

Be mindful of who is listening to assistive audio

PSNI Global Alliance member and hearing compliance specialists Williams AV discuss assistive learning in highly secure environments.

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In board rooms, courtrooms, and similar places where information discussed should not be shared beyond the confines of the room, it is important to ensure that those with hearing impairments can take part in the proceedings in a secure way. Under legislation such as The Americans with Disabilities Act (ADA), and the UK Equality Act, service providers have a legal obligation to make reasonable changes to ensure that people with disabilities are not excluded. This includes offering facilities for the hearing impaired.

Best practices for deploying assistive listening

A typical solution that most people are familiar with is FM systems for broad coverage. It's cost effective and easily accessible. But what if the audio has to be contained within the venue?

In such a situation, we have to concern ourselves with securing audio streams, to ensure that confidential information is not shared outside of the room but is understood clearly by any hearing impaired participants.

Choosing the appropriate technology

Different technologies offer different benefits. So, what are the relative advantages of the options currently available?

Loop

If a hearing aid is fitted with a t-coil, as is fairly common, the wearer's preferred assistive listening technology is often the induction loop. Although installing a loop can present difficulties such as the need to lift carpets, many hearing aid users prefer it since access is as simple as flicking a switch on the hearing aid. Since hearing aids are set up to suit the individual's specific type of hearing loss, the listening experience is far better for the user. The loop is a secure solution in that in order to pick up the signal, one has to be inside the loop.

Digital

Digital RF uses a series of transceivers and receivers to provide full duplex audio communication between multiple parties. Transmissions can be secured using encryption, while a frequency-hopping algorithm can be used to avoid interference and prevent eavesdropping. Systems are available in kit form making it easy to deploy and store as required.

Hearing aid users can make use of digital RF either by connecting their devices to a receiver, or by using a neck loop. This is an induction loop that, as its name suggests, is worn around the neck. It is connected to the digital receiver and works with the hearing aid's t-coil in the same way as a normal induction loop.

Wi-Fi

Wi-Fi assistive listening technology offers high-quality sound and is especially convenient for users of smartphones. Anyone wishing to make use of the system can do so by downloading an app, logging in and listening through their own headphones or Bluetooth enabled hearing aids. It is not necessary to obtain a receiver.

Wi-Fi signals can travel through walls, so for security, the signal has to be accessed using a PIN. This would be provided to users by an event organiser.

Infrared

Infrared (IR) ensures direct clear delivery of your message without sacrificing security. The signal cannot travel through opaque walls and is therefore contained within the room. Emitters are available in different sizes depending on coverage area required, and multiple emitters can be used to eliminate blind spots in larger venues.

Where to deploy assistive listening technologies

There is a whole world of situations where an organisation needs to communicate with everyone in a room but also needs to feel confident that anything communicated is secure. Courtrooms, government offices, corporate meeting rooms, and medical consultation rooms are just a few of them. Selecting the right assistive listening technology will ensure that the hearing impaired are included, and that security is observed.

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