SLOVENSKI STANDARD
oSIST prEN IEC 62676-4:2024

01-december-2024

Video nadzorni sistemi za varnostne aplikacije - 4. del: Smernice za uporabo

Video surveillance systems for use in security applications - Part 4: Application guidelines

Videoüberwachungsanlagen für Sicherungsanwendungen - Teil 4: Anwendungsregeln

Systèmes de vidéosurveillance destinés à être utilisés dans les applications de sécurité - Partie 4: Directives d'application

Ta slovenski standard je istoveten z: **prEN IEC 62676-4:2024**

ICS:

13.320	Alarmni in opozorilni sistemi	Alarm and warning systems
33.160.40	Video sistemi	Video systems

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COMMITTEE DRAFT FOR VOTE (CDV)

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IEC TC 79 : ALARM AND ELECTRONIC SECURITY SYSTEMS	
SECRETARIAT: France	SECRETARY: Mr Jean-François LIGNEREUX
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Information security and data privacy	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

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TITLE:

Video surveillance systems for use in security applications - Part 4: Application guidelines

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 4: Application guidelines

FOREWORD

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IEC 62676-4 has been prepared by Technical Committee 79: ALARM AND ELECTRONIC SECURITY SYSTEMS. It is an International Standard.

This 2nd edition cancels and replaces the 1st edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) ...;

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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 International Standard is English [change language if necessary].

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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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.

VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 4: Application guidelines

1 Scope

This part of IEC 62676 gives recommendations and requirements for the, planning, design, installation, testing, commissioning, and maintaining of Video Surveillance Systems (VSS) comprising of image capture device(s), interconnection(s) and image handling device(s), for use in security applications within private or public spaces.

The objectives of this part of IEC 62676 are to:

b) provide a framework to assist all interested parties in establishing their requirements,

c) assist specifiers and users in determining the appropriate equipment required for a given application,

d) provide means of evaluating objectively the performance of the VSS.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 31010, *Risk management - Risk assessment techniques*

IEC 62305 (series), *Protection against lightning*

IEC 62305-3, *Protection against lightning – Part 3: Physical damage to structures and life hazard*

IEC 62305-4, *Protection against lightning – Part 4: Electrical and electronic systems within structures*

IEC 62676-1-1: *Video surveillance systems for use in security applications – Part 1-1: System Requirements*

IEC 62676-1-2: *Video surveillance systems for use in security applications – Part 1-2: General Video Transmission Requirements*

IEC 62676-2-1: *Alarm systems – Video surveillance systems for use in security applications – Part 2-1: Video Transmission Protocols – General Requirements*

IEC 62676-2-31: *Video surveillance systems for use in security applications - Part 2-31: Live streaming and control based on web services*

IEC 62676-2-32: *Video surveillance systems for use in security applications - Part 2-32: Recording control and replay based on web services*

IEC 62676-2-33: *Video surveillance systems for use in security applications - Part 2-33: Video transmission protocols – Cloud uplink and remote management system access*

IEC 62676-3:*Video surveillance systems for use in security applications– Part 3: Analog and digital video interfaces*

IEC 62676-5: *Video surveillance systems for use in security applications - Part 5: Data Specifications and Image Quality Performance for Camera devices*

IEC 62820-2: *Building intercom systems – Part 2: Requirements for advanced security building intercom systems (ASBIS)*

IEC 62820-3-2: *Building intercom systems – Part 3-2: Application Guidelines – Advanced security building intercom systems (ASBIS)*

ISO 31000: *Risk management - Guidelines*

ISO/IEC 11801 (series), *Information technology - Generic cabling for customer premises*

ISO/IEC 13818-1, *Information technology — Generic coding of moving pictures and associated audio information — Part 1: Systems*

ISO/IEC 14496-2, *Information technology — Coding of audio-visual objects — Part 2: Visual*

ISO/IEC 14496-10, *Information technology — Coding of audio-visual objects — Part 10: Advanced video coding*

ISO/IEC 15444-1, *Information technology — JPEG 2000 image coding system — Part 1: Core coding system*

ISO/IEC 19794-5, *Information technology — Biometric data interchange formats — Part 5: Face image data*

ITU-T Rec. T.81 / ISO/IEC 10918-1, *Information technology — Digital compression and coding of continuous-tone still images: Requirements and guidelines — Part 1: Requirements and guidelines*

ITU-T Rec. H.263, *Video coding for low bit rate communication*

ITU-T Rec. H.264, *Advanced video coding for generic audiovisual services*

ITU-T Rec. H.265, *High efficiency video coding*

ITU-R BT601, Standard to define how digital interlaced video signals to be coded (also formerly known as CCIR 601)

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1
4K (UHD)
The standard for Ultra High-Definition television (UHDTV) defined by SMPTE2036 to be with 3.840 x 2.160 pixels at 25 or 30 fps.

3.1.2
8K (UHD)
The standard for Ultra High-Definition television (UHDTV) defined by SMPTE2036 to be with 7.680 x 4.320 pixels at 25 or 30 fps.

3.1.3
At-site visual check
Activity to determine and assess the feasibility of implementing the safety concept per camera location to be monitored as well as checks of visible disturbances and defects - in particular for influences occurring outside of VSS system parts - on the monitoring tasks of a VSS that are not evaluated operationally and whether there are deviations from the function of the VSS required in the safety concept. The at-site visual check is the responsibility of the operator, who may, however, hand over the inspection to a competent person VSS or to a competent system engineer VSS.

3.1.4
camera housing
enclosure to provide physical and/or environmental protection of the camera, lens and ancillary equipment

3.1.5
camera sensitivity
Image capturing device capability to produce an image in certain light conditions

3.1.6
characterise
Minimum requirement of a VSS camera to characterise a target, e.g. persons (type of person, gait and actions can be characterised) and vehicles (vehicle brands can be characterised) with a display of > 250 pixel/metre

3.1.7
competent person VSS
Person who has been instructed by a competent system engineer VSS about the assigned tasks within the scope of the on-site check and the possible dangers and consequences of improper behaviour

Note 1 to the term: This includes the necessary knowledge for the assessment of the object requirements, with regard to the type of danger and the required function of the VSS, the influence of the use as well as the limits of use and the instruction about the security concept of the video surveillance system, about existing requirements as well as legal requirements or requirements of the operator from safety aspects as personal and property protection measures or to avoid personal injury.

Note 2 to the term: The task requires competences for independent planning and processing of the requirements from the at-site visual check as well as in-depth general knowledge and specialist theoretical knowledge in order to be able to assess to what extent environmental or object changes can influence the effectiveness of a video surveillance system. The recognition of possible interactions from other requirements as well as the development of alternative actions is necessary. Detected deviations must be securely justified, responsibly communicated and, if necessary, retracted if no other problem solutions can be found.

3.1.8
Competent system engineer VSS
Person who, on the basis of professional technical training, knowledge and experience as well as knowledge of the relevant standards, regulations and directives, is able to assess the work to be carried out and recognise possible hazards.
A competent system engineer VSS can be employed by either an installation company/system integrator company, project planning company or at owner or at user of the VSS.

Note 1 to the term: For the field of video surveillance systems, training from the spectrum of electrical engineering in the field of communications, information, microprocessor, measurement and control or general electrical engineering is required, and experience in the respective other fields as well as system knowledge of video security technology must be demonstrated. Qualification of competence for VSS knowledge can be proven by training certificates of e.g., local security associations or vendors of VSS.

Note 2 to the term: Several years of activity in the relevant fields of work can also be used to assess the professional training.

Note 3 to the term: The activity requires the ability to independently plan and process comprehensive technical tasks in a complex, specialised, changing environment. Integrated technical knowledge and in-depth theoretical knowledge of the subject must be available. The scope and limits of the possible applications of a video surveillance system must be known. A very broad spectrum of specialised cognitive and practical skills is required. Work processes are to be planned in a comprehensive manner and assessed with comprehensive consideration of handling alternatives and interactions with neighbouring areas. The competence to guide others and to support them with well-founded learning guidance must be given. Interdisciplinary complex issues must be presented in a structured, target-oriented and addressee-related manner. Own and externally set learning and working goals must be reflected upon, evaluated, pursued in a self-directed manner and answered.

3.1.9
Constant bit rate
Where the bit rate of a camera stream is kept constant regardless of the image quality or movement in the scene

3.1.10
Corrective maintenance
Maintenance carried out after failure detection to restore a VSS to a condition in which it can perform its required function. Corrective maintenance corresponds to repair and serves as a corrective measure after a failure has been detected.

3.1.11
discern
Minimum requirement of a VSS camera to discern a target, e.g. objects and their movements with a display of > 80 pixel/metre

3.1.12
electronic iris
automatic electronic shutter which changes the camera sensitivity in relation to the varying light conditions in order to maintain the video output signal within defined limits

3.1.13
electronic shutter
arrangement in the camera changing its sensitivity by electronically controlling its exposure time

3.1.14
event recording
event controlled recording or storing of image signals for a pre-determined time
NOTE: refers to video recording not to system log of events

3.1.15
external synchronisation
method of feeding reference timing signals to all connected devices to ensure that their video output signals are synchronous

3.1.16
focal length (f)
measurement of the converging power of a lens, normally expressed in mm, which can be used to determine the angle of view for a given sensor size

3.1.17
geo data
digital information assigning a certain spatial location to the earth's surface