

# HLAA Technology Showcase Webinar: Is Bluetooth® Technology the New Standard for Assistive Listening Systems?

## Question and Answer

Question	Answer
when it's convenient - the distinction between ALDs and assistive listening systems? :)	ALS is an Assistive Listening System. Auracast can be an ALS for a location or venue to assist in hearing audio, either speech, live or recorded for people with hearing loss or anyone needing audio assistance. Other ALSs include Loop systems, IR and FM, etc. ALDs are assistive listening devices. While a hearing aid is technically an ALD, in the context of an assistive listening systems, ALDs may be provided to the user by the venue or location. ALDs in this context are specifically capable of accessing an assistive listening system at the venue or location.
I've noticed that even among Bluetooth employees, estimates of when Auracast will become widely available in hearing devices. What is your best estimate?	Launch timing is sometimes difficult to predict with new capabilities. The Bluetooth SIG does not own the launch timing of any individual company using Bluetooth technology. Under our observation, we believe devices will begin ramping up in first half 2023.
What about preferences? Many people don't have bluetooth devices. They have older devices and prefer hearing loops that broadcast signals to the device in their ear?	Auracast is an additional ALS technology. We believe Auracast and telecoil for hearing loop systems will operate alongside each other, providing users with a choice in the future.
You mention hearing aids - but does this info include cochlear implants as well?	In the context of this presentation, hearing aid is used to represent all assistive hearing devices. We anticipate Cochlear implants will be capable of using Auracast in the future.
Also, many local venues say they couldn't afford to install hearing loop (T-coil) technology. For a medium-sized auditorium, what percentage of a relative cost would Auracast be compared to T-coil?	The Bluetooth SIG is not able to quote a relative cost comparison at this time. The Bluetooth SIG does have plans in the future to publish case studies of a typical installation.
MY CIs have BT settings for CI, LE Left CI and LE Right CI. Will I have access to Auracast?	Please consult your manufacturer. Specific plans to support existing devices is up to each manufacturer.
Finally, would hearing assistive devices hearing aids and cochlear implants) need FDA approval before activating Auracast?	We are not aware of any additional FDA requirements to activate Auracast.
Department of Corrections dont allow for offenders to wear blue tooth hearing aids. We are wondering... how can they manipulate a blue tooth hearing aid for other purposes? If Blue tooth hearing aids will be (if not already) the new standard. The standard hearing aids will not be an effective tool for accommodations?	We anticipate Auracast and exiting telecoil systems will work along side each other for some time. For use cases like this, we anticipate telecoil and hearing loop systems will continue to meet your requirements.
Projected timeline for when products will be available in the market? Which hearing aid manufacturers has products under development to be released in the next 2 years? Which assistive listening manufacturers are expected to have products available in the market in the next 2 years? Are there chipsets for auracast currently for	Launch timing is sometimes difficult to predict with new capabilities. The Bluetooth SIG does not own the launch timing of any individual company using Bluetooth technology. Under our observation, we believe devices will begin ramping up in first half 2023. Without explicit permission or public notification, the Bluetooth SIG is not

device developers to integrate into existing bluetooth receivers?	in the position to comment on any individual company's launch timing.
How will this technology impact the school setting? Is this something that can compete with Roger (DM systems)?	Auracast is capable of accommodating assistive listening in a school setting. Use cases may vary. Please consult with an ALS system provider or installer directly.
Who has trademarked Auracast? Is it a commercial company or non-profit?	Terms of use for the Auracast brand is part of the terms of use for Bluetooth Trademarks, owned by the Bluetooth SIG, Inc. Please consult the Brand Guide for Bluetooth Trademarks. [LINK]
Is there a privacy setting with Auracast - as is required of courtroom systems?	Auracast is capable of supporting a broadcast code, limiting access to the broadcast audio.
If a muted TV has Auracast, will the audio still be broadcast? Does the BT standard cover this?	Yes. This is covered by the Silent TV use case identified in the presentation.
Is Bluetooth currently working with state departments of education? Currently some states prohibit any Bluetooth use when students are taking formal testing. Most tests are provided on the computer and even have listening components. This is seriously impacting our students with auditory tech like HAs and CIs. One example of a state with this challenge is Arizona. Can or have you connected with state education leaders to address this issue, especially since Bluetooth is becoming more integrated?	The Bluetooth SIG is actively working with hearing loss advocacy organizations like the HLAA and others worldwide. The Bluetooth SIG is not yet working with the department of education; however, we would like to work with advocacy organizations to increase the awareness and use of accessibility technologies for people with hearing loss.
Will sources have the ability to set encrypted passcodes so only users with the appropriate passcode and hear the AuraCast audio?	Yes. Auracast is capable of supporting a broadcast code to limit access to authorized individuals.
Will Auracast interfere with close captioning?	No. Close captioning (CC) and Auracast will operate independent from each other. We do know of efforts to translate CC into Auracast audio broadcast for those living with visual impairment and hearing loss.
What is the expected range? Similar to standard bluetooth at 35-50'? For larger spaces, are amplifiers an option?	Auracast is a broadcast technology for public spaces without the requirement of acknowledgements from the receiver. For this reason, we generally observe the listening range for Auracast receiver to be greater than a typical personal audio use cases. In venues and public spaces, we anticipate Auracast broadcasters will use centrally positioned, higher power transmitters to cover larger spaces. Range limitations may vary depending on the location of the transmitter and the architecture of the location.
My church uses a Bluetooth app called Listen Anywhere which uses the wifi system. Is Auracast similar to that ?	Unlike current WiFi-based systems, Auracast provides a direct listening experience from the Auracast transmitter direct to your hearing aid or CI. The smartphone may be used to select the broadcast audio stream but it is not an intermediate device between the Auracast broadcast and the hearing aid. WiFi systems typically use a smartphone or intermediate device to receive the broadcast and re-transmit using the Bluetooth audio connection between the smartphone and the hearing aid.
Will a script be available? This was too fast to understand something technical.	Pease check with the HLAA. I believe CC will be available with the webinar recording.
Who are the main Auracast equipment manufactures?	The Bluetooth SIG is aware that current ALS system providers are evaluating their product plans to support Auracast broadcast audio. Without explicit permission or

	public announcement, the Bluetooth SIG cannot comment on specific manufacturers.
Will any Bluetooth headphone or earbuds work with Auracast?	Manufacturers of Bluetooth headphones or earbuds will explicitly claim support of Auracast broadcast in their literature.
Does this work over wifi? How is it enabled? If it works with wifi, what are troubleshooting options?	Auracast broadcast audio is a Bluetooth technology.
Can I still listen privately to my own smartphone if desired?	Yes. Auracast broadcast is a separate capability from your personal, LE Audio listening experience.
Is the auracast going to be easy to install at a movie theater, restaurant and different sports venues ?	Yes. We believe Auracast will be installed both in plug-and-play as well as professional installations. The infrastructure requirements can be as simple as a centralized transmitter connected to the chosen audio source.
Will hearing aids with other than regular bluetooth be needed?	LE Audio and Auracast have specific support requirements. Please consult with your manufacturer.
Please don't tell me it was said orally. I can't follow him. He talks too fast.	My apologies for the speed at which I walked through the presentation. I believe CC will be available with the recording.
Sorry. Fourth question: can an existing smartphone add the ability to receive and assist an Auracast transmission, or would it have to be hard wired into future models?	The ability for existing smartphones and hearing devices to support Auracast broadcast audio is at the discretion and capability of the manufacturer.
will this be available via smartphone app? or will my existing hearing aids need to get firmware and/or hardware update?	The ability for existing smartphones and hearing devices to support Auracast broadcast audio is at the discretion and capability of the manufacturer.
How does this technology work in comparison to "traditional" looping/induction systems? Is this going to replace that technology over the next decade?	Auracast broadcast audio, a Bluetooth technology, is separate from current induction/loop systems. We believe the two technologies will work alongside each other, supporting new and existing users, for some time.
At a sports venue, will there be multiple channels be available (like local broadcast channels and also the venue's production audio ?	Auracast broadcast audio is capable of supporting multiple channels of audio. Please consult with a transmitter manufacturer for deployment requirements and capabilities.
Will Auracast work with Android phones as the assistant?	Yes. We anticipate a native broadcast assistant will be available in Android phones.
"Quality audio steam" = Bluetooth LE, correct?	Yes. Auracast broadcast audio is Bluetooth technology using the Bluetooth LE Audio specification.
How does the audio quality compare to CD quality audio?	The Bluetooth SIG has provided quality comparisons of the new LC3 audio codec on Bluetooth.com [LINK]
What's the effective listening range? And what about the latency issue?	Auracast is a broadcast technology for public spaces without the requirement of acknowledgements from the receiver. For this reason, we generally observe the listening range for Auracast receiver to be greater than a typical personal audio use cases. In venues and public spaces, we anticipate Auracast broadcasters will use centrally positioned, higher power transmitters to cover larger spaces. Range limitations may vary depending on the location of the transmitter and the architecture of the location.
Can Auracast work on any Phonax hearing aids models?	You will need to consult with Phonax on their product planning.

<p>Is there a list of companies that participate in this SIG? Have any manufacturers produced a Auracast compatible device yet? Has any public location adopted this standard yet?</p>	<p>You can search for a list of Bluetooth member companies on Bluetooth.com. The Bluetooth SIG cannot comment on the product roadmap and planning of any specific company. It is too early to comment on specific public locations at this time. In the future, the location registration database should provide a listing of capable locations.</p>
<p>Who is responsible for installing auracast in these locations? Would it be paid for by the recipient companies and such?</p>	<p>There is an existing ecosystem of ALS installers and professional audio system installers we believe will support installation of an Auracast broadcast audio system.</p>
<p>How much is it to install? What is the price tag for this technology? Again, how does it compare to hearing loop systems?</p>	<p>The Bluetooth SIG cannot comment on the cost of installation.</p>
<p>Projected Availability timeline of location database?</p>	<p>The ability to register a location is available today. A public version the database will be available in 2023.</p>
<p>Will location registration, brand, trademark etc. be covered globally over the world?</p>	<p>Yes. The Bluetooth SIG, Inc. owns the Auracast trademark.</p>
<p>I've watched a couple of these webinars already. Bluetooth SIG is doing a great job of marketing this new technology, but it doesn't even exist in the real world (available to consumers) yet?! What I really want to know is WHEN will it be readily available, and WHERE and HOW can I try it out??</p>	<p>Launch timing is sometimes difficult to predict with new capabilities. The Bluetooth SIG does not own the launch timing of any individual company using Bluetooth technology. Under our observation, we believe devices will begin ramping up in first half 2023. Without explicit permission or public notification, the Bluetooth SIG is not in the position to comment on any individual company's launch timing.</p>
<p>Will latency be an issue with BlueTooth Classic or LE?</p>	<p>Manufacturers are very conscious of latency and are developing and improving their systems with the lowest latency requirements for their use case.</p>
<p>I have only a week left on my hearing aids trial period. I want to know whether I'll need different hearing aids to use Auracast.</p>	<p>Please consult with your manufacturer for specific product plans.</p>
<p>Can an Auracast broadcast be private? For example, sharing laptop audio in a public area. I don't want all around to hear, only select people.</p>	<p>Yes. Auracast supports the use of a broadcast code for private listening.</p>
<p>What is the approximate cost for Auracast?</p>	<p>The Bluetooth SIG is not able to quote cost for devices are installations. There is no cost to use the Auracast brand. Any qualified Bluetooth device that meets the additional requirements for support of Auracast may use the Auracast brand with their device.</p>
<p>What advice do you have for a governmental organization that is working to identify assistive listening systems for meetings spaces right now? When do you expect devices to be available? Are there any devices we can buy now that can be upgraded later to accommodate Auracast?</p>	<p>We recommend consulting with an ALS installer to design and support a system that accommodates existing technology with the capability of supporting Auracast as it comes available to users.</p>
<p>Does Auracast require a whole new infrastructure e.g. cabling, transmitters and aerials similar to WiFi</p>	<p>The best way to describe a typical Auracast installation is very similar to a WiFi installation. In public spaces, we anticipate installers will use a centrally located, higher power Auracast transmitter connected to the audio source.</p>
<p>My iPhone has Bluetooth, not auto cast yet?</p>	<p>Please consult with the phone manufacturer. The Bluetooth SIG is not capable of quoting the product plans for any individual manufacturer.</p>

Will i need to buy a new iphone?	Please consult with the phone manufacturer. The Bluetooth SIG is not capable of quoting the product plans for any individual manufacturer.
Who are Auracast's major competitors?	Auracast, a Bluetooth technology, is a complimentary technology to other assistive listening systems.
What would it take for a place of worship to make this bluetooth available if they do not have T-coil	Specific installations may vary. Please consult with an installer for your particular location. . In public spaces, we anticipate installers will use a centrally located, higher power Auracast transmitter connected to the audio source.
Could you please describe further what you hope for in advocacy for Standard Broadcast? Are you anticipating proprietary extensions to Standard Broadcast from consumer companies that would preclude hearing aids or the development of proprietary hearing aid standards that are not accessible to all Auracast devices?	We would like both individuals and organization to advocate for the installation of an Auracast system in public spaces. As Auracast is a universal standard, any manufacturer and installer claiming support for Auracast will be available to all hearing devices claiming support for Auracast.
Thje bluetooth on my phone next to the hearing aids says LE. Does that mean the same as this LE (low energy?)	LE does mean Low Energy in the context of Bluetooth technology. Please consult with your manufacturer for the specific capabilities in your device.
When will iPhone and Earlens have aurocast?	Please consult with the manufacturer. The Bluetooth SIG is not capable of quoting the product plans for any individual manufacturer.
How to I get my local borough council to install this system?	Advocacy requirements may vary. I suggest working with a local installer and a council representative.
Will Bluetooth LE date be able to be update to BT LE Audio	Please consult with the manufacturer. The Bluetooth SIG is not capable of quoting the product plans for any individual manufacturer.
Will there be an easy way to use this system coupled with captioning software for those of us who need it?	We believe developers will supply systems coupled with CC.
Does insurance cover for this Bluetooth and see this Bluetooth ear pieces is for me with profundity hearing loss?	Please consult with the insurance carrier. The Bluetooth SIG is not capable of quoting the plans for any individual company.
In a similar vein, if I'm in the market for new hearings aids and a smartphone right now, is there anything I should look for to ensure they will work with Auracast when it becomes available?	You should look for the Auracast brand. Manufacturers who support Auracast will quote the capability in product literature. Please consult with the manufacturer. The Bluetooth SIG is not capable of quoting the product plans for any individual manufacturer.