

# RAILWAY CYBER SECURITY BY SELECTRON

SECURITY BY DESIGN



**SELECTRON**

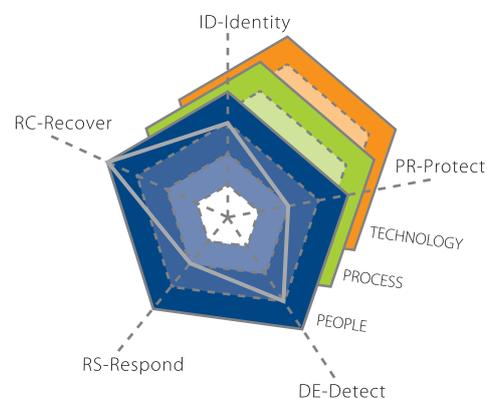
# Selectron is the Knorr-Bremse Railway Competence Center for Product Cyber Security

Swiss-based Selectron Systems AG belongs to the Knorr-Bremse Group. With more than 60 years of experience, Selectron is one of the world's leading companies of providing hardware and software for TCMS solutions (Train Control & Management System) for car builders, integrators and operators. High-quality standards, innovative technology and an integrated, generic SW chain – from OS to tools – form the main pillars of its huge success.

## The Selectron Cyber Security vision:

To become the leading secure solutions provider in the railway sector by providing secure-by-design technology and security services – enabling our global clients to protect their business.

**Implementation of a security framework based on IEC 62443 and NIST; considering people, processes and technology to mitigate cyber security risks and assure legal compliance**



## The Selectron Cyber Security mission:

- Create railway solutions with cyber security built in by design
- Provide innovative security services complementing Selectron solutions
- Accelerate transition to a defense in-depth collaboration with our clients

## Safe railway control systems require Cyber Security

1



Operators seeking to increase productivity and reduce cost by implementing automated operation (e.g., ATO initiatives of leading rail operators)

2



Transportation operators transitioning to digital business models with ubiquitous networking (Predictive Maintenance, Smart Multimodal Solutions)

3



Railway operational technology moving to open standards (Ethernet, IP, LTE, 5G, Cloud, etc.)

4



Regulations: EU NIS Directive, TÜV, NIST, etc. (e.g., fines could reach up to 4% of global turnover)

## Why your organization should care: Threats and vulnerabilities in railways

- Vulnerable legacy infrastructure in railways
- Increasing attack surface as a result of ubiquitous networks
- Low cyber-readiness: Staff needs OT cyber tools, skill sets and processes
- Increasing cyber threats due to the use of open standards

## How can Selectron support you? Solutions for our clients' challenges

### Selectron cyber-resilience program for legacy systems

your cyber-resilience increased with a set of holistic measures; for example:

- Device hardening
- Threat Detection Solution
- Incident management processes
- Security training to empower your staff

**Vulnerable legacy infrastructure and regulation compliance (E.g., NIS directive)**

**Selectron security solutions with optimized roi**

### Selectron innovative security solutions

Selectron provides you with customized Security by Design solutions:

- Security Gateway
- Threat Detection Solution
- Secure CPU 94x, certified to IEC 62443

**New digital business' ubiquitous networking increases attack surface**

**New products with security by design conforming to IEC 62443, NIS, etc.**

### Selectron excellence training and consulting services

- Selectron is a railway sector ISA/IEC 62443 training provider
- Consulting services according to the IEC 62443 standard:
  - Selectron Cyber Security Maturity Assessment
  - Selectron Cyber Security Risk Assessment

**Low ot cyber-readiness. need for adapted tools, processes & skill sets**

**Empowering your team to improve your ot cyber maturity**

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