SVENSK STANDARD

SS-EN IEC 62676-2-11, utg 1:2025

Fastställd	Sida	Ansvarig kommitté
2025-03-05	1 (23)	SEK TK 79

Larmsystem – System för videoövervakning (VSS) – Del 2-11: Protokoll för videoöverföring – Interoperabilitetsprofiler för VMS och VSaaS

Video Surveillance Systems (VSS) for use in security applications – Part 2-11: Video transmission protocols – Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement

Som svensk standard gäller europastandarden EN IEC 62676-2-11:2024. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62676-2-11:2024.

Nationellt förord

Europastandarden EN IEC 62676-2-11:2024

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62676-2-11, First edition, 2024 - Video Surveillance Systems (VSS) for use in security applications - Part 2-11: Video transmission protocols – Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 13.320.00

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Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: elstandard.se

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SEK Svensk Elstandard

Box 1042
172 21 Sundbyberg
Tel 08-444 14 00
elstandard.se

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62676-2-11

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English Version

Video Surveillance Systems (VSS) for use in security applications - Part 2-11: Video transmission protocols - Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement (IEC 62676-2-11:2024)

Systèmes de vidéosurveillance destinés à être utilisés dans les applications de sécurité - Partie 2-11: Protocoles de transmission vidéo - Profils d'interopérabilité pour les systèmes VMS et VSaaS en nuage pour la sécurité urbaine et le maintien de l'ordre (IEC 62676-2-11:2024)

Videoüberwachungssysteme (VSS) für den Einsatz in Sicherheitsanwendungen - Teil 2-11: Videoübertragungsprotokolle - Interop-Profile für VMS- und Cloud VSaaS-Systeme für sichere Städte und Strafverfolgungsbehörden (IEC 62676-2-11:2024)

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

Ref. No. EN IEC 62676-2-11:2024 E

SEK Svensk Elstandard SS-EN IEC 62676-2-11, utg 1:2025

European foreword

The text of document 79/697/CDV, future edition 1 of IEC 62676-2-11, prepared by IEC/TC 79 "Alarm and electronic security systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62676-2-11:2024.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2025-03-19
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2027-06-19

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 Standard IEC 62676-2-11:2024 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO 22311	NOTE	Approved as EN ISO 22311

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.

Publication	Year	Title	EN/HD	Year
IEC 60839-11-31	2016	Alarm and electronic security systems - Part 11-31: Electronic access control systems - Core interoperability protocol based on Web services	EN 60839-11-31	2017
IEC 60839-11-32	-	Alarm and electronic security systems - Part 11-32: Electronic access control systems - Access control monitoring based on Web services	EN 60839-11-32	-
IEC 62676	series	Video surveillance systems for use in security applications	EN 62676	series
IEC 62676-2-31	2019	Video surveillance systems for use in security applications - Part 2-31: Live streaming and control based on web services	EN IEC 62676-2-31	2019
IEC 62676-2-32	2019	Video surveillance systems for use in security applications - Part 2-32: Recording control and replay based on web services	EN IEC 62676-2-32	2019
IEC 62676-2-33	2022	Video surveillance systems for use in security applications - Part 2-33: Video transmission protocols - Cloud uplink and remote management system access	EN IEC 62676-2-33	2022
ISO 23601	-	Safety identification - Escape and evacuation plan signs	-	-
ISO/IEC 14496-3	-	Information technology - Coding of audio-visual objects - Part 3: Audio	-	-
ISO/IEC 14496-10	-	Information technology - Coding of audio-visual objects - Part 10: Advanced Video Coding	-	-
ISO/IEC 14496-12	2022	Information technology - Coding of audio-visual objects - Part 12: ISO base media file format	-	-

ISO/IEC 23000-10	-	Information technology_- Multimedia application format (MPEG-A) - Part 10: Video surveillance application format	-	-
ISO/IEC 23008-2	-	Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 2: High efficiency video coding	-	-
ITU-T/Rec G.711	-	Pulse code modulation (PCM) of voice frequencies	-	-
ITU-T/Rec G.722	-	7 kHz audio-coding within 64 kbit/s	-	-
RFC 5246	-	The Transport Layer Security (TLS) Protocol Version 1.2	-	-

IEC 62676-2-11

Edition 1.0 2024-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Video Surveillance Systems (VSS) for use in security applications – Part 2-11: Video transmission protocols – Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement

Systèmes de vidéosurveillance destinés à être utilisés dans les applications de sécurité – Partie 2-11: Protocoles de transmission vidéo – Profils d'interopérabilité pour les systèmes VMS et VSaaS en nuage pour la sécurité urbaine et le maintien de l'ordre

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 2-11: Video transmission protocols – Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement

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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9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 62676-2-11 has been prepared by IEC technical committee 79: Alarm and electronic security systems. It is an International Standard.

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

Draft	Report on voting
79/697/CDV	79/702/RVC

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.

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.

A list of all parts in the IEC 62676 series, 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 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.

IMPORTANT – The "colour inside" logo on the cover page of this document 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.

INTRODUCTION

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

The IEC 62676 series of standards on video surveillance systems (VSS) is divided into six independent parts:

Part 1: System requirements;

Part 2: Video transmission protocols;

Part 3: Analog and digital video interfaces;

Part 4: Application guidelines;

Part 5: Data specifications and image quality performance for camera devices;

Part 6: Performance testing and grading of real-time intelligent video.

Each part offers its own clauses for the scope, normative references, definitions, and requirements.

Today there is a lack in directive standards giving precise requirements for VSS in certain situations involving third parties (and especially the authorities), compared to intrusion or fire detection alarm systems, while video applications are becoming more important for public security.

In most cases, such situations apply to one or more independent regular operational systems (or systems of systems) and correspond to exceptional events or security incidents where authorities, first responders, etc. need immediate access to the data (video and associated information) through a single third-party Video Management System (VMS) for a timely response.

Since the surveillance systems are a crucial asset in crime prevention, crisis management, or forensic applications to assist the law-enforcement agencies and smart cities, the goal of this document is to provide a fully interoperable interface for VMS and Cloud Video Surveillance-as-a-Service (VSaaS) Systems with third-party:

- security operations centres,
- professional remote video monitoring,
- remote access by law-enforcement and authorities,

for sharing their digital video-surveillance contents and associated metadata.

This document builds upon the IEC 62676 family of standards and complements it. It does not specify any detailed requirements on application guidance and video observation objectives, on system availability, cyber security, privacy, national and legal constraints, operational procedures, environmental conditions, or technical protocols.

VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

Part 2-11: Video transmission protocols – Interop profiles for VMS and cloud VSaaS systems for safe cities and law enforcement

1 Scope

Based on the IP video features offered by the IEC 62676-2 protocol series, this document defines minimum requirement profiles for Video Management Systems (VMS) and cloud Video-Surveillance-as-a-Service (VSaaS) Systems to optimize interfacing with third parties.

It defines minimum required VMS interoperability levels from video export to exclusive video control, for the sake of remote support, for example in crisis situations, regulating governmental organizations, national law enforcement, private security service companies, public transport operators and other authorities.

This document is intended to set the common technical basis for national regulations requiring inter-organizational remote, local or on-site access, for example so that authorities can be granted temporary access to the VSS in the case of emergency situations.

This standard is accordingly expected to supersede ISO 22311 (Societal Security – Video-surveillance – Export interoperability).

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 60839-11-31:2016, *Alarm and electronic security systems – Part 11-31: Electronic access control systems – Core interoperability protocol based on Web services*

IEC 60839-11-32, *Alarm and electronic security systems – Part 11-32: Electronic access control systems – Access control monitoring based on Web services*

IEC 62676 (all parts), *Video surveillance system for use in security applications*

IEC 62676-2-31:2019, *Video surveillance system for use in security applications – Part 2-31: Live streaming and control based on web services*

IEC 62676-2-32:2019, *Video surveillance system for use in security applications – Part 2-32: Recording control and replay based on web services*

IEC 62676-2-33:2022, *Video surveillance system for use in security applications – Part 2-33: Cloud uplink and remote management system access*

ISO 23601, *Safety identification – Escape and evacuation plan signs*

ISO/IEC 14496-3, *Information technology – Coding of audio-visual objects – Part 3: Audio*

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

ISO/IEC 14496-12:2022, *Information technology – Coding of audio-visual objects – Part 12: ISO base media file format*

ISO/IEC 23000-10, *Information technology – Multimedia application format (MPEG-A) – Part 10: Surveillance application format*

ISO/IEC 23008-2, *Information technology – High efficiency coding and media delivery in heterogeneous environments – Part 2: High efficiency video coding*

ITU-T/Rec G.711, *Pulse code modulation (PCM) of voice frequencies*

ITU-T/Rec G.722, *7 kHz audio-coding within 64 kbit/s*

RFC 5246, *The Transport Layer Security (TLS) Protocol Version 1.2*