technical support or tools to facilitate implementation, particularly for low-resource settings.

This feedback will be synthesized by WHO into an updated draft, which will be shared with meeting participants for further input. The final Call will then be published for stakeholders to make commitments on.

Emerging issues: Lauren Dillard

Presenter: Lauren Dillard (WHO)

In this session, Lauren presented findings from a recent scoping review on emerging sources of unsafe listening amongst children and young people (aged ≤35 years), focusing on non-traditional exposures not previously covered by existing WHO/ITU safe listening standards.

- The review aimed to map exposure risks beyond commonly addressed domains such as personal listening devices, music venues, and video gameplay.

- It analysed 53 studies across all six WHO regions, identifying a range of everyday recreational and environmental sources of harmful sound exposure.

Key findings included:

- Prevalent sources of exposure included loud outdoor parties, motor sports and recreational firearms, children's toys (e.g. toy weapons, sound books), white noise machines used for infant sleep, home and car stereos, team sports environments, power tools and lawn equipment and Virtual reality headsets.

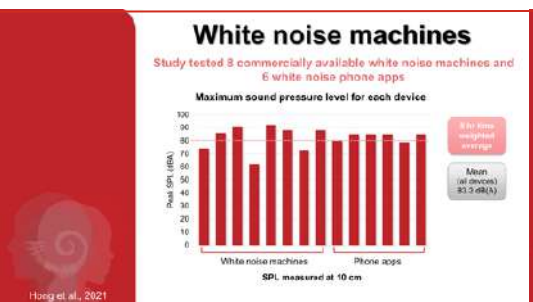
Risk characteristics:

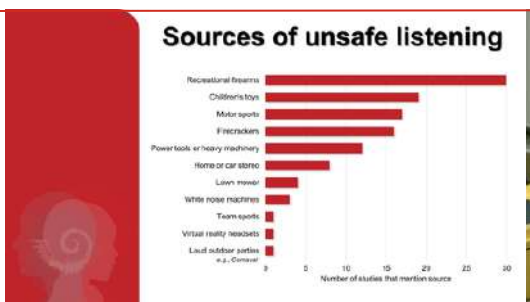
- Many sources produced peak sound levels near or above recommended exposure thresholds.
- Exposure was often prolonged or repeated, with minimal awareness or use of hearing protection.

Notable trends:

- Inconsistent use of protection (e.g. during firearm use or sports events).
- Cultural and regional variation in exposures, particularly in recreational firearm use.
- Elevated risk even in very young children (e.g. infants exposed to loud toys or white noise machines).

Lauren underscored the need to expand the scope of public health messaging and preventive strategies to address these emerging risks. The findings support a life-course approach to hearing health promotion and offer insights for future standard-setting, product regulation, and education campaigns.





Emerging issues: the impact of digitally treated sound: Paul Avan

Presenter: Paul Avan (Université Clermont Auvergne, France)

Paul Avan presented findings from his ongoing research into the effects of digitally compressed sound, particularly in relation to listening fatigue and auditory comfort.

He highlighted the increasing exposure to digitally manipulated audio due to video conferencing, virtual events, and streaming platforms, raising the question of how these forms of sound might affect hearing over time.

Key points from the presentation:

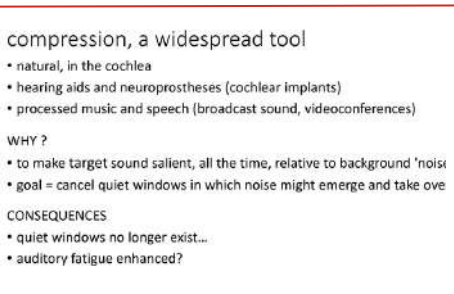
- Digital compression, widely used to reduce bandwidth and storage requirements can also reduce background interference, but may increase auditory fatigue. This is due to the elimination of natural silences and dynamic range, which reduces opportunities for the auditory system to recover.

- Comparative studies using animal models showed signs of prolonged auditory fatigue following exposure to compressed sound, even when cochlear structures remained intact.

- Paul proposed that fatigue is objectively measurable, not just a subjective complaint, using techniques such as acoustic reflex testing.

In response to audience questions, Paul clarified that while compression is required in digital networks, we need better awareness, tools to quantify excessive compression, and research into how musical composition and audio engineering can mitigate risks.

Paul concluded by suggesting that the auditory effects of digitally treated sound, particularly under long exposure conditions, deserve further exploration.
His remarks called for nuanced consideration of how sound design intersects with listening health in professional and everyday environments.



Thematic Group A:
Devices, systems, video gameplay & esports

Purpose:
This thematic group focused on strengthening the adoption and implementation of the WHO-ITU global standards for safe listening in personal audio systems (H.870) and video gameplay and esports (H.872). Participants aimed to identify the challenges limiting uptake of these standards across industry and advocacy settings, and to propose solutions through internal communication, stakeholder engagement, and technical advancement.

The group also explored how to raise awareness of the standards amongst manufacturers, professionals, and end users; discussed options for launching conformance testing; examined relevant developments in device technologies; and considered the feasibility of creating a sensitivity register for accurate sound exposure measurements.

Key Interventions:

- Internal Communication: Within companies, differing priorities hinder adoption.
- Advocacy: Need to link hearing loss to broader health issues (e.g., cognitive decline).
- Championing: Identify internal champions to drive change.
- Industry Engagement: Target industry associations (e.g., GDC, IGDA), platforms (e.g., Xbox), and events.

Next steps:

- Conformance Testing: WHO and ITU to review process to move forward with launching conformance testing for H.870 and H.872 safe listening standards.
- Accessibility: Promote safe listening features as part of "sensory health" and accessibility on existing platforms.
- Use Cases: Leverage success stories like Apple's integration of safe listening into their products to motivate other manufacturers.
- User Engagement: Collaborate with relevant organizations representing end users to promote and motivate use of safe listening features.
- Improving dosimetry: Collaborate with Bluetooth SIG, USB Implementers Forum, and CENELEC for audio device metadata exchange to improve accuracy of dosimetry within listening devices.

Thematic Group B: Venues & events

Purpose:
This thematic working group focused on supporting and improving the implementation of the WHO Global Standard for Safe Listening Venues and Events.

Four initiatives were presented to showcase implementation strategies:

- Listen for Life (UK): Industry-led campaign integrating hearing testing, education, and promoting safe listening at live events and venues.
- Healthy Ears, Limited Annoyance (HELA) Initiative (UK): Certification and collaborative research platform targeting stakeholders across the live events sector.
- Make Sound Not Noise (Switzerland): Hands-on workshops supporting legal compliance amongst sound engineers.
- ESSENCE Project (EU): Erasmus-funded programme embedding the Standard into vocational training.

Implementation Frameworks:

- Participants discussed a need for both bottom-up cultural change and practical tools to support early-stage adoption. The group endorsed the expansion of HELA Certification and hands-on workshops to support education and training.

Barriers Identified:

- **Key challenges were grouped by stakeholder, including:**
  - Engineers: Lack of access to simple tools, training, and affordable monitoring equipment.
  - Venue operators: Budget constraints and unclear ownership responsibilities.
  - Musicians: Cultural resistance and limited awareness of risks.
  - Audiences: Low awareness of hearing protection and limited access to quality options.
  - Education and advice: Scarcity of local guidance and training infrastructure.

Next steps:

- Develop and publish case studies to promote implementation.
- Leverage existing contacts and networks to encourage wider regional representation in future working groups.
- Investigate opportunities to improve access to low-cost, reliable sound level meters.
- Strengthen technical advice networks (e.g. via HELA).
- Recommend minor amendments to the WHO Global Standard for Safe Listening Venues and Events to improve visibility of some features.
- Publish peer review article on the Global standard.

Thematic Group C: Research Protocols

Purpose:

- This thematic group focused on advancing research to better understand the effects of recreational and environmental sound exposure across the lifespan.

- Discussions covered protocol development, research priorities, pilot plans, and strategies to strengthen global evidence on the impact of sound exposure on hearing and broader health outcomes.

Outcomes of work:

- The thematic workgroup finalized a research protocol for assessing hearing loss due to recreational sound exposure (ages 20–39).
- Two questionnaires will be used for data collection which will cover:
  - Demographics
  - Health information
  - Sources of recreational sound exposure
  - Sources of non-recreational sound exposure
  - Auditory symptoms associated with sound exposure
- An adapted version will be made available for children and adolescents.

Next steps:

- Publication: Aim to publish in a peer-reviewed journal by August 2025, and make the research protocol available by the end of 2025.
- Pilot Testing: Three-phase pilot planned:
  - Phase 1: an initial review of the questionnaires by the Safe Listening Group in September 2025,
  - Phase 2: Revisions and small-scale testing through the end of 2025, and
  - Phase 3: Conclude with a full pilot at three sites using final version of the questionnaire in Spring 2026.
- Future Research Priorities:
  - White noise machines (especially for children).
  - Virtual reality headset exposure.
  - Non-auditory effects of sound (e.g., on sleep, cognition).
  - Middle-aged and older adults' exposure.
  - Research in low- and middle-income countries.
  - Early markers and self-monitoring tools for hearing loss.

Thematic Group D: Advocacy & awareness

Purpose:
This thematic working group focused on refining educational tools and advocacy strategies for promoting safe listening and hearing health amongst children and youth.

Key Discussion Areas:

- Content on Smart Hearing for Children:
  - Feedback provided regarding the pilot test video developed by WHO. Emphasis on age segmentation, clearer behavior change messaging, and shorter video formats to maintain engagement. There were also concerns about content tone, realism, and the need for more diverse focus group representation.
  - Supplementary ideas included coloring books, stickers, posters, competitions, and drama activities.
  - Partnership opportunities identified with Video Games Europe and other trade associations to support safe listening habits in school-aged audiences.
- Virtual Reality (VR):
  - Proposals to use VR to enhance interactivity and realism, such as volume control and infection simulations.
  - Recommendations for improved scientific accuracy, accessibility features like captions, and durability in school settings.
  - Recognized potential for training health workers in low- and middle-income countries.
- Video gameplay and esports:
  - Highlighted the emerging field of esports medicine and gaps in player support for hearing, sleep, and stress management.
  - Opportunities to embed hearing health messages through collaboration with developers, influencers, and tournaments.
  - Interest in platforms like Athlete365 and scholastic esports for targeted awareness, alongside a call for longitudinal research on sound exposure.
- Advocacy campaigns:
  - Reviewed examples of successful campaigns and brainstormed concepts for a global event or action for World Hearing Day (3 March).

Outcomes and next steps:

- Smart hearing for children: Update content based on feedback from this group, supported by behavior-focused messaging and diverse focus groups.
- VR Tools: Review how VR and augmented reality can be used for advocacy and awareness raising.
- Video Gameplay & Esports: Leverage video gameplay platforms for advocacy; integrate messaging into training, competitions, and community engagement.



Meeting participants

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Adriana Lacerda (Université de Montréal)
Lidia Best (G3ict)
Jessica Borowski (Meyer Sound Laboratories)
Karl Brookes (Sony Group Corporation)
Jonathan Burton (University of Derby)
Karissa Chesky (Baylor College of Medicine)
Samuel Couth (University of Manchester)
Raju Desai (Apple Inc.)
Jonathan Digby (University of Derby)
Nicola Diviani (University of Lucerne)
Rob Eikelboom (Ear Science Institute Australia)
Raphael Elmiger (Bundesamt für Gesundheit)
Laura Crisitina Espinel (Escuela Colombiana de Rehabilitación)
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Adrian Fuente (University of Montreal)
Sayaka Fujimoto (Sony Group Corporation)
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Ian Hoffman (Peabody Institute : Johns Hopkins University)
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Thomas Lund (Genelec)
Zhong (Noah) Luo (Huawei Technologies Co., Ltd)
Heather Malyuk (Soundcheck Audiology)
William Martin (Dangerous Decibels)
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