TURVARAKENDUSTES KASUTATAVAD VIDEOVALVESÜSTEEMID. OSA 1-1: SÜSTEEMI NÕUDED. ÜLDIST

Video surveillance systems for use in security applications - Part 1-1: System requirements - General



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 62676-1-1:2014 sisaldab Euroopa standardi EN 62676-1-1:2014 ingliskeelset teksti.	This Estonian standard EVS-EN 62676-1-1:2014 consists of the English text of the European standard EN 62676-1-1:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 14.03.2014.	Date of Availability of the European standard is 14.03.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 13.320

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN 62676-1-1

NORME EUROPÉENNE EUROPÄISCHE NORM

March 2014

ICS 13.320

English version

Video surveillance systems for use in security applications -Part 1-1: System requirements -General

(IEC 62676-1-1:2013)

Systèmes de vidéosurveillance destinés à être utilisés dans les applications de sécurité -

Part 1-1: Exigences systèmes -Généralités (CEI 62676-1-1:2013) Videoüberwachungsanlagen für Sicherheitsanwendungen - Teil 1-1: Systemanforderungen (IEC 62676-1-1:2013)

This European Standard was approved by CENELEC on 2013-12-02. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists 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.

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

CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 79/432/FDIS, future edition 1 of IEC 62676-1-1, prepared by IEC TC 79 "Alarm and electronic security systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62676-1-1:2014.

The following dates are fixed:

•	latest date by which the document has	(dop)	2014-09-02
	to be implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2016-12-02
	standards conflicting with the		
	document have to be withdrawn		

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

Endorsement notice

The text of the International Standard IEC 62676-1-1:2013 was approved by CENELEC as a European Standard without any modification.

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

IEC 62676-2 Series NOTE Harmonised as EN 62676-2 Series.
ISO/IEC 13818-1 NOTE Harmonised as EN ISO/IEC 13818-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60065	-0	Audio, video and similar electronic apparatus Safety requirements	s -EN 60065	-
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Te Eh: Hammer tests	est EN 60068-2-75	-
IEC 60529	-	Degrees of protection provided by enclosure (IP Code)	es EN 60529	-
IEC 60950-1	-	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	-
IEC 61000-6-1	2005	Electromagnetic compatibility (EMC) - Part 6 1: Generic standards - Immunity for residential, commercial and light-industrial environments	S- EN 61000-6-1	2007
IEC 61000-6-2	2005	Electromagnetic compatibility (EMC) - Part 6 2: Generic standards - Immunity for industria environments		2005 2005
IEC 61000-6-3	-	Electromagnetic compatibility (EMC) - Part 6 3: Generic standards - Emission standard fo residential, commercial and light-industrial environments		-
IEC 61000-6-4	-	Electromagnetic compatibility (EMC) - Part 6 4: Generic standards - Emission standard fo industrial environments		-
IEC 62262	-	Degrees of protection provided by enclosure for electrical equipment against external mechanical impacts (IK code)	es EN 62262	-
IEC 62599-1	2010	Alarm systems - Part 1: Environmental test methods	.0	-
IEC 62599-2	2010	Alarm systems - Part 2: Electromagnetic compatibility - Immunity requirements for components of fire and security alarm systems	9	-
IEC 62676-4		Video surveillance systems for use in securi applications - Part 4: Application guidelines	ty -	<u> </u>
ISO 12233	2000	Photography - Electronic still-picture camera - Resolution measurements	ıs -	0

CONTENTS

FO	REWO)RD		4
INT	RODI	JCTION		6
1	Scop	e		7
2	Norm	ative refere	ences	7
3	Term	s, definition	ns and abbreviations	8
	3.1	Terms and	definitions	8
	3.2		ons	
4	-		ription of the VSS	
	4.1			
	4.2		ironment	
			eneral	
			age capture	
			erconnections	
			age handling	
	4.3		anagement	
		•	eneral	
		4.3.2 Da	ita management	. 25
		4.3.3 Ac	tivity management	. 26
		4.3.4 Int	erfaces to other systems	.27
	4.4	System se	curity	.28
			eneral	
		4.4.2 Sy	stem integrity	. 28
			ita integrity	
5	Secu	rity grading		. 28
6	Func	tional requi	rements	.30
	6.1	Video envi	ironment	.30
		6.1.1 Im	age capture	.30
		6.1.2 Int	erconnections	.30
		6.1.3 Im	age handling	.31
	6.2	System ma	anagement	. 36
		6.2.1 Op	peration	.36
		6.2.2 Ac	tivity and information management	.36
			erfacing to other systems	
	6.3	System se	curity	.38
			eneral	
			stem integrity	
			age and data integrity	
	6.4		ental requirements	
			SSs as primary mitigation of the risk	
			SSs as secondary mitigation of the risk	
_	6.5	• .	ılity	
7	Envir		lasses	
	7.1			
	7.2		ental Class I – Indoor, but restricted to residential/office	46
	7 2		ental Class II – Indoor – General	
	7.3		inai Ciass II — IIIUUUI — Gelleläi	.40

Environmental Class III – Outdoor, but sheltered from direct rain and sunshine, or indoor with extreme environmental conditions	46
Environmental Class IV – Outdoor – General	
, ,	
,	
- VSS	23
- Reference to 130 12233 resolution measurement chart (unit in × 100 lines)	45
Storage	31
Level of seeses	40
– Access to system set-up	13
	43
- Access to system set-up	43
	mentation System documentation Instructions relating to operation System component documentation (normative) Special national conditions (informative) Video export in homeland security systems (thy) - VSS - Example for VSS - Activity management - Risk and security grades - Reference to ISO 12233 resolution measurement chart (unit in ×100 lines) Storage Archiving and backup System logs Monitoring of interconnections Tamper detection Level of access Authorisation code requirements Data access Access to system logs

INTERNATIONAL ELECTROTECHNICAL COMMISSION

VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 1-1: System requirements – General

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.

International Standard IEC 62676-1-1 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

The text of this standard is based on the following documents:

FDIS	Report on voting
79/432/FDIS	79/445/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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

The reader's attention is drawn to the fact that Annex A lists all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this standard.

A list of all parts in the IEC 62676, published under the general title *Video surveillance* systems for use in security applications, can be found on the IEC website.

The committee has decided that the contents of this publication 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

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

IMPORTANT - The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer. JOSON OCHONOCOLO DE LA LITA

5

INTRODUCTION

The IEC Technical Committee 79 in charge of alarm and electronic security systems together with many governmental organisations, test houses and equipment manufacturers has defined a common framework for video surveillance transmission in order to achieve interoperability between products.

The IEC 62676 series of standards on video surveillance system is divided into 4 independent parts:

Part 1: System requirements

Part 2: Video transmission protocols

Part 3: Analog and digital video interfaces

Part 4: Application guidelines (to be published)

Each part has its own clauses on scope, references, definitions and requirements.

This IEC 62676-1 series consists of 2 subparts, numbered parts 1-1 and 1-2 respectively:

IEC 62676-1-1, System requirements – General

IEC 62676-1-2, System requirements – Performance requirements for video transmission

The first subpart of this IEC 62676-1 series applies to systems for surveillance of private and public areas. It includes four security grades and four environmental classes.

This IEC Standard is intended to assist Video Surveillance System (VSS) companies, manufacturers, system integrators, installers, consultants, owners, users, insurers and law enforcement in achieving a complete and accurate specification of the surveillance system. This International Standard does not specify the type of technology for a certain observation task.

Due to the wide range of VSS applications e.g. security, safety, public safety, transportation, etc. only the minimum requirements are covered in this standard.

For specific applications e.g. in homeland security, additional requirements need to be applied, which are defined in the annex of this standard.

This IEC Standard is not intended to be used for testing individual VSS components.

Today VSSs reside in security networks using IT infrastructure, equipment and connections within the protected site itself.

VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 1-1: System requirements – General

1 Scope

This part of IEC 62676 specifies the minimum requirements and gives recommendations for Video Surveillance Systems (VSS), so far called CCTV, installed for security applications. This Standard specifies the minimum performance requirements and functional requirements to be agreed on between customer, law-enforcement where applicable and supplier in the operational requirement, but does not include requirements for design, planning, installation, testing, operation or maintenance. This standard excludes installation of remotely monitored detector activated VSSs.

This IEC Standard also applies to VSS sharing means of detection, triggering, interconnection, control, communication and power supplies with other applications. The operation of a VSS is not be adversely influenced by other applications.

Requirements are specified for VSS components where the relevant environment is classified. This classification describes the environment in which the VSS component may be expected to operate as designed. When the requirements of the four environmental classes are inadequate, due to the extreme conditions experienced in certain geographic locations, special national conditions may be applied (see Annex A).

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 60065, Audio, video and similar electronic apparatus - Safety requirements

IEC 60068-2-75, Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests

IEC 60529. Degrees of protection provided by enclosures (IP Code)

IEC 60950-1, Information technology equipment – Safety – Part 1: General requirements

IEC 61000-6-1:2005, Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light-industrial environments

IEC 61000-6-2:2005, Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments

IEC 61000-6-3, Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments

IEC 61000-6-4, Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments