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English Version

**Security for industrial automation and control systems - Part 1-5:  
Scheme for IEC 62443 security profiles  
(IEC/TS 62443-1-5:2023)**

Sécurité des automatismes industriels et des systèmes de  
commande - Partie 1-5: Schéma pour les profils de sécurité  
IEC 62443  
(IEC/TS 62443-1-5:2023)

IT-Sicherheit für industrielle Automatisierungssysteme - Teil  
1-5: Schema für IEC 62443 IT-Sicherheitsprofile  
(IEC/TS 62443-1-5:2023)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 62443-2-4:2015	NOTE	Approved as EN IEC 62443-2-4:2019 (not modified)
IEC 62443-3-2:2020	NOTE	Approved as EN IEC 62443-3-2:2020 (not modified)
IEC 62443-3-3:2013	NOTE	Approved as EN IEC 62443-3-3:2019 (not modified)
IEC 62443-4-1:2018	NOTE	Approved as EN IEC 62443-4-1:2018 (not modified)
IEC 62443-4-2:2019	NOTE	Approved as EN IEC 62443-4-2:2019 (not modified)
ISO/IEC 15408 (series)	NOTE	Approved as EN ISO/IEC 15408 (series)

# TECHNICAL SPECIFICATION

**Security for industrial automation and control systems –  
Part 1-5: Scheme for IEC 62443 security profiles**



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# TECHNICAL SPECIFICATION

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**Security for industrial automation and control systems –  
Part 1-5: Scheme for IEC 62443 security profiles**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**SECURITY FOR INDUSTRIAL AUTOMATION  
AND CONTROL SYSTEMS –**
**Part 1-5: Scheme for IEC 62443 security profiles****FOREWORD**

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IEC TS 62443-1-5 has been prepared by IEC technical committee 65: Industrial-process measurement, control and automation. It is a Technical Specification.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
65/947/DTS	65/1009/RVDTS

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Specification is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts in the IEC 62443 series, published under the general title *Security for industrial automation and control systems*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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## INTRODUCTION

This document specifies a scheme for defining security profiles for the IEC 62443 series.

The scheme is applicable to IEC 62443 security profiles intended to be published as part of the upcoming IEC 62443 dedicated security profiles sub-series). The document can also be used for the definition of security profiles outside of the IEC 62443 series.

IEC 62443 security profiles can be used by interested parties (e.g., organizations, interested groups/ sectors) to contextually map a defined set of requirements specified in the IEC 62443 series. Examples for the necessity of security profiles include the industry sector specific (area of application) contextual mapping of IEC 62443 terminology and requirements.

NOTE The ISO/IEC 15408 series also uses a concept of profiles (called "Protection Profiles"), but those profiles are based on a different scheme, specific to ISO/IEC 15408.

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# SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –

## Part 1-5: Scheme for IEC 62443 security profiles

### 1 Scope

This part of IEC 62443 specifies a scheme for defining (selecting, writing, drafting, creating) IEC 62443 security profiles.

This scheme and its specified requirements apply to IEC 62443 security profiles which are planned to be published as part of the upcoming IEC 62443 dedicated security profiles sub-series.

IEC 62443 security profiles can support interested parties (e.g. during conformity assessment activities) to achieve comparability of assessed IEC 62443 requirements.

### 2 Normative references

There are no normative references in this document.

### 3 Terms, definitions, abbreviated terms, and acronyms

#### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC TS 62443-1-1:2009 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

##### 3.1.1

#### **contextual mapping**

declaration and rationale of how a selected requirement is applied within a specific environment

Note 1 to entry: A contextual mapping is neither intended to undermine principles and concepts of the underlying IEC 62443 document(s) nor to alter / modify the definition / rationale of a selected requirement.

#### EXAMPLE 1:

Detailing requirements, e.g.

- the applicable framework for a security risk assessment methodology (e.g. IEC 62443-2-4, SP.03.01 BR)
- required security training courses for service provider staff, subcontractors, or consultants in a particular industry sector (e.g. IEC 62443-2-4, SP.01.01, SP.01.02)
- the central identification and authentication system that should be supported by a component (see IEC 62443-4-2, CR 1.1)

EXAMPLE 2: Detailing roles and responsibilities (e.g. within the oil & gas industry the asset owner could be the owner of an oil drilling platform)