Audio Engineering Society Standards Committee

Guideline for members - Style for AES standards

Contents

1 General

1.1 Sources

The style for AES Standards derives from several sources:

- International Electrotechnical Commission (IEC) - International Organization for Standardization (ISO) Directives, Part 2: Rules for the structure and drafting of International Standards http://www.iec.ch/tiss/iec/Directives-Part2-Ed4.pdf
- Systeme Internationale (SI)
- The style manual of the Journal of the AES
- The Chicago Manual of Style

In addition to accepting general features common to these sources, AESSC emphasizes the following specific features. Reference to recent AES documents is recommended.

1.2 Definitions

1.2.1 Classes of documents

1.2.1.1
standard
a document that implies a full consensus of those, both inside and outside of AESSC groups, who are directly and materially affected by its scope and provisions and is intended as a guide to aid the manufacturer, the consumer, and the general public

1.2.1.2
information document
form of standard containing a summary of scientific and technical information; originated by a technically competent writing group; important to the preparation and justification of an AES standard or to the understanding and application of such information to a specific technical subject.

> NOTE An AES information document implies the same consensus as an AES standard. However, dissenting comments may be published with the document as a form of resolution.

1.2.1.3
trial-use standard
document that provides opportunity for discussion and trial use before the document is presented as a call for comment leading to consensus and finalization of the standard.

> NOTE The AESSC recognizes that certain standards will ultimately be tested in their applications and that trial use will show need for additional changes, modifications and additions. Such a document is intended to change and will be prepared as a public call for comment only after a working group is satisfied that the document is ready.

1.2.1.4
standards project report
document that implies a consensus of those directly and materially affected by its provisions who have approved it as representing the views of their AESSC subcommittee but not of the AES as a whole

1.2.2 Types of standards
1.2.2.1

practice
recommended practice
set of recommendations, requirements, or both for configuring a device or operation and that does not produce a test result

1.2.2.2
test method
set of procedural recommendations, requirements, or both to produce a test result

1.2.2.3
specification
set of recommendations, requirements, or both to be satisfied by a device or operation

1.2.2.4
guide
guideline
set of recommendations, requirements, or both that provide options and information for complying with a practice, test method, or specification

1.2.2.5
classification
arrangement of items based on a hierarchy of properties

1.2.2.6
terminology
set of definitions of terms, abbreviations and symbols

2 Preparation

2.1 Proposed drafts

2.1.1 Disclaimer

No proposed draft document shall be circulated in a format that could be interpreted as a finished document.

Every page of all proposed draft documents must feature the disclaimer:

Committee use only - Not for publication

(Use of this disclaimer is according to the AESSC Rules. It allows all committee uses including liaisons and similar limited distributions authorized by the AESSC or one of its bodies. It does not allow multiple-copy publication.)

2.1.2 AESSC Word template

It is strongly recommended that, where drafts are produced using MS Word, the ASESSC Word template is used. This template contains much useful information, and it's set of pre-formed styles means that the document will be compatible with AES presentation style.

2.1.3 Disable automated features

Proposed draft documents should, when not containing equations or figures, be circulated in ASCII format with line breaks, stripped of word-processor codes.

> NOTE When using Microsoft Word or other applications with automatic formatting, it is recommended to disable the automatic formatting. In the MS Word Insert menu, click on autotext, autotext, then remove all features except curly quotes and replacement of - with an em dash.

Document files shall contain no links to other objects either internally or externally - in particular, automatic numbering.

2.1.4 Separate figures

Figures that contain text or editable objects shall be provided in object-editable files such as produced by Adobe Illustrator, or AutoCAD. More information is provided in the AESSC Word template

2.2 Postings of proposed drafts

7-bit ASCII text shall be used as much as possible. Acrobat PDF is strongly recommended for all binary documents on the group document sites because of disk space economy and universal ease of reading. The content of a PDF document, if not intentionally secured, can be copied to another file and modified for discussion.

Remember, do not send binary documents as attachments to the e-mail reflectors; instead announce their uploading to the group document site by sending a message to the e-mail reflector.

Preferred formats and filename conventions are described in the communications guide.

3 Punctuation and capitalization

Titles of documents shall be capitalized in descending (sentence) style, that is, only the initial letter of the first word of each tier of the title shall be capitalized, for example, *AES Recommended practice for digital engineering - Format for the user-channel bits*

All section headings, running heads in figures and tables, legends in figures, and so on shall be capitalized in descending style.

Captions for tables and figures shall consist of a single sentence clause or phrase in the form *Figure 1 - Typical caption*.

Compound adjectives shall be hyphenated (for example, low-pass filter).

A comma shall be placed before the conjunction in a series of items in a sentence, for example address bits, user bits, and information bits.

References are to be formatted according to ISO 690, as in the following examples.

1) IEC 268-5, Sound system equipment, Part 5: Loudspeakers. Geneva, Switzerland : International Electrotechnical Commission, 1989.
2) KUTTRUFF, H and BRUCHMULLER, HG. Zur messtechnischen Uberpruefungen reflexionsaermer Raeume (On Measuring Technique for the Examination of Anechoic Rooms). Acoustica. 1974. Vol. 30, No. 3, p. 402-409.

4 Syntax

Any clauses containing a requirement for compliance with the standard shall use the verb "shall." A clause containing a recommendation having the status of a strong suggestion shall use the verb "should." Clauses giving permission shall use the verb "may." Clauses expressing a possibility shall use the verb "can."

The solidus (/) should be reserved for its use as a mathematical operator and shall not be used in narrative text in place of stating the exact relationship between words. For example, the form "and/or" shall not be used. Instead use "A, B, or both" or "A, B, C, or a combination thereof."

The form "etc." shall not be used. Instead use "and so on." Similarly, other Latin abbreviations shall be used only when they are recognized technical expressions. Non-English abbreviations such as "i.e." and "e.g." shall be expressed in English (such as "that is" and "for example," respectively).

Defining or restrictive sentence clauses shall begin with the pronoun "that." Non-defining and non-restrictive sentence clauses shall begin with "which."

Personal pronouns such as "we" shall not be used because of the probable ambiguity of their antecedents.

5 Abbreviations and expressions

Every abbreviation based on the name of an entity shall be preceded on first use by the complete name of the entity. The author shall indicate if the name has been confirmed within the previous three months. This confirmation is necessary because the names of many entities have become changed without changing their abbreviations.

All expressions of quantities in the text shall use SI letter symbols (for example, 10 kHz). However, textual uses of names of units shall be spelled out (for example, frequency in kilohertz). The abbreviation for bytes is byte and for bits is bit, hence bit/s, kbit/s, and Mbit/s. All mantissas larger than 9999 shall include a space

every three digits from the right (for example, 1 000 000). For clarity in submitted ASCII txt, use a "#" sign in place of the space (for example, 1#000#000).

The decimal point is a comma, unless expressly excepted.

The SI symbol for year is lower-case "a".

SI practice is to include a space between the quantity and its symbol in all cases except angular degrees, minutes, and seconds - all three of which are superscript symbols (º, ',"). Remember, in contrast, the symbols for time minutes and seconds are "min" and "s" respectively.

Numerical calendar dates shall be written per ISO 8601, yyyy-mm-dd, all numerals. Incomplete dates may be written according to ISO 8601 or be written as dd-MMM-yyyy where the month is alphabetical. For example: 1992-01-15, January 1992, 15 January.

Numerical time of day shall be written per ISO 8601, hh:mm:ss. Combined date and time shall be written yyyy-mm-dd hh:mm:ss. If the date-time is to be Coordinated Universal Time, the time zone is indicated by by the offset. For example, New York standard time is hh:mm:ss-05:00. Paris is hh:mm:ss+01:00.

Binary coding units shall be described as "logic 1" or "logic 0." The plural form shall be "logic 1's."

Use the form "2's complement, rather than "twos" or "two's."

When data and coding need to be represented, include the following in clause 0 and format the coding accordingly.

0.2 Conventions used in this standard
0.2.1 Decimal points
According to IEC directives, the comma is used in all text to indicate the decimal point. However, in the specified coding, including the examples shown, the full stop is used as in IEC programming language standards.

0.2.2 Data representation
In this standard, all coding and data representations are printed in an equally spaced font.

0.2.3 Non-printing ASCII characters
Non-printing characters are delimited by angle brackets, as in <CR, LF> for carriage return.

6 Numbering

Clause and subclause numbering shall be arabic numerals with subclause numbers separated by periods (for example, 1.12.4.2). No period shall appear following the last digit in the number. Clauses and subclauses may contain multiple paragraphs under a single number.

Procedures shall be numbered with numerals followed by close parentheses (for example, 1)), however, when a procedure is broken into groupings of steps, each grouping shall be numbered with a lower-case roman letter followed by a close parenthesis (for example, a)).

Lists shall be numbered with lower-case roman letters followed by close parentheses (for example, a)). Sub-groupings in lists shall be numbered with numerals followed by close parentheses (for example, 1)).

Every document shall contain a foreword preceding the normative part of the document. It shall contain the names of the working group and subcommittee that prepared the document; a history and rationale of the development and approval of the document; other organizations that contributed to the document; the relationship of the document to other AES documents; if a revision, the nature of the revision; and the membership of the writing group.

The first clause of every document shall be "1 Scope." The second clause shall "2 Normative references." The third clause shall be "3 Definitions."

There shall be no indentation of clauses or first lines. Only lists and numbered procedures, that is, those clauses preceded by "1)," "a)," and so on shall be indented.

In the "Definitions" clause, all terms shall be in lower case and shall be placed on the line after the subclause number in boldface. The next lines shall contain synonyms and abbreviations in plain text. Following the terms and abbreviations, in predicate syntax, shall be the definition. The definition shall begin with a generic term initialized with an lower-case letter. For example [do not indent in standard],

> **3.5**
> **continuity index**
> CI
> count of the messages or packets sent to a destination

with no concluding full stop.

Clarifying sentences may follow the definition subclause as parts of a note. The subclauses containing the terms shall not be enumerated in the table of contents.

The reference clause shall contain only entries carrying normative weight for the document shall be titled "2 Normative references." Such a clause shall contain only published international (ISO, IEC, or ITU) or AES standards that have to be referenced in order to use the particular standard in the document. Other referenced standards may be placed in an informative annex titled "Informational references." Archival-status papers and published books may appear in an informational annex titled, "Bibliography." Works not published in cataloged editions by an established publisher and unpublished papers may not be referenced.

A passing reference such as "See AESxx," or "Additional information is contained in AESyy," is not normative.

7 Spelling and hyphenation

The following terms shall be used as listed.

> pseudorandom
> non-linearity
> non-circular
> nonaudio
> subframe

8 Numbers in text

Regarding numerals versus literals for numbers, when the number is part of a physical quantity (space, time, mass, temperature) or a designator it must be numerical no matter how many digits (for example 1 month duration, 5 m long, channel 2). When it is a part of a aggregate quantity (number of pieces), only numbers

under one hundred and not integral multiples of ten (one hundred, two thousand) are set as literals (for example, two pages, 120 bottles of beer, one million readers). Listed or continued numbers should be all the same regardless of digits ("one, three, and five","6, 17, 215", "2-10").

9 Word usage

9.1 Acoustic and acoustical as adjectives

"Acoustic" modifies nouns that can be described quantitatively or analytically, for example, "acoustic impedance," "acoustic horn," "acoustic center." "Acoustical" modifies qualities, for example, "acoustical measurements" (but "acoustic measurement of impedance"), "acoustical material." For some nouns, such as "transducer," the choice will depend on whether or not the context is quantitative or qualitative. Use the adjective "acoustics" to modify entities that do not necessarily function acoustically, for example, "acoustics dictionary".

9.2 Designators for documents, projects, and groups

All designators shall be in the forms used on the AESSC Web site.

9.3 Mandatory vs Required

The word, "mandatory," shall not appear in any AESSC publication when referring to an AES standard because AES standards are voluntary. Use "required" instead.

10 Typography

This clause is for reference. Typography is set by the secretariat and may vary. The AESSC Word template contains relevant typographical examples.

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