How PCI DSS Can Help You Secure Your Critical Infrastructure

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Agenda

Our Central Questions for Today

How is critical infrastructure protected in the EU

What challenges are we facing

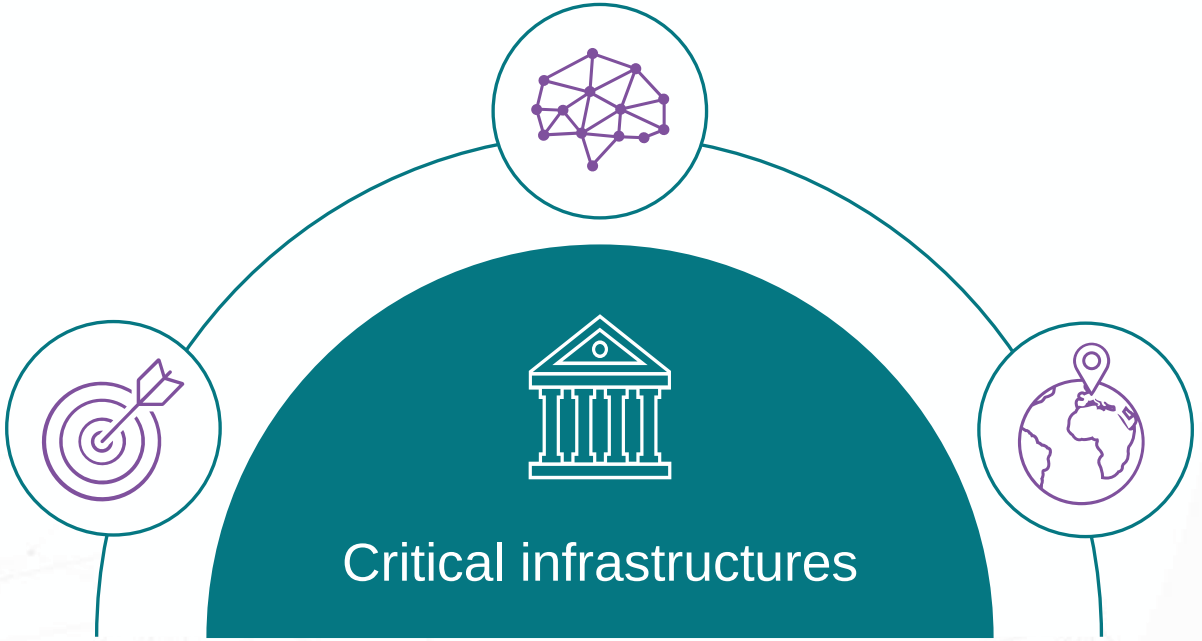
How can PCI DSS support you

Worldline Case Study

Critical Infrastructure Protection is Vital

Due to the high value of the target, attackers use very complex and elaborate attacks.

Particularly affected by digital threats.



Global political flashpoints are fueling the threat.

"… are entities of importance for the state community whose failure would result in lasting supply bottlenecks, significant disruptions to public safety or other dramatic consequences."

Regulation in the EU

EU NIS2

Directive on Security of Network and Information Systems

Goal: Regulates the information security of critical services to reduce the impact of cyber attacks and incidents to IT systems and networks.

Measures: Demands cyber security of company including:
policies and governance | incident and continuity management
IT security in the supply chain | IT audits and tests | cryptography

IT-Sicherheitsgesetz (2.0) / IT Security Act

German regulation

Piano nazionale per la protezione cibernetica e la sicurezza informatica

Italian regulation

Other member states regulations based on NIS2

Member states regulation

What to Protect

- Water
- Nutrition
- Health
- Waste Management

Finance and Insurance

Authorization

Clearing / Settlement

ATM

POS Terminal Operator

…

- Transport & Traffic
- IT & Telecom
- Energy
- SPIE

Concept: Security Baseline (1/2)

The Security Standard for Critical Infrastructure Assessments

> *"... Critical Infrastructures must implement **adequate organizational and technical measures** to reduce the possibility of incidents to the availability, integrity, authenticity and confidentiality of the systems of the information technology …"*

German Regulation (§8a BSI Law)

Concept: Security Baseline (2/2)

Sector-Specific Security Standard (B3S)

defined by experts per sector

ISO 27001 (BSI Grundschutz)

in combination with adequate sector-specific requirements

ISO 27001 (BSI Grundschutz)

might also be acceptable standalone

Example: Sector Finance and Insurance

B3S Electronic Cash Network Operators

Critical Service

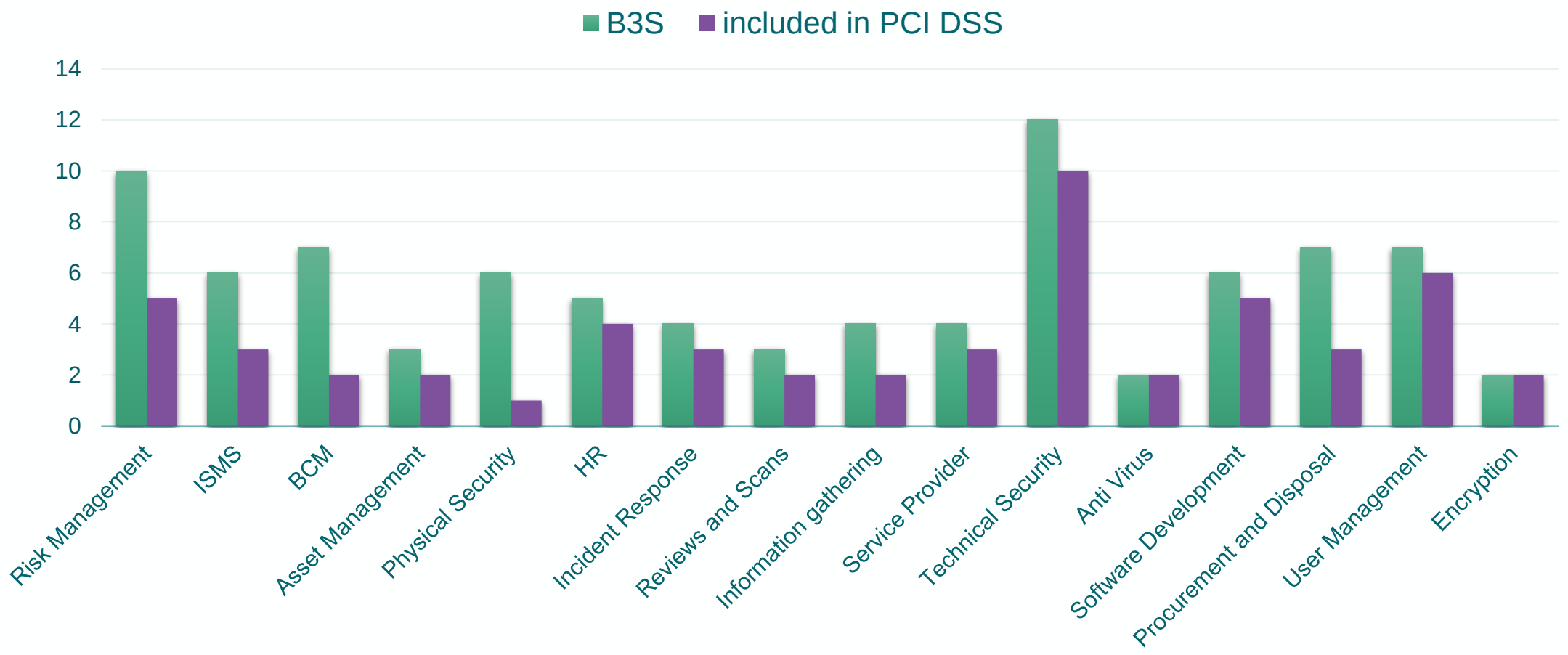
Systems that receive card data from POS terminals and systems that process that data.

PCI DSS

The core systems are the same if credit card payments are allowed.

B3S relies heavily on PCI DSS 3.2.1, but only for the PCI DSS scope.

B3S Electronic Cash Network Operators vs. PCI DSS



Case Study

Worldline Germany GmbH

PCI Security Standards Council®

Case Study: Assessment Approach

Scoping

PCI DSS Assessment

Critical Infrastructure Assessment

Reporting

Case Study: Scoping

Define the Scope for PCI DSS and the Critical Service

Scoping

Critical Infrastructure Scope

PCI DSS Scope

Cardholder Data Environment

Connected To Systems

Security Impacting Systems

Non-PCI DSS Scope

Additional systems of the critical infrastructure e.g. systems working with tokens

Management Systems

Case Study: Assessment

PCI DSS Assessment Followed by the Critical Infrastructure Assessment

Perform PCI DSS testing for PCI DSS compliance

Verify that all non-compliances are remediated

PCI DSS Assessment

Critical Infrastructure Assessment

Perform KRITIS testing in PCI DSS scope

Perform KRITIS testing and PCI DSS testing in non-PCI DSS scope

Case Study: Reporting

Write and Submit Reports

PCI DSS Scope

Report on Compliance

Attestation of Compliance

Critical Infrastructure

Assessment Report

List of non-Compliances

Reporting

Key Take-Aways

PCI DSS Can Help You Secure Your Critical Infrastructure

Securing critical infrastructure will be one of the major IT security issues for the next years.

PCI DSS overlaps with sector-specific security standards or can even be a baseline by itself.

Advantages for the PCI DSS and critical infrastructure assessment due to synergy effects between both scopes and the clarity of DSS requirements.

Use PCI DSS not only in the credit card environment.