

## SLOVENSKI STANDARD SIST-TS CLC IEC/TS 62443-1-5:2024

01-september-2024

Zaščita industrijske avtomatizacije in nadzornih sistemov - 1-5. del: Shema za IEC 62443 zaščitne profile (IEC/TS 62443-1-5:2023)

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

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)

Ta slovenski standard je istoveten z: CLC IEC/TS 62443-1-5:2024

ICS:

25.040.40 Merjenje in krmiljenje Industrial process

industrijskih postopkov measurement and control

SIST-TS CLC IEC/TS 62443-1-5:2024 en,fr,de

SIST-TS CLC IEC/TS 62443-1-5:2024

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

https://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-2024

# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

CLC IEC/TS 62443-1-5

June 2024

ICS 25.040.40

#### **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)

This Technical Specification was approved by CENELEC on 2024-06-10.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

ottps://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-202



European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2024 CENELEC

All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Ref. No. CLC IEC/TS 62443-1-5:2024 E

#### CLC IEC/TS 62443-1-5:2024 (E)

### **European foreword**

This document (CLC IEC/TS 62443-1-5:2024) consists of the text of IEC/TS 62443-1-5:2023 prepared by IEC/TC 65 "Industrial-process measurement, control and automation".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

#### **Endorsement notice**

The text of the International Technical Specification IEC/TS 62443-1-5:2023 was approved by CENELEC as a European Technical Specification without any modification.

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)
ISO/IEC 15408 (series)	NOTE Approved as EN ISO/IEC 15408 (series)

nttps://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-202



## IEC TS 62443-1-5

Edition 1.0 2023-09

# TECHNICAL SPECIFICATION

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

## Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

attps://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-2024

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 25.040.40 ISBN 978-2-8322-7499-6

Warning! Make sure that you obtained this publication from an authorized distributor.

### CONTENTS

FC	REWO	RD	4	
IN	TRODU	CTION	6	
1	Scop	e	7	
2	Norm	ative references	7	
3	Terms, definitions, abbreviated terms, and acronyms			
	3.1	Terms and definitions		
	3.2	Abbreviated terms and acronyms		
4	Secu	rity profile		
5		rity profile requirements		
	5.1	General		
	5.2	PR.01: Security profile content		
	5.2.1	Requirement		
	5.2.2	•		
	5.3	PR.02: Selection		
	5.3.1	Requirement		
	5.3.2	•		
	5.4	PR.03: Contextual mapping		
	5.4.1	RequirementRequirement	11	
	5.4.2		12	
	5.5	PR.04: No new requirements	12	
	5.5.1	Requirement	12	
	5.5.2		12	
	5.6	PR.05: No modification of IEC 62443 requirements	12	
	5.6.1	Requirement		
	5.6.2	Rationale and supplemental guidance	12	
	5.7			
	5.7.1	Requirement		
	5.7.2	11 3		
	5.8	PR.07: Security level		
	5.8.1	Requirement		
	5.8.2	11 3		
	5.9	PR.08: Security risk evaluation of the security profile		
	5.9.1	Requirement		
	5.9.2	11 0		
	5.10	PR.09: Document type		
	5.10.	•		
_	5.10.			
6		ess for the creation, validation, and application of IEC 62443 security profiles		
	6.1	General		
	6.2	Creation phase		
	6.3	Validation phase		
	6.4	Application phase		
	•	normative) IEC 62443 security profile content		
Bi	bliograp	hy	16	

IEC TS 62443-1-5:2023 © IEC 2023 - 3 -

Figure 1 – Relationship between standards and security profiles within the IEC 62443 series	10
Figure 2 – Relations between security profile requirements	10
Table A.1 – Minimum IEC 62443 security profile content	15

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

ottps://standards.jteh.aj/catalog/standards/sjst/7bc5803c-d673-41ab-a550-bcb5b3db8146/sjst-ts-clc-jec-ts-62443-1-5-202

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

# SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –

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

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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.

IEC TS 62443-1-5:2023 © IEC 2023

- 5 -

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 <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/publications">www.iec.ch/publications</a>.

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 in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- · replaced by a revised edition, or
- amended.

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

ottps://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-202

- 6 - IEC TS 62443-1-5:2023 © IEC 2023

#### 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.

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST-TS CLC IEC/TS 62443-1-5:2024

ottps://standards.iteh.ai/catalog/standards/sist/7bc5803c-d673-41ab-a550-bcb5b3db8146/sist-ts-clc-iec-ts-62443-1-5-2024