
SMPTE STANDARD**SMPTE Labels Structure**

Page 1 of 18 pages

Table of Contents	Page
Foreword	2
Intellectual Property	2
1 Scope	3
2 Conformance Notation	3
3 Normative References	3
4 SMPTE Labels Structure	4
4.1 Individual Classes of Labels	5
4.2 SMPTE Labels Register Structure and Format	8
5 Labels Register Maintenance	12
5.1 Register Version Information	12
5.2 Register Management and Compatibility Requirements	12
5.3 Register Availability	13
Annex A Glossary of Terms (Normative)	14
Annex B Registration Criteria (Normative)	15
B.1 Criteria for Modifications to Entries in Classes 1-7 and 12	15
B.2 Criteria for Modifications to Entries in Class 13	15
B.3 Criteria for Modifications to Entries in Class 14	16
Annex C Organization of References (Informative)	17
Annex D Bibliography (Informative)	18

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 ST 400 was prepared by Technology Committee Metadata and Registers Committee, 30MR.

Intellectual Property

At the time of publication no notice had been received by SMPTE claiming patent rights essential to the implementation of this Standard. However, attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. SMPTE shall not be held responsible for identifying any or all such patent rights.

1 Scope

This standard defines the structure of a register of labels as defined by SMPTE ST 336. These labels may be used in a range of applications such as production workflow applications, data exchange formats, and archival asset management systems.

The standard normatively defines universal identifiers, label names, definitions, and standardized symbols, as well as other normative and informative fields.

Applications of individual entries will vary but, when used, shall conform to the definitions and formats in the labels register.

2 Conformance Notation

Normative text is text that describes elements of the design that are indispensable or contains the conformance language keywords: "shall", "should", or "may". Informative text is text that is potentially helpful to the user, but not indispensable, and can be removed, changed, or added editorially without affecting interoperability. Informative text does not contain any conformance keywords.

All text in this document is, by default, normative, except: the Introduction, any section explicitly labeled as "Informative" or individual paragraphs that start with "Note:"

The keywords "shall" and "shall not" indicate requirements strictly to be followed in order to conform to the document and from which no deviation is permitted.

The keywords, "should" and "should not" indicate that, among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others; or that a certain course of action is preferred but not necessarily required; or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.

The keywords "may" and "need not" indicate courses of action permissible within the limits of the document.

The keyword "reserved" indicates a provision that is not defined at this time, shall not be used, and may be defined in the future. The keyword "forbidden" indicates "reserved" and in addition indicates that the provision will never be defined in the future.

A conformant implementation according to this document is one that includes all mandatory provisions ("shall") and, if implemented, all recommended provisions ("should") as described. A conformant implementation need not implement optional provisions ("may") and need not implement them as described.

Unless otherwise specified, the order of precedence of the types of normative information in this document shall be as follows: Normative prose shall be the authoritative definition; Tables shall be next; followed by formal languages; then figures; and then any other language forms.

3 Normative References

Note: All references in this document to other SMPTE documents use the current numbering style (e.g. SMPTE ST 298:2009) although, during a transitional phase, the document as published (printed or PDF) may bear an older designation (such as SMPTE 298-2009). Documents with the same root number (e.g. 298) and publication year (e.g. 2009) are functionally identical.

The following standards contain provisions that, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

SMPTE ST 298:2009, Universal Labels for Unique Identification of Digital Data

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

SMPTE ST 2029:2009, Uniform Resource Names for SMPTE Resources

W3C Recommendation - Namespaces in XML 1.0 (Second Edition), World Wide Web Consortium, 16 August 2006. <http://www.w3.org/TR/REC-xml-names/>

4 SMPTE Labels Structure

SMPTE labels defined in this standard shall be 16-byte "SMPTE Labels" as defined in SMPTE ST 336.

The SMPTE labels structure provides flexibility in capturing data and exchanging it among applications through a standardized hierarchy of universal labels (ULs) that uniquely identify the labels, grouped to aid their management within a small but comprehensive number of classes. Label classes are collections of labels with common characteristics or attributes. Additional classes are provided for user-defined public, private, and experimental labels.

The labels register defined by this document provides two methods of referencing an individual item. The first is to use a unique, two-part, 16-byte universal label that is numerical (and hence language independent). The second method of referencing an item is to use its assigned symbol, which is a name that conforms to computer language syntax restrictions. Symbols are intended for use in computer languages such as the Extensible Markup Language (XML). The symbol shall be unique within a namespace that has been defined according to Section 4.2.7.

Note: The symbol, together with its namespace defined in Section 4.2.7, forms a unique identifier like the UL.

The KLV coding of data items and groups of data items is defined in SMPTE ST 336. The structure of the metadata element dictionary is defined in SMPTE ST 335, including provision for labels for use as values whose meaning is entirely covered by the definition of the label itself. This document defines the structure of a register for label entries. The associated labels register includes all entries which have been approved according to the specific procedures defined in Annex B.

The exact format of the universal label shall be as defined in SMPTE ST 336. The first eight bytes of the universal label shall consist of the UL Header (2 bytes) and UL designator (6 bytes). The UL designator shall identify the item as belonging to a specific SMPTE register of a given category, structure, and version. The second eight bytes shall form the item designator as defined in SMPTE ST 336. The item designator shall be used to uniquely identify the meaning or definition of the item in the register.

The labels register shall be organized into nodes, leaves and children. The register classes form class nodes and below these are further nodes at each subclass. To aid the management of the register, these nodes and subnodes shall be assigned a universal label, so as to give clear breaks in the structure. Entries within a subclass form leaves, which are the label descriptions.

The universal labels used in the labels register defined by this document shall be constructed as shown in Table 1, which complies with SMPTE ST 336.

Table 1 – Construction of SMPTE universal labels

Byte Position	Description	Value	Meaning
1	UL Header		
1	Object identifier	06h	Object identifier tag per SMPTE ST 298
2	UL length	0Eh	The byte length of the object identifier value is 14 bytes.
3	UL designator		
3	UL code	2Bh	The administering organization is an ISO organization.
4	UL subcode	34h	The delegated organization is SMPTE.
5	Registry category designator	04h	The registry category is labels.
6	Registry designator	01h	Labels structure.
7	Structure designator	01h	The register structure conforms to this SMPTE standard.
8	Version number	01h to 7Fh	This indicates the version number of the register.
9-16	Item designator	Defined by the labels register	This identifies a specific label within the labels register.

Note: As defined in SMPTE ST 298, a value of 00h at any position in a UL is treated as a terminator and all further values within that UL are required to be zero also.

4.1 Individual Classes of Labels

Within the labels register, labels shall be organized into a hierarchical structure, where each is assigned to a labels class as shown in the overview of Figure 1. The initial set of labels classes in this standard consists of:

- Class 1: Identification and location labels
- Class 2: Administration labels
- Class 3: Interpretive labels
- Class 4: Parametric labels
- Class 5: Process labels
- Class 6: Relational labels
- Class 7: Spatio-temporal labels
- Class 12: Compound labels
- Class 13: Organizationally registered for public use
- Class 14: Organizationally registered as private
- Class 15: Experimental

These classes are further subdivided as described in the sections below.

The number of labels classes can be extended in the future to a maximum of 127, and the class numbers that have not been assigned here shall be reserved for use by SMPTE.

The processes for registration of new labels shall be as specified in normative Annex B.

Byte 9 of the UL identifies which of these labels classes a label belongs to. Subsequent bytes enable the hierarchical identification of subclasses.

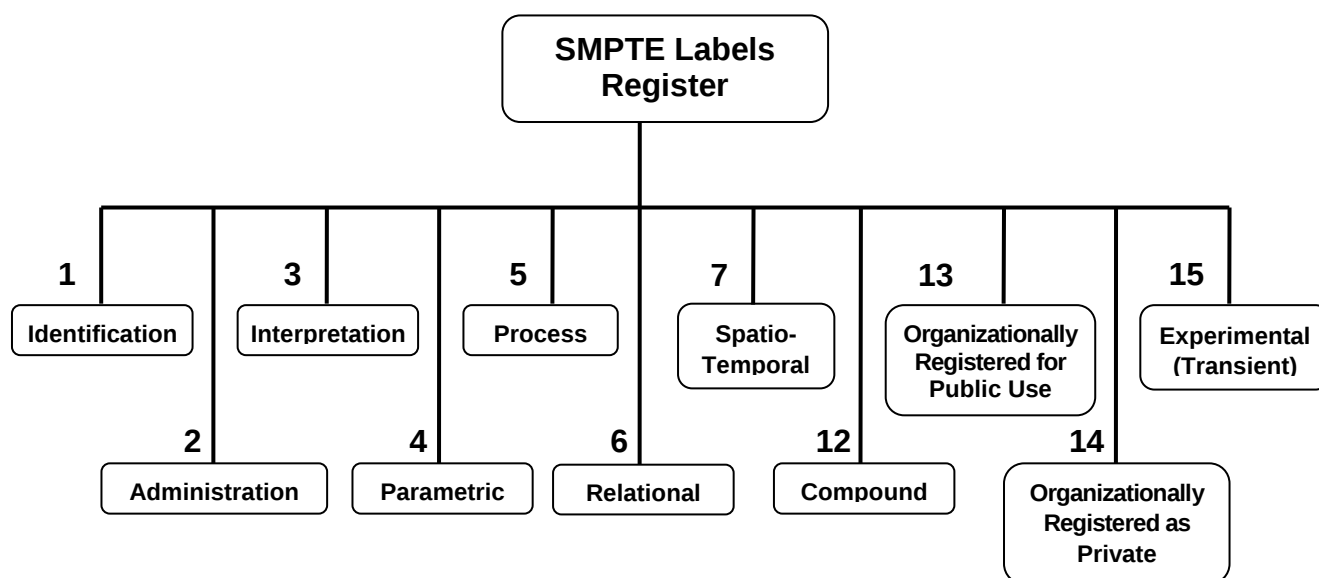


Figure 1 – Labels class structure

4.1.1 Class 1: Identification and Location Labels

Labels in this class shall primarily carry information about identification and location. Labels in this class shall include information about identifiers and locators with both global and local scope.

Sub-classes in this Class include:

- Object Identifiers
- Device Identifiers
- Media Locations

Other subclasses may be added through the process defined in Annex B.1.1.

4.1.2 Class 2: Administration Labels

Labels in this class shall primarily identify administrative or business information including authorization usage and encryption.

Sub-classes in this Class include:

- Security Classification
- Encryption Types

Other subclasses may be added through registration per Annex B.1.1.

4.1.3 Class 3: Interpretive Labels

Labels in this class primarily carry information that defines how data is interpreted. Labels in class 3 shall be principally used for identifying catalogues, thesauri and other items which can be used to provide terms for either human or machine application.

Sub-classes in this Class include:

- Fundamental (such as length and time systems)
- Descriptive (human-assigned collections of key-words)
- Categorization (identifying a category set)
- Descriptors (machine-assigned or computed)

Other subclasses may be added through registration per Annex B.1.1.

4.1.4 Class 4: Parametric Labels

Labels in this class shall primarily carry information that describes the technical characteristics of devices or systems.

Sub-classes in this Class include:

- Essence Encoding Characteristics
- Container Encoding Characteristics
- Test Parameter Sets
- Compression Coding Characteristics

Other subclasses may be added through registration per Annex B.1.1.

4.1.5 Class 5: Process Labels

Labels in this class shall primarily carry information that describes how the essence was originated or processed.

Sub-classes in this Class include:

- Process Indicators
- Manipulation Kinds
- Downstream Processing History Types
- Enhancement or Modification Processes
- Processor Settings (device-specific)

Other subclasses may be added through registration per Annex B.1.1.

4.1.6 Class 6: Relational Labels

Labels in this class shall primarily carry information that describes a class of relationships between objects.

Sub-classes in this Class include:

- Generic Relationships
- Relative Relationships
- Object to Object Relationships
- Relationship Structures

Other subclasses may be added through registration per Annex B.1.1.

4.1.7 Class 7: Spatio-Temporal

Labels in this class shall primarily carry information about aspects of time, place, or space.

Sub-classes in this Class include:

- Position and Space Vector Systems
- Image Positional Information
- Distance and Angle Specifications
- Delay and Latency Kinds

Other subclasses may be added through registration per Annex B.1.1.

4.1.8 Class 12: Compound

Labels in this class shall primarily carry information that combines information from multiple classes.

This class is intended for labels whose role is to identify entities that cannot be accommodated in a single class.

Sub-classes may be added through registration per Annex B.1.1.

4.1.9 Class 13: Organizationally registered for public use

Labels in this class shall consist of items that have been registered by a specific organization and are therefore reserved and managed separately from the other classes (1-7 and 12) of labels. Subclasses and labels used by the class 13 registrant shall be published in the labels register. Class 13 labels shall be managed by the SMPTE Registration Authority and its approval shall be consistent with Annex B.2.

4.1.10 Class 14: Organizationally registered as private

Labels in this class shall consist of individual items whose definitions are held by a specific organization and are therefore reserved and managed separately from the other classes (1-7 and 12) of labels.

Each allocated top-level node shall be publicly identified in the labels register and universal labels under that shall be reserved for use by the registered organization. Labels used by the class 14 registrant shall not be published in the labels register. Allocation of top-level nodes in class 14 shall be managed by the SMPTE Registration Authority and its approval shall be consistent with Annex B.3.

Note: If a device or application is required to parse metadata instances with labels defined in class 14, and act on those class 14 labels, it will require a definition that is supplied by the owning organization rather than attempting to use any version of the SMPTE register defined by this document.

4.1.11 Class 15: Experimental

Class 15 labels shall only be used in multimedia research or other limited access, experimental environments where experimentation with new labels and applications does not depend on strict conformance to approved standards and which remain within a test or laboratory environment.

4.2 SMPTE Labels Register Structure and Format

Each label or labels class/subclass shall be described by a number of fields, which are classified as normative, informative, stated, or calculated.

The fields that apply to leaves or nodes are indicated in the following subsections. In the labels register, nodes describe classes/subclasses and leaves describe the labels.

Normative fields of the labels register are those that are required for the description of a label or class/subclass. They may be omitted only if they are not applicable.

Informative fields provide additional information that is intended to help users of the labels register. In the case of a conflict between an informative field and a normative field, the normative field shall take precedence.

Stated fields contain values that were stated by the originator of the item and were used to derive the normative fields. Derivation may be manual (i.e., by the document editor) or calculated by formula.

Calculated fields are non-normative fields that are derived from other fields. Note that this definition excludes derived normative fields. In the case of conflict between a calculated field and a normative field, the normative field shall take precedence.

The following sections list the specific normative and informative fields. Descriptions of the stated and calculated fields are also given. The order in which the fields appear in the register need not reflect the order in which they are presented below.

Table 2 – Classification of fields used in the labels register

Field(s)	Description	Classification	Scope	Required?	Format
Register	4.2.1	normative	nodes, leaves	Required	Text (enumerated)
Register version at introduction	4.2.2	calculated	nodes, leaves	Derived	Integer
Node or Leaf	4.2.3	normative	nodes, leaves	Required	Text
Level	4.2.4	calculated	nodes, leaves	Derived	Integer
SMPTE designator and item designator	4.2.5	stated	nodes, leaves	Required for derivation of normative UL	16 hexadecimal bytes (as individual fields)
URN representation of the universal label	4.2.6	normative	nodes, leaves	Required	URN representing the UL
Namespace Name	4.2.7	normative	nodes	Required for top-level class 13/14 node	URI
Symbol	4.2.8	normative	nodes, leaves	Required	Text restricted to character pattern defined in 4.2.8
Name	4.2.9	normative	nodes, leaves	Required	Text
Definition	4.2.10	normative	nodes, leaves	Required	Text
Defining document	4.2.11	normative	nodes, leaves	Optional	Text
Applications	4.2.12	informative	nodes, leaves	Optional	Text
Notes	4.2.13	informative	nodes, leaves	Optional	Text
isDeprecated	4.2.14	normative	nodes, leaves	Required	Boolean

When any version of the register is made available for ballot, or published in any form, all fields classified in Table 2 as normative or informative shall be included. Other fields may be included.

4.2.1 Register

This normative field shall identify the register to which an item belongs, for example, "Elements", "Groups", "Types", or "Labels". For the register defined by this standard, this field shall have the value "Labels".

4.2.2 Register version at introduction

This calculated field shall record the version number of the register which first recorded the allocation of a label or class/subclass description against its UL.

For all entries in classes 1-7 or 12, and for any nodes registered in class 14, the version number shall be the version of the register which first contained the entry. Class 13 entries may use the same method for selecting version numbers, or another method at the discretion of the organization responsible for those entries.

Byte 8 of the UL shall also hold the version number.

4.2.3 Node or Leaf

This normative field shall define whether the item is a node or a leaf as defined in Section 4.

4.2.4 Level

This calculated field shall indicate the level of an item in the class hierarchy of the labels register. It shall be calculated from the position of the last active byte of the item designator.

4.2.5 SMPTE designator and item designator

These stated fields shall contain the 16 individual bytes of the universal label in hexadecimal notation.

The SMPTE designator (first 8 bytes) shall be consistent with the provisions of Table 1.

The item designator (last 8 bytes) uniquely identifies the specific item in the register in a hierarchical fashion. Classes are designated with the first byte in the item designator and subsequent bytes enable the hierarchical identification of subclasses and/or individual labels. The item designator shall reflect the class/subclass that is most appropriate for that item and shall not be identical to the item designator assigned to another item in any draft or published version of the register.

4.2.6 URN representation of the universal label

This normative field shall be derived from the value of the universal label as defined by Section 4.2.5 and represented in a normative text format that has been approved for use in SMPTE registers. This provides a consistent textual format for representing the underlying UL.

The normative text format of the universal label is the internationally recognized Uniform Resource Name (URN) notation. SMPTE ST 2029 defines the urn:smpte:ul representation of a SMPTE ST 298 UL, which shall be used for this value.

4.2.7 Namespace Name

This normative field shall define the scope over which symbols, which are defined in Section 4.2.8, are unique. For classes 1-7 and 12 the Namespace Name shall be identified by the Uniform Resource Identifier (URI) <http://www.smpte-ra.org/reg/400/<revision>>, where <revision> shall be a string denoting the year of publication of this structure standard as 4 decimal digits, and may be appended with 2 month decimal digits in the range 01-12. For classes 13 and 14, a Namespace Name shall be specified by the registrant for the top-level node and may be specified for any sub-node.

Organizations that have defined labels in classes 13 and 14 may choose any valid Namespace Name (URI) for the symbols identifying these labels in accordance with the XML-Namespace recommendation; this is subject to the restriction that this Namespace Name shall not correspond to the XML namespace used for class 1-7 and 12 symbols. The Namespace Name (URI) shall be specified as a normative field of the class 13 or 14 node to which this namespace applies. All sub-nodes shall belong to this namespace, unless another namespace has been specified. Therefore, if no Namespace Name (URI) for a node is given, it shall be inherited from the ancestor node.

4.2.8 Symbol

This normative field shall define the symbol that identifies a class/subclass or label. A symbol is a name that conforms to computer language syntax restrictions, and it is intended for use in computer languages such as the Extensible Markup Language (XML). To enable the use of symbols in a wide range of computer languages, a symbol shall be a string composed only of the characters A-Z, a-z, 0-9, and _, and it shall begin with an alpha character (A-Z, a-z) or an underscore (_).

Symbols shall be defined for both nodes and leaves and shall be unique within the XML namespace identified by Section 4.2.7.

Note 1: This implies that class 1-7 and 12 symbols are unique within the labels register.

Note 2: The combination of Namespace Name and Symbol produces a unique identification for a label in the same way that namespace name and local name are used in W3C REC-xml-names to form an expanded name.

4.2.9 Name

This normative field shall be the name for the label or class/subclass identified by the universal label or symbol. It shall be written in U.S. English. The name should use title case capitalization.

Note: SMPTE EG 2074 gives guidelines for item or node naming to ensure the name is descriptive and unambiguous.

4.2.10 Definition

This normative field shall be the human-readable description of the item or class/subclass. It shall be written in U.S. English.

4.2.11 Defining document

This normative field shall reference the primary standard or authoritative document that provides further information about an item, if such a reference is available. For example, the label for an MXF Operational Pattern could reference the document that defines that Operational Pattern.

4.2.12 Applications

This informative field shall be an informative listing of some known applications that use a particular label.

4.2.13 Notes

This informative field may be used to provide additional information that may assist in the interpretation and correct application of the label or a class/subclass of the labels register. This information cannot be deduced from the other normative and informative fields.

4.2.14 isDeprecated

This normative field is an indication to system designers that the label should no longer be used.

The field shall contain a boolean value that is true for labels that have been classified as deprecated according to the processes described in Annex B.1.3 or Annex B.2.3. All other entries shall carry the value false. Where a node is flagged as deprecated no new nodes or leaves shall be allocated under that node. Leaves under a deprecated node may be flagged as deprecated or left usable.

Note: Deprecation can be used in situations where it has been determined that the entry is erroneous or could cause compatibility problems, so great care is required to avoid them. However some situations can require use of a label after it has been deprecated, such as reading from a large archive of material that contains elements that may have the value of the deprecated label. In these situations developers will need to exercise great caution.

5 Labels Register Maintenance

The principles for maintenance and administration of the labels register are defined in the following clauses:

5.1 Register Version Information

The following information shall be provided by the SMPTE Registration Authority with each update to the labels register:

Standard name: Labels Register

Structure designator: One-byte unsigned integer that indicates that the labels register is defined by this structure document. The structure designator shall have a value of 01h.

Version number: One-byte unsigned integer in the range of 1 to 127

Effective date: Date of publication of any updates to the register on the web site of the SMPTE Registration Authority (www.smp-te-ra.org) as provided by the SMPTE Operations Manual.

Register Administrator: SMPTE Registration Authority

Contact information: Text provided on the SMPTE Registration Authority's website, www.smp-te-ra.org

Users of the labels register should check the SMPTE-RA web site regularly for updates to the register.

5.2 Register Management and Compatibility Requirements

To ensure reliable and correct interpretation of legacy material in the future, changes to the labels register shall be carried out in accordance with the registration procedures defined in Annex B. Annex B specifies the provisions and corresponding requirements for additions, deletions, deprecations, and changes to items in classes 1-7 and 12 (Annex B.1), class 13 (Annex B.2), and class 14 (Annex B.3).

The addition process shall be carried out and documented in accordance with Annex B by the SMPTE Registration Authority. It shall occur on request from the appropriate SMPTE technology committee and shall be administered in accordance with Annex B. The version number of the register shall be incremented each and every time an addition (or group of additions) is approved since this is critical to ensuring the operational compatibility of metadata decoders. The incrementing of the version number shall not prevent use of unaffected universal labels, structure, or contents by a decoder that conforms to the prior version.

Note: It is inevitable, given the above addition process, that eventually the register will become cluttered with legacy entries to the point where the responsible SMPTE technology committee determines it has reached the limit of its usefulness. At this stage, or when other changes to the register contents, to an existing approved register structure, or to relationships between labels and other metadata that prevent backward compatibility are necessary, a new structure standard and the associated register will be created. These will be made readily accessible online by the SMPTE Registration Authority to allow upgrades to decoders. The superseded standard will then undergo no further revision unless essential under the SMPTE five-year rule.

5.3 Register Availability

The latest version of the labels register shall be made available on the SMPTE Registration Authority website, www.smp-te-ra.org, in a defined electronic publishing format with an accompanying document specification. A minimum of the two immediate previous versions should also be available in a clearly indicated archive.

Annex A Glossary of Terms (Normative)

A.1 Attribute: A characteristic of a label or the item identified by the label.

A.2 Class: The broad category that forms the first level of hierarchy for all registered labels.

A.3 Context: The circumstance, purpose, and perspective under which something is defined or used.

A.4 Designator: A sub-identifier within a universal label.

A.5 Identifier: A sequence of numbers or characters, capable of uniquely identifying that with which it is associated, within a specified context.

A.6 Item (register): An object in a register that instantiates a defined set of attributes. An item in the labels register is a description of a label, a class or subclass of labels.

A.7 Item designator (SMPTE ST 336): The last 8 bytes of the universal label, which uniquely identify a particular item within the context of the UL designator.

A.8 Labels register: The register, as defined by this standard, of approved labels and the attributes of the types that they identify.

A.9 Leaf: An entry in the register that defines a label.

A.10 Level number: The last non-zero value of a UL of a node or leaf. Which value in a UL is the level number depends on the level of the entry; i.e., how many entries are above it in the hierarchy.

A.11 Metadata element: A data element defined by the metadata element dictionary.

A.12 Node: An entry in the registry that is used to provide a hierarchical structure for leaves. A node may have any number of nodes and leaves under it that are logically grouped by the node. All entries under a node share the non-zero bytes of the node's UL.

A.13 Registry: An information system for registering metadata (e.g. metadata elements, types, labels, groups).

A.14 Register: The information store or database maintained by a registry.

A.15 Registration authority: An organization responsible for maintaining a register.

A.16 Top-level node: A node in class 13 or 14 under which an individual or organization other than SMPTE controls the entries.

A.17 Universal label: Specifically a SMPTE-administered universal label, which is 16 bytes. The syntax of the universal labels used in the data element dictionary is defined in SMPTE ST 336, which describes the mechanism by which the UL is used as a key that explicitly identifies a predefined value or group of values.

A.18 UL designator (SMPTE ST 336): A sequence of sub-identifiers (bytes 3-8 of a 16-byte universal label) designating the ISO/ITU organization, registry category, registry, registry structure, and version number.

A.19 Value: An instance of information.

Annex B Registration Criteria (Normative)

This annex defines the specific registration criteria for entries in each of the defined labels classes.

B.1 Criteria for Modifications to Entries in Classes 1-7 and 12

Classes 1 to 7 and 12 of the register shall be administered by the Metadata and Registers Committee, 30MR or another body as appointed by the Standards Committee from time-to-time. All changes shall only take place after successful completion of a ballot of the administering body.

Changes may be instigated by the administering body, or by any organization or individual that is a member of SMPTE upon providing the following information:

- 1) Contact information for the organization, individual, or committee requesting the change;
- 2) Details of the requested change of the registered label along with a justification for the change;
- 3) Details of any supporting document that may require the change of the registered label.

B.1.1 Additions to Entries in Classes 1-7 and 12

Additions to the register in classes 1 to 7 and 12 shall be subject to review for adequacy of information, including technical description, non-conflict with existing engineering documents, and compliance with the requirements in this section. Class 1 to 7 and 12 additions shall not require a supporting SMPTE engineering document.

B.1.2 Changes to Entries in Classes 1-7 and 12

During the ballot process for a change of an entry whose class is in the range 1 to 7 and 12, negative votes based upon procedural issues, including adequacy of technical description, shall be accepted.

B.1.3 Deprecation of Entries in Classes 1-7 and 12

Any request for flagging of a registered label as deprecated shall result in the posting of an appropriate public notice describing the proposed deprecation.

B.1.4 Deletion of Entries in Classes 1-7 and 12

Entries in classes 1 to 7 and 12 shall not be deleted.

B.2 Criteria for Modifications to Entries in Class 13

Class 13 of the register shall be administered by the Metadata and Registers Committee, 30MR or another body as appointed by the Standards Committee from time-to-time.

Nodes in class 13 may be allocated to a specified organization which becomes responsible for instigating changes under that node. A node shall be allocated after successful completion of a consensus vote of the administering body. The allocated node shall be regarded as the top-level node for that organization within the class 13 register.

All changes in class 13 entries are at the discretion of the appropriate organization. All changes shall be reviewed for adequacy of information and compliance with the provisions of this document.

Changes may be instigated upon submitting the following information to the administering body:

- 1) Contact information for the organization, individual, or committee requesting the change;
- 2) Details of the requested change of the registered label along with a justification for the change;
- 3) Details of any supporting document that may require the change of the registered label;

The administering body shall check that all required information has been supplied and include the modifications in the next published version of the register.

B.2.1 Additions to Entries in Class 13

Additions to the register in class 13 shall be subject to review for adequacy of information; this shall be limited only to compliance with the requirements in this section. Class 13 additions shall not require a supporting SMPTE engineering document.

B.2.2 Changes to Entries in Class 13

Changes to class 13 entries shall be subject to review for adequacy of information this shall be limited only to compliance with the requirements in this section.

B.2.3 Deprecation of Entries in Class 13

Any request for flagging of a registered label as deprecated should result in the posting of an appropriate public notice describing the proposed deprecation.

B.2.4 Deletion of Entries in Classes 13

Entries in class 13 shall not be deleted.

B.3 Criteria for Modifications to Entries in Class 14

Class 14 of the register shall be administered by the Metadata and Registers Committee, 30MR or another body as appointed by the Standards Committee from time-to-time.

Nodes in class 14 may be allocated to a specified organization which becomes responsible for all entries under that node. A node shall be allocated after successful completion of an administrative vote of the administering body. The allocated node shall be regarded as the top-level node for that organization within the class 14 register.

A request for a class 14 node shall include the following information:

- 1) Contact information for the organization, individual, or committee requesting the node;
- 2) Statement of intention to apply the registered labels node, and intended date of first use;

Note: A fee might apply for the registration of a class 14 node.

Changes to the register in class 14 shall not be subject to review.

Annex C Organization of References (Informative)

No single standard can contain all of the information needed to describe and encode metadata. Hence, a layered approach is used to convey the information so the user can select the applicable standard(s) for the level of implementation needed. The SMPTE normative standards for metadata include:

- The standard for the groups register structure (SMPTE ST 395) and the groups register itself;
- The standard for the metadata element dictionary structure (SMPTE ST 335) and the metadata element dictionary itself;
- The standard for the types register structure (SMPTE ST 2003) and the types register itself;
- This standard for the SMPTE labels structure (SMPTE ST 400) and the labels register itself;
- The standard for key-length-value (KLV) data encoding (SMPTE ST 336).

Annex D Bibliography (Informative)

Note: All references in this document to other SMPTE documents use the current numbering style (e.g. SMPTE ST 395:2003) although, during a transitional phase, the document as published (printed or PDF) may bear an older designation (such as SMPTE 395M-2003). Documents with the same root number (e.g. 395) and publication year (e.g. 2003) are functionally identical.

SMPTE EG 2074 (to be published), SMPTE Metadata Naming Guidelines

SMPTE ST 335:2012, Metadata Element Dictionary Structure

SMPTE ST 395:2003, Television — Metadata Groups Registry Structure

SMPTE ST 2003:2012, Types Dictionary Structure

Extensible Markup Language (XML) 1.0 (Fifth Edition), W3C Recommendation, 26th November 2008, <http://www.w3.org/TR/2008/REC-xml-20081126/>

ISO/IEC 11179-1, Information technology — Metadata registries (MDR) — Part 1: Framework, Second edition, 2004-09-15

Merriam Webster's Collegiate Dictionary, 11th Edition, July 2003, Merriam-Webster