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Lifecycle requirements for functional safety and security for IACS

INTERNATIONAL
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LIFECYCLE REQUIREMENTS FOR FUNCTIONAL SAFETY AND SECURITY FOR IACS

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INTRODUCTION

Safety and security are becoming increasingly interdependent. Traditional safety-related systems are not isolated any more, as required by connectivity and inter-operability, and threats and vulnerabilities can increase the probability of attacks to safety-related systems. IEC TR 63069 gives some top-level framework recommendations for functional safety and security.

This specification concentrates on how to consider the lifecycles for functional safety and security in different stages, optimizing risk assessment, improving efficiency of safety and security related activities included in engineering processes, avoiding conflicts between safety functions and security countermeasures. This document also will give some safety and security co-engineering guidelines to make the implications to systems more safe, more secure, and cost efficient.

LIFECYCLE REQUIREMENTS FOR FUNCTIONAL SAFETY AND SECURITY FOR IACS

1 Scope

This PAS provides requirements and guidance for ensuring and assuring functional safety and security in different stages of the lifecycle. It will help the coordination of risk assessment, design and management and operation processes, avoiding conflicts between functional safety and security.

This specification does not aim to define a completely new lifecycle, but based on the functional safety lifecycle, security lifecycle and other state of the art engineering processes, it aims to provide requirements and suggestions to support coordination between functional safety and security.

The objective of this document is Industrial Automation Control Systems (IACS), including the Equipment Under Control (EUC) system and the safety-related system.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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