



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**J.97**

(07/2002)

SERIES J: CABLE NETWORKS AND TRANSMISSION  
OF TELEVISION, SOUND PROGRAMME AND OTHER  
MULTIMEDIA SIGNALS

Ancillary digital services for television transmission

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**Metadata on cable networks**

ITU-T Recommendation J.97

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# **ITU-T Recommendation J.97**

## **Metadata on cable networks**

### **Summary**

This Recommendation specifies that metadata used in cable networks must allow for modification at the cable head-end by the controlling cable network operator of that metadata received from an original source.

### **Source**

ITU-T Recommendation J.97 was prepared by ITU-T Study Group 9 (2001-2004) and approved under the WTSA Resolution 1 procedure on 29 July 2002.

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

## NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

## INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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# ITU-T Recommendation J.97

## Metadata on cable networks

### 1 Scope

This Recommendation specifies that the recipient of metadata from an original source intended to be distributed on cable networks is the cable head-end or cable distribution center of the controlling multiple service operator (MSO). The MSO can then use and add information to metadata and then, selectively redistribute metadata to cable customer services based upon designated metadata profiles.

Metadata, as used in this Recommendation, is descriptive data associated with a content asset package. It may vary in extent from merely identifying the content package title, or information to populate an EPG or managing assets, to providing a complete index of different scenes in a movie or providing business rules detailing how the content package may be displayed, copied, or sold. Metadata may originate from studios, distribution networks (cable, satellite, or others), and other sources.

### 2 References

#### 2.1 Informative

- [1] *PMC Project P/META (Metadata Exchange Standards)*, European Broadcasting Union, [http://www.ebu.ch/pmc\\_meta.html](http://www.ebu.ch/pmc_meta.html).
- [2] ISO/IEC 15938-1:2002, *Information Technology – Multimedia content description interface – Part 1: Systems*.
- [3] ISO/IEC 15938-2:2002, *Information Technology – Multimedia content description interface – Part 2: Description definition language*.
- [4] ISO/IEC 15938-3:2002, *Information Technology – Multimedia content description interface – Part 3: Visual*.
- [5] ISO/IEC 15938-4:2002, *Information Technology – Multimedia content description interface – Part 4: Audio*.
- [6] *MPEG-7: Context, objectives and technical roadmaps*, (V. 12), ISO/IEC ITC1/SC29/WG11/N2861, July 1999.
- [7] *Specification Series: S-3 on Metadata*, The TV-Anytime Forum. <http://xml.coverpages.org/TVAnytime-sP003v11.pdf>.

### 3 Terms, definitions and conventions

If this Recommendation is implemented, the keywords "MUST" and "SHALL" as well as "REQUIRED" are to be interpreted as indicating a mandatory aspect of this Recommendation.

The keywords indicating a certain level of significance of a particular requirement that are used throughout this Recommendation are summarized below.

"MUST"	This word or the adjective "REQUIRED" means that the item is an absolute requirement of this Recommendation.
"MUST NOT"	This phrase means that the item is an absolute prohibition of this Recommendation.

"SHOULD"	This word or the adjective "RECOMMENDED" means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.
"SHOULD NOT"	This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.
"MAY"	This word or the adjective "OPTIONAL" means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.

#### **4 Abbreviations and acronyms**

This Recommendation uses the following abbreviations:

CPE Customer Premises Equipment

EPG Electronic Programme Guide

MSO Multiple Service Operator; a Cable Network Operator

VoD Video on Demand

#### **5 Background**

Multiple-content providers may provide many and various kinds of products such as movies or educational programs for transmission over cable networks. Metadata is descriptive data associated with a content asset package. Business-to-business arrangements are made to facilitate the transfer of content via an MSO's head-end(s) to CPE, (e.g. set-top boxes, PVRs, etc.). Content assets along with its metadata are transferred on a network from a content source, or independent provider, to an MSO's Asset Management System (AMS) residing in the head-end. Metadata may also be generated from several sources along the distribution path from the content provider to the eventual end user. At the AMS, application-specific metadata is unwrapped to provide placement, business rules or other information about the content. Some of this metadata may be reused in services to customers (e.g. VoD, EPG, etc.), which must be at the discretion of the MSO and application server.

#### **6 Recommendation**

In view of the importance of the use of metadata associated with content assets for completing business-to-business and application arrangements used in properly conveying source content assets by MSOs over cable networks to end users, the intended recipient of this metadata applied in the process **MUST** be the controlling MSO of the cable network who can readily use, add to and selectively redistribute metadata to cable customer services based upon designated metadata profiles.



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