

Rail Services

Cybersecurity

With the development of digitalization, automation, and big data (IOT) in the railway industry, related monitoring or control systems such as Communication, Signaling, Environment, Power, CCTV, PIS, Radio, and SCADA are experiencing an increase in information content. Additionally, transmission methods are trending toward Ethernet networks.

These systems face an increasing number of network threats during operation, such as malware, hacker attacks, and information leaks. As a result, ensuring the network security of industrial control systems has become an important task to protect production assets and ensure the stability of industrial operations.

Therefore, related to industrial network information, security in the railway industry is gaining increasing attention.

IEC 62443 is a series of industrial control system cybersecurity standards developed by the International Electrotechnical Commission (IEC). These standards are designed to safeguard industrial control systems from network attacks and threats, addressing the security risks these systems face during the processes of digitalization and interconnectivity. The aim is to ensure the secure and reliable operation of industrial control systems.

Therefore, ensuring the network security of railway industrial control systems has become a crucial task to protect equipment assets and ensure the stability and safety of the operation of related devices.

The IEC 62443 standard series covers various aspects of industrial control systems, including network architecture, security functionalities, security management, and security technical requirements. These standards provide a comprehensive set of guidelines and specifications to assist organizations and businesses in establishing secure industrial control systems, thereby reducing security vulnerabilities and risks.

By adhering to the IEC 62443 standards, organizations and businesses can enhance the network security of industrial control systems, reduce potential network attack risks, and ensure system reliability and availability. These standards are widely adopted globally and have become internationally recognized and referenced benchmarks for industrial control system network security.

OUR SOLUTION

As an internationally recognized IEC 62443 certification service provider, SGS offers a comprehensive range of services with its specialized technical team to assist railway partners and businesses in achieving compliance with relevant industrial network security

standards of IEC 62443 and attaining the goal of IEC 62443 certification. These services encompass standard training, gap analysis, and security assessment, among others.

With our comprehensive qualifications and professional services, SGS is capable of providing reliable security assurance for businesses. This ensures the security of industrial control systems and information technology, enabling them to effectively address the ever-growing challenges in network security.

IEC 62443-2-4:2015

Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers.

IEC 62443-3-3:2013

Industrial communication networks - Network and system security - Part 3-3: System security requirements and security levels.

IEC 62443-4-1:2018

Security for industrial automation and control systems - Part 4-1: Secure product development lifecycle requirements.



We are the world's leading testing, inspection and certification company

SGS has a network of more than 2.650 offices and laboratories worldwide, with more than 98.000 employees. SGS offers you a complete portfolio of railways services:

SGS RAILWAY SERVICES

- Railways Technical Certification – NOBO / DEBO Conformity assessment body
- Railways Safety Certification – ISA / ASBO Independent safety assessment body
- RAMS Safety Management
- Testing & Inspection
- Welding Services – EN 15085 Certification
- Manufacturing - Supply Chain Quality Services
- Cybersecurity

CONTACT US

If you wish to know more about our services or how to get started, please do not hesitate to get in touch.

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