

Maritime ICT Forecast

Challenges and Solutions

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Impact Analysis of the Main ICT Change Drivers

- Digitization → Increased Demand on Sat Communications and **Cybersecurity**
- Vessel Automation → Increased Demand on Sat Communications, Hardware, and **Cybersecurity**
- Cyber Threats → **Cybersecurity**
- Regulation → **Cybersecurity**
- Remote Access and Remote Support → Increased Demand on Sat Communications and **Cybersecurity**
- New Communication channels → **Cybersecurity**

Opportunities and challenges

- Bigger Data
- IoT
- Smart Applications
- Smart Devices
- Access to Data
- Access to on-board systems
- New Business Models. Vessel-as-a-service

Industry Readiness

- Legacy fragmentation that slows down the innovation
- Poor cybersecurity framework and capabilities
- Poor connectivity (high latency, low bandwidth)
- Poor quality of existing software
- Regulated environment

Change Accelerators

- New Connectivity Options
 - LEO
 - MEO
 - 5G
 - VHTS
- New Generation of Ship Owners and IT Executives
- IMO Cybersecurity Guidelines and gradual development of new cybersecurity culture.
- Class society cyber-mature

Critical Solutions

- Hybrid connectivity
 - The unification of different communication channels into a single service
 - Data transmission via the best or cheapest channel per application/service
- Integrated Cybersecurity Strategy and Solutions
 - proactive full spectrum strategy
 - complete solution, guarding against a full range of cyber threats.
 - Providing end-to-end protection across the organization's whole infrastructure – edge to edge across endpoints, networks, and cloud
 - Option of a tailor-made solution.
 - Integrating solutions from multiple vendors.
 - Providing a holistic approach of centralized threat intelligence
 - Flexible and scalable.
 - Puts businesses in control of securing their infrastructure.
 - Zero-Trust , cybersecurity Mesh

The Mix of Services will change

- OT Operations → Edge
- OT Support → Cloud
- Business Applications → Cloud
- Business Applications → Cloud
- Cybersecurity → Application-Level Security
- Cybersecurity → Zero trust security model