Improving comfort for passengers with automated public address announcements in your native language

An integrated solution by Bosch and AviaVox

Challenges

We've all experienced a similar situation – arriving late at the airport. People are rushing, there's constant noise and, to make matters even more frustrating, the announcement that your gate has changed is in a language you don't understand. Reverberant environments like airports can make it hard to hear announcements clearly, adding to an already stressful situation or even leading to a missed flight. Also, when passengers arrive late at the gate, it can cost the airline time and money. So, how can airports ensure that paging is clearly understood by passengers, preferably in their native language?

Market requirements

When airports opt for a new public address system, why not invest in a reliable public address solution that delivers the highest speech intelligibility with multiple language options and easy handling, all ensured by a high degree of automation? Assignable announcements to specific areas guarantee the relevant message is heard and understood where it is needed, reducing the overall noise clutter and improving the airport ambience. The result is a less noisy airport and a calmer travelling experience.

In partnership with

AVIAVOX®
ARTIFICIAL VOICE SYSTEMS

Our solution: seamless integration

AviaVox Artificial Voice System can be integrated with the PRAESENSA Public Address and Voice Alarm system. AviaVox is a leading provider of intelligent Artificial Voice Systems for airports and airlines. Using phoneme technology, the company has achieved uniquely life-like, natural-sounding generated speech in almost 40 languages. The speech quality is so high that it cannot be distinguished from a human voice.

▶ Bosch PRAESENSA is an IP-based, fully featured Public Address and Voice Alarm system. Designed with ease-of-use in mind, PRAESENSA offers straightforward installation and integration, delivering superior audio quality with an easy-to-use interface. The combination of IP-connectivity with a smart power concept and integrated redundancies provides an extremely cost-efficient solution that is equally suited to centralized and decentralized topologies.

▶ AviaVox solutions enhance the experience of passengers, helping airports and airlines meet business and regulatory targets. The company implements cutting-edge technological innovations to achieve uncompromising products of the highest-available quality.
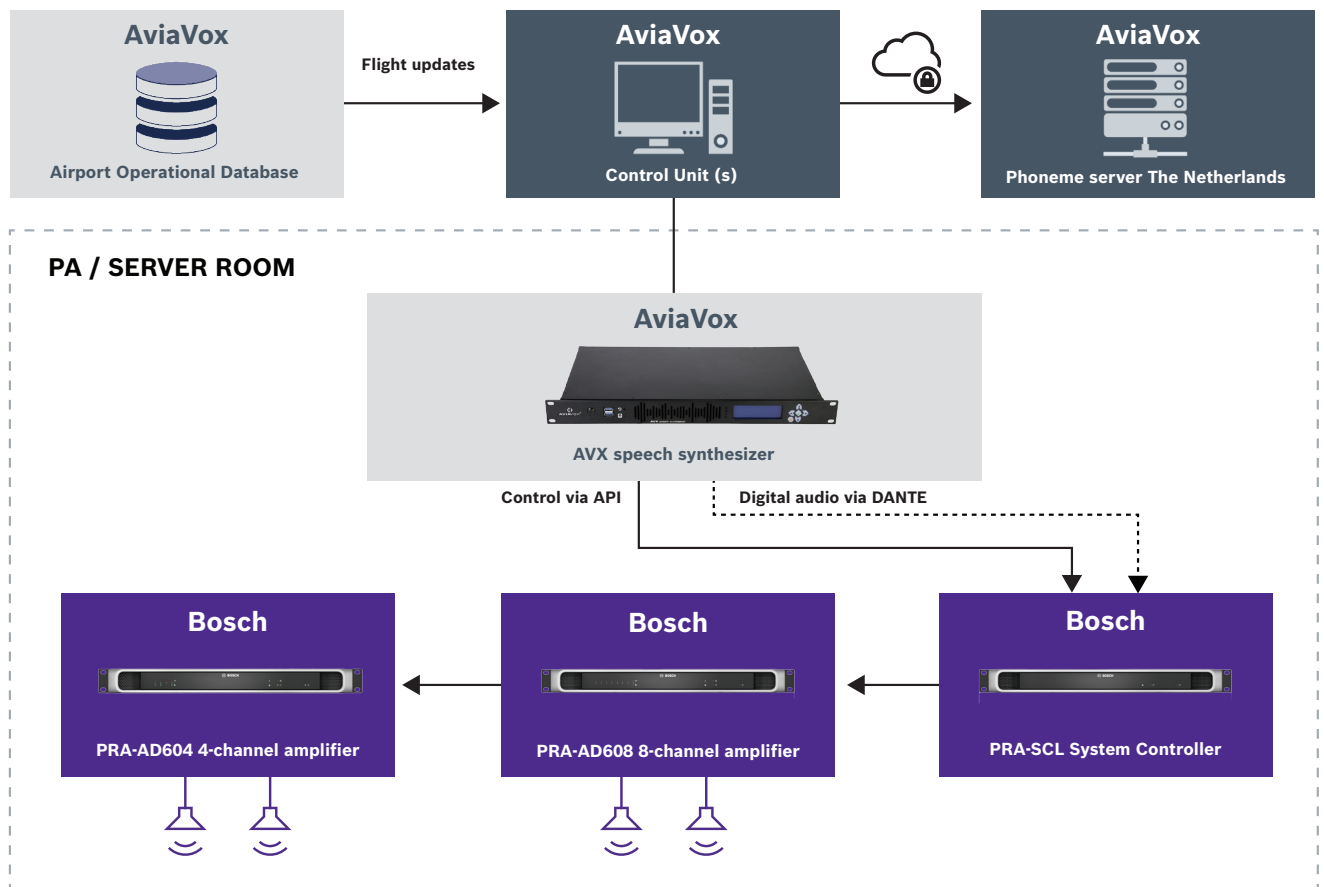
Benefits for the system integrator/installer:

▶ Time- and cost-efficient installation as IP-based technology allows using standard IT.

▶ Deep integration with Bosch PRAESENSA gives comprehensive control of loudspeaker lines.

▶ Minimized down times when servicing as the AVX can be easily replaced without any specific reconfigurations.

▶ State-of-the-art, safe signal transport – The Control Unit sends encrypted routing information to the AVX combined with a set of encrypted phonemes.
AVX converts the data into Dante audio signals that are fed to the PRAESENSA system.

Benefits for the passenger

▶ Announcements throughout the airport building are clearly and easily understood in the passenger's native language.

▶ Better, quicker passenger orientation.

▶ Lower passenger stress level due to improved airport ambience.

Application example: airports

The Bosch PRAESENSA Public Address and Voice Alarm system and the AviaVox Artificial Voice System are interfaced through the AviaVox AVX speech synthesizer, combining PRAESENSA with the Airport-Terminal-Client (ATeC) and/or the Airline-Gate-Client (AGC) by AviaVox. This makes it possible to automatically generate announcements in multiple languages based on the latest flight information.

AviaVox		AviaVox		AviaVox
Airport Operational Database	Flight updates →	Control Unit (s)		Phoneme server The Netherlands

PA / SERVER ROOM

AviaVox

AVX speech synthesizer

Control via API   Digital audio via DANTE

Bosch	Bosch	Bosch
PRA-AD604 4-channel amplifier	PRA-AD608 8-channel amplifier	PRA-SCL System Controller

Benefits for the operator/owner:

▶ Intuitive operation offering multiple control options.

▶ User-friendly configuration web interface.

▶ Failure-safe solution by integrated redundancies.

▶ Smart power concept saves energy to minimize operational cost.

▶ Announcements can be generated manually and automated – even based on the latest flight information thanks to the high connectivity to other airport systems.

▶ Simultaneous announcements to adjacent PA zones are balanced to avoid acoustical overlaps to avoid noise clutter, supporting a relaxed ambience.

▶ High security due to safe and tamper-free SSL connection configured via TCP/IP.

▶ Flexible audio zone selection and assignment to any single PA zone or to PA zone groups.

▶ Flawless operation by steady information on system and zone availability.

▶ Comfortable announcement priority handling by queuing and rescheduling.