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Security for industrial automation and control systems – Part 6-1: Security evaluation methodology for IEC 62443-2-4

(CLC TS 62443-6-1:2024)

(IEC TS 62443-6-1 2024)

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ICS 25.040.40

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English Version

**Security for industrial automation and control systems - Part 6-1:
Security evaluation methodology for IEC 62443-2-4
(IEC/TS 62443-6-1:2024)**

Sécurité des automatismes industriels et des systèmes de
commande - Partie 6-1: Méthodologie d'évaluation de la
sécurité pour la IEC 62443-2-4
(IEC/TS 62443-6-1:2024)

IT-Sicherheit für industrielle Automatisierungssysteme -
Teil 6-1: Security-Evaluierungsmethodik für IEC 62443-2-4
(IEC/TS 62443-6-1:2024)

This Technical Specification was approved by CENELEC on 2024-12-09.

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.



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

European foreword

This document (CLC IEC/TS 62443-6-1:2024) consists of the text of document IEC/TS 62443-6-1:2024, 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 62443-6-1:2024 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/TS 62443-1-5	NOTE	Approved as CLC IEC/TS 62443-1-5
ISO/IEC 17000:2020	NOTE	Approved as EN ISO/IEC 17000:2020 (not modified)
ISO/IEC 18045:2022	NOTE	Approved as EN ISO/IEC 18045:2023 (not modified)
ISO 9000:2015	NOTE	Approved as EN ISO 9000:2015 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62443-2-4	2015	Security for industrial automation and control systems – Part 2-4: Security program requirements for IACS service providers	EN 62443-2-4	2019
+ A1	2017		+ A1	2019



TECHNICAL SPECIFICATION



**Security for industrial automation and control systems –
Part 6-1: Security evaluation methodology for IEC 62443-2-4**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.040.40

ISBN 978-2-8322-8328-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –**Part 6-1: Security evaluation methodology for IEC 62443-2-4**

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.
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IEC TS 62443-6-1 has been prepared by IEC technical committee TC 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
65/1030/DTS	65/1042A/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 https://www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at <https://www.iec.ch/standardsdev/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 in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

Repeatable and comparable evaluations of the security program according to IEC 62443-2-4¹ require a common understanding for acceptable evaluation criteria and conformance evidence.

This document supports service providers and evaluators to do a conformity assessment by evaluating the security program against the requirements of IEC 62443-2-4.

This document specifies the evaluation methodology to support interested parties, for example during conformity assessment activities to achieve repeatable and reproducible evaluation results against IEC 62443-2-4 requirements.

¹ Throughout the document, when reference is being made to IEC 62443-2-4 (undated), this means IEC 62443-2-4:2015 and IEC 62443-2-4:2015/AMD1:2017 (Ed.1). A consolidated version of IEC 62443-2-4 is available.

SECURITY FOR INDUSTRIAL AUTOMATION AND CONTROL SYSTEMS –

Part 6-1: Security evaluation methodology for IEC 62443-2-4

1 Scope

This part of IEC 62443 specifies the evaluation methodology to support interested parties (e.g. during conformity assessment activities) to achieve repeatable and reproducible evaluation results against IEC 62443-2-4 requirements. This document is intended for first-party, second-party or third-party conformity assessment activity, for example by product suppliers, service providers, asset owners and conformity assessment bodies.

NOTE 1 62443-2-4 specifies requirements for security capabilities of an IACS service provider. These security capabilities can be offered as a security program during integration and maintenance of an automation solution.

NOTE 2 The term “conformity assessment” and the terms first-party conformity assessment activity, second-party conformity assessment activity and third-party conformity assessment activity are defined in ISO/IEC 17000.

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.

IEC 62443-2-4:2015, *Security for industrial automation and control systems – Part 2-4: Security program requirements for IACS service providers*

IEC 62443-2-4:2015/AMD1:2017