

MarTRX™ an European coast guard maintains 24/7 continuity of operations during a period of significant disruption



This large European coast guard depends on its command centers to monitor radio traffic for persons and vessels in distress, and to help direct search and rescue efforts. When the COVID-19 crisis struck in early 2020, the organization faced an unprecedented challenge: enable dozens of operators to continue their work remotely from home.

In less than two weeks, a remote working solution was implemented based on the Frequentis maritime product suite MarTRX. It allowed operators to connect to a central maritime dispatcher from home using commercial-off-the-shelf laptops and audio equipment using consumer-grade broadband connections.

“The events of 2020 have highlighted the importance of operational agility for maritime safety agencies. With MarTRX, coast guard organizations can enable continuous, high-quality services – even in the face of severe disruption.”

Khashayar Saravandi-Rad, Vice President Maritime, Frequentis

Client profile

A large European coast guard organization responsible for monitoring and managing several thousand miles of coastline and territorial waters. With a wide range of duties including customs, security, law enforcement and search and rescue, the organization's watchstanders continuously monitor maritime emergency radio, and digital selective call traffic monitoring to help keep maritime vessels safe.

Business situation

When the COVID-19 crisis hit Europe, this large coast guard needed to act fast to ensure its operators could continue their vital work from home during a nationwide lockdown. The organization sought a solution for continuity of operations using commercial equipment and home broadband connections.

Solution

The coast guard engaged Frequentis to implement a highly sophisticated extension of its latest MarTRX solution, and deploy virtual operator working positions on the coast guard's existing virtual server cluster. The new approach allows operators to deliver Global Maritime Distress and Safety System (GMDSS) monitoring and rescue coordination services via an intuitive interface while in quarantine in their own homes.

Impact

- Enables the coast guard to spin up remote operations for its operators in just two weeks, helping to protect mariners and commercial activity users during the national lockdown.
- Delivers a full range of functionality for remote users, including radio monitoring, maritime emergency radio, and digital selective call (DSC) traffic handling.
- Drastically enhances the organization's resilience in the event of future operational disruption, reducing the risk of distress calls going unanswered.

Thanks to the MarTRX solution, the coast guard achieved its goal of delivering 24/7 service for maritime stakeholders during the pandemic, maintaining the expected level of safety and security for mariners. Looking ahead, the organization is now better prepared for future contingencies: from natural and environmental disasters to terrorist incidents.

Coordinating nationwide safety operations

To help keep commercial and recreational maritime stakeholders safe, the country operates a network of command centers that continuously monitor radio traffic and help to direct search and rescue efforts in the event of maritime emergencies.

When the country suddenly announced a strict nationwide lockdown, the coast guard organization knew that it needed to react rapidly to ensure it could continue to deliver its vital services within the stringent new restrictions.

Dealing with the challenges of lockdown

To keep the maritime domain safe while also protecting its watchstanders, the coast guard needed solutions, and needed them quickly. A new approach had to allow dozens of operators to use commercial-off-the-shelf laptops and audio equipment, all connected via consumer-grade broadband Internet services. Despite these limitations, the coast guard couldn't compromise on availability or capability.

Pressed for time, the coast guard engaged experts from Frequentis to help find a solution. Within just two weeks, task forces from both organizations had designed, validated, implemented and configured a remote-working solution. Powered by MarTRX, the new platform created virtual operator working positions. These positions are accessible via encrypted consumer broadband connections from anywhere in the world—enabling operators to work from their homes during the national lockdown.

Enabling highly available remote operations

With a consistent user interface and standardized workflows, MarTRX makes it easy for operators to attain and maintain high levels of situational awareness, streamline their decision-making, and adhere to the organization's standardized workflows and procedures. Crucially, the Frequentis solution delivers dependable levels of reliability and availability for mission-critical communications—ensuring that the coast guard can maintain a high-quality service for maritime stakeholders 24 hours a day, seven days a week. Since it partnered with Frequentis to deliver its new remote-working solution, the coast guard has succeeded in delivering a continuous service with zero interruptions to date.

Ready for anything

The coast guard is confident that its MarTRX solution will deliver value long after the current crisis is over. By embracing a future-facing approach to command and control integrating new processes, concepts of operation, or technologies will be fast, straightforward, and cost-efficient. These capabilities allow agencies to centralize watchstanders, decentralize them, or do both, depending on mission demand and staffing standards. Most importantly, the coast guard strengthened its mission resilience and operational continuity in the event of future contingencies: from hurricanes, to pandemics, or any other natural or human-made hazard.

“Fully software-defined solutions – free from proprietary hardware restrictions – will play a key role in the maritime command centers of the future. The success of this project demonstrates that such an approach can deliver the scalability and extensibility to support tomorrow's communications requirements.”

Khashayar Saravandi-Rad, Vice President Maritime, Frequentis



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