



Overview

PAXGuide is Sittig's automatic announcement system. Sittig Technologies is the German market leader for automatic announcement systems at airports. The system allows automated high quality announcements in over 43 languages to reduce operating costs and increase efficiency as well as customer experience at airports. In addition to boarding announcements reflecting all airline specific needs, the system uses data from sensor, camera and workforce management systems to play out dedicated intelligent announcements. PAXGuide uses existing PA and IT infrastructures and has interfaces to all major PA brands such as Bosch, Honeywell, IED, TOA, etc.. Thereby, the system acts as a management system on top of the PA-system and thus has the ability to interconnect multiple PA-systems.

PAXGuide has been designed modularly, which means it can be customized easily and therefore be perfectly tailored to the customer's needs with interfaces to several other systems. The system can be implemented either as an on-premise or cloud solution.

Use cases for automatic announcements at airports

- Automation of general announcements & information such as: "Please do not leave your luggage unattended".
- Automation of boarding announcements, such as first call, boarding group calls, last call, etc. triggered by an interface to the AODB/FIDS. No handling agent at the gate is required to perform the announcements.
- Announcements in the native language of the arriving/departing passengers.
- Automation of additional business processes and information delivery with interfaces to other systems (examples: Interface to camera systems to increase/decrease volume in highly frequented areas, or information of ground staff).

All PAXGuide benefits at a glance



Automation in 43+ languages

Announcements can be generated in over 43 languages to ensure that every passenger understands the message. In addition, one of the best Text-2-Speech engines on the market can be used.



Interfaces to all major PA-systems

Interfaces to: Bosch Praesideo / Praesensa / Paviro, Honeywell Variodyn D1, TOA SX-2000 / VX-3000, Dynacord Promatrix 9000/8000/6000, IED Globalcom, G+M, Biamp Vocia.



Uses the existing infrastructure

Thanks to state-of-the-art IP technology, PAXGuide uses existing cabling, loudspeakers and IT infrastructures. Thus, no costly rewiring is necessary.



Modular design

The PAXGuide system has been designed modularly, which means it can be customized easily and therefore be perfectly tailored to the customers needs. Modules for different use cases make it extremely flexible.



Smart automatic announcements

In addition to boarding announcements with all airline specifics, the system uses data from sensor, camera and workforce management systems to play out targeted intelligent announcements.



On-Premise or Cloud solution

The system can either be installed on-site or can be hosted in the Sittig or a private cloud and can therefore be used in a scalable and cost-efficient manner.



System Modules

The PAXGuide system consists of different modules that can be easily and flexible assembled.





Automatic Announcement Modules

Core user interfaces for the operation of the automatic announcement system. Specialized for various applications and user groups.



PAXpaging

Web application for central announcement workstations for the management of time-controlled, stored and manual announcements. Predefined templates consisting of stored text modules, Text-2-Speech texts and ad-hoc recordings can be individually compiled and output. In addition, all announcements triggered by the system are displayed in a global history database. PAXpaging is ideal for info desks and central announcement workplaces.



PAXgate

Web application for automization of the announcement process at the airport gate. Announcements such as first call, boarding call, etc. can be triggered automatically with live-data from the AODB/FIDS or can be triggered manually by the handling agent at the gate during the boarding process. The gate announcements can be transmitted to any airport location, they are however directed to the zone of the specific gate by default. Of course, manual gate announcements are still possible. PAXgate is a helpful partner for the ground staff to automate the standard boarding announcements in a high, consistent and understandable quality.





PAXadmin

Web application for configuration and administration of the PAXGuide system. Automatically detects the integrated software modules as well as IP-Paging Stations and enables userfriendly configuration of these. The configuration options are very extensive and include the administration of users, announcements, announcement zones and priorities as well as the assignment of the IP-Paging Stations and many more. PAXadmin is included in every PAXGuide system.



Database Modules

The interface to flight databases, which are needed to output announcements automatically and with individualized content. The following database interfaces are available (further interfaces on request):

- AODB: Interface to the central database system of the airport
- FIDS: Interface to the database of displayboards of the airport
- · Online-Provider: Interface to the database of an online provider



Speech Modules

Different technologies for audio announcements in realtime and high quality.

The following Speech modules are available:

- **Prompt Voice:** Prerecorded text blocks recorded with native speakers in high quality that are automatically assembled for each announcement.
- **Text-2-Speech:** Live generated announcements with one of the best Text-2-Speech engines on the market. Allows to generate new announcements quickly and easily.

Available Languages

If a language is needed that is currently not in our portfolio, we can create it using our large network of professional native speakers and our own sound studio (Prompt Voice only). There are no additional costs for the creation of a new language.

The following languages are available in our portfolio at the moment (Prompt Voice and Text-2-Speech):

Language	PV	T2S
Albanian	х	
Arabic	х	х
Chinese	х	х
Czech	х	
Danish	х	х
Dutch	х	х
German	х	х
German (Austrian)		х
English (Australian)		х
English (British)	x	х
English (Indian)		х
English (NZ)		х
English (US)		х
English (Welsh)		х
French	х	х

Language	PV	T2S
French (Canadian)		х
Greek	х	
Hebrew	х	
Hindi	х	х
Indonesian	х	
Icelandic		х
Italian	х	х
Japanese	х	х
Korean	х	х
Mongolian	х	
Norwegian		х
Plattdeutsch	х	
Polish	х	х
Portuguese (Brazil)		х

PV	T2S
х	х
х	х
х	х
	х
	х
Х	х
	х
	х
х	
х	х
Х	
Х	
Х	
	х
	x x x x x x x x





PA-System Modules

We are experts in interfacing to PA-systems from various brands. Our established interfaces to all major PA-systems allow to play out announcements in dedicated small zones as well as to interconnect multiple PA-systems. Thus, the PAXGuide system provides a unified management platform and reduces background noise. The PAXGuide system has interfaces to:

- · Bosch Praesideo, Praesensa, Paviro
- Honeywell Variodyn D1
- TOA SX-2000, VX-3000
- IED Globalcom
- Dynacord Promatrix 9000/8000/6000
- · Biamp Vocia
- G+M



Other Modules

PAXGuide offers a number of additional modules to get the most out of automated announcements.

Sensor/Camera System Interface

Installed sensor systems, such as Xovis, can be connected to the PAXGuide system to significantly improve the passenger flow. Based on real-time data provided by the sensor/camera system, announcements can be played out automatically in dedicated areas using previously defined scenarios. But not only announcements can be triggered also other activities can be performed. This leads to an improved passenger experience and supports terminal operations. Below is just a small selection of use cases:

- Automatic volume adjustment in certain areas based on passenger volume
- Automatic routing of passengers in case of overcrowded queues
- Automatic announcement when people are (too) close to a certain point (e.g. escalator)
- Automatic control of external units, e.g. slowing down an escalator if the queue in the upper area is too long

Workforce Management System

External workforce management systems (such as Inform or T-Systems) can be connected so that work instructions to ground handlers are issued automatically via the PA system. This allows to make personalized calls to the locations where the employees are currently located with current work instructions.

Personalized PAX Calls

In combination with biometric systems, location-based passenger announcements can be made automatically (e.g., the Last Call). In the zone in which the passenger is currently located, passenger-specific announcements are made in his or her native language.

SIP Interface

Interface to trigger announcements via SIP telephony or handle each SIP endpoint as a kind of PA zone (Infopoints, SIP Loudspeaker...). The Interface provides multiple (up to 60) channels/calls in each direction at the same time.

Open Interface

PAXGuide provides an interface that can be used to connect a variety of external systems. Enables the use of large existing data sources to trigger announcements or play out announcements in other systems.

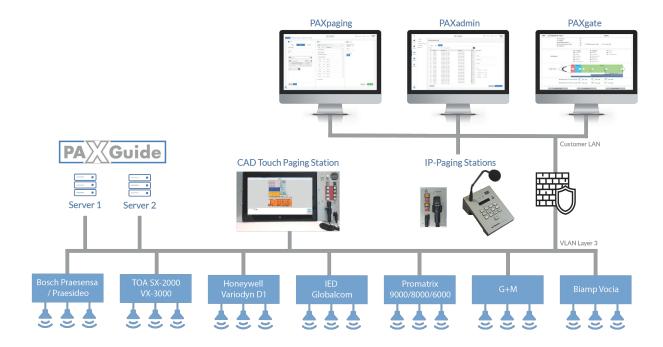


Technical Overview

The PAXGuide system can either be installed locally as an on-premise version or accessed as a cloud system. In general, IP-Paging Stations from Sittig are not mandatory. The existing paging stations can be used. Sittig IP-paging stations are only required to record and store announcements within the system and to make cross-PA-system calls.

PAXGuide On-Premise

PAXGuide is available as onsite system that can also be setup redundant.



PAXGuide Cloud

With the PAXGuide Cloud System, the system is easy to integrate and to maintain. This allows a resource-efficient operation of the system as well as a fast roll-out of the system at the airport. The public address systems at the airport is connected to the cloud via a gateway (PAXController) using a secure site-2-site VPN connection.

