# **DeepShield ICS Security Compliance Framework 2023**

## 1. Introduction and Purpose

- 1. This Industrial Control System (ICS) Security Compliance Framework ("Framework") establishes the mandatory security controls, protocols, and compliance requirements for DeepShield Systems, Inc. ("DeepShield") and its integrated industrial cybersecurity platform.
- 2. This Framework is designed to ensure compliance with applicable regulatory requirements while implementing DeepShield's proprietary deep-layer security architecture for protecting critical infrastructure and operational technology environments.

## 2. Scope and Applicability

- 1. This Framework applies to all DeepShield products, services, and operations related to:
- a) Industrial automation systems
- b) SCADA networks
- c) Maritime and subsea infrastructure
- d) Manufacturing operations technology
- e) Critical infrastructure protection systems
- 2. All employees, contractors, and third-party service providers accessing or managing DeepShield systems must comply with this Framework.

## 3. Regulatory Compliance Standards

- 1. DeepShield's Framework incorporates requirements from:
- NIST SP 800-82 Guide to ICS Security
- IEC 62443 Industrial Network and System Security
- NERC CIP Standards
- Maritime Cybersecurity Framework (BIMCO)
- ISO/IEC 27001:2022 Information Security Management
- 2. Where conflicts exist between standards, the more stringent requirement shall apply.

## 4. Security Control Requirements

- 1. Network Segmentation and Access Control
- a) Mandatory implementation of DeepShield's proprietary OT network isolation protocol
- b) Multi-factor authentication for all privileged access
- c) Role-based access control (RBAC) implementation
- d) Regular access rights review and attestation
- 2. Threat Detection and Response
- a) Continuous AI-driven monitoring of OT networks
- b) Real-time anomaly detection using DeepShield's behavioral analysis engine
- c) Automated incident response protocols
- d) Mandatory incident reporting within 4 hours of detection
- 3. System Hardening
- a) Regular vulnerability assessments
- b) Quarterly penetration testing
- c) Security patch management
- d) Baseline configuration management

#### 5. Maritime and Subsea Infrastructure Protection

- 1. Specialized Controls
- a) Subsea control system isolation
- b) Maritime-specific threat detection
- c) Vessel cybersecurity requirements
- d) Offshore platform protection measures
- 2. Compliance with International Maritime Organization (IMO) Guidelines
- a) Resolution MSC.428(98) compliance
- b) Maritime cyber risk management
- c) Port facility cybersecurity

## 6. Audit and Assessment

1. Internal Audit Requirements

- Quarterly security control assessments
- Annual comprehensive framework review
- Continuous compliance monitoring
- Regular penetration testing

## 2. External Audit Requirements

- Annual third-party security assessment
- Regulatory compliance verification
- Client audit support protocols

## 7. Incident Management and Reporting

#### 1. Incident Classification

- Level 1: Critical Infrastructure Impact
- Level 2: Operational Disruption
- Level 3: Security Event
- Level 4: Policy Violation

## 2. Response Requirements

- Mandatory incident documentation
- Escalation procedures
- Stakeholder notification protocols
- Post-incident analysis

## 8. Training and Awareness

## 1. Required Training Programs

- Annual security awareness training
- Quarterly technical updates
- Role-specific security training
- Incident response drills

## 9. Framework Updates and Maintenance

1. This Framework shall be reviewed and updated:

- Annually at minimum
- Following major security incidents
- Upon significant regulatory changes
- As required by threat landscape evolution

# **10.** Compliance Declaration

The undersigned affirm that this Framework has been reviewed and approved as the governing document for DeepShield Systems, Inc.'s ICS security compliance program.

Effective Date: January 1, 2023

Dr. Marcus Chen
Chief Executive Officer
DeepShield Systems, Inc.

Sarah Blackwood
Chief Technology Officer
DeepShield Systems, Inc.

Dr. Elena Rodriguez
Chief Security Architect
DeepShield Systems, Inc.

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