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FREQUENTIS Voice Communication Services for Remote Virtual Tower Operations Celebrate their International Debut

Flexible and collaborative end-to-end IP communication solution tailored to the needs of virtual remote tower operations.

With the introduction of the Remote Virtual Tower operational concept, the need for flexible and collaborative communication solutions arises. Moving away from rigid structures, the coordination needs for remote towers demand a flexible use of radio and telephone resources. Breaking up the silo, the new open concept of voice communication services integrates perfectly with the surrounding tower application landscape.

New technology enablers, who are set to cut costs of ATM and boost efficiency, are getting ready for deployment. Currently we are witnessing an evolution towards a more flexible use of shared ATM service. This leads to the concept of virtual centres. Moving away from rigid centre and tower structures, demands set by more efficient use of controller resources and flexibilisation of airspace use are some of the main drivers of future operations.

An excellent use case around virtual centre operation is the Remote Virtual Tower operation. The focus of remote and contingency tower concepts has been on visualisation solutions, but there is much more to a working concept of operation than replacing out-of-tower window view with visual surveillance solutions. Only by successfully merging the classic triad of communication, navigation, and surveillance from different remote tower sites across an ATM-grade communication network into a Remote Virtual Tower operation centre, the true cost-saving and efficiency benefits will be unleashed and operational and regulatory acceptance can be achieved. Matching the capabilities of the tower applications and communication equipment with the new use cases of remote operation is the key enabler for successful deployment of remote towers and virtual centres.

At a remote tower control centre, controllers are co-located to operate various airports simultaneously, dynamically shifting resources according to the prevailing air traffic. With remote tower voice communication services being fully integrated into the controllers workflow on the HMI, validated SESAR concepts are introduced to the benefit of operations. By separating the control room user interface from the technical infrastructure, voice communication is offered as a service to remote tower controllers irrespective of their location using an ATM-grade network. With this cloud-like setup, redundancy and contingency come built-in to the architecture for the Virtual Centre, as controllers can use the service from anywhere, and the service can run in any technical centre.

FREQUENTIS VCS3020X End-to-End IP Communication Solution

The Frequentis VCS3020X is the leading end-to-end IP communication solution for Air Traffic Management globally. Its robust and proven architecture brings unrivalled scalability and functionality, and its wide array of workload sharing and networking capabilities makes it a critical element for any successful implementation of Dynamic Sectorisation or Virtual Air Traffic Control Centres. That's why more than 25,000 air traffic controllers across the globe use and trust in Frequentis technology every day.

Find out more on Voice Communication Services during [World ATM Congress](#) (Madrid, 10-12 March, 2015) in our presentation 'Virtual centre application use case study: Concept of operation for multi-remote virtual tower operation' in the FREQUENTIS Aviation Arena, on Wednesday, 11 March, from 11:15 to 12:00.

About FREQUENTIS

Frequentis is an international supplier of communication and information systems for control centres with safety-critical tasks. These 'Control Centre Solutions' are developed and distributed by Frequentis in the business segments Air Traffic Management (civil and military air traffic control, air defence) and Public Safety & Transport (police, fire and rescue services, emergency medical services, shipping, and railways). Frequentis maintains a worldwide network of subsidiaries, offices and local representatives in more than 50 countries. The company's products and solutions are behind more than 25,000 operator positions in over 115 countries. Using the whole bandwidth of this extensive portfolio, Frequentis is the leading provider of voice communication systems... all making our world a safer place every day!

For more information, please visit www.frequentis.com

Julia Jene, Consultant Corporate Communications, Frequentis AG,
julia.jene@frequentis.com, phone: +43 1 81150-1435

