

Maritime Asset Protection Framework 2024

DeepShield Systems, Inc.

Effective Date: January 15, 2024

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1. INTRODUCTION AND PURPOSE

1. This Maritime Asset Protection Framework ("Framework") establishes the comprehensive security protocols and operational standards for DeepShield Systems, Inc.'s ("DeepShield") maritime cybersecurity solutions and critical infrastructure protection services.
2. This Framework governs all maritime-related security operations, including but not limited to vessel control systems, port facility networks, offshore platform protection, and subsea infrastructure security implementations.

2. DEFINITIONS

1. "Maritime Assets" means any vessel, offshore facility, port infrastructure, or marine terminal utilizing DeepShield's security solutions.
2. "OT Systems" refers to operational technology systems, including industrial control systems (ICS), supervisory control and data acquisition (SCADA) systems, and related maritime operational infrastructure.
3. "Security Event" means any detected or suspected compromise, breach, or unauthorized access attempt affecting protected Maritime Assets.

3. SCOPE OF PROTECTION

1. System Coverage
 - a) Vessel navigation and propulsion control systems
 - b) Port facility access control and monitoring systems
 - c) Cargo handling and tracking systems
 - d) Maritime communications infrastructure
 - e) Offshore platform operational systems
 - f) Subsea control networks and equipment

2. Protection Layers

2.1. Network Segmentation and Access Control

2.2. Real-time Threat Monitoring

2.3. Automated Incident Response

2.4. System Redundancy and Failover

2.5. Data Encryption and Secure Communications

4. OPERATIONAL REQUIREMENTS

1. System Implementation

1.1. All Maritime Asset protection implementations must undergo DeepShield's standardized security assessment protocol.

1.2. Implementation plans must include detailed network topology documentation and threat model analysis.

1.3. Security controls must be validated through penetration testing before deployment.

2. Monitoring and Response

2.1. 24/7 security operations center (SOC) monitoring

2.2. Automated threat detection and response protocols

2.3. Incident escalation procedures

2.4. Regular security status reporting

5. COMPLIANCE AND STANDARDS

1. Regulatory Compliance

- International Maritime Organization (IMO) cybersecurity guidelines
- Port facility security requirements
- National maritime security regulations
- Industry-specific compliance standards

2. Security Standards

- ISO 27001 Information Security Management
- IEC 62443 Industrial Network Security
- NIST Cybersecurity Framework

- Maritime-specific security protocols

6. INCIDENT MANAGEMENT

1. Incident Classification

- 1.1. Level 1: Minor security events
- 1.2. Level 2: Moderate security incidents
- 1.3. Level 3: Major security breaches
- 1.4. Level 4: Critical system compromises

2. Response Procedures

- 2.1. Initial assessment and containment
- 2.2. Incident investigation and documentation
- 2.3. System recovery and restoration
- 2.4. Post-incident analysis and reporting

7. MAINTENANCE AND UPDATES

- 1. Regular system updates and patch management
- 2. Quarterly security assessments
- 3. Annual framework review and revision
- 4. Continuous monitoring system upgrades

8. CONFIDENTIALITY AND INTELLECTUAL PROPERTY

- 1. All aspects of this Framework and associated implementation details are confidential and proprietary to DeepShield Systems, Inc.
- 2. Distribution of this document is restricted to authorized personnel only.

9. LIMITATION OF LIABILITY

- 1. DeepShield Systems, Inc. maintains appropriate insurance coverage for maritime security operations but disclaims liability for consequences of security events beyond its reasonable control.

10. EXECUTION AND VALIDATION

This Framework is hereby adopted and implemented by DeepShield Systems, Inc., effective as of the date first written above.

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