Product brief: VCS3020X
Breaking down barriers in ATM

VCS3020X voice communication system is the fastest end-to-end VoIP system for air traffic control (ATC). It is the only fully duplicated parallel running voice communication system in a dynamic Air Traffic Management (ATM) environment.

Air Navigation Service Providers (ANSPs) need to deliver more capacity and increase efficiency for airspace users. Increased collaboration building virtual centres, new concepts such as remote tower ATC and digital technology platforms require innovation with safety in mind. Supporting air traffic modernisation programs around the world, VCS3020X lets you close this gap and ensures that ANSPs can improve their ATC services even in such a challenging environment. VCS3020X is the evolution of ATC voice communication prepared for the next decades.

Key features

Collaborative ATM

The VCS3020X allows ANSP's to share infrastructure between area control centres and ensures all ATM relevant tower functions without any limitation in size and location. The most flexible airspace management solution available today enables gap free handover of sector responsibility.

End-to-end IP

The most crucial challenge is to manage the delays of a VoIP system. End-of-life legacy and IT evolution are cost and complexity drivers which can be solved through one simple solution. The VCS3020X secures your communication for the next decades through its outperforming air/ground delay times and full compatibility with IP-based ATM networks of the future. The modular design enables easy feature and system expansion while saving costs.

Datacentre deployment

Air traffic controllers can run voice communication to their counterparts without any physical limitation to the area the aircraft is flying over. Through Frequentis' Virtual Centre concept, ATC functions can be shared and duplicated between different centres. VCS3020X means total freedom for any controller to operate any frequency from any location.

Photo: © DFS Deutsche Flugsicherung GmbH

VCS at a glance

- Distributed intelligence and parallel operating for unrivalled resilience, reliability and safety
- HD audio for G/G and A/G communication
- Dynamic delay compensation for IP networks and echo-free voice experience for controllers
- Voice compression enabling bandwidth and cost reduction for A/G communication
- Seamless integration with Frequentis tower solutions
- Market leader in voice communication for remote tower solutions
- Setting the standard for voice communication user interfaces

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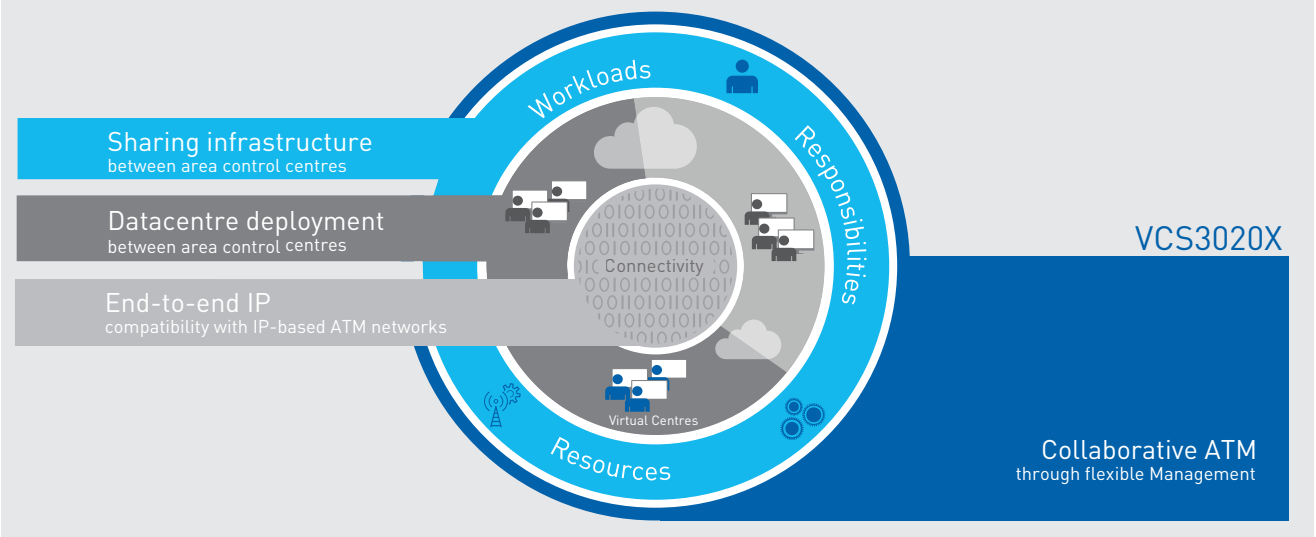
FOR A SAFER WORLD



Benefits

Fastest end-to-end IP VCS

Shortest air/ground delay times through market leading communication server for unrivalled scalability and redundancy – without compromising established quality of service and safety levels.

Trusted by 25,000 air traffic controllers

Technology leader in ATM communications, 500+ successful projects in 80+ countries around the globe.

Global change programs readiness

The VCS3020X system prepares ANSPs for future changes in ATM as well as upcoming requirements of SESAR, ICAO, NextGEN and OneSKY programmes in the next five to ten years through its reliability and preparation to work in a legacy environment as well as in a mixed environment.

Supporting dynamic sectorisation

Cornerstone component for a flexible approach to airspace use. Adding the capability to share workloads, network resources and management responsibilities.

Technical specifications

Delay times	Air ground: 20ms
Interfaces	LAN, WAN: Telephone, Radio ED137
Legacy connectivity	Two wire; four wire; E&M; MFC-R2, R5; ATS-QSIG; ISDN
Deployment	Small deployment on 1HU (for TWR/small system) Split shelf with A+B in one (medium size) Single A / B Shelf for large systems (>200 Pos) Virtual deployment in the data centre
Redundancy	Parallel operation, redundant WAN connection, seamless radio connection
Compliance	ED137 & ICAO Annex 10, 11 ED-153 software assurance level 3 (SWAL-3) ESARR6 fulfilment
Security	Port hardening, Port logging, built-in firewalls, lifecycle security patch management

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