

MARITIME CYBER SECURITY

On land, port and sea

Ready for 2021?

The Maritime business is facing huge challenges with managing Cyber Security in their environments. The maritime regulator, International Maritime Organization IMO, has updated their regulations and guidelines to include cyber risk management onboard ships mandatory as of 1 January 2021.

Which organisation are you?

We have heard many different approaches and explanations:

- We don't have so much valuable assets onboard
- Let's wait and see until requirements are clearer
- Our organisation is still not mature for this project
- We have started but need specialised assistance
- Our organisation is ISO 27001 compliant

3-step cyber security project

Deductive Labs offers you a three step standard process that is easy to follow and easy to budget.



Step 1: Kickoff including awareness training, setting up organisation, goals and objectives



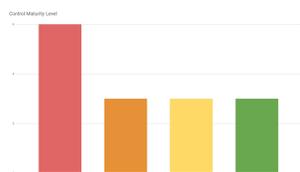
Step 2: Current state analysis including self-assessments, interviews, document and technical analysis. Deductive Labs Assessment Tool is used throughout the process.



Step 3: Implementation and project management in order to carry out recommended and prioritised activities.

Assessment Tool

Deductive Labs has developed a customised Cyber Security Assessment tool including security standards ie. ISO 27001, IEC 62443, NIST Cybersecurity framework, and the Bimco guidelines. It is used as our main tool when carrying out a current state analysis. A light version is also used for self-assessments that are beneficial as a first step activity to gather basic information but also for increasing awareness purposes.



Domain	Objective ID	Objective	Prestate	Person / role	Status	Comments / evidence
ACM-Asset, Change and Configuration Management						
ACM-2: Manage Asset Inventory						
ACM	ACM1	Manage Asset Inventory	There is an inventory of IT and OT assets that are important to the delivery of the functions management of the inventory may be ad hoc	Carl Svedsson / Project Manager	Not implemented - 1	IT and OT assets onboard vessels are mostly documented in the company asset inventory system.
ACM	ACM1	Manage Asset Inventory	There is an inventory of IT and OT assets that are important to the delivery of the function (e.g., IT systems, sensors, IEC, Navigation, ECDIS, VDR, AIS, Communication, DSCOM, VMS, WLAN, GSM/Cellar, Propulsion and Power systems, Access control, CCTV, Winch, SAS, Cargo management, CCR, Fleet Management System/IMS), Passenger catering and management systems, Crew and passenger networks, Wi-Fi, LAN, Core communication and network/wireless (voice, video, VPN), IT systems, Cloud, etc. management of the inventory may be ad hoc.	Ava Garcia / Technical Fleet Manager	Largely implemented - 3	IT and OT assets onboard vessels are mostly documented in the company asset inventory system. The IT and OT assets that are critical to the operation of vessels has been identified and documented in the asset inventory.
ACM	ACM1	Manage Asset Inventory	Inventory attributes include information to support the Cyber Security strategy (i.e., location, asset owner, applicable security requirements, service dependencies, service level agreements, and confidentiality of assets to relevant stakeholders)	Ava Garcia / Technical Fleet Manager	Partially implemented - 2	Most assets has information about location, owner, security requirements, dependencies and vendor agreements. Not all assets have been documented with detailed information and proper tagging to cover all assets in use on the fleet.
ACM	ACM1	Manage Asset Inventory	Unauthorized assets are prioritised based on their importance to the delivery of the function	Ava Garcia / Chief Technology Officer	Not implemented - 1	Some assets are prioritised but a total review of all assets must be made. Proper tagging to cover all assets.
ACM	ACM1	Manage Asset Inventory	There is an inventory and network and data-flow diagrams for all connected IT and OT assets related to the delivery of the function	John Smith / Chief Technology Officer	Not implemented - 1	No detailed network diagrams or flow diagrams has been created.
ACM	ACM1	Manage Asset Inventory	The asset inventory is current (as defined by the organisation)	John Smith / Chief Technology Officer	Not implemented - 1	The asset inventory has not been updated in the last 12 months. Project is ongoing to review and document of assets in use.

Your partner

Deductive Labs, experienced and specialised partner for maritime cyber security. We can assist your organisation to be prepared for cyber threats and in order to fulfil current and upcoming requirements and regulations.