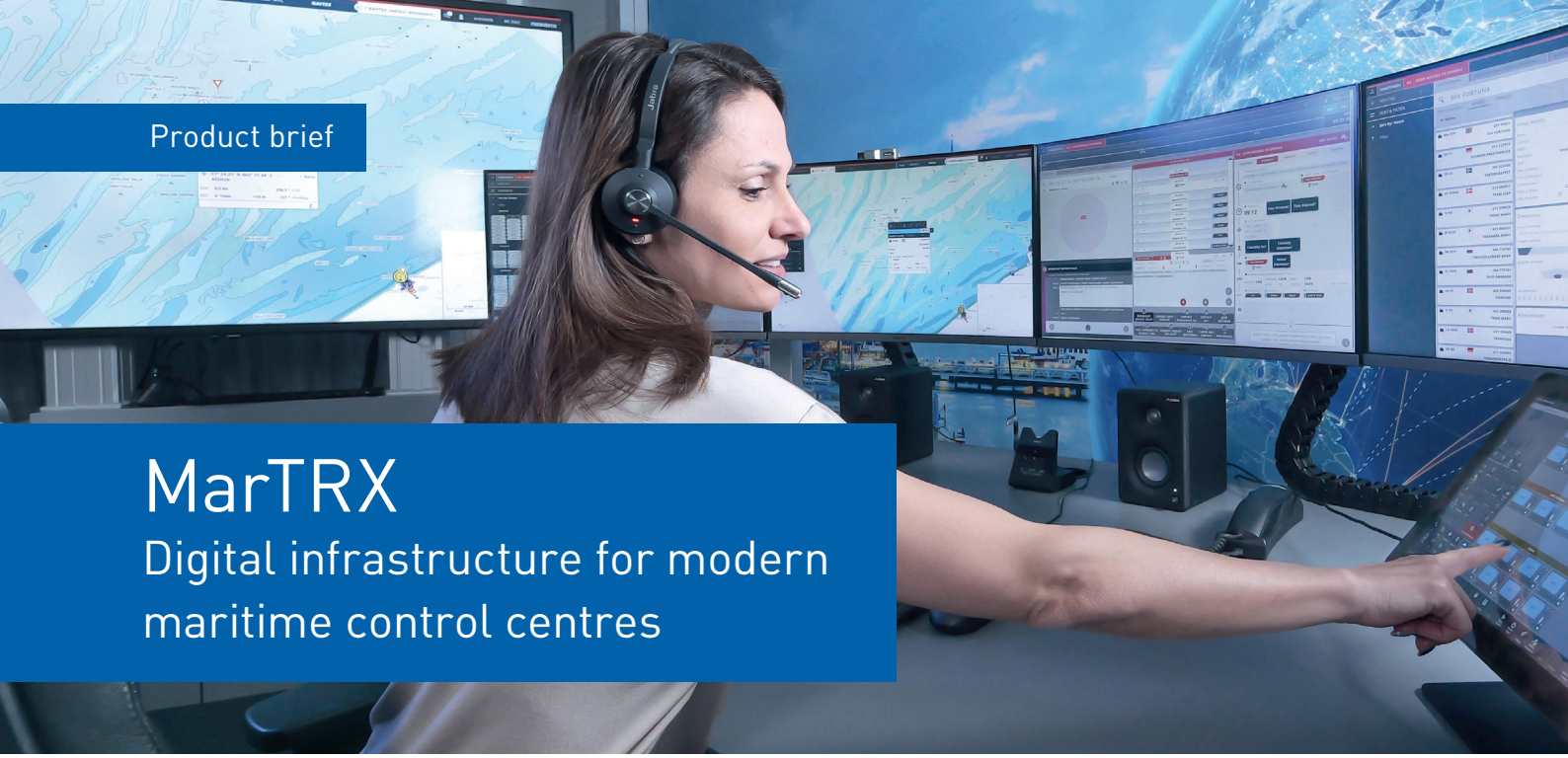


Product brief

# MarTRX

## Digital infrastructure for modern maritime control centres

From managing port traffic and shipping lanes to coordinating search and rescue, maritime control rooms operate in increasingly challenging environments. These digital nerve centres must integrate complex data from a growing array of sources and use it to provide reliable situational awareness. They must also support fast and confident decision-making, enable clear communication with vessels, and share information with external partners. Frequentis MarTRX offers advanced digital infrastructure that helps maritime control rooms enable safe navigation, protect the maritime environment and save lives at sea. Covering all key use cases in a modular architecture, MarTRX is built for long-term interoperability and ongoing evolution.

## MarTRX at a glance

- Voice and data communications, GMDSS, search & rescue, VTS, coastal surveillance
- One coherent architecture for any combination of functions
- Modular and adaptable to any maritime control use cases
- Evergreen technology for long-term support and evolution
- Open for integration with third-party and legacy systems
- High availability, strong cybersecurity, operational resilience
- User-centric workflows supporting rapid decision-making

## Key features

MarTRX provides communications, incident coordination, situational awareness, traffic management and coastal surveillance. It does this within one coherent environment and is adaptable to all marine requirements. As the digital foundation for maritime control environments, the solution enables organisations to transform at their own pace. It also allows them to continually deploy new capabilities without disruption. MarTRX replaces multiple disconnected systems and workflows to enable more efficient and intelligent maritime operations. It delivers clarity, intuitive controls and stress-free decision-making. And with a modern architecture built on microservices, MarTRX imposes no restrictions on system configuration.

FREQUENTIS

FOR A SAFER WORLD

# Transforming highly diversified information into actionable decisions

In maritime control environments, operators are under pressure – whether safety-critical or financial – to rapidly assimilate complex information on multiple systems and screens. Making the right decisions is challenging when the individual user is responsible for integrating data across these systems.

Demand is growing for information sharing, cooperation and interoperability between organisations. It is therefore increasingly important to gain rapid insight from disjointed datasets. Built for resilience, interoperability and future growth, MarTRX is a modular maritime control platform. It integrates data, supports clear and fast decision-making, and enables safe operations. MarTRX empowers operators to put clear decisions into action – rapidly and efficiently.

## Modular capabilities to meet any operational needs

**Maritime situational awareness** Integrates sensor data, vessel information and operational inputs to deliver a clear and accurate view of maritime activity.

**Operational communication management** Manages voice and data communication across maritime radio networks, control centres and operational partners.

**Incident coordination** Enables structured response to incidents through coordinated information flow, communication and workflow management.

**Maritime traffic management** Monitors and coordinates vessel movements through a unified operational picture to support safe, efficient and environmentally responsible navigation.

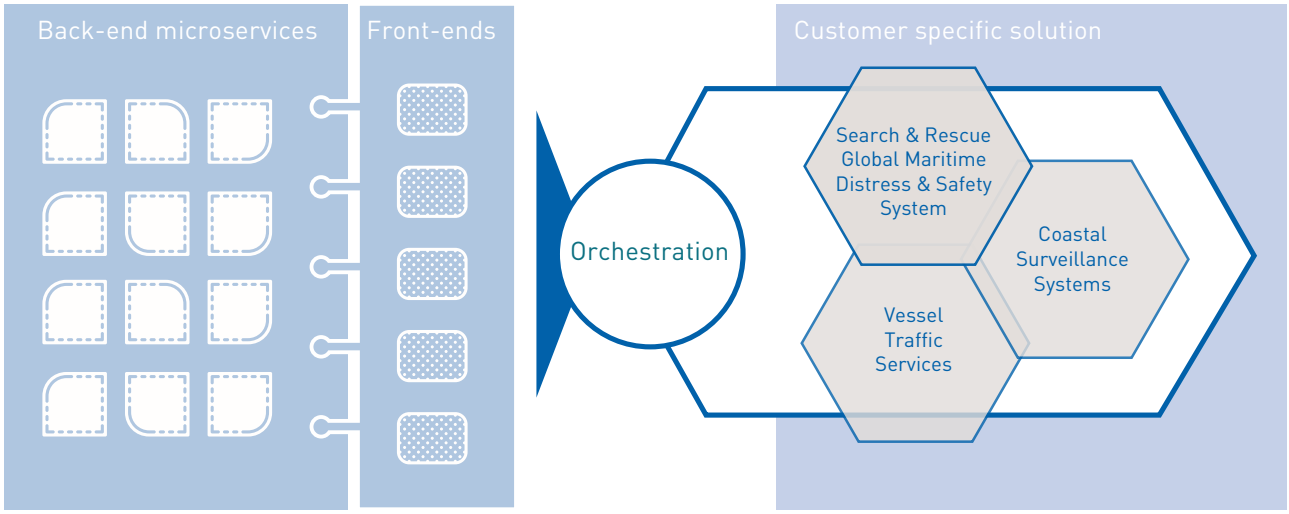
**Multi-agency collaboration** Enables secure information sharing and coordinated action across organisations, including coast guards, port authorities, search and rescue services, maritime administrations and more.

**Operational integrity and replay** Provides secure recording and logging, replay and analysis of operational situations to support investigations, training and continuous improvement.

# One environment, multiple missions

MarTRX offers a modular, highly portable, microservices-based architecture, On-premises or in the cloud, able to meet essentially any maritime requirements. Organisations can start small and add capabilities non-disruptively or change direction without penalty.

MarTRX is designed for easy integration through standardised interfaces such as RESTful APIs. Organisations can deploy MarTRX software alongside existing legacy systems and execute a modernisation programme at their own pace. In real-world deployments, the same MarTRX technology supports customers ranging from single ports up to the Canadian Coast Guard, custodians of the world's longest coastline. As an evergreen platform, MarTRX is continuously upgraded and can accompany customers across decades of growth and development.




# Clarity for safer seas

## Enables safe navigation

By delivering a clear overview and integrating diverse data sources, MarTRX helps operators maintain situational awareness. It also helps operators make intelligent decisions and communicate accurately with vessels to help them navigate safely.

## Protects the maritime environment

Integrating sensor data, vessel information and operational inputs, MarTRX provides comprehensive surveillance capabilities to support security, border integrity and environmental protection.

## Saves lives at sea

MarTRX unites real-time data across multiple systems and data sources, enabling clear, timely communications. In doing so, it supports search and rescue operators in making and enacting the right decisions to protect water users.

## Supports cross-agency collaboration

In an increasingly complex and interconnected maritime environment, MarTRX simplifies secure data sharing with other organisations. In this way, it promotes efficient and effective joint operations and contributes to a clear operational picture for all involved parties.

## Key capabilities

| | |
|---|---|
| Architecture designed for operational evolution | MarTRX is the architectural foundation for maritime control environments, integrating people, information and workflows into a coherent framework. It enables organisations to introduce capabilities incrementally, integrate existing systems and continuously evolve their operations as requirements change. |
| Deployment models | Single-site operations; multi-site operations; national networks; virtual control centres; remote operator positions; cloud/data-centre/hybrid deployment |
| Maritime operational contexts | Maritime voice and data communications, GMDSS Search & Rescue, Vessel Traffic Services, coastal surveillance |
| Maritime operational capabilities | Situational awareness; operational communication management; incident coordination; maritime traffic management; multi-agency collaboration; operational integrity and replay; infrastructure resilience |
| MarTRX architectural foundation | Open APIs and standards, shared data services, workflow engine, security by design, high availability, thin-client access, service-oriented architecture built on microservices |
| Operational ecosystem | Radar, AIS, voice, cameras, RDF, weather, GMDSS, satellites, drones, external data sources, national systems, third-party applications |
| Built for reliability | High availability and resilience for mission-critical operations |
| Secure by design | Cybersecurity embedded throughout the lifecycle |
| Open and interoperable | Standards-based integration eliminates vendor lock-in |
| Future-proof | Designed to integrate AI and other new technologies |

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

The information contained in this publication is for general information purposes only. The technical specifications and requirements are correct at the time of publication. Frequentis accepts no liability for any error or omission. Typing and printing errors reserved. The information in this publication may not be used without the express written permission of the copyright holder.



© Frequentis AG 2026, all rights reserved