EDGE

TORCH-X™ MARITIME

COMPREHENSIVE MARITIME PROTECTION AND COMMAND AND CONTROL SOLUTION

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Elbit Systems' Torch-X Maritime is an integrated, advanced command and control (C^2) solution for protection and operations management in the maritime arena. The comprehensive system features strategic and operational capabilities to address the challenges of monitoring, protection, security and defense of maritime borders, maritime facilities, coastal sites, vessel traffic control and port entries.

Torch-X Maritime incorporates advanced cyber defense capabilities to withstand the modern and ever-changing threat landscape.

Elbit Systems has decades of experience and a proven track record in the design, development and deployment of comprehensive, large-scale and complex maritime C^2 and protection solutions.
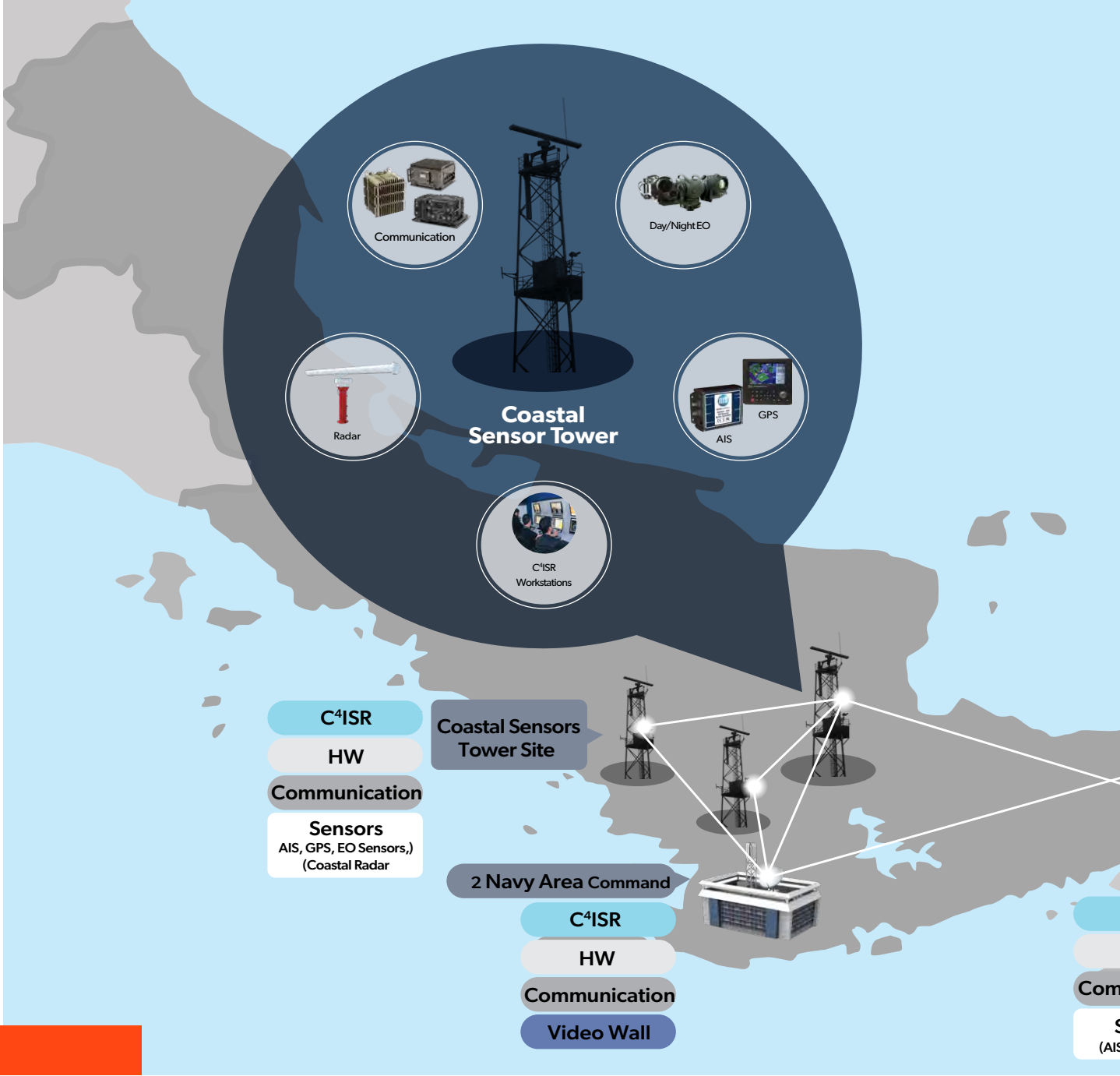
SOLUTION OVERVIEW

Torch-X Maritime is a multi-layer, integrated solution that incorporates industry-standard mature components, an open architecture C^5ISR application with sophisticated technologies, combining various sensors and tactical elements. The solution enables highly effective cross-force coordination, quick and precise planning and execution with effective sensor-to-responder capabilities, as well as simulation and training capabilities for mission planning and development of emergency procedures. Advanced AI tools assist the decision-making process by recommending tasks to the commanders, based on all available data and in accordance with the rules of engagement.

Imagery and data from all available sensors are fused and the situational awareness picture. With a unified operational picture, a scalable toolbox of AI, machine-learning and tactical decision support algorithms, Torch-X Maritime brings true multidomain networked warfare capabilities.

Coastal Sensor Tower

- Communication
- Day/Night EO
- Radar
- GPS
- AIS
- C⁴ISR Workstations

C⁴ISR	Coastal Sensors Tower Site
HW	
Communication	
Sensors AIS, GPS, EO Sensors,) (Coastal Radar	

2 Navy Area Command

C⁴ISR

HW

Communication

Video Wall

TORCH-X™
Maritime

Enhanced operational effectiveness at all levels of command and deployment:

Torch-X Maritime delivers real-time data, voice and live video information sharing between participating forces and platforms at sea to provide a common language and seamless operations in maritime routine and emergency situations. The solution also supports the linkage of civil, governmental and military agencies, for improved civil-military cooperation (CIMIC) and safety in emergency events. Advanced record and replay capabilities enable event monitoring, investigation and reporting.

C⁵ISR service platform - open architecture infrastructure:

Torch-X Maritime is based on Elbit Systems' C⁵ISR service platform, designed as an "evergreen" ecosystem that can accommodate third party applications and provide the development environment for future growth and requirements. It offers an advanced communication infrastructure and deployment solutions, to establish a multi-layered surveillance and reconnaissance array. The open architecture infrastructure enables customer integration into the development process, for independent changes and additions. The modular solution is based on customizable building blocks and uses industry standards, designed for future growth capacity. Agile and scalable, the

C⁴ISR **1 Vessel**
HW
Communication
Sensors
(AIS, GPS, Radar)

1 Navy Area Command
C⁴ISR
HW
Communication
Video Wall

Headquarter
C⁴ISR
HW
Communication

C⁴ISR **2 Vessel**
HW
Communication
Sensors
(S, GPS, Radar)

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solution easily interfaces with new or legacy systems.

Advanced C⁵ISR application:

Featuring a simple, intuitive and configurable web user interface, the application enables multi-interface control and connectivity with external applications, sensors and devices to generate a common real-time, reliable and accurate situation picture. It is suitable for installation on coastal, mobile and naval command platforms.

Multiple interface connectivity and control:

Full integration and connectivity to multiple systems, with the ability to control and manage remote sensors in real-time.

Imagery and data from all available sensors and

external sources are fused and enriched, with AI-based anomaly detection. The relevant information comprises the situational awareness picture. With a unified operational picture, a scalable toolbox of AI, machine-learning and tactical decision support algorithms, Torch-X Maritime brings true multidomain networked warfare capabilities.

Cyber protection:

Torch-X Maritime incorporates Elbit Systems CyberShield, a sophisticated, military-grade solution that performs continuous endpoint cyber health monitoring and preventive actions to withstand adversary cyber security threats.v

KEY FEATURES

Maritime tactical picture management

Open architecture

Modular and scalable

Mission planning and training capabilities

Multiple interface support for various sensors, effectors and systems

Full communication media support

Interoperable

Operates autonomous vehicles

Data fusion from all sensors and external sources

Comprehensive Situational Awareness Picture

KEY BENEFITS

Crisis analysis: emergency procedure development, resource allocation and control

Common situational awareness and operational language among different forces
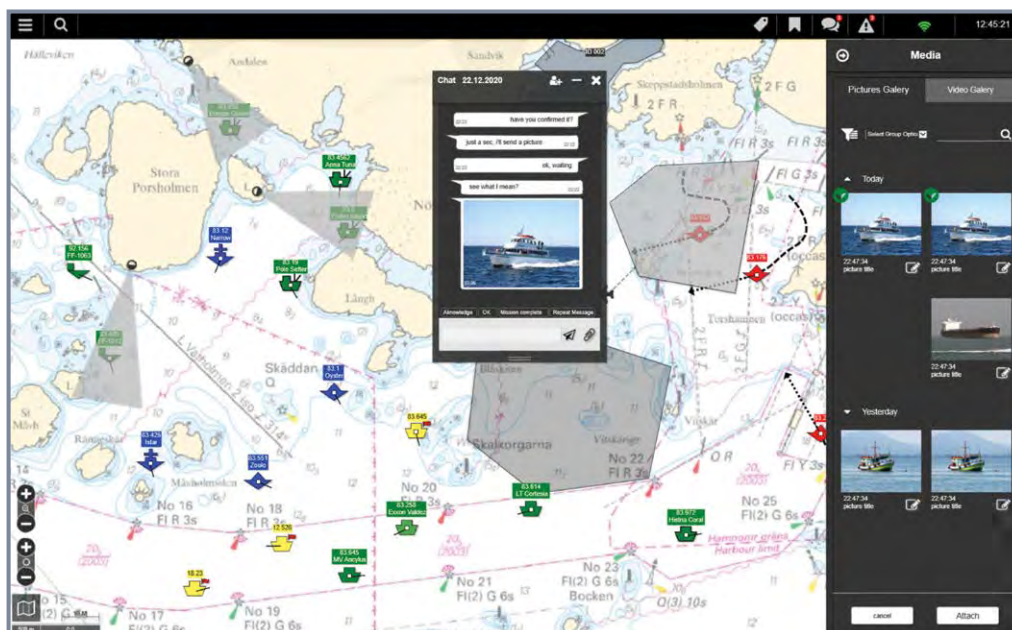
Advanced monitoring capabilities

Record and replay capabilities

Real-time information sharing: data, voice and live video

Battle-proven, secure and safe

Built-in advanced cyber threat protection

Interaction with our forces and external information