

SMPTE ENGINEERING GUIDELINE

SMPTE Metadata  
Naming Guidelines



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## **Foreword**

SMPTE (the Society of Motion Picture and Television Engineers) is an internationally-recognized standards developing organization. Headquartered and incorporated in the United States of America, SMPTE has members in over 80 countries on six continents. SMPTE's Engineering Documents, including Standards, Recommended Practices, and Engineering Guidelines, are prepared by SMPTE's Technology Committees. Participation in these Committees is open to all with a bona fide interest in their work. SMPTE cooperates closely with other standards-developing organizations, including ISO, IEC and ITU.

SMPTE Engineering Documents are drafted in accordance with the rules given in Part XIII of its Operations Manual.

SMPTE EG 2074 was prepared by Technology Committee TC-30MR.

## **Introduction**

This section is entirely informative and does not form an integral part of this Engineering Document.

Proposals for metadata items are submitted by users for approval and entry into the SMPTE family of metadata registers. This document gives guidance on the structuring of metadata item names in order to improve the consistency and presentation of the resulting registers.

## 1 Scope

This document contains naming guidelines for metadata item names and symbols in the SMPTE family of metadata registers that follow the provisions of SMPTE ST 336. A metadata item may be an entry in the Elements, Labels, Groups, Types, or other registers. These naming standards have been developed to aid consistency and precision, and prevent unnecessary redundancy.

This document contains semantic, syntactic, and lexical guidelines relating to the naming of items in SMPTE metadata registers.

This document contains an annex of preferred terminology that will be updated as required.

## 2 Metadata Item Naming Guidelines

Provisions in this section are expressed in the form of rules for clarity, but it should be recognized that this document is an Engineering Guideline and as such its provisions are not normative.

This document provides guidelines in an effort to represent data concepts with the best possible unique names within a namespace. It is often better for the description of a proposed metadata item to be developed first, to guide the best choice of a metadata item name.

Metadata items are divided into Classes, as defined by SMPTE ST 336 (see Annex A Bibliography). Ideally, these guidelines will be applied to all publicly-visible metadata item Classes, though the owners of Class 13 space have complete freedom to name their metadata items in any way they wish.

Class 14 metadata items are not registered by SMPTE and the names are only known within the organization that owns the space.

### 2.1 Spelling Conventions

The metadata item names are spelled in U.S. English according to Merriam Webster's Collegiate Dictionary. Where more than one spelling is provided for any word, the first spelling listed is preferred. Avoid variant spellings.

Avoid	Best Practice
Organisation Name	Organization Name
Programme Name	Program Name

### 2.2 Consistent Semantics/Terminology

To aid consistency and help prevent conceptual redundancy, it is important that consistent semantics are assigned to terms used to form metadata item names. The preferred terms will be updated regularly in Annex B of this document.

- Preferably, only one word or term is used to represent an identified concept within metadata item names. These terms, and guidance on style issues, will be tracked in the Annex B style guide.
- Avoid abbreviations in metadata item names and symbols. An abbreviation can be used when it is more recognizable than the terminology it represents or when an internationally-recognized abbreviation avoids a long name, but whenever possible, use the full word to avoid ambiguity.

*Examples of acceptable abbreviations:*

HTML, MPEG, DoD, ID, UUID, US, Org

- Do not use the same word to represent more than one meaning within item name and symbol fields.
- When conflicts in terminology arise, consult popular usage, style guides, dictionaries, academic guidelines, and other linguistic criteria to drive the resolution of which term best fits the descriptive requirement.

## 2.3 Uniqueness

Metadata item names and symbols are unique; please check any proposed additions against the existing registers. If the only difference between metadata items is the data type (ISO 7-bit ASCII vs. Unicode, for example), then the symbol can choose to append the symbol name with the data type, though the data item names will likely be the same in this case.

## 2.4 Capitalization

For normative metadata item names, capitalize in title case according to the Chicago Manual of Style. For acronyms in metadata item names, capitalize as they would be in standard text.

*Item Name Examples:*

HTML Anchor Name  
DoD Security Classification Code  
MPEG Bit Rate  
UserID

Symbol names for use in XML representations of metadata are also required in metadata registers. They are derived from the chosen metadata item name with breaks between words removed by using "CamelCaps" and underscores can be used for more logically significant breaks. Underscores are used sparingly, not to separate words.

Item Name	Symbol	Avoid	OK, if needed
Country Code	CountryCode	Country_Code, CountryCd	CountryCode_ISO7

## 2.5 Syntax

This section provides rules for the word order for registry name fields. The object class name, if applicable, comes first, followed by one or more descriptive modifiers and finally the representation class of the metadata item.

### 2.5.1 Object Class Words

The object class, if applicable, provides context for the terminology and is the first word in the metadata item name. An audio item, for example, such as Audio Channel Configuration contains the object class "audio." The object class functions as an adjective.

## 2.5.2 Representation Class Words

Use standardized representation class words to define the type of value a metadata item contains. The representation class terms are maintained in an appendix to this document. Descriptive modifiers can be nouns or adjectives.

Representation class words such as Code, Type, Name, Ratio, or ID, appear at the end of the name. This ensures that these distinctions in data representation are obvious.

*Examples:*

Text Language Code  
 Extended Text Language Code  
 U.S. Airport Name  
 Presentation Aspect Ratio

	Avoid	Better
	City	City Name
	Country	City Code
	User	Country Name
		Country Code
		User Name
		User ID

Additional modifiers generally appear between the object class and the representation class.

## 2.6 Punctuation

Avoid punctuation in metadata item names, unless it is necessary for clarity.

*Examples of acceptable punctuation:*

Cue-In  
 X-Offset

Users are strongly encouraged to avoid ampersands and periods in metadata item names.

Symbol names are further restricted in their use of special characters by the symbol's language rules (defined in SMPTE ST 336 as XML), so this needs to be kept in mind when developing the metadata item names. Hyphens are technically allowed in XML, but may cause issues in other programming languages. Users are strongly encouraged to avoid them for this reason.

### 2.6.1 Separators

Separators can be used when metadata item names are converted into symbols. However, spaces cannot be used in metadata symbols. Symbols usually use CamelCase, but sparingly use underscores to indicate significant breaks in concepts.

*Example:*

CityName\_ISO7

## 2.7 Other Guidelines

- Avoid the terms "data" or "information" or "etc." in item names. These terms do not add anything to the meaning of the name.

Avoid	Better
User Name Data	User Name

- Except when describing constructs such as arrays or batches, item names are ideally singular.

Avoid	Better
Country Codes	Country Code

- Avoid the terms "weak ref" and "strong ref" in metadata item names.

Avoid	Better
Event Array Strong References	Event Array

- Use active voice for verbs used in metadata item names.

Avoid	Better
Defined Object ID	Definition Object ID

- Avoid prepositional phrases in metadata item names, where possible. This will keep the name shorter and more concise.

Avoid	Better
Code for the Name of the Country	Country Code
Reference to a production script	Production Script Reference

- Avoid system-specific terms – metadata items may be used across multiple systems.

Avoid	Better
AAF Organization Name	Organization Name

- Avoid jargon or obscure abbreviations, such as "DM" or "SR."

Avoid	Better
DM Framework	Descriptive Metadata Framework

- Use terminology that will be globally understood by international English speakers. Avoid expressions or abbreviations that are unique to one country's use of the data or that require advanced cultural understanding.

Avoid	Better
DM Framework	Descriptive Metadata Framework
EC UL	Essence Container Label
UI Specification	User Interface Specification

- Avoid excessively wordy titles. Put explanatory information in the description of the item.

Avoid	Better
IEEE Device Identifier (often used as a network node identifier)	IEEE Device Identifier
Material Occurance True Date-Time (Date, Hours, minutes, seconds, fractions of seconds)	Material Occurrence Date-Time

- Do not specify the data type in the metadata item name; the metadata registers have a separate field for data type.

Avoid	Better
Country Code ISO 7	Country Code

- Do not use code-style word spacing in metadata item name fields.

Avoid	Better
Manufacturer_Name Bounding_Rectangle	Manufacturer Name Bounding Rectangle

- Avoid parentheses in metadata item names.

Avoid	Better
Annotation Event (Sets)	Event Annotation Sets

- Use “date-time,” “date,” or “time” as needed.

Avoid	Use
Annotation Date and Time Annotation Date/Time Annotation Date Time Annotation Date & Time	Annotation Date-Time

## 2.8 User Interface Names vs. Registered Metadata Item Names

When constructing user interfaces, it is recognized that it may be desirable to use contextual terminology or local terms. However, the normative metadata item names are those specified by the SMPTE metadata dictionaries in U.S. English.

To avoid confusion or inaccurate data, any synonym used in a user interface needs to be a truly contextual synonym of the normative SMPTE Metadata Dictionary item names.

## Annex A Bibliography (Informative)

Note: All references in this document to other SMPTE documents use the current numbering style (e.g. SMPTE ST 336:2007) although, during a transitional phase, the document as published (printed or PDF) may bear an older designation (such as SMPTE 336M-2007). Documents with the same root number (e.g. 336) and publication year (e.g. 2007) are functionally identical.

SMPTE ST 336:2007, Data Encoding Protocol Using Key-Length-Value

This section lists the documents on which some of the advice in this Engineering Guideline is based. Metadata names are written in U.S. English, as specified in the following reference source:

*Merriam Webster's Collegiate Dictionary, 11<sup>th</sup> Edition*

The style guidelines are based on the following reference:

*Chicago Style Guide, 14<sup>th</sup> Edition*



## Annex B Metadata Dictionary Style Guide (Informative)

### A

Amount – (Representation Class) Indicates a total number or quantity; often used to describe currency, but has other uses as well.

Audio – Avoid “aural” or “sound”

### B

### C

Code – (Representation Class) A code is an alphanumeric string assigned to substitute for another value.

Color – Do not use “colour”

### D

Date-Time – (Representation Class) Do not use Date/Time, Date:Time, Date Time, etc.

### E

### F

### G

### H

### I

ID – (Representation Class) Indicates a metadata item that contains a value that serves as an identifier for a work or other item.

### J

### K

Kind – Use “kind” over “type” to indicate an enumerated item in metadata item names.

### L

### M

### N

Name – (Representation Class) Indicates a metadata item that contains a designation or appellation for an item.

Number – (Representation Class) Indicates a numeric value.

### O

Organization – Do not use “organisation”

### P

Program – Do not use “programme”

### Q

### R

Ratio – (Representation Class) Indicates a dimensionless item that contains a relation in degree or number between two similar things.

### S

Slot – Use “Track”

**T**

Track – Do not use “slot”

**U**

**V**

**W**

**X**

**Y**

**Z**