



Project number: 6-057 IEP

Accelerating the adoption of Auracast: everyone should hear what matters

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Executive Summary

Public transport environments present a persistent challenge in ensuring all passengers can reliably access critical audio information. Service updates, disruptions, safety announcements, and wayfinding instructions are often difficult to hear in noisy and complex settings. While hearing loops have improved accessibility for many users, they remain constrained by fixed infrastructure, limited coverage, and restricted functionality. As a result, people who are deaf or hard of hearing, blind or low vision and/or neurodivergent continue to face barriers to accessing important information.

Funded through the iMOVE Impact Extension Program (IEP), this project brought together La Trobe University, NEC Australia, and Get Skilled Access to investigate how a new Bluetooth technology, Auracast, can function in public transport.

Auracast provides a new approach to assistive listening by broadcasting audio directly to personal devices such as hearing aids, cochlear implants, smartphones and headphones. It can broadcast one-to-many without pairing while using very low energy. Today, Auracast can already deliver significant benefits by providing clearer audio, extending coverage well beyond traditional hearing loop zones, and doing so with simpler, less invasive and lower-cost deployment. It also enables multiple information channels, allowing different passenger groups to access information that is relevant to their needs rather than relying on a single broadcast for all users.

Trials conducted at Melbourne Airport Terminal 4, CDC Melbourne bus services, and Transport Canberra light rail, interchange, and onboard bus environments demonstrated that Auracast is technically feasible in real-world transport settings. Participants consistently reported improved speech clarity, better access to information, and greater confidence when travelling. Benefits were observed not only among hearing aid users, but also among blind and low-vision passengers, neurodivergent participants, and other travellers seeking clearer access to information in challenging listening environments.

The findings indicate that Auracast is ready for controlled early deployment. Bounded environments such as buses, train carriages, waiting rooms, and clearly defined station zones can deliver immediate benefits.

The trials also identified areas requiring further maturity, including device compatibility, service discovery and connection processes. These should be viewed as normal stages of ecosystem development rather than barriers to deployment. Starting with real-world implementations will provide the feedback needed to improve products, refine user experience, support standards development, and accelerate market adoption.

A staged deployment approach is therefore recommended. Early deployments should focus on high-value use cases and simple configurations centred on core passenger information. Clear channel naming, compatibility testing, passenger information, and straightforward onboarding should be prioritised. Auracast should be deployed alongside, not instead of, existing hearing loop systems and other passenger information channels to ensure continuity, inclusion, and risk management during the transition period.

Overall, the evidence demonstrates that Auracast represents a significant opportunity to improve the accessibility, flexibility, and scalability of audio information in public transport.

In the near term, it can deliver clearer audio, broader coverage and lower-cost deployment than traditional hearing loops. With modest adaptation, it can support multiple information channels tailored to different passenger needs. Looking further ahead, it provides a pathway towards seamless, personalised passenger information services integrated across transport networks. The priority should now be pragmatic deployment that delivers immediate passenger benefits while supporting the continued evolution of the wider ecosystem.

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Introduction

This report presents the findings of the Auracast Public Transport Trials, an initiative funded through the iMOVE Cooperative Research Centre and undertaken by La Trobe University, NEC Australia and Get Skilled Access. The project was established to explore the application of Auracast broadcast audio technology in public transport and other complex public environments, and to better understand its potential to improve access to information for passengers.

The project combined technical trials and user experience evaluation across a range of real-world transport settings, including Melbourne Airport Terminal 4, CDC Melbourne bus services, and Transport Canberra light rail, interchange and onboard bus environments. Together, these environments provided the opportunity to assess Auracast in fixed locations, onboard vehicles, interchange settings and multimodal journeys.

The trials were designed to examine both the practical deployment of Auracast and the experience of passengers using the technology. Technical testing focused on deployment architectures, receiver behaviour, integration with passenger information systems, channel management and deployment readiness. User testing explored how people with diverse disabilities, including people who are deaf or hard of hearing, blind or low vision, neurodivergent, and those who experience situational barriers in public transport environments, experienced the technology in realistic travel scenarios.

Three appendices have been produced as part of the project and can be downloaded from the iMove website from the same location as this report:

		
The Market Overview Report examines the broader Auracast ecosystem, including standards development, device availability, product maturity and market readiness.	The NEC Technical Evaluation Report documents the technical deployments, operational observations, deployment models and implementation considerations arising from the trials.	The GSA User Experience Evaluation Report presents participant feedback, accessibility outcomes and usability insights from the user testing program.

This summary report brings together the findings from the project to provide a consolidated view of what the trials mean for public transport operators, accessibility practitioners, technology providers and government. It highlights the key lessons emerging from the field trials, the opportunities created by Auracast, and the practical implications for future deployment. The report is intended to support strategic decision-making by identifying where Auracast can deliver value today and where further development may be required. For organisations planning deployment, the appendices provide detailed technical guidance, implementation considerations and practical resources to support adoption.

1. Announcements in public transport are problematic for people that need them most

Access to information is fundamental to using public transport safely, confidently and independently. Passengers rely on timely information about service changes, disruptions, boarding instructions, safety announcements and wayfinding throughout their journey. For many people, this information is essential rather than convenient, enabling them to navigate unfamiliar environments, make informed travel decisions and respond to changing conditions in real time.

While the issue is particularly significant for passengers who are deaf or hard of hearing, it extends far beyond traditional assistive listening users. Blind and low-vision passengers rely heavily on audio information to navigate journeys independently. Neurodivergent passengers may use adaptive listening technologies to reduce distraction and improve comprehension. Even passengers without disabilities can experience difficulties accessing information in busy and complex transport environments.

Existing assistive listening technologies, particularly hearing loops, have played an important role in improving accessibility. However, hearing augmentation provision remains limited across many public transport environments, and compliance with accessibility requirements is often inconsistent. Public transport standards currently require limited hearing augmentation coverage, meaning that large parts of a passenger journey may remain outside the reach of assistive listening services. As hearing accessibility advocates have observed, the experience of assistive listening in public places can vary from excellent to downright awful.

These challenges are amplified by the nature of public transport itself. Journeys are dynamic, requiring passengers to move between vehicles, platforms, interchanges, waiting areas and terminals. Information is often time-critical, context-specific and safety-related. The result is that many passengers continue to experience public transport with less access to information than they would like to, reducing confidence, independence and inclusion, and creating barriers to equitable access to transport services.



2. Auracast can be a step-change solution

2.1 What Auracast is and how it works

Auracast is a Bluetooth LE Audio broadcast technology that enables audio to be transmitted from a source system to multiple compatible devices simultaneously. Auracast is an open Bluetooth standard that is free for listeners and venue operators to use, with Bluetooth SIG membership and certification requirements applying primarily to manufacturers developing compatible products

Unlike traditional Bluetooth connections, which typically connect a single transmitter to a single receiver, Auracast allows many users to receive the same broadcast at the same time using hearing aids, cochlear implants, smartphones, headphones, earbuds and other compatible devices.

Auracast is specifically designed for very low power consumption, enabling long battery life for both broadcast transmitters and compatible receiver devices

At its simplest, an Auracast deployment consists of elements:

- Audio streams from a source of information, such as a public address system, passenger information system, airport information system, onboard announcement system, or text-to-speech service.
- An Auracast transmitter that broadcasts the information.
- One or more Auracast broadcast channels.
- Compatible receiver devices used by passengers (e.g., hearing aids, headphones, etc) who select the channel, using an assistant in a similar fashion as Wi-Fi, by scanning a QR code or by tapping the phone on an NFC device.

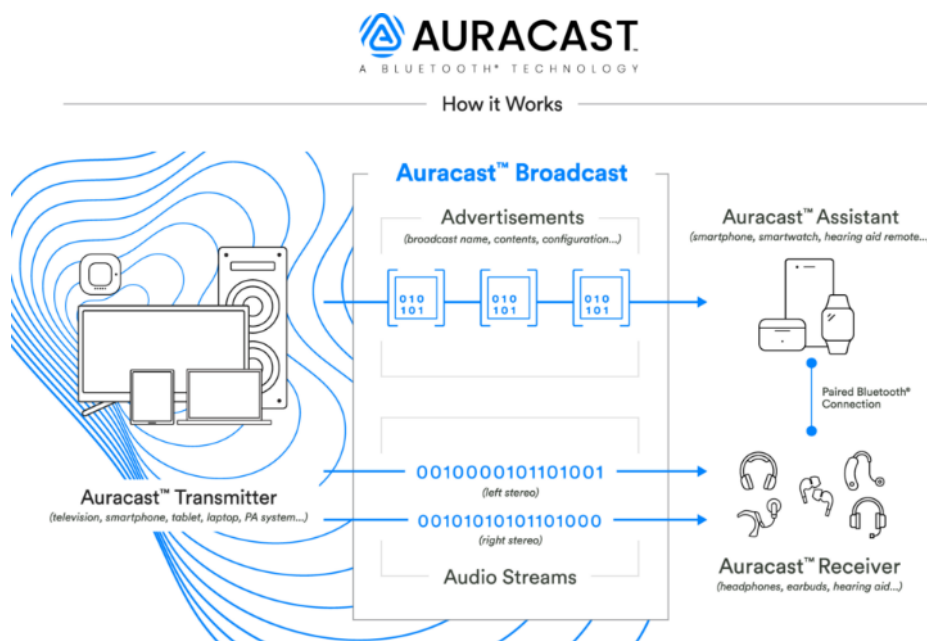


Image provided by Ampetronic (<https://www.ampetronic.com/>)

In a public transport environment, rather than selecting a generic “hearing loop” service, passengers could potentially select specific channels for specific needs, such as turn-by-turn bus route descriptions for blind people, or only emergency and live announcements for regular commuters.

In public transport environments, Auracast should therefore be viewed as a new audio delivery layer that sits alongside existing passenger information systems. A distinguishing characteristic of Auracast is that broadcasts can include metadata in addition to audio. Metadata can describe the broadcast, identify the channel, provide contextual information, and assist users in selecting the most relevant service. Another example of the use of metadata is the ability to halt a music stream that is being listened to over headphones for the duration of an announcement. The Bluetooth Auracast SIG is continually developing new standards for such features.

This ability to combine audio with contextual metadata creates opportunities that extend well beyond traditional assistive listening technologies. It allows information to be organised, filtered and personalised in ways that better align with how passengers travel through complex public transport environments.

2.2 Why Auracast is different from hearing loops

Existing hearing loops have provided an important accessibility solution for many years. However, they rely on fixed infrastructure and typically require users to remain within a defined listening area. This can be particularly limiting in public transport environments where passengers move between vehicles, platforms, waiting areas, terminals and interchanges throughout a journey.

Auracast creates opportunities to support multiple audio channels, route-specific information, mobility assistance services, connection information, multilingual content and more personalised listening experiences. Because broadcasts can be organised using channels and metadata, passengers can potentially select the information that is relevant to their journey rather than receiving the same information as everyone else.

Auracast introduces a fundamentally different model. Rather than delivering audio to a physical location, it delivers audio directly to the passenger's personal device. This shifts assistive listening from a place-based model to a user-based model, allowing passengers to access the information they choose wherever they are located within the broadcast area.

Public transport operators can provide audio information in a way that is simultaneously more accessible, more flexible and potentially more useful for a broader range of passengers. The opportunity is to move away from ‘one solution fits all’ , a mantra driven by the technological limitations of the hearing loop. As the technology, devices and ecosystem continue to evolve, Auracast has the potential to become not only a better assistive listening technology, but also a new platform for delivering passenger information to a broader audience.

3. Auracast delivers value today

To evaluate the application of Auracast in public transport environments, a series of technical and user experience trials were undertaken as part of an iMOVE Cooperative Research Centre project delivered by La Trobe University, NEC Australia and Get Skilled Access. The project combined technical deployment testing with real-world user evaluation to better understand how Auracast performs in transport environments and how passengers interact with the technology.

User testing involved 19 structured trial sessions conducted across three locations: Melbourne Airport Terminal 4, CDC Melbourne bus services operating from Highpoint Shopping Centre in Maribyrnong, and the Dickson light rail and bus interchange in Canberra. Participants represented a diverse range of disabilities and access needs, including hearing aid users, cochlear implant users, people who are blind or have low vision, neurodivergent participants, and people who use adaptive listening technologies.

The trials assessed both fixed and mobile transport environments. At Melbourne Airport, participants evaluated departure information and mobility assistance broadcasts while moving through terminal spaces. On buses and at interchanges, participants assessed stop announcements, route information, interchange connections and mobility assistance services during live public transport journeys. Technical testing examined broadcast discovery, connection methods, audio quality, range, reconnection behaviour, channel management and integration with passenger information systems. User testing focused on ease of use, accessibility, usefulness of information, audio quality and overall passenger experience.

Together, the trials provided an opportunity to evaluate Auracast across a range of transport contexts, including airport terminals, onboard vehicles, platforms, interchanges and multimodal journeys, allowing both technical performance and passenger experience to be assessed under realistic operating conditions.

The trials demonstrate that the technology is capable of delivering meaningful passenger benefits today. The findings reveal three distinct levels of value.

01

At its most basic, Auracast can replicate and improve on the traditional hearing loop experience.

02

With modest adaptation, it can support services that extend beyond the capabilities of hearing loops, by offering more than one or two channels.

03

As devices, platforms and standards mature, it has the potential to support a seamless, personalised passenger information experience.

3.1 Auracast as a hearing loop alternative: a significant improvement

At its simplest, Auracast functions as a modern assistive listening system. It delivers announcements directly to passengers' personal hearing aids, cochlear implants, headphones or smartphones, providing clearer and more reliable access to audio information than is often possible through conventional hearing loops.

The trials demonstrate that this basic deployment model is already capable of delivering meaningful accessibility benefits while remaining straightforward to implement.

3.1.1 User Experience

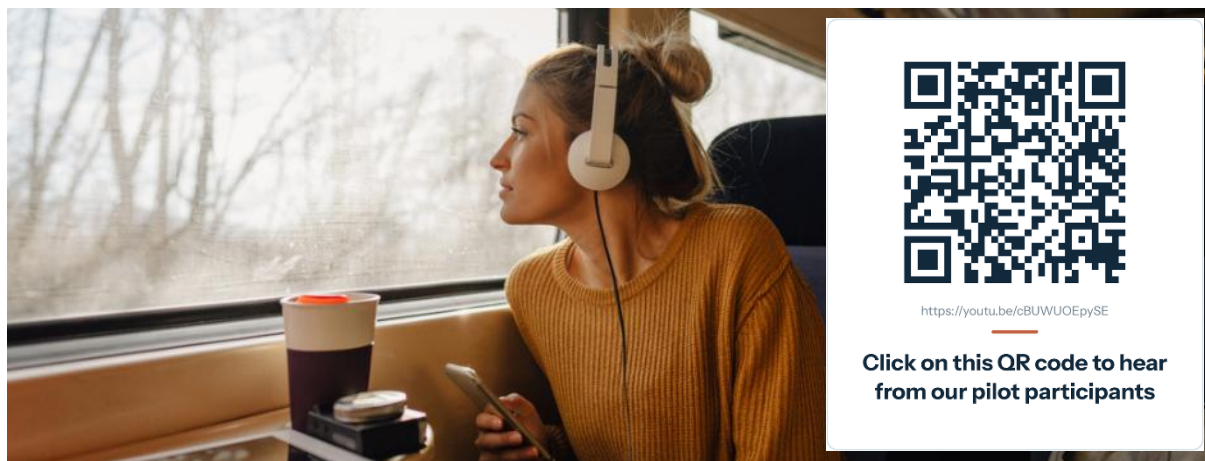
At its most basic level, Auracast provides a listening experience that closely aligns with the traditional purpose of hearing loops while overcoming many of their practical limitations. Participants consistently describe the experience as clearer, easier to use, and less restrictive than existing assistive listening solutions.

A recurring theme throughout the trials is the improvement in audio clarity. Many participants report that announcements are easier to understand, with less distortion, interference and listening effort than traditional hearing loop systems. Participants also value the ability to move freely while remaining connected to the service, removing the need to remain within a fixed hearing augmentation zone. The participants that have given up on the hearing loop, would reconsider the use of an assistive hearing technology.

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The experience is particularly valued in busy public transport environments where public address announcements are often difficult to hear. Participants explain that Auracast allows them to hear important information in real time without constantly monitoring visual displays, checking maps, or seeking assistance from staff. Users also describe being able to navigate unfamiliar journeys with greater independence and less reliance on external tools such as mapping applications.

The trials demonstrate that route-specific and journey-relevant information significantly increases confidence. Participants value knowing the next stop, receiving sufficient warning before disembarking, understanding available connections, and maintaining awareness of their current location throughout their journey. This contributes to lower cognitive load and reduced travel anxiety and supports more independent travel.



Click on, or scan the QR code image above to hear from participants

Specific participant feedback includes:

<i>“Usually overhead public announcements are distorted, but this is good, in general I’m quite happy with it.”</i> – Hearing aid user.	<i>“It was good, consistent, clear, I wasn’t confused at any point.”</i> – Adaptive Headphone user.
<i>“Being in a crowded environment I could still hear the messages coming through and still have a conversation. I feel a sense of relief that I can hear important information about my flight without having to always ask staff</i> – Hearing aid user.	<i>“There’s no comparison with the Auracast vs the T-switch ... I can wander around and not have to be in one spot. The fact I can roam around and not worry about being in one place at one time reduces my anxiety.”</i> – Cochlear implant and hearing aid user
<i>“Hearing the announcements makes me feel more confident on the bus.”</i> – Cochlear implant and hearing aid user	<i>“I wasn’t worried about loading or buffering or missing my stop. I loved that it was live and there was no delay impact.”</i> – Adaptive headphone user.
<i>“It reduces my anxiety to know what’s happening.”</i> – Cochlear implant and hearing aid user	<i>“In some ways it was easier, going on unfamiliar routes and not having to rely on Google Maps.”</i> – Adaptive headphone user.

3.1.2 Deployment considerations

The trials demonstrate that the strongest initial deployment opportunities are environments where the passenger context is clear and the broadcast area is well defined. The strongest candidate environments are:



Onboard buses



Fixed bus interchanges



Fixed light rail platforms



Station or terminal areas
where the broadcast zone is
bounded



Mobility assistance or
connection
information points

These environments are suitable because the passenger context is clear, the broadcast zone can be managed, and the service can provide value even while consumer device adoption is still developing.

The trials reinforce the value of introducing Auracast as a complementary technology alongside hearing loops, public address systems and visual passenger information. This approach provides immediate benefits while supporting a gradual transition as compatible devices become more common.

To make this basic scenario work well, deployment considerations include:

- **Start in bounded environments.** Focus on locations where the passenger context is clear and the broadcast area can be easily understood and managed, such as onboard buses, platforms, interchanges, waiting areas and terminal zones.
- **Deploy as a complementary service.** Auracast should initially augment rather than replace hearing loops, public announcements, visual displays, mobile applications and staff assistance, ensuring information remains accessible to passengers whose devices are not yet Auracast-enabled.
- **Use clear and consistent channel names.** Channel naming should be treated as a user experience issue rather than a technical configuration. Names should

be short, meaningful and immediately understandable, helping passengers identify the correct service quickly and confidently.

- **Provide informative QR-code or tap-on signage.** QR codes and tap on devices should do more than provide a connection mechanism. Supporting information should explain what information is available, which channel the passenger is joining, who the service is intended for, where it applies, any device requirements, and what to do if the broadcast is unavailable.
- **Test a broad range of receivers.** User experience varies significantly across hearing aids, cochlear implants, headphones, earbuds, smartphones and manufacturer applications. Compatibility testing should therefore form part of any deployment programme.
- **Make the service easy to discover.** Visibility is critical. Signage, posters, vehicle branding, accessible seating information, app prompts and other awareness mechanisms may all be needed to ensure passengers know the service exists and understand how to access it.
- **Use transport-aware announcement logic.** Information should be relevant to the transport context and delivered at the right time. Route confirmation, stop announcements, connection information, disruptions and destination information all need to be carefully designed to support passenger decision-making.
- **Actively manage audio quality.** Factors such as pronunciation, voice selection, volume levels, announcement timing and consistency between different information sources have a significant impact on usability and should be managed throughout deployment and operation.
- **Integrate with passenger information systems.** Auracast provides the greatest value when connected to existing passenger information systems, enabling real-time delivery of route information, stop announcements, service updates, mobility assistance information and other journey-relevant content.

Together, these considerations provide a practical framework for controlled early deployment.

Note that many of the above recommendations, equally apply to the hearing loop and that, similarly to the hearing loop, an Auracast system isn't a 'set and forget' technology, even though the core technology is much less 'temperamental' or easily interfered with.

Successful implementation is not simply about broadcasting audio, but about creating a reliable, understandable and useful passenger information service that fits naturally within the broader transport information ecosystem.

3.2 Beyond hearing loops: multiple channels

Auracast can support services that extend beyond traditional assistive listening and move beyond a single broadcast for all passengers. By using multiple channels, transport operators can provide different types of information to different users at the same time. For example, a blind passenger may choose a channel providing turn-by-turn navigation, stop announcements and connection guidance, while a regular commuter may subscribe only to disruption and service alert information. Other channels could provide airport departure information, mobility assistance services, multilingual content or route-specific updates. Current transmitters feature two channels, already offering an opportunity to improve on the hearing loop, but recently a six channel transmitter has been launched specifically to cater to public transport environments. Multi-channel capability is within reach today.

3.2.1 User experience

When multiple channels and transport-specific information are introduced, the user experience evolves from a single assistive listening channel to customized passenger information support.

Participants identify opportunities for richer information services, including disruption information, connecting services, route confirmation, visual display information delivered as audio, airport flight information, mobility assistance services and personalised content streams. These expectations illustrate that users already see Auracast as more than an assistive listening technology.



Directions to a bus stop,
platform or gate



Notification that the correct
service is approaching

Turn-by-turn guidance through a station or terminal		
		
Guidance to accessible facilities such as lifts, toilets or assistance points	Connection instructions when transferring between services	Alerts when approaching a required stop or destination

For example, a blind passenger could subscribe to a navigation channel providing:

Another prominent reason for using a second channel is to avoid listening fatigue, for instance by only providing live announcements and information about disruption, not the regular route information or arrival and departure announcements.

Representative participant feedback on this topic includes:

<i>“The second channel with the access information would be better if it had information showing delays and traffic issues.”</i>	<i>“The content I’d like to hear is departures, emergencies, gate changes, gate open, passenger calls, and disruptions. On the second channel, the general info being repetitive on a loop was good so I can hear it once and then don’t need it again.”</i>
<i>“If it could be more specific where you could select your flight on a list of channels, so I can only hear the flight that I need.”</i>	<i>“Location of the sensory or quiet room would be helpful on a second channel, and maybe information about where the accessible toilets are depending on which gate I’m at.”</i>

<i>“Different languages would be helpful too for when we travel.”</i>	<i>“I like being able to walk around while still hearing the broadcast versus the hearing loop restrictions. Being able to move makes me feel like everyone else.”</i>
<i>“It would be great if I could time the announcements to chime in 3 stops before I needed to get off whilst I listen to music on my headphones.”</i>	<i>“Being able to choose a voice, gender and accent would be awesome.” – Cochlear implant and hearing aid user.</i>

3.2.2 Deployment considerations

Using multiple channels is a key advantage over traditional hearing loops. It enables Auracast to deliver passenger information services that hearing loops were never designed to provide, including route-specific information, connection guidance, mobility assistance services, disruption messages and location-specific information.

Supporting multiple channels requires passenger information to be separated at the source, allowing different types of information to be routed to different Auracast broadcasts rather than combining all announcements into a single audio stream. For example, stop announcements, service disruptions, mobility assistance information, airport departures and connection information may each need their own channel and associated metadata. Many professional Auracast products support Digital Audio Network Through Ethernet (Dante) integration, allowing them to connect to existing digital audio networks commonly used in public address and AV systems

Multi-channel deployments also require channel management rules, information governance processes and operational ownership. Transport operators need to decide which information belongs on which channel, how channels are updated, how disruptions are handled, and how information remains consistent across public address systems, visual displays and Auracast broadcasts.

3.3 Auracast's full potential

3.3.1 User experience

While the trials demonstrate that Auracast can already deliver value in bounded environments such as buses, platforms, interchanges and terminal areas, it also creates the prospect for a truly seamless passenger experience across an entire transport network. This will however, require some further development of Auracast protocols and standards.

A key challenge is enabling passengers to move between vehicles, platforms, stations and terminals without needing to repeatedly discover, select and reconnect to broadcasts.

Today, QR codes and tap on devices provide an effective mechanism for joining a service, particularly during initial deployment. However, repeatedly scanning QR codes, tapping on or manually selecting channels throughout a journey can create friction. Passengers increasingly expect information services to be available automatically, with minimal effort required to access them.

Similarly, large-scale deployment will require more reliable handover between broadcast zones. A passenger travelling through a multimodal journey should ideally experience a smooth transition between services without needing to manually reconnect when moving between buses, platforms, terminals or station areas. This requires improvements in receiver behaviour, channel discovery, metadata handling and interoperability across devices and applications.

The future experience emerging from the trials is one where passengers receive relevant information when and where it is needed, while remaining free to move throughout complex public environments and interact with other services and technologies.

Representative participant feedback includes:

“Arriving at the airport is when I want to be ‘switched on’ so it’s important to know information from the moment I arrive.”

“There would be no gap, and it would be connected everywhere, or I would have information on where to go to be in the range of the broadcast.”

“I like being able to walk around while still hearing the broadcast vs the hearing loop restrictions. Being able to move makes me feel like everyone else.”

“Reconnecting was good, but it would be good to be notified when it reconnects like a welcome message, so you know you’re back on.”

“It doesn’t seem to reconnect automatically all the time. The connection itself is automatic with background static noise, but the messages don’t play, you need to select the channel.”

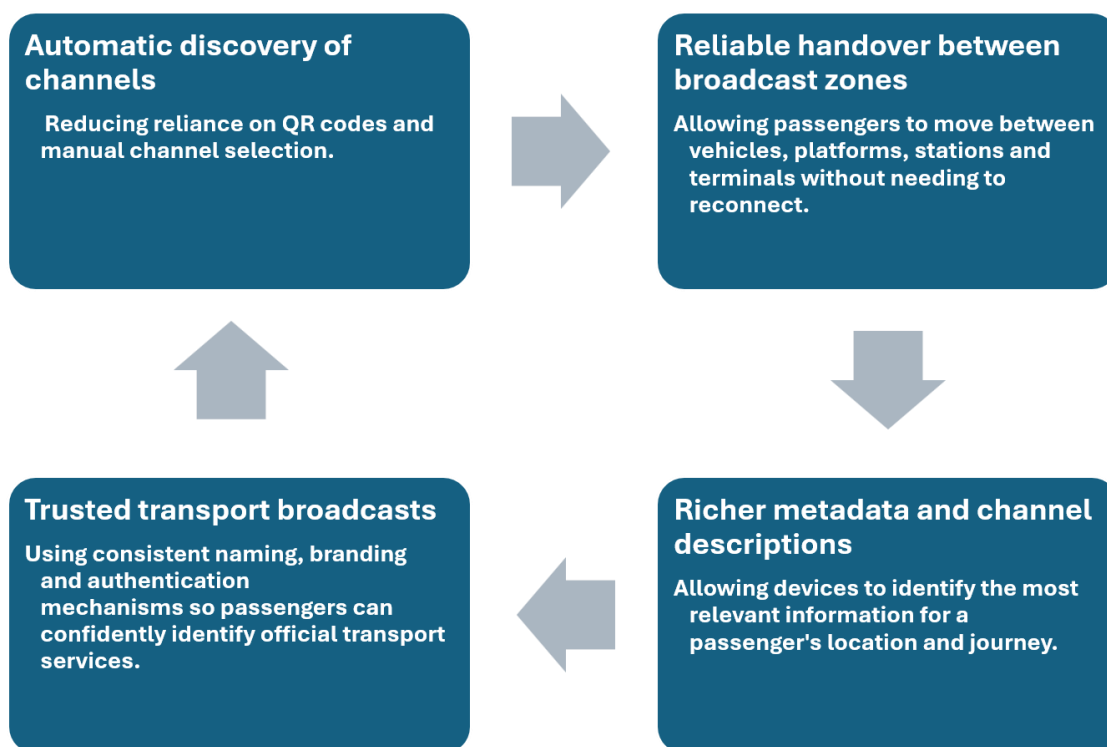
The overall user experience emerging from the trials is therefore one of progression: first, a better hearing-loop experience; second, a better passenger information experience; and ultimately, a more personalised and seamless public transport journey.

3.3.2 Development considerations

Achieving a seamless network-scale experience introduces challenges that do not arise in bounded deployments.

The key lesson from the trials is that the next stage of development goes beyond improving audio quality, range and cost. It is about creating a seamless, low-effort experience that allows passengers to move across a transport network while remaining connected to relevant information of their choice.

Future deployments will need to support:



Together, the findings demonstrate that Auracast already delivers meaningful value across three deployment levels. First, it provides a significantly improved assistive listening experience compared with traditional hearing loops. Second, it enables passenger information services that extend beyond the capabilities of hearing loops through route-specific, mobility and context-specific information channels. Third, it establishes a pathway towards more seamless and personalised passenger information services as the ecosystem matures. Importantly, the first two levels can be delivered using technology that is available today.

4. Active Ecosystem

The trials demonstrate that Auracast is already capable of delivering meaningful benefits in bounded public transport environments. The remaining question is how quickly the broader ecosystem will mature to support larger-scale deployment. Several indicators suggest this maturity is likely to occur rapidly.

The key reason is that Auracast is built on the Bluetooth LE Audio ecosystem rather than being developed as a standalone assistive listening technology. Bluetooth SIG market forecasts show Bluetooth technology being embedded across a wide range of consumer, enterprise and industrial products, including smartphones, PCs, televisions, hearing aids, earbuds, headphones, wearables, personal and industrial robotics, and medical devices.

Auracast benefits from support across one of the world's largest consumer technology ecosystems. Compatible products are already available from major global brands including Samsung, Sony, Google, JBL, Jabra, Sennheiser, Bose and Shokz, alongside leading hearing technology manufacturers such as ReSound, Oticon, Signia, Widex and Cochlear. Unlike previous assistive listening technologies, which were largely driven by specialist accessibility markets, Auracast is being supported by mainstream consumer electronics, mobile devices, hearing aids and professional audio equipment. This breadth creates economies of scale in silicon, software, and product development that benefit technologies built on the Bluetooth platform, including Auracast. As a result, public transport can benefit from innovation and investment occurring across one of the world's largest consumer technology ecosystems.



4.1 B2C: The hearing aid industry supports Auracast

Even though today, device readiness remains uneven, there are significant differences in implementation across hearing aids, smartphones, and consumer audio products. However, all major hearing aid manufacturers (Sonova/Phonak, GN ReSound, Oticon, Starkey, Widex, Signia, Cochlear) have either released Auracast-compatible products or publicly announced Auracast roadmaps. GN ReSound reports that it has sold approximately 180,000 Auracast-enabled hearing aids in Australia in this financial year and now offers compatible devices across multiple price categories, including subsidised products.

Hearing aid manufacturers are motivated because Auracast supports not only assistive listening but also mainstream audio applications such as television viewing, personal audio sharing and public venue listening. Hearing aids have increasingly become Bluetooth-connected devices for phone calls, streaming and app-based management. Auracast builds on this existing transition rather than requiring a completely new hardware ecosystem.

4.2 B2B: The Auracast offering is maturing quickly

Professional Auracast transmitters are now widely commercially available, and several products already support two-channel or dual-mono broadcasts, flexible routing, network management, Dante integration, PoE power and scalable multi-transmitter deployment. Commercial products are available from suppliers including Ampetronic, Williams AV, Bettar and others, demonstrating that transmitter hardware is no longer a major barrier to deployment.

Available equipment can support two independent audio channels, allowing different information streams to be broadcast simultaneously. Many products support integration with existing digital audio networks through Dante, Power over Ethernet installation, secure and encrypted broadcasting, and remote monitoring and diagnostics. Centralised management platforms allow multiple transmitters and services to be administered from a single interface, while scalable multi-transmitter architectures support deployment across larger transport facilities and public venues.

The pace of product development indicates a market that is progressing rapidly, but one that is still evolving to support more complex use cases such as multi-channel passenger information services, large-scale network deployments and integration with transport information systems.



4.3 Smartphone and operating system vendors are heavily invested

Many of the capabilities required for network-scale deployment are fundamentally software challenges rather than transmission challenges.

Within the Auracast architecture, smartphones often act as assistants that discover broadcasts, display metadata and help users select channels.

Future user experiences are increasingly being shaped by operating system vendors and application developers, including companies such as Google, Samsung, Xiaomi and other smartphone manufacturers. These developments are expected to improve service discovery, channel selection, metadata presentation, onboarding and integration with other mobility and accessibility applications.

These developments benefit not only transport but also television listening, tourism, public venues, event delivery and enterprise communication. As a result, substantial investment is already occurring in the broader ecosystem.

4.4 Integrated passenger information systems

Passenger information systems are increasingly evolving from traditional public address systems into integrated digital information platforms. The trials demonstrated that users do not simply want better access to public announcements. They want different types of information for different needs delivered through different channels.

Modern systems already combine real-time vehicle data, service disruptions, journey planning information, accessibility services, mobile applications and passenger displays into a single information environment. As this transition continues, Auracast has the potential to become a multi-channel output within the broader passenger information ecosystem, alongside visual displays, mobile applications and traditional announcements.

This shift creates opportunities that extend beyond assistive listening. Information can be separated, structured and distributed according to passenger needs, allowing different channels to provide route-specific information, disruption alerts, wayfinding guidance, accessibility services or multilingual content.

4.5 Standards bodies continue to refine the ecosystem

The Bluetooth SIG continues to evolve the Auracast ecosystem. While IEC 60118-17 remains under development, an important shift is already visible. The standards discussion is moving beyond the characteristics of individual technologies and towards the accessibility outcomes they deliver. The emergence of IEC 63087 as a technology-neutral assistive listening framework, alongside IEC 60118-17 as a technology-specific performance standard for Auracast, provides a pathway towards future accessibility requirements that focus on the user experience.

Future development is focusing on improving interoperability between devices, richer metadata and channel descriptions, easier service discovery, trusted broadcast identification, and more seamless user experiences across complex environments.

As standards mature, they will help create more predictable user experiences across manufacturers and environments.

4.6 Government are already involved

Accessibility standards should also move towards defining the end user experience (regardless of the technology)

Governments and regulators also play an important role in accelerating ecosystem maturity. Existing accessibility frameworks, building standards and transport standards were largely developed around hearing loops and other legacy assistive listening systems. As a result, many requirements implicitly reflect the limitations and deployment characteristics of those technologies rather than the accessibility outcomes users are trying to achieve.

Department of Infrastructure, Transport, Regional Development, Communications, and the Arts (DITRDCA) chaired the Hearing Augmentation Working Group, which was established to review and update assistive listening technologies for public transport and infrastructure. In 2025 they published a paper ([link to working group paper](#)) and are actively following new deployments with a view on the development of new standards.

Over time, standards will need to evolve from technology-specific requirements towards outcome-based accessibility requirements. Rather than prescribing a particular technology or deployment model, future standards should focus on the end-user experience and define requirements such as:

- Reliable access to up-to-date and real time information;
- Broad and consistent coverage;
- Low listening effort;
- Support for personal devices;
- Ease of discovery and connection;
- Multiple content streams where appropriate;
- Support for multilingual and personalised information;
- Accessibility during disruptions and emergencies; and
- Equitable access regardless of the assistive technology being used.

Future accessibility standards should define the outcomes that users require and allow industry to innovate in how those outcomes are delivered.

4.7 Audiologists can help to accelerate adoption

Audiologists occupy a critical position in the adoption pathway. One of the key lessons from hearing loops, despite being the world's most broadly adopted assistive technology, is that technology availability alone does not guarantee usage. The market review found that many hearing aid users either did not have telecoils enabled, were

unaware of their existence, or received little instruction on how to use assistive listening systems effectively.

For audiologists hearing loops and T-coils have become a lower priority feature of a complex product. Auracast creates an opportunity to avoid repeating this pattern. Auracast's broader usability will raise the priority.

Audiologists can play a critical role in accelerating adoption by recommending Auracast-capable devices, enabling and configuring Auracast functionality during fitting, educating users about public Auracast services, demonstrating real-world use cases, helping users understand compatibility requirements, and increasing awareness of assistive listening technologies.



4.8 Market demand

Real-world deployment is now becoming a significant driver of ecosystem maturity. Auracast is already being deployed or trialled across a growing range of Australian venues, including the County Court of Victoria, Brisbane River ferries, universities, churches, airports and public facilities. Beyond accessibility, these deployments are exploring applications such as assistive listening, multilingual services, event audio and public information. This growing deployment base is creating demand for improved device compatibility, service discovery, broadcast management and user experience, further accelerating investment across the wider ecosystem

Public transport represents one of the larger real-world applications for Auracast. The transport sector therefore can provide a strong driver for many of the developments already being pursued by device manufacturers, operating system vendors and standards bodies.

5. Conclusion

The above Auracast ecosystem developments represent the normal maturation pathway for an emerging technology. The ecosystem will evolve through implementation. Early deployments provide the practical experience required to improve products, refine standards, influence regulation, and accelerate adoption. Transport operators, device manufacturers, hearing technology providers, platform vendors, standards bodies, and governments all have a role to play in this process.

The evidence from the trials indicates that Auracast has reached the point where meaningful value can be delivered in public transport environments today.

Deployment of Auracast today represents a substantial improvement over traditional hearing loops by providing clearer, more accessible audio directly to passengers' personal devices. With modest adaptations, current technology can already support use cases that extend beyond the capabilities of conventional assistive listening systems by offering two, or more channels. Looking ahead, continued ecosystem development has the potential to unlock a genuine step change in how passenger information is delivered and accessed.

The recommended approach is therefore to begin staged, fit-for-purpose implementation in suitable public transport environments led by the parties who are responsible for public transport information.

Auracast should initially be deployed alongside hearing loops, not as a replacement for them, ensuring continuity of access for current telecoil users while enabling growing numbers of passengers to benefit from Auracast-enabled hearing aids, cochlear implants, smartphones and consumer audio devices.

This parallel deployment model allows operators to deliver immediate accessibility benefits, gain operational experience, support ecosystem development and manage transition risk, while providing a pathway towards a more mature and capable assistive listening environment over time.

