

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



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

**Systèmes de vidéosurveillance destinés à être utilisés dans les applications de  
sécurité –  
Partie 2-33: Protocoles de transmission vidéo – Liaison montante au nuage et  
accès au système de gestion à distance**



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**VIDEO SURVEILLANCE SYSTEMS FOR  
USE IN SECURITY APPLICATIONS –**
**Part 2-33: Video transmission protocols – Cloud uplink and remote  
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**FOREWORD**

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

Draft	Report on voting
79/658/FDIS	79/666/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.

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

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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## INTRODUCTION

Surveillance systems are important in public safety projects to maintain law and order as well as public safety, and to assist the police to perform forensic analysis. Due to organizational and security reasons, large-scale surveillance systems are split in segments, which can lead to information silos. This document provides a standardized interface for management systems such that authorized entities can easily access remote information using the same mechanism they are using today for accessing local information.

## VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –

### Part 2-33: Video transmission protocols - Cloud uplink and remote management system access

#### 1 Scope

This document specifies management systems interfaces and mechanisms for remote operational access to physical security devices such as video surveillance devices and systems. For video surveillance, the use cases focus on accessing live video and retrieving recordings. The mechanisms defined in this document are not restricted to surveillance applications, but also cover remote access to security systems and electronic access control systems. Configuration of devices and management systems is out of the scope of this document.

Clause 4 introduces remote management access. Clause 5 defines a set of requirements that the protocol needs to fulfil. Clause 6 extends the token-based resource-addressing scheme of IEC 60839-11-31. Clause 7 describes how to retrieve information about remote resources. Clause 8 defines how to connect to devices that are not directly reachable because they are for instance located behind firewalls.

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

IETF RFC 4122, *A Universally Unique IDentifier (UUID) URN Namespace*

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

IETF RFC 6125, *Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)*

IETF RFC 7540, *Hypertext Transfer Protocol Version 2 (HTTP/2)*

#### 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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