**Security Operations Center (SOC) Integration Blueprint** 

DeepShield Systems, Inc.

Document ID: DS-SOC-2023-001

Version: 2.0

Effective Date: January 15, 2024

1. Purpose and Scope

1. This Security Operations Center (SOC) Integration Blueprint ("Blueprint") establishes the

framework and requirements for integrating DeepShield Systems, Inc.'s ("DeepShield") proprietary

deep-layer security architecture with client Security Operations Centers.

2. This Blueprint applies to all SOC integration projects involving DeepShield's Industrial Control

System (ICS) security solutions, including but not limited to SCADA networks, maritime facilities,

and operational technology (OT) environments.

2. Definitions

1. "Deep-Layer Architecture" means DeepShield's proprietary security framework comprising

AI-driven threat detection, real-time monitoring, and adaptive defense mechanisms (Patent Pending

US2023/0456789).

2. "Integration Components" means all software, hardware, APIs, and protocols required to establish

functional connectivity between Client SOC infrastructure and DeepShield systems.

3. "Critical Infrastructure Protection Modules" or "CIP Modules" means DeepShield's specialized

security modules designed for maritime and subsea infrastructure protection.

3. Technical Integration Requirements

1. Network Architecture

a) Implementation of secure VPN tunnels using AES-256 encryption

b) Dedicated VLAN configuration for OT traffic isolation

c) Redundant communication channels with automatic failover

d) Implementation of DeepShield's proprietary OT protocol filtering

- 2. Data Processing Infrastructure
- a) Minimum processing capacity of 100,000 events per second
- b) Real-time correlation engine deployment
- c) Dedicated storage for 365-day log retention
- d) High-availability cluster configuration

# 4. Security Controls and Compliance

- 1. Mandatory Security Controls
- a) Multi-factor authentication for all administrative access
- b) Role-based access control (RBAC) implementation
- c) End-to-end encryption for all data transmission
- d) Automated backup and recovery procedures
- 2. Compliance Requirements
- a) NIST SP 800-82r3 alignment for ICS security
- b) ISA/IEC 62443 standards compliance
- c) NERC CIP requirements adherence where applicable
- d) Maritime cybersecurity regulations compliance (IMO 2021)

# **5. Implementation Procedures**

- 1. Pre-Integration Phase
- a) Network architecture review and approval
- b) Security posture assessment
- c) Integration component compatibility verification
- d) Baseline performance metrics establishment
- 2. Integration Phase
- a) Component deployment sequence
- b) Testing and validation procedures
- c) Performance optimization steps
- d) Documentation requirements

# 6. Operational Requirements

- 1. Monitoring and Response
- a) 24/7 automated monitoring capabilities
- b) Incident response procedures
- c) Escalation matrices
- d) Communication protocols
- 2. Maintenance and Updates
- a) Scheduled maintenance windows
- b) Update deployment procedures
- c) Version control requirements
- d) Change management processes

### 7. Intellectual Property Protection

- 1. All DeepShield proprietary technologies, including the Deep-Layer Architecture and CIP Modules, remain the exclusive property of DeepShield Systems, Inc.
- Integration partners shall not reverse engineer, decompile, or attempt to derive source code from DeepShield components.

#### 8. Liability and Indemnification

- 1. DeepShield's liability shall be limited to direct damages arising from gross negligence or willful misconduct.
- 2. Integration partners shall indemnify DeepShield against third-party claims arising from unauthorized modifications to the integration components.

# 9. Confidentiality

- 1. All technical specifications, implementation details, and security configurations shall be treated as Confidential Information.
- 2. Disclosure of integration details requires written authorization from DeepShield's Chief Security Architect.

# 10. Document Control

<ol> <li>This Blueprint is maintained by De</li> </ol>	epShield's Security	Architecture Team.
--	---------------------	--------------------

2. Annı	ıal review	and updates	are required	to maintain	alignment	with evolving	security	standards
and thre	eats.							

Document End.

Approval and Authorization
APPROVED BY:
Dr. Elena Rodriguez
Chief Security Architect
DeepShield Systems, Inc.
Date: _
James Morrison
VP of Engineering
DeepShield Systems, Inc.
Date: _