

Transforming mission-critical services with broadband communications

Empower first responders in the field and the control room Enhance situational awareness with multimedia and video Enable new applications and features in crisis situations





Meeting demand for data transfer on a larger scale

Public safety and public transport organisations depend on reliable communications in the field to remediate crisis situations as quickly as possible. At the same time, control room operators who deploy resources must deliver the right information to the right people at the right time. For the owners and providers of the mission-critical communications infrastructure that support these operations, demand for non-stop availability, rock-solid security and increasing capacity is always growing. The result is a perfect storm for existing mission-critical communications, demanding a fresh approach.

Challenges for end-users and mission-critical communications infrastructure owners

Increasing volumes and new types of data

Dispatchers and field employees need to exchange audio, video or other multimedia information.

Escalating political and public pressure

With the number of significant natural catastrophes rising, demand for efficient usage of Public Protection and Disaster Relief (PPDR) resources via extended MCS is growing.

Limited resources and budgets

Ongoing drive to do more with less, raising quality and efficiency of services while controlling costs.

Reducing reaction times

The goal is always to respond faster and more effectively to emergency situations, optimising outcomes.

Barriers to international cooperation

Difficulty of exchanging information effectively across authorities and regions.

Integration with existing equipment

Dispatchers and officers in the field must be able to seamlessly interconnect to radio network technologies currently in use and to access multimedia from different resources.

Frequentis sees the opportunity to change the paradigm for the operation of mission-critical services based on high-availability broadband communication networks. Alongside our partner, Nemergent Solutions SL, we are making this concept a reality. Together, we have created a pioneering trial version and are now engaged on multiple projects. Crucially, our solutions are purpose-built for missioncritical industries since commercial systems do not allow for prioritisation of mission-critical communications. Our vision is to lead the way in helping owners and providers of critical infrastructure achieve a smooth migration through our missioncritical communications network services, and in working with stakeholders in the field and control rooms to enable an exceptional user experience.

Mission-critical services in broadband communication

By engaging Frequentis and Nemergent Solutions, organisations can enable better situational awareness for incident operators. Our MCX offering spans voice communications, data communications, transmission of huge amounts of data, new communication features and multi-organisation networks. Users of mission-critical information in the field can draw on our applications and user experience services, while owners and providers of critical infrastructure can make use of our network services. Finally, control room operators can take advantage of new features and integration with multimedia powered by our product bundles. Our solutions work with all standard networks and any device that can host our services.

Advantages of Frequentis MCX

Compliant and customised

We provide a base server architecture that complies with industry standards, then add features tailored to your users.

Open and easy to integrate Designed for interoperability with other venders, our colu

with other vendors, our solutions avoid lock-in and enable organisations to continue using existing equipment.

End-to-end service portfolio

Our product bundles include applications for use in the field, networks, service infrastructure and MCX-enabled control room solutions.



Partnering to deliver standards-based end-to-end MCX solution

Build on specialist expertise

Frequentis' knowledge of solutions for the missioncritical industries – combined with Nemergent Solutions' innovation in this space – provides a truly compelling proposition. We will team up with you to create a solution that combines your end user and control room technology with our standards-based server architecture. From delivery of test equipment to engagement with your stakeholders to optimise the user experience, our goal is your satisfaction.

Frequentis MCX use cases

Using MCX, organisations can enable seamless international cooperation, allowing them to respond more effectively to a variety of crisis situations. In all cases, MCX will simplify the exchange of information, facilitate better resource sharing and contribute to safety.

Battle forest fires

Mobilise fire fighters from multiple countries, connect them with the local chain of command in each affected region, enable them to exchange critical information and make use of rich media, such as location and video surveillance information. Respond to high-speed, crossborder criminal chases Maintain connections to control rooms even when the chase enters another country, monitor information from the field in real time and provide it to all dispatchers, share new intelligence with the mobile team in pursuit in real time.

Enable a pan-European eHealth system

Connect to first-aid experts remotely and automatically, enable effective dispatching of emergency vehicles across borders, facilitate communications between hospitals to avoid excess strain on resources.

Frequentis' MCX solution

- ightarrow Targeting 99.999% availability, even during peak demand and across geographies.
- \rightarrow In-built redundancy to minimise the likelihood of failure.
- \rightarrow Integrated security features including advanced authentication and encryption of signalling and media.
- \rightarrow High performance for both up- and download of information.
- → Support for new devices such as ruggedised smartphones and tablets, and provide SDKs and customised applications for media supported operations infield.
- → Support for integration of mobile control rooms or offices, and placing maps, videos and images at users' fingertips.



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FREQUENTIS AG Innovationsstraße 1

1100 Vienna, Austria Tel: +43-1-811 50-0 www.frequentis.com