Conex™ VCCS
Voice Communication Control System
Securing Air Traffic Communication

Conex™ VCCS offers a completely integrated VCCS system enabling Air Traffic Controllers to perform „air to ground“ and „ground to ground“ communication complying with ICAO, EUROCAE and EUROCONTROL standards. The solution supports audio and video documentation.

Integration of radio systems
- ED137 and VoIP (SIP, RTP, RTSP, SRTP)
- Analog radio
- Digital radio (TETRA, POCSAG, EDACS)
- LTE / 5G, GSM
- E1/T1

Easily expandable and reliable
The robust and flexible design makes Conex™ VCCS suitable for individual airports as well as nationwide high-availability solutions with regional air traffic control and can be upgraded at any time. Various redundancy variants can be implemented with Conex™ VCCS.

TCMS - Technical Control & Management System
Conex™ TCMS provides centralized management of all Voxtronic products and other SNMP-enabled devices. Individual reports enable intelligent and planned management of distributed communication systems.

Best Signal Selection
Enables automatic selection of the best signal from different radio sources through intelligent analysis algorithms.

Telephony & Conferencing
The voice communication system provides all important PBX features required by air traffic controllers. Conferencing allows secure conversation and interactive off-site collaboration with aircraft, ground crew, emergency services and external participants.

Smart Communication.
**Key features**

Due to its open architecture, Conex™ VCCS can be adapted to specific requirements and supplemented with individual functions.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>GIS, geodata</td>
<td>The integrated position detection offers a location-specific overview during operation. The site history (subsequent evaluation and playback) allows quick decision-making. If predetermined limits are exceeded, the responsible dispatcher will be alerted by “geofencing”.</td>
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<td>OPUS Codec</td>
<td>The built-in OPUS audio codec is specifically designed for interactive streaming applications with automatic bandwidth adjustment and outstanding voice quality.</td>
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<td>Role management</td>
<td>Roles consist of permissions and functions assignable to a specific dispatcher.</td>
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<td>Encrypted End-to-end</td>
<td>Conex™ supports point-to-point encryption and end-to-end encryption, allowing secure communication.</td>
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<td>communication</td>
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<td>Decision and scenario</td>
<td>Conex™ supports users in managing critical communication scenarios to handle incidents more efficiently.</td>
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<td>management</td>
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Integrated documentation
Conex™ VCCS offers an integrated recording system. It documents incoming emergency calls, missions, incidents and communication processes preserving evidence, demonstrating compliance, clarifying communication content and supporting Air Accident Investigation.

Emergency calls & alerts
Allows to define scenarios that automatically alert specific contacts during an emergency call.

Workflow management
Supports users in handling operational processes which can be defined in the system.

Documentation of voice, data and video
- Video and voice documentation (camera, radio, telephony)
- Recording screen content (screenshot, video clip)
- Live monitoring (listening, open listening, live streaming)
- Search and filter with configurable automatic prefilter

Live streaming
Allows to view live images of connected video cameras.

Recording of radar data
Supports air traffic control in the investigation and prevention of accidents and incidents.

Incident management
Conex™ VCCS supports dispatchers in capturing and handling operational incidents. The operating processes are handled according to the nature of the incident in predetermined steps. The system supports dispatchers to avoid wrong decisions.
Perimeter protection
The primary task of perimeter protection is to minimize or even prevent damage at an early stage. It is important to identify potential threats at an early stage in order to initiate countermeasures. This can ensure that unauthorised intrusions are detected in time.

Motion detection
Alerts the user audiovisually when detecting a movement.

Counting
Enables the counting of objects when passing over a defined limit. When thresholds are exceeded, the user is automatically alerted.

Heatmap
Heatmaps display the areas with the highest activity.

Metadata
Conex™ enables legally valid and tamper-proof documentation of audio, video and metadata.

Video
Video systems and surveillance cameras are documented with the available additional information such as call and connection data, geodata and mission documents in a legally compliant manner.
About us

Voxtronic develops secure communication products and solutions for enterprises with high security requirements and organizations with critical infrastructure for public safety, public transport and industry by using the latest technologies.

Conex™ Platform
- Operator Position - Conex™ Dispatch
- Air Traffic Communication - Conex™ VCCS
- Documentation of Communication Processes - Conex™ Voxlog®
- Technical Control & Monitoring System - Conex™ TCMS
- Session Border Controller - Conex™ SBC
- Gateway - Conex™ Gateway
- Data Analysis - Conex™ Analytics
- Access Control & Time and Attendance - Conex™ Access

Join™ VLC
Join™ VLC is an analog- and (Ro)IP-Gateway for integrating analog sources into a modern IP infrastructure.

Voxtronic Service
- Projects
- Development
- Installation
- Training
- Maintenance

Certificates
- ISO 9001
- ISO 14001
- ISO 27001
- DMR Association Member