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STN	**Formát súboru pre profesionálny prenos a výmenu digitálnych zvukových údajov**	**STN EN IEC 62942** 36 8306

File format for professional transfer and exchange of digital audio data

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/20

Obsahuje: EN IEC 62942:2020, IEC 62942:2019

130992

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62942

March 2020

ICS 33.160.30

English Version

File format for professional transfer and exchange of digital audio data (IEC 62942:2019)

Format de fichier pour le transfert et l'échange professionnels de données audionumériques (IEC 62942:2019)

Dateiformat für die professionelle Übertragung und den Austausch digitaler Audiodaten (IEC 62942:2019)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 100/3143/CDV, future edition 1 of IEC 62942, 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 IEC 62942:2020.

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) 2020-10-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-01-16

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

Endorsement notice

The text of the International Standard IEC 62942:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO 3166-1	NOTE	Harmonized as EN ISO 3166-1

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-
ISO/IEC 10646	2017	Information technology - Universal Coded Character Set (UCS)	-	-
SMPTE ST 330	2011	SMPTE standard for television - Unique Material Identifier (UMID)	-	-
RFC 3629	-	UTF-8, User Datagram Protocol	-	-

IEC 62942

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INTERNATIONAL STANDARD

File format for professional transfer and exchange of digital audio data

IEC 62942:2019-12(en)

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The world's leading online dictionary on electrotechnology, containing more than 22 000 terminological entries in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

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67 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

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INTERNATIONAL STANDARD

File format for professional transfer and exchange of digital audio data

INTERNATIONAL
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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FILE FORMAT FOR PROFESSIONAL TRANSFER AND EXCHANGE OF DIGITAL AUDIO DATA

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62942 has been prepared by technical area 6: Storage media, storage data structures, storage systems and equipment, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

CDV	Report on voting
100/3143/CDV	100/3226/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 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.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The Broadcast Wave format file (BWFF) is based on the Microsoft WAVE[1] audio file format, which is a type of file specified in the Microsoft resource interchange file format (RIFF) [1][2] WAVE files specifically contain audio data. The basic building block of a RIFF file is a chunk which contains specific information, an identification field, and a size field. A RIFF file contains a number of chunks.

The BWFF specifically includes a <Broadcast Audio Extension> chunk to carry certain metadata important for broadcast and professional use. For reliable interchange, some restrictions apply to the format of the audio data.

The Broadcast Wave Format was first developed using ASCII text for all fields. Later, as the format was further developed, it was proposed to use multi-byte characters to internationalize the format. It was understood that to use multi-byte character sets within the existing format would cause compatibility issues when multi-byte metadata was parsed by applications expecting ASCII text. The separate nature of human-readable and machine-readable metadata was established, and a new "universal" chunk was established to carry internationalized human-readable metadata using multi-byte character sets without interoperability issues. This is described in Annex K.

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1 Microsoft® is a registered trademark, and Windows™ is a trademark of Microsoft Corp.. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.

2 Numbers in square brackets refer to the Bibliography.

FILE FORMAT FOR PROFESSIONAL TRANSFER AND EXCHANGE OF DIGITAL AUDIO DATA

1 Scope

This document specifies a file format for interchanging audio data between compliant equipment. It is primarily intended for audio applications in professional recording, production, post-production, and archiving.

It is derived from the AES31-2 [2] but is also compatible with variant specifications including EBU Tech 3285 [3] to [10], ITU-R BR.1352-3-2007 [11] to [14], and the Japan Post Production Association's BWF-J [15].

This document contains the specification of the broadcast audio extension chunk and its use with PCM-coded audio data. Basic information on the RIFF format and how it can be extended to other types of audio data is given in Annex E. Details of the PCM WAVE format are also given in Annex A.

An optional extended format, BWF-E, supports 64-bit addressing to permit file sizes greater than 4 GB.

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.

ISO/IEC 10646:2017, *Information technology – Universal Coded Character Set (UCS)*

ISO 8601, *Data elements and interchange formats – Information interchange – Representation of dates and times*

SMPTE ST 330-2011; *SMPTE standard for television – Unique Material Identifier (UMID)*

INTERNET ENGINEERING TASK FORCE (IETF). RFC 3629: *UTF-8, a transformation format of ISO 10646* [online]. Edited by F. Yergeau. November 2003 [viewed 2019-11-26]. Available at https://www.rfc-editor.org/rfc/rfc3629.txt