

Security from the perspective of the component manufacturer

The challenge of safe production plants can only be met in a goal-oriented manner through the interaction between operators, integrators/machine builders and component manufacturers.

Depending on the final responsibility of the operator, the basic requirements and criteria for the entire security assessment are defined here. Based on criteria such as the results of the risk assessment, environmental factors, governance, etc., the security level to be aimed for (security level target) is formulated. The security level formulated and for which the operator is responsible serves as a guideline for integrators and machine builders. This target must be met at least by technical, process-related, and organizational measures. The integrator or machine builder is also responsible for associated hygiene factors such as patch and change management, remediation of security problems, and reporting of vulnerabilities.

The integrator or machine builder has the task of achieving the desired security goal based on the operator's requirements by using suitable components, or to fulfill the missing features by using compensatory measures, such as the use of key switches as access protection.

Due to these facts, it shows up that security requirements can be met only conditionally by the component manufacturer alone. Basic functions can be implemented based on the trade-off between resource availability and associated benefits. The security functions to be provided depend on the level of security required by the market in the component's area of application. In addition, it may be necessary for security functions to be effective only in conjunction with externally provided measures, such as system-wide timers or central user management.

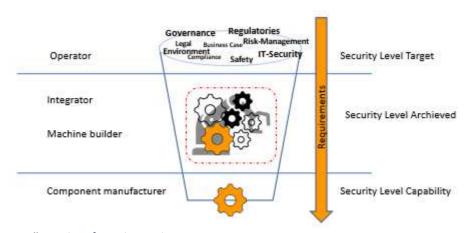


Illustration of security requirements