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**Video Surveillance Systems (VSS) for use in security applications –
Part 2-11: Video transmission protocols – Interoperability 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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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

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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

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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 IEC 62676-2-11 (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*