

Australian/New Zealand Standard™

**Video surveillance systems for use in  
security applications**

**Part 2.2: Video transmission protocols  
— IP interoperability implementation  
based on HTTP and REST services**



AS/NZS IEC 62676.2.2:2020

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- Australian Digital & Telecommunications Industry Association
- Australian Federal Police
- Australian Industry Group
- Australian Security Industry Association
- Engineers Australia
- Fire Protection Association Australia
- Insurance Council of Australia
- New Zealand Security Association
- NSW Police Force
- Queensland Police Service
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Australian/New Zealand Standard™

## **Video surveillance systems for use in security applications**

### **Part 2.2: Video transmission protocols — IP interoperability implementation based on HTTP and REST services**

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## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-031, Intruder Alarm Equipment and Installations.

The objective of this Standard is to specify a compliant IP video protocol based on HTTP and REST services.

Video transmission devices are often equipped with web servers that respond to HTTP requests. The HTTP response may contain XML content (for GET actions), XML response information (for SET actions), or various text/binary content (for retrieval of configuration data, etc.). REST is an approach to creating services that expose all information as resources in a uniform way. The ease of using REST is its uniform interface for operations. Since everything is represented as a resource, create, retrieve, update, and delete (CRUD) operations use the same URI. This specification leverages the features of HTTP and REST for IP video transmission.

A video transmission device supporting conformance to the requirements of this standard based on HTTP and REST Services as described in this document is declared as compatible to 'AS/NZS IEC 62676-2 HTTP and REST interoperability.'

This Standard is identical with, and has been reproduced from, IEC 62676-2-2:2013, *Video surveillance systems for use in security applications — Part 2-2: Video transmission protocols — IP interoperability implementation based on HTTP and REST services*.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**VIDEO SURVEILLANCE SYSTEMS FOR USE  
IN SECURITY APPLICATIONS –**

**Part 2-2: Video transmission protocols –  
IP interoperability implementation based  
on HTTP and REST services**

FOREWORD

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International Standard IEC 62676-2-2 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
79/436/FDIS	79/449/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.

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 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.

## INTRODUCTION

The IEC Technical Committee 79 in charge of alarm and electronic security systems together with many governmental organisations, test houses and equipment manufacturers have 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 62676-2 series consists of 3 subparts, numbered parts 2-1, 2-2 and 2-3 respectively:

IEC 62676-2-1, *Video transmission protocols – General requirements*

IEC 62676-2-2, *Video transmission protocols – IP interoperability implementation based on HTTP and REST services*

IEC 62676-2-3, *Video transmission protocols – IP interoperability implementation based on Web services*

This second subpart of this IEC 62676-2 series covers IP interoperability implementation based on HTTP and REST services. It is based on the requirements for IP video transmission protocols covered in IEC 62676-2-1, which defines protocol requirements to be fulfilled by any high-level IP video device interface.

## **VIDEO SURVEILLANCE SYSTEMS FOR USE IN SECURITY APPLICATIONS –**

### **Part 2-2: Video transmission protocols – IP interoperability implementation based on HTTP and REST services**

#### **1 Scope**

This part of IEC 62676 specifies a compliant IP video protocol based on HTTP and REST services.

Video transmission devices are often equipped with web servers that respond to HTTP requests. The HTTP response may contain XML content (for GET actions), XML response information (for SET actions), or various text/binary content (for retrieval of configuration data, etc.). REST is an approach to creating services that expose all information as resources in a uniform way. The ease of using REST is its uniform interface for operations. Since everything is represented as a resource, create, retrieve, update, and delete (CRUD) operations use the same URI. This specification leverages the features of HTTP and REST for IP video transmission.

A video transmission device supporting compliance to the requirements of this standard based on HTTP and REST Services as described in this document is declared as compatible to 'IEC 62676-2 HTTP and REST interoperability.'

#### **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.

ISO/IEC 10918-1, *Information technology – Digital compression and coding of continuous-tone still images: Requirements and guidelines*

ISO/IEC 11172-3:1993, *Information technology – Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s – Part 3: Audio*

ISO/IEC 13818-2, *Information technology – Generic coding of moving pictures and associated audio information: Video*

ISO/IEC 14496-2:2004, *Information technology – Coding of audio-visual objects – Part 2: Visual*

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

ISO/IEC 14496-10:2012, *Information technology – Coding of audio-visual objects – Part 10: Advanced video coding*

IETF RFC 1213, *Management Information Base for Network Management of TCP/IP-based internets: MIB-II*