MarTRX
An integrated maritime control centre solution
Built around the operator’s needs
Integrated and networked workflows
Flexible and modular architecture
The complexity challenge for operators

Operators in maritime control centres with a diverse array of legacy and new operation and communication systems rarely benefit from a consistent user interface or a standardised workflow. In fact, even relatively simple activities may require them to know and execute a complex sequence of commands via different interfaces, which also increases the time and effort involved in training new operators. Managing IT integration and security across all systems is challenging and functional upgrades are likely to be slow and costly.

Introducing MarTRX

Frequentis MarTRX is an integrated solution for maritime control centres, covering Search & Rescue (SAR), Vessel Traffic Services (VTS) and Coastal Surveillance Systems (CSS).

MarTRX offers a unified, intuitive user interface complete with optimised workflows that make it easy for operators to achieve situational awareness, handle ongoing events, streamline decision-making, and adhere to organisational rules and best practices.

Context-sensitive tools guide operators through established workflows, providing easy access to the functions they are most likely to need at each stage. By seamlessly handling the underlying integration, MarTRX enables operators to focus on end-to-end outcomes rather than individual processes.

User-centric, intuitive working environment

Operators can customise the interface and workflows to suit their individual needs, while maritime control centres can adapt the entire solution to their requirements. Built-in communication technology provides fully integrated support for seamless multi-centre operations by ensuring that operators can easily interact with local and remote co-workers directly from any part of the solution.
MarTRX offers a fully extensible, state-of-the-art platform based on shared microservices. The flexible and open interface architecture ensures fast and easy adaptation to future requirements and full integration with both existing control centre and new third-party software modules, while thin-client technology helps to keep total cost of ownership low.

Microservice architecture: flexible system deployment

All graphical data is ergonomically overlaid on the Sea Chart Module, creating the Tactical Situation Display for complete awareness. Event Monitoring and Statistics supports fast and effective decision-making by giving controllers system-wide information.

Maritime Communication System MCS 3020IP is the core of any deployment. It enables operators to interact with any party. Maritime Directory provides detailed information about vessels, organisations, persons, auxiliary vehicles, etc.

Incident Management boasts a highly graphical interface to support operators in following the appropriate workflows. Multi-Sensor Fusion combines information from sensors such as radars, cameras, radio direction finders and external data sources.

MarTRX can be configured to include comprehensive Training and Simulation functionality. Technologies for GMDSS include all relevant services such as Digital Selective Calling, NAVTEX, SafetyNET, CMB and more.

Virtual Control Centre Handling uses modern user management technologies for hot desking and role-based system access. Sensor Integration Management enables practically any sensor or third-party application to be easily integrated.

Big Data driven Alarms and Warnings attract the attention of the operator. Common Logging records all voice and sensor data, system-processed information, user interactions and system status.
Integrated, open, user-centric

Designed from the ground up to meet real-life requirements in maritime control centres, MarTRX brings a number of benefits to maritime organisations, while its unique integration of full voice and data communication capabilities places all actionable knowledge at the operator’s fingertips for rapid decision-making and collaboration.

Flexible and reliable support for mission and safety critical workflows

With critical information and intuitive tools provided through a highly graphical interface, MarTRX helps operators focus on their primary goals in high-pressure situations. This helps them to prioritise activities, avoid stress and make high-quality decisions.

Thin-client terminals significantly reduce the cost per working position, while modern web technologies permit the deployment of standard networking components and greatly reduce the complexity of interfaces.

Adherence to industry standards and the use of commercial off-the-shelf hardware reduce the likelihood of vendor lock-in, eliminate obsolescence and reduce total cost of ownership.

MarTRX’s agnostic, open-API approach to extending functionality extends the lifespan of the solution, reducing complexity and maintenance costs. It also protects today’s investments by enabling seamless integration with existing technologies.

By giving operators a tailored set of information and tools, MarTRX unobtrusively supports fast and effective working. It promotes the most likely functions without limiting what operators can do, optimising workflow and user experience, while diminishing training requirements.

Modularity facilitates ongoing expansion and adaptation to new requirements. It also permits extensive customisation at low cost. Third-party applications can be rapidly and simply integrated via system APIs, facilitating multi-agency operations.

With MarTRX, maritime control centres can improve the effectiveness, efficiency, and job satisfaction of their operators while simultaneously reducing cost and complexity for the organisation as a whole to serve the ultimate goal: achieve maximum safety for lives at sea.