SLOVENSKI STANDARD
SIST EN 61966-2-4:2007/A1:2016

01-december-2016

Večpredstavnostni sistemi in oprema - Merjenje in upravljanje barv - 2-4. del: Upravljanje barv - Razširjena lestvica v YCC-barvnem prostoru za video aplikacije - xvYCC

Multimedia systems and equipment - Colour measurement and management - Part 2-4: Colour management - Extended-gamut YCC colour space for video applications - xvYCC

Multimediasysteme und -geräte - Farbmessung und Farbmanagement - Teil 2-4: Farbmanagement - Erweiterter YCC-Farbraum für Videoanwendungen - xvYCC

Systèmes et appareils multimédia - Mesure et gestion de la couleur - Partie 2-4: Gestion de la couleur - Extension de gamme de l'espace chromatique YCC pour applications vidéo - xvYCCC

Ta slovenski standard je istoveten z: **EN 61966-2-4:2006/A1:2016**

ICS:

17.180.20	Barve in merjenje svetlobe	Colours and measurement of light
33.160.60	Večpredstavni (multimedijski) sistemi in oprema za telekonference	Multimedia systems and teleconferencing equipment

SIST EN 61966-2-4:2007/A1:2016 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61966-2-4:2006/A1

September 2016

ICS 33.160.40

English Version

Multimedia systems and equipment - Colour measurement and management - Part 2-4: Colour management - Extended-gamut YCC colour space for video applications - xvYCC (IEC 61966-2-4:2006/A1:2016)

Systèmes et appareils multimédia - Mesure et gestion de la couleur - Partie 2-4: Gestion de la couleur - Extension de gamme de l'espace chromatique YCC pour applications vidéo - xvYCCC (IEC 61966-2-4:2006/A1:2016)

Multimediasysteme und -geräte - Farbmessung und Farbmanagement - Teil 2-4: Farbmanagement - Erweiterter YCC-Farbraum für Videoanwendungen - xvYCC (IEC 61966-2-4:2006/A1:2016)

This amendment A1 modifies the European Standard EN 61966-2-4:2006; it was approved by CENELEC on 2016-06-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC 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 Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61966-2-4:2006/A1:2016 E

European foreword

The text of document 100/2457A/CDV, future IEC 61966-2-4:2006/A1, prepared by IEC/TC 100, "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61966-2-4:2006/A1:2016.

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)	2017-03-02
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-06-02

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

Endorsement notice

The text of the International Standard IEC 61966-2-4:2006/A1:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

Addition

IEC 61633-12-1:2011	NOTE	Harmonized as EN 61633-12-1:2011.
IEC 61633-12-2:2014	NOTE	Harmonized as EN 61633-12-2:2014.

IEC 61966-2-4

Edition 1.0 2016-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Multimedia systems and equipment – Colour measurement and management – Part 2-4: Colour management – Extended-gamut YCC colour space for video applications – xvYCC

Systèmes et appareils multimédia – Mesure et gestion de la couleur – Partie 2-4: Gestion de la couleur – Extension de gamme de l'espace chromatique YCC pour applications vidéo – xvYCC

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FOREWORD

This amendment has been prepared by technical area 2: Colour measurement and management, of IEC technical committee 100: Multimedia systems and equipment.

The text of this standard is based on the following documents:

CDV	Report on voting
100/2457A/CDV	100/2601/RVC

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.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

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FOREWORD

Update the list referring to the parts of IEC 61966 as follows:

Delete, in the reference to part 2-5, "(under consideration)".

Remove the following entries:

Part 7-2: Colour printers – Reflective prints – CMYK inputs (proposed work item)
Part 10: Quality assessment (proposed work item)
Part 11: Quality assessment – Impaired video in network systems (proposed work item)

Add the following new entries:

Part 12-1: Metadata for identification of colour gamut (Gamut ID)
Part 12-2: Simple Metadata format for identification of colour gamut

Add, after Annex C, the following new Annex D:

Annex D
(informative)

Recommended usage of IEC 61966-12-2 for this standard

While this standard provides wider colour gamut for consumer electronic (CE) imaging devices, it does not specify the target gamut in which captured and/or computer-generated video contents are rendered, stored, transmitted and then displayed. IEC 61966-12-2 provides a very useful scheme for describing the target gamut for video contents exchange between CE imaging devices.

Usually CE imaging devices render video contents into a “standard” target display, which is widely used by general users. In most cases, those target display devices can be described by the IEC 61966-12-2’s structure. The scope of IEC 61966-12-2 is based on a unique profile of additive three-primary-colour type displays. Therefore, IEC 61966-12-2 is recommended for the use in video exchange in CE imaging devices.

On the other hand, IEC 61966-12-1 has much higher flexibility with three classes of profiles (full, medium and simple). However, as written in the introduction of IEC 61966-12-2, it will be a limitation for CE devices, if a sender device and a receiver device are "based on the IEC 61966-12-1 standard", but cannot understand and interpret the structure of all three classes of profiles, as specified below:

a) the receiver device cannot handle the Gamut ID of incoming contents, if the sender device sends only full or medium profile;
b) the sender device should convert a full profile to a simple one for CE-devices, if the receiver can receive the simple profile only. But the conversion is not possible for all the cases.

NOTE Items a) and b) have been copied from the introduction of IEC 61966-12-2.

Informative notes on other extended-gamut colour spaces:

Recently, some other extended-gamut colour spaces have been proposed, such as ITU-R BT.2020 or SMPTE ST 428-1 (XYZ), which have much wider gamut than generally used displays, or sometimes primary colours are defined outside of existing colours (i.e. virtual colours). In most cases, the gamut of generally used displays in the market is different from the very wide gamut of those recently proposed extended gamut colour spaces. The reflection exposed above can also be applied, in such cases.

Bibliography

Add, in the bibliographical references after item [18], the following new entries:

[19] IEC 61966-12-1:2011, *Multimedia systems and equipment – Colour measurement and management – Part 12-1: Metadata for identification of colour gamut (Gamut ID)*

[20] IEC 61966-12-2:2014, *Multimedia systems and equipment – Colour measurement and management – Part 12-2: Simple metadata format for identification of colour gamut*

[21] Recommendation ITU-R BT.2020-1 (2014-06), *Parameter values for ultra-high definition television systems for production and international programme exchange*

[22] SMPTE 428-1-2006 (2006-09), *D-Cinema Distribution Master (DCDM) – Image Characteristics*

[23] SMPTE ST 2086-2014 (2014-10), *Mastering Display Color Volume Metadata Supporting High Luminance and Wide Color Gamut images*