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BSI Standards Publication

# Audio archive system

Part 2: Audio data preservation

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## National foreword

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The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems and equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

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# TECHNICAL SPECIFICATION

## Audio archive system –
## Part 2: Audio data preservation

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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# AUDIO ARCHIVE SYSTEM –

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 62702-2, which is a technical specification, 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 technical specification is based on the following documents:

| Enquiry draft | Report on voting |
|---|---|
| 100/2461/DTS | 100/2519/RVC |

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

A list of all parts in the IEC 62702 series, published under the general title *Audio archive system*, can be found on the IEC website.

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

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

# INTRODUCTION

Sound recordings such as music, speech, and storytelling are an important human heritage and should be preserved whenever possible. However, we were unable to record and preserve sounds until Edison achieved the first recording in 1877. Although various technologies were invented later, most of them have a limited lifespan with respect to audio archiving because storage and sound quality deteriorates when it is transferred to the next generation storage device.

The progress of LSI technology made it possible to digitize recorded sound. The digital recording is very suitable for audio archiving because the migration is performed by copying digital data.

There can be various recording materials for this purpose, they are optical disks, magnetic disks, magnetic tape and non-volatile memories such as phase change memory.

This Technical Specification specifies physical and logical aspects for a standard of audio archives of various storage types which are typically used for audio archives in markets.

The IEC 62702 series currently consists of:

Part 1 which specifies the minimum requirements on physical aspects of optical disks for digital sound recordings. Part 1-1 specifies DVD optical disk, Part 1-2 specifies BD optical disk.

Part 2 which specifies the minimum requirements for digitization of content, format of digitised content, content information and media inspection.

# AUDIO ARCHIVE SYSTEM –

# Part 2: Audio data preservation

## 1 Scope

This part of IEC 62702, specifies the requirements for digitization of audio data for audio preservation.

## 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.

IEC 62227, *Multimedia home server systems – Digital rights permission code*

## 3 Terms and definitions

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

**3.1**
**audio archive**
archive that consists of audio data preservation

**3.2**
**audio data preservation**
data of audio stored in physical media for preservation

**3.3**
**AIP**
archival information package

**3.4**
**dissemination**
distribution of preserved audio content to users

**3.5**
**objective media**
media whose storage is based on impartial criteria

## 4 Objective media inspection

### 4.1 Criteria of the objective media

In order to objectively determine whether recorded audio content should be digitised and migrated to an archival media for long term preservation, the following criteria should be applied.

- Evaluate the availability of the media and its playback means in the long term with consideration to the format of the media; whether the media specification is internationally