



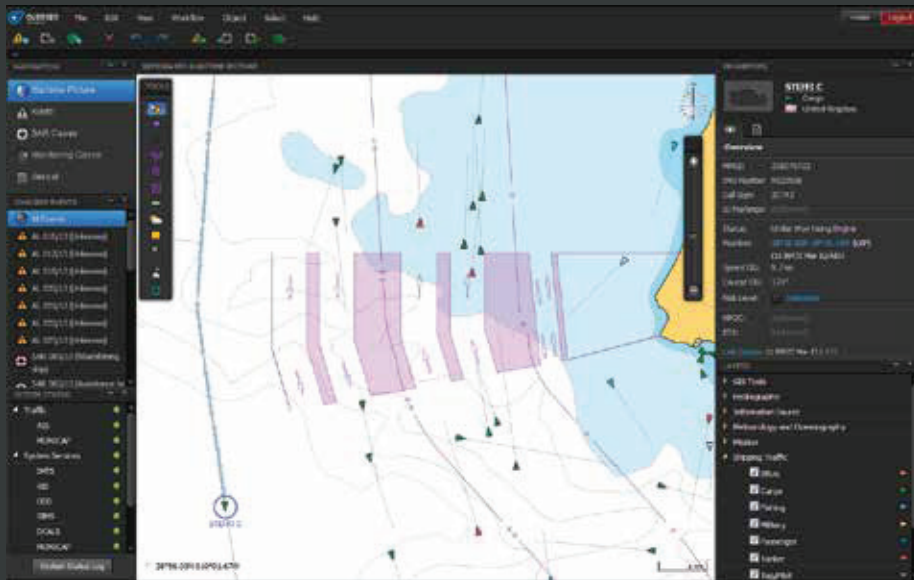
OVERSEE

Search and Rescue

Maritime safety is of paramount importance to all maritime related activities; without safety, the attraction for commercial and recreational purposes, along with the associated marketplace is compromised. Thus, the agencies responsible for providing the safety infrastructure play a pivotal role in maritime economy; however, the challenges faced in particular by Search and Rescue (SAR) agencies are as complex as they are diverse. At the Information Systems level, an integrated picture encompassing all the information made available through a multitude of data sources is required, as well as adequate computing capacity to monitor and extract all the relevant knowledge from these data sources. Coupled with the need for interoperability

between multiple agencies typically engaged in SAR operations, the success of a mission is dependent upon the ability to instruct and track SAR resources as the rescue progresses. Critical Software's Search and Rescue Solutions provide an answer to all these challenges; our maritime operations product-line is designed in close cooperation with SAR professionals, leveraging a Service Oriented Architecture to fully integrate mission specific applications and support incorporation of legacy systems. Our SAR solutions facilitate Operation Risk Management, Maritime Operation Planning, Maritime Drift Analysis, Resource Management, Integrated Traffic Monitoring, Trajectory Conflict Detection and Satellite Imagery Processing services.





One-stop shop – a high-end Maritime Rescue Co-ordination Centre (MRCC) ‘Swiss Army knife’ compliant with IAMSAR guidelines and maritime SAR best practices.

Business driven – designed in close cooperation with SAR professionals with focus on solving real-world problems with real-time monitoring of the system ROI.

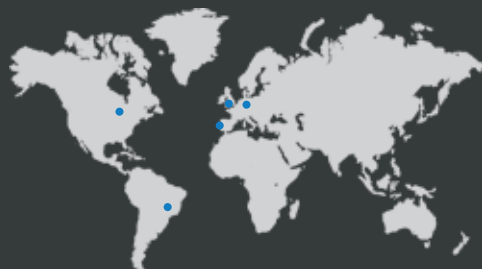
Web-based easy-to-use interface – takes advantage of advanced web technologies to provide feature rich interface that promotes a great user experience.

Open and Service Oriented Architecture (SOA) – a modular SOA that supports the integration of legacy systems, hence facilitating the evolution of existing environments.

Secure data exchange – a secure data exchange mechanism, implemented over the internet or custom network, to support cooperation between different agencies.

CONTACTS

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UNIÃO EUROPEIA

Fundo Europeu de Desenvolvimento Regional

MAIN FUNCTIONALITY

INTEGRATED MARITIME SITUATIONAL AWARENESS

Marine traffic data source integration (AIS, VMS, LRIT, etc.)

COSPAS-SARSAT alert integration with geo-referenced display

METOC data integration

External databases integration (e.g. vessel databases)

Cartographic and hydrographic data

Real-time geo-referenced SRU display

EARLY WARNING

Automatic interest area monitoring

Automatic maritime traffic overdue warning

Ship tracking service

OPERATION PLANNING AND DECISION SUPPORT

GEO-spatial analysis tools (user defined areas, distance and area measurement tools, bearing measurement tools)

Review and preview of all context elements, including traffic and METOC using time navigation feature

Geo-referenced display of vessel position history

Automatic port visit logging

IAMSAR based drift analysis and search area determination

Scenario simulation and analysis

SRU deployment support

INCIDENT MANAGEMENT

End-to-end incident life-cycle management

Correlation of multiple alerts

Communications integration with record/playback

Mission progress monitoring

Email and SMS notification

Navigation alerts

MRCC OVERALL MANAGEMENT

Report and briefing generation

Personnel handover

MRCC KPI monitoring

Interagency information exchange

Training and certification

Deployed using on-site infrastructure or cloud-based architecture

Infrastructure monitoring

IT Infrastructure governance tools