TECHNICAL REPORT

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Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 13:

MPEG media transport implementation guidelines

Technologies de l'information — Codage à haute efficacité et livraison des medias dans des environnements hétérogènes —

Partie 13: Lignes directrices de mise en oeuvre du transport des medias MPEG



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC | TC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This second edition cancels and replaces the first edition (ISO/IEC/TR 23008-13:2015), which has been technically revised.

The main changes compared to the previous edition are as follows:

 areas on MMT deployment case in Japan and conversion between MMTP and MPEG-2 TS stream have been improved by adding new guidelines.

A list of all parts in the ISO/IEC 23008 series can be found on the ISO website.

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Introduction

This document provides guidelines for implementation and deployment of multimedia systems based on the ISO/IEC 23008 series. These guidelines include the following:

- guidelines on usage of MMT functions;
- guidelines on deployment use cases designed based on ISO/IEC 23008-1.

Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 13:

MPEG media transport implementation guidelines

1 Scope

This document provides technical guidelines for implementing and deploying systems based on ISO/IEC 23008-1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 23008-1:2014, Information technology — High efficiency coding and media delivery in heterogeneous environments — Part 1: MPEG media transport (MMT)

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms, definitions, symbols and abbreviated terms given in ISO/IEC 23008-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Overview

4.1 System overview

This clause describes the exemplary but typical system overview of MPEG Media Transport (MMT) as shown in <u>Figure 1</u>.

The media origin provides A/V media or generic files to MMT sending entity in the form of Packages or Assets which are defined in ISO/IEC 23008-1. A Package is comprised of Assets, Presentation Information and Transparent Characteristics, etc. Physically, an Asset is a group of MPUs or generic files.

The MMT sending entity fragments MPU/generic files and generates MMTP packets to deliver A/V media data itself. Concurrently, it also generates signalling message for the successful delivery and presentation of A/V media included on that MMTP packet flow.