

## SVENSK STANDARD SS-EN IEC 62443-2-4

FastställdUtgåvaSidaAnsvarig kommitté2019-06-121.11 (1+92)SEK TK 65

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## IT-säkerhet i industriella automationssystem – Del 2-4: Fordringar på IT-säkerhetsprogram för dem som tillhandahåller tjänster för industriella automationssystem

Security for industrial automation and control systems – Part 2-4: Security program requirements for IACS service providers

Som svensk standard gäller europastandarderna EN IEC 62443-2-4:2019 och EN IEC 62443-2-4:2019/A1:2019. Den svenska standarden innehåller de officiella engelska språkversionerna av EN IEC 62443-2-4:2019 och EN IEC 62443-2-4:2019/A1:2019.

## Nationellt förord

Europastandarden EN IEC 62443-2-4:2019 och EN IEC 62443-2-4:2019/A1:2019

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 62443-2-4, First edition, 2015<sup>\*)</sup> Security for industrial automation and control systems -

Part 2-4: Security program requirements for IACS service providers

utarbetad inom International Electrotechnical Commission, IEC.

Tabell A.1 finns att ladda ner i form av en Excel-fil på SEKs webbshop under hämta fritt.

<sup>\*)</sup>Corrigendum August 2015 och A1:2017 till IEC 62443-2-4:2015 är inarbetade i standarden.

ICS 25.040.40; 35.100.05

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN IEC 62443-2-4

April 2019

ICS 25.040.40; 35.100.05

**English Version** 

## Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers (IEC 62443-2-4:2015)

Sécurité des automatismes industriels et des systèmes de commande - Partie 2-4: Exigences de programme de sécurité pour les fournisseurs de service IACS (IEC 62443-2-4:2015) IT-Sicherheit für industrielle Automatisierungssysteme - Teil 2-4: Anforderungen an das IT-Sicherheitsprogramm von Dienstleistern für industrielle Automatisierungssysteme (IEC 62443-2-4:2015)

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Ref. No. EN IEC 62443-2-4:2019 E

## **European foreword**

This document (EN IEC 62443-2-4:2019) consists of the text of IEC 62443-2-4:2015 prepared by IEC/TC 65 "Industrial-process measurement, control and automation".

The following dates are fixed:

•	latest date by which the document has to be implemented at national	(dop)	2020-04-03
	level by publication of an identical national standard or by endorsement		

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

## CONTENTS

FC	FOREWORD						
IN	NTRODUCTION						
1 Scope							
2	Norm	native references	7				
3 Terms, definitions, abbreviated terms and acronyms							
	3.1	Terms and definitions					
	3.2	Abbreviations					
4 Concepts			11				
	4.1	Use of IEC 62443-2-4	11				
	4.1.1	Use of IEC 62443-2-4 by IACS service providers	11				
	4.1.2	Use of IEC 62443-2-4 by IACS asset owners	12				
	4.1.3	Use of IEC 62443-2-4 during negotiations between IACS asset owners and IACS service providers	12				
	4.1.4	Profiles	13				
	4.1.5	IACS integration service providers	13				
	4.1.6	IACS maintenance service providers	14				
	4.2	Maturity model	14				
5	Requ	uirements overview	16				
	5.1	Contents	16				
	5.2	Sorting and filtering	16				
	5.3	IEC 62264-1 hierarchy model					
	5.4	Requirements table columns					
	5.5	Column definitions					
	5.5.1						
	5.5.2						
	5.5.3						
	5.5.4	· · · · · · · ·					
	5.5.5 5.5.6	•					
	5.5.6 5.5.7						
	5.5.8						
Δr		(normative) Security requirements					
		bhy					
ы	bilograp	JIIY	00				
Fi	gure 1 –	- Parts of the IEC 62443 Series	5				
Fi	gure 2 –	- Scope of service provider capabilities	6				
	Table 1 – Maturity levels						
	Table 2 – Columns						
Τa	Table 3 – Functional area column values19						
Та	Table 4 – Topic column values24						
Та	Table 5 – Subtopic column values21						
Та	able A.1 – Security program requirements23						

IEC 62443-2-4:2015+AMD1:2017 CSV - 3 - © IEC 2017

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –

## Part 2-4: Security program requirements for IACS service providers

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This Consolidated version of IEC 62443-2-4 bears the edition number 1.1. It consists of the first edition (2015-06) [documents 65/545/CDV and 65/561A/RVC] and its corrigendum 1 (2015-08), and its amendment 1 (2017-08) [documents 65/637A/CDV and 65/661/RVC]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 62443-2-4 has been prepared by IEC technical committee 65: Industrial-process measurement, control and automation.

This publication contains an attached file in the form of an Excel 97-2003 spreadsheet version of Table A.1. This file is intended to be used as a complement and does not form an integral part of the publication.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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- amended.

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## INTRODUCTION

This standard is the part of the IEC 62443 series that contains security requirements for providers of integration and maintenance services for Industrial Automation and Control Systems (IACS). It has been developed by IEC Technical Committee 65 in collaboration with the International Instrumentation Users Association, referred to as the WIB from its original and now obsolete Dutch name, and ISA 99 committee members.

Figure 1 illustrates the relationship of the different parts of IEC 62443 being developed. Those that are normatively referenced are included in the list of normative references in Clause 2, and those that are referenced for informational purposes or that are in development are listed in the Bibliography.



Figure 1 – Parts of the IEC 62443 Series

## SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –

## Part 2-4: Security program requirements for IACS service providers

## 1 Scope

This part of IEC 62443 specifies a comprehensive set of requirements for security capabilities for IACS service providers that they can offer to the asset owner during integration and maintenance activities of an Automation Solution. Because not all requirements apply to all industry groups and organizations, Subclause 4.1.4 provides for the development of Profiles that allow for the subsetting of these requirements. Profiles are used to adapt this document to specific environments, including environments not based on an IACS.

NOTE 1 The term "Automation Solution" is used as a proper noun (and therefore capitalized) in this part of IEC 62443 to prevent confusion with other uses of this term.

Collectively, the security capabilities offered by an IACS service provider are referred to as its Security Program. In a related specification, IEC 62443-2-1 describes requirements for the Security Management System of the asset owner.

NOTE 2 In general, these security capabilities are policy, procedure, practice and personnel related.

Figure 2 illustrates how the integration and maintenance capabilities relate to the IACS and the control system product that is integrated into the Automation Solution. Some of these capabilities reference security measures defined in IEC 62443-3-3 that the service provider must ensure are supported in the Automation Solution (either included in the control system product or separately added to the Automation Solution).



Figure 2 – Scope of service provider capabilities

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In Figure 2, the Automation Solution is illustrated to contain a Basic Process Control System (BPCS), optional Safety Instrumented System (SIS), and optional supporting applications, such as advanced control. The dashed boxes indicate that these components are "optional".

NOTE 3 The term "process" in BPCS may apply to a variety of industrial processes, including continuous processes and manufacturing processes.

NOTE 4 Automation Solutions typically have a single control system (product), but they are not restricted to do so. In general, the Automation Solution is the set of hardware and software, independent of product packaging, that is used to control a physical process (e.g. continuous or manufacturing) as defined by the asset owner.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

"None"