NSAI
Standards

Irish Standard
I.S. EN ISO 22311:2014

Societal security - Video-surveillance - Export interoperability (ISO 22311:2012)

I.S. EN ISO 22311:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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Údarás um Chaighdeáin Náisiúnta na hÉireann

I.S. EN ISO 22311:2014

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 22311

November 2014

ICS 03.100.01; 13.310; 35.240.99

English Version

Societal security - Video-surveillance - Export interoperability (ISO 22311:2012)

Sécurité sociétale - Vidéosurveillance - Interopérabilité de l'export (ISO 22311:2012)

Sicherheit und Schutz des Gemeinwesens - Videoüberwachung - Datenschnittstellen (ISO 22311:2012)

This European Standard was approved by CEN on 18 October 2014.

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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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Ref. No. EN ISO 22311:2014 E

EN ISO 22311:2014 (E)

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Foreword

The text of ISO 22311:2012 has been prepared by Technical Committee ISO/TC 223 "Societal security" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 22311:2014 by Technical Committee CEN/TC 391 "Societal and Citizen Security" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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

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Endorsement notice

The text of ISO 22311:2012 has been approved by CEN as EN ISO 22311:2014 without any modification.

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INTERNATIONAL STANDARD

ISO
22311

First edition
2012-11-15

Societal security — Video-surveillance — Export interoperability

Sécurité sociétale — Videosurveillance — Interopérabilité de l'export

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ISO 22311:2012(E)

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ISO 22311:2012(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 22311 was prepared by Technical Committee ISO/TC 223, *Societal security*.

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I.S. EN ISO 22311:2014

ISO 22311:2012(E)

Introduction

Video-surveillance is a crucial asset in intelligence collection, crime prevention, crisis management, forensic applications etc. The minimum requirement in societal security is for the authorities to be able to rapidly use the data collected by different CCTV systems from given locations.

This International Standard provides an export interoperability profile which constitutes the exchange format and minimum technical requirements that ensure that the digital video-surveillance contents exported are compatible with the replay systems, establish an appropriate level of quality and contain all the context information (metadata) necessary for their processing.

It is crucial for societal security that present and future video-surveillance systems implement this interface to allow efficient forensic processing of the material produced, often in massive quantities.

This International Standard also contains provisions to ensure that privacy measures can be implemented to protect the rights of the individuals.

This International Standard does not impose implementation methods or technological solutions. It relies heavily on individual technical standards separately developed and concentrates on minimum necessary profiles or subsets thereof to achieve its societal security objectives.

This International Standard is a blend of profiles of standards and practices, which combined, will achieve a minimum level of interoperability.

This implementation has only been possible because of standards produced by the following bodies:

— ISO/IEC JTC 1/SC 29/WG 11, Coding of moving pictures and audio (MPEG);

— ISO/IEC JTC 1/SC 29/WG 1, Coding of still pictures (JPEG);

— IEC/TC 79, Alarm systems and electronic security (including its European equivalent CENELEC/TC 79, Alarm systems and electronic security);

— ITU, International Telecommunication Union;

— IETF, Internet Engineering Task Force;

— SMPTE, Society of Motion Picture and Television Engineers;

— NATO, Standardization Agency.

The normative Annex A contains a metadata dictionary.

The importance of having images stored and presented to the user in such a way that their use is facilitated is presented in the informative Annex B.

INTERNATIONAL STANDARD   **ISO 22311:2012(E)**

Societal security — Video-surveillance — Export interoperability

1 Scope

This International Standard is mainly for societal security purposes and specifies a common output file format that can be extracted from the video-surveillance contents collection systems (stand alone machines or large scale systems) by an exchangeable data storage media or through a network to allow end-users to access digital video-surveillance contents and perform their necessary processing. The means of exchange are not part of this International Standard.

This common output file format relies on a combination of several technical standards that individually are not restrictive enough to provide the requested interoperability. These standards are formally referenced to avoid duplications or divergence. When appropriate to improve the interoperability, subsets or a limited number only of these standards are called.

Since video-surveillance recording often includes taking records of citizens, requirements relating to privacy, use of the records and their disposal are also considered.

Based on the above mentioned technical standards, the following format components are covered:

— Video;

— Audio;

— Metadata:

    — Descriptive (location, camera identifier, etc.)

    — Dynamic (date, time, pan, tilt, zoom, identification results, etc.)

— Encapsulation/packaging for the output file;

— Data/access security and integrity;

— Provisions for privacy;

— Informative data regarding the presentation to users.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO/IEC 10918-1:1994, *Information technology — Digital compression and coding of continuous-tone still images: Requirements and guidelines — Part 1*

ISO/IEC 10918-5, *Information technology — Digital compression and coding of continuous-tone still images: JPEG File Interchange Format (JFIF) — Part 5*[1)]

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

ISO/IEC 14496-3:2009, *Information technology — Coding of audio-visual objects — Part 3: Audio*

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1) To be published.

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