IEC 62443 Industrial Control Systems Security Compliance

Documentation

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Approved By: Dr. Elena Rodriguez, Chief Security Architect

1. Purpose and Scope

- 1. This document certifies DeepShield Systems, Inc.'s ("DeepShield") compliance with the IEC 62443 series of standards for Industrial Control Systems (ICS) security, specifically addressing the implementation and maintenance of secure industrial automation and control systems.
- 2. This documentation covers DeepShield's proprietary deep-layer security architecture platform and all associated components, including:
- Network monitoring systems
- Threat detection modules
- Automated response frameworks
- Maritime and subsea protection modules
- SCADA integration components

2. Compliance Framework

- 1. DeepShield maintains compliance with the following IEC 62443 standards:
- a) IEC 62443-2-4: Security program requirements for IACS service providers
- b) IEC 62443-3-3: System security requirements and security levels
- c) IEC 62443-4-1: Secure product development lifecycle requirements
- d) IEC 62443-4-2: Technical security requirements for IACS components
- 2. Security Capability Levels achieved:
- Security Level 3 (SL3) for core platform components

- Security Level 4 (SL4) for critical infrastructure protection modules

3. Technical Controls Implementation

- 1. Authentication and Access Control
- Multi-factor authentication implementation
- Role-based access control (RBAC) framework
- Privileged access management system
- Secure remote access protocols

2. Network Segmentation

- Zone and conduit model implementation
- DMZ architecture for external connections
- Network isolation for critical systems
- Secure communication protocols

3. System Hardening

- Secure configuration baseline
- Patch management procedures
- Vulnerability management program
- Security monitoring and logging

4. Risk Assessment and Management

- 1. DeepShield conducts quarterly risk assessments covering:
- Threat modeling and analysis
- Vulnerability assessments
- Impact analysis
- Control effectiveness evaluation

2. Risk treatment procedures include:

- Risk mitigation strategies
- Compensating control implementation
- Residual risk acceptance criteria

- Continuous monitoring requirements

5. Incident Response and Recovery

- 1. Incident Management Framework
- Detection and analysis procedures
- Containment strategies
- Eradication and recovery processes
- Post-incident analysis requirements
- 2. Business Continuity Integration
- Recovery time objectives (RTO)
- Recovery point objectives (RPO)
- System restoration procedures
- Backup and redundancy requirements

6. Compliance Monitoring and Reporting

- 1. Continuous Monitoring Program
- Security metrics collection
- Performance indicators
- Compliance dashboards
- Executive reporting requirements
- 2. Audit Program
- Internal audit schedule
- External certification maintenance
- Non-conformance management
- Corrective action tracking

7. Documentation and Records

- 1. Required Documentation
- System security plans
- Configuration management records

- Change management logs
- Training records
- Incident reports
- Audit findings

2. Record Retention

- Minimum retention periods
- Storage requirements
- Access controls
- Disposal procedures

8. Certification and Validation

- 1. DeepShield maintains current certifications from:
- T V Rheinland for IEC 62443-2-4
- exida for IEC 62443-3-3
- Bureau Veritas for maritime modules
- 2. Annual validation activities include:
- External penetration testing
- Control effectiveness assessment
- Configuration review
- Documentation updates

9. Legal Compliance Statement

The undersigned hereby certifies that DeepShield Systems, Inc. maintains full compliance with the IEC 62443 series of standards as detailed in this document. This certification is valid as of the Effective Date and is subject to ongoing maintenance and periodic review.

10. Signatures

DEEPSHIELD SYSTEMS, INC.

By: _

Dr. Elena Rodriguez

Chief Security Architect

Date: January 11, 2024

Witnessed By: _

James Morrison

VP of Engineering

Date: January 11, 2024

11. Disclaimer

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