International Telecommunication Union



Recommendation ITU-R BT.1674-1 (06/2015)

# Metadata requirements for production and post-production in broadcasting

BT Series Broadcasting service (television)



International Telecommunication Upier



#### Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

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Series of ITU-R Recommendations	
	(Also available online at <u>http://www.itu.int/publ/R-REC/en</u> )
Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
Μ	Mobile, radiodetermination, amateur and related satellite services
Р	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

Electronic Publication Geneva, 2015

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#### **Rec. ITU-R BT.1674-1**

#### **RECOMMENDATION ITU-R BT.1674-1**

#### Metadata requirements for production and post-production in broadcasting

(Question ITU-R 46/6)

(2004-2015)

#### Scope

This Recommendation references the SMPTE metadata dictionary contents and defines a registry of metadata element descriptions associated with essence (video, audio, and data in their various forms) or other metadata. A full explanation is contained in SMPTE ST 335-2012. The metadata dictionary structure defined in SMPTE ST 335-2012 covers the use of metadata for all types of essence. The Metadata dictionary entries are listed in SMPTE RP 210.13 2012.

#### Keywords

Metadata Dictionary, wrapper, Data Elements

The ITU Radiocommunication Assembly,

#### considering

*a)* that digital broadcasting has introduced fundamental changes to the infrastructure and methods of production and post-production of audio, video and other electronic media;

*b)* that compatibility of data encoding and bit-stream formats in digital production and post-production is desirable to facilitate programme exchange and emission;

c) that a common terminology, set of formats and usage for metadata may improve the usefulness of metadata and reduce the opportunity for its misinterpretation, misuse, loss or corruption;

*d*) that metadata is fundamental to media asset management systems which have become increasingly important in the effective and timely operation of broadcast and other electronic media services;

e) that metadata and associated wrappers has gained wide acceptance in broadcasting and associated industries;

*f)* that subsequently standards bodies have established a series of standards for data stream components in terms of essence, overhead, metadata and wrappers;

g) that these standards for metadata are continuing to be developed;

h that extensible mark-up language (XML) coding continues to play a role in metadata coding,

#### recommends

1 that the data types and formats of the metadata dictionary for production and post-production in broadcasting should comply with the data types and formats described in Annex 1;

**2** that the dictionary structure of such metadata should comply with the dictionary structure described in Annex 2.

NOTE 1 – SMPTE recommended practice RP 210.13-2012 and SMPTE Standard ST 335-2012 are given in Attachment 1 to Annex 1 and Attachment 1 to Annex 2, respectively. SMPTE recommended practice RP 210.13-2012 and SMPTE Standards ST 335-2012 refer to Version 2012, which are the versions approved by Administrations of Member States of the ITU in application of Resolution ITU-R 1-6 on 12.03.06. By agreement between ITU and SMPTE, these Versions were provided and authorized for use by SMPTE and accepted by ITU-R for inclusion in this Recommendation. Any subsequent versions of SMPTE recommended practice RP 210.13-2012 and SMPTE Standard ST 335-2012 which have not been accepted and approved by Administrations of Member States of the ITU are not part of this Recommendation. For subsequent versions of SMPTE documents, the reader should consult the SMPTE website: <a href="http://www.smpte.org/">http://www.smpte.org/</a>.

#### Annex 1

#### SMPTE recommended practice RP 210.13-2012

#### METADATA DICTIONARY REGISTRY OF METADATA ELEMENT DESCRIPTIONS

### Summary of SMPTE recommended practice RP 210.13-2012: Metadata dictionary registry of metadata

This metadata dictionary contents practice defines a registry of metadata element descriptions for association with essence or other metadata. A full explanation is contained in SMPTE ST 335-2012. The metadata dictionary structure defined in SMPTE ST 335-2012 covers the use of metadata for all types of essence (video, audio, and data in their various forms). The recommended practice specifies that any application must conform both to:

- a) the definitions and formats in SMPTE ST 335-2012; and
- b) this metadata dictionary contents practice.

The Standard SMPTE ST 335 and this practice must be used together as a pair – neither must be used in isolation. This practice contains a representation of the SMPTE metadata dictionary registry contents in the form of a spreadsheet, and other representations will be made available as specified in SMPTE ST 335-2012.

#### Attachment 1 to Annex 1



#### Annex 2

#### **SMPTE ST 335-2012**

#### TELEVISION – METADATA DICTIONARY STRUCTURE

#### Summary of SMPTE ST 335-2012: Television – Metadata dictionary structure

The metadata dictionary structure defined in this Standard covers the use of metadata for all types of essence (video, audio, and data in their various forms). Applications of individual dictionary entries will vary but, when used, metadata shall conform to the definitions and formats in this metadata dictionary structure Standard and the associated metadata dictionary recommended practice (SMPTE RP 210.13-2012). SMPTE RP 210.13-2012 defines a registered set of metadata element descriptions for association with essence or other metadata and this Standard and the contents practice must be used together as a pair – neither should be used in isolation.

## Attachment 1 to Annex 2