

IT SECURITY – CYBER SECURITY

TRAINING - CONSULTING - ANALYSES - ASSESSMENTS - AUDITS - CERTIFICATION







Increasing connectivity of equipment, systems and applications in cyberspace networks harbours additional risks. Targets of attack vary, from PCs and smartphones, smart meter and smart home solutions to cars with Internet capabilities. Cybercrime is focused on industries such as the automotive sector, electronics and software as well as mechanical engineering and critical infrastructure with its automation and industrial control systems (ICS).

The new connectivity of previously isolated products or systems poses a more recent type of challenge to the IT Security of these systems. Many products, systems and their components have only inadequate protection in the light of these changes.

Protect your IT systems against malware and criminal attacks with IT Security Analysis Services from SGS. Make yourself and your staff fit by using our dedicated training and personal certification offering.

YOUR PARTNER SGS-TÜV SAAR

As an accredited inspection body for IT Security, SGS-TÜV Saar – as part of the SGS Group, the world's largest provider of testing and certification services with more than 85,000 employees around the globe — will assist you regarding the security of your development environments, products, applications and systems.

We are at the forefront of future legislation and standardisation in order to be able to continually serve you with the latest know-how available. The SGS Group is a member of the European Public-Private Partnership (PPP) for Cyber Security of the European Cyber Security Organisation (ESCO). In the field of Cyber Security standardisation in the automotive sector we are active on national and global levels as well.

In addition, we are participants in the German Alliance for Cyber Security (initiated by the Federal Office for Information Security – BSI).

OUR PORTFOLIO FOR YOU AT A GLANCE

IT Security & Industry:

- Training programmes and personal certification
- Testing & certification of processes and products

For the following areas:

- Industrial IT Security, Security of Operational Technology (OT) (here: application of IEC 62443)
- Automotive Cyber Security
 (here: application of SAE J3061)
- Energy sector, smart grids (here: application of IEC 62351)

Conventional IT Security:

- Consultancy, testing and certification relating to ISO/IEC 27001 and BSI Basic Protection
- Basic services such as penetration tests
- Performance certifications for Identity and Access Management (IAM) products

Cyber Security & Functional Safety:

 Combination assessments and audits relating to Cyber Security & Functional Safety

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INDUSTRIAL IT SECURITY

TESTING AND CERTIFICATION ACCORDING TO IEC 62443 FOR OPERATIONAL TECHNOLOGY (OT SECURITY)

Increasing digitalisation and interlinking of production machines and critical infrastructures lead to a significant increase in IT Security risks.

For industrial automation and control systems as well as for assembly plants we offer you evaluations and certifications according to the "Industrial IT Security Standard" IEC 62443. This provides your customers with proof of the level of IT Security in your equipment and products.

As early as in 2014 SGS-TÜV Saar launched a testing and certification programme according to IEC 62443 and

has been awarded corresponding DAkkS accreditation. Based on this standard companies can have their industrial control systems reviewed for potential weaknesses and develop effective safeguards. The standard is focused on IT Security in Industrial Automation and Control Systems (IACS) required for reliable and secure operation of automated systems or infrastructures.

We will test the conformity of development and integration processes for you and assess the implemented OT security functions based on the IEC 62443 series of standards.





AUTOMOTIVE CYBER SECURITY

TESTING AND CERTIFICATION ACCORDING TO SAE J3061

In view of the continually increasing complexity of the structures in automobiles, plus additional functionalities in the field of connected and automated driving, the threat potential is rising significantly.

In addition to our long-standing activities in the field of Functional Safety, we will naturally support you in the field of Cyber Security as well, in line with our approach of "Safety and Security from a single professional source".

As the world's first body to do so, we have successfully passed the accreditation audit in the field of Automotive Cyber Security.

Due to our testing and certification programme in combination with our

training and personal qualification programme we are in a position to fully serve you in accordance with the only standard available on the international market (SAE J3061).

We are also at the forefront, nationally and internationally, in the effort of creating a future ISO standard (based on SAE J3061 and IEC 62443).

OUR SERVICES

- Training & personal qualification focused on SAE J3061
- Assessments of product conformity according to SAE J3061
- Audits relating to processes according to SAE J3061
- Certification of products & processes according to SAE J3061





DATA AND COMMUNICATIONS SECURITY FOR THE ENERGY SECTOR

PROCESS AUDIT AND PROCESS CERTIFICATION ACCORDING TO IEC 62351

According to the IT Security Act intended "to increase the security of information technology systems" passed by the German Federal Parliament, companies which are part of the critical infrastructure have to meet minimum requirements for IT Security.

Critical infrastructure – KRITIS – includes companies in the fields of energy supply, transport and traffic, information technology and telecommunication, the financial and insurance sectors as well as healthcare and food.

SERVICES FOR OPERATORS

Do you know if the IT Security Act (ITSiG) is relevant to you as an operator? We will assist you in answering this question. In addition to our training programmes, we offer you solutions relating to these topics in individual workshops. This is where company-specific questions can be clarified and solutions for practical application can be found. For smaller-scale operators we fill wind feasible solutions to meet state-of-the-art demands.

SERVICES FOR MANUFACTURERS AND OPERATORS

Electric mobility, small thermal power stations, etc. increasingly lead to the emergence of new data transmission and communications scenarios. Your SCADA and CMS systems can benefit from our long-standing experience with networked systems. We will help you to find solutions for these growing security demands.

Protect your investments by an analysis of the threat posed by security risks.

The data and communications protocols used in the power industry differ from those in conventional IT Security. That is why a special series of standards, IEC 62351, exists in this field. Familiarise yourself with this standard in one of our training programmes. Join us in discussing the differences between them and conventional IT Security (ISO/IEC 27001).

We will assist you with document templates for a company-specific Information Security Management System (ISMS) according to IEC 62351.

In our Security Management Audits/Assessments we test whether or not your processes/products meet the requirements of IEC 62351.



TRAINING AND PERSONAL CERTIFICATION INDUSTRIAL & AUTOMOTIVE IT SECURITY

IT Security ensures trouble-free business processes and successful market presence. SGS-TÜV Saar offers you an extensive training and personal qualification programme centred on Industrial IT Security/Cyber Security. Optimise the qualification of your staff by means of the know-how imparted by our experts for IT Security.

OUR TRAINING PORTFOLIO FOR YOU:

- Introduction IT Security in Industry
- SAE J3061 Best Practices Cyber Security for the Automotive Industry
- Data and IT Security for the Power Industry
- IT Security for Industrial Automation and Control Systems

Details can be found on our website at www.sgs-tuev-saar.com/it-security

You would like to additionally complete a personal certification programme? If so, we offer you:

- Persoal certification as a "CICSP (SGS-TÜV)"/Certified Industrial Cyber Security Professional (SGS-TÜV Saar)
- Personal certification as a "CACSP (SGS-TÜV)"/Certified Automotive Cyber Security Professional (SGS-TÜV Saar)



CONVENTIONAL IT SECURITY

SERVICES FOR IDENTITY AND ACCESS MANAGEMENT (IAM) PRODUCTS

Identity and Access Management (IAM) requires precise biometric processes and products. How can you convince your customers of the performance of your own products? For instance, how can you provide credible proof of the accuracy and reliability of your biometric recognition software?

You can do so by including an independent observer in a product acceptance test. Our subject-matter experts will accompany the validation of a biometric product as eye witnesses. We will confirm the results obtained and the test runs in a Technical Report and a Certificate.

SECURITY CHECK – RISK ANALYSES, WEAKNESS ASSESSMENTS AND PENETRATION TESTS

In view of the increasing digitalisation of business processes and data it is more crucial than ever to protect company know-how against data leaks and cyberspace attacks. Using our Security Check, we determine the current level of cyber security in your company.

A Security Check offers a valuable element in system development. It enables early detection and correction of deficiencies during the development process.

We will perform risk analyses for you based on industry-specific threat scenarios, damage classifications and damage probabilities. In addition, we offer you weakness analyses, including penetration tests.

ISO/IEC 27001 AND BSI IT BASIC PROTECTION

We offer you tests and certifications according to ISO/IEC 27001 and "BSI IT Basic Protection".

ISO/IEC 27001 as the internationally leading standard for information security management systems offers a systematic and structured approach that protects your confidential data, ensures the integrity of your operational data and increases the availability of the IT systems in your company.

In addition to carrying out certifications, our support for you includes consultancy as well as on-site audits which serve to determine to what extent the requirements of ISO/IEC 27001 have already been implemented or what measures would still be useful.

SGS-TÜV SAAR GMBH

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