SLOVENSKI STANDARD
oSIST prEN 50742:2026

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Varnost strojev - Zaščita pred korupcijo

Safety of machinery - Protection against corruption

Ta slovenski standard je istoveten z: **prEN 50742:2025**

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03.100.02	Upravljanje in etika	Governance and ethics
13.110	Varnost strojev	Safety of machinery

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English Version

Safety of machinery - Protection against corruption

To be completed To be completed

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2026-02-27.

It has been drawn up by CLC/TC 44X.

If this draft becomes a European Standard, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CENELEC in three official versions (English, French, German).
A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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European foreword

This document (prEN 50742:2025) has been prepared by CLC/TC 44X “Safety of machinery: electrotechnical aspects”.

This document is currently submitted to the Enquiry.

The following dates are proposed:

• latest date by which the existence of this document has to be announced at national level	(doa)	dav + 6 months
• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dav + 12 months
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dav + 36 months (to be confirmed or modified when voting)

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZZ, which is an integral part of this document.

Introduction

Machinery must be safe in order to prevent injuries and loss of life.

The communication with the machine must not lead to hazardous situations.

The manufacturer performs a risk assessment according to EN ISO 12100 to identify all potential hazards.

Vulnerabilities can lead to a corruption of the control system of the machine and hazards can lead to dangerous situations.

By exploitation of vulnerabilities via communication with the machine, the machine could be operated outside safe parameters or degrade safety functions.

Vulnerabilities cannot create new hazards.

The probability that someone will use a vulnerability for a malicious attempt cannot be predicted.

The risk can only be assessed in terms of its impact on functional safety.

Vulnerabilities are divided into several types.

This document provides two approaches:

— Approach A (Clause 5 and 7) has been developed to facilitate compliance for machinery developed without references to EN IEC 62443 series of standards.

— Approach B (Clauses 6 and 8) has been provided to facilitate compliance for machinery developed in the context of the EN IEC 62443-3-3:2019, EN IEC 62443-4-1:2018, EN IEC 62443-4-2:2019.

NOTE 1 The EN IEC 62443 series provides information and a methodology to approach cybersecurity.

This document is intended for use by machinery designers, control system manufacturers and integrators, and others involved in the specification, design and validation of an SCS.

NOTE 2 See EN IEC 62443-4-1:2018; the manufacturer can be a product supplier or system integrator.

This document does not address the role of the user.

1 Scope

This document provides requirements and recommendations for protection against corruption for machinery, related products and partly completed machinery referred to in this document as ‘machinery’.

This document provides requirements and recommendations to prevent accidental and intentional (including malicious) corruption of machines resulting in hazardous situations.

This document applies to:

— hardware components, including interfaces to remote devices and control systems, that can transmit signals or data;

— software and data;

if they could influence the safety of the machinery.

NOTE 1 Topics can overlap with the domain of cybersecurity but are not necessarily identical in their coverage.

NOTE 2 This document does not describe functional safety requirements of control systems in machinery.

This document specifies requirements to related risks in all lifecycle steps.

Machinery interfaces to external systems and services are in the scope of this document. External systems and services are out of the scope of this document.

This document does not apply to machinery installed before the date of its publication.

This document specifies requirements related to protection against corruption related risks in all lifecycle steps such as:

— development;

— manufacturing;

— commissioning;

— operation;

— maintenance;

— decommissioning.

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.

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

EN IEC 62443-3-3:2019,[1] *Industrial communication networks - Network and system security - Part 3-3: System security requirements and security levels*

EN IEC 62443-4-1:2018, *Security for industrial automation and control systems - Part 4-1: Secure product development lifecycle requirements*

[1] As impacted by EN IEC 62443-3-3:2019/AC:2019.