INTERNATIONAL STANDARD ISO/IEC 13818-1:2015/Amd.1:2015
TECHNICAL CORRIGENDUM 2

Published 2016-10-15

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Information technology — Generic coding of moving pictures and associated audio information

Part 1: Systems

AMENDMENT 1: Delivery of timeline for external data

TECHNICAL CORRIGENDUM 2: Clarifications and corrections on pause flag, URL construction and adaptation field syntax

Technologies de l'information — Codage générique des images animées et du son associé

Partie 1: Systèmes

AMENDEMENT 1: Livraison d'un calendrier pour données externes

RECTIFICATIF TECHNIQUE 2: Clarifications et corrections sur la syntaxe pause drapeau, la construction d'URL et champ d'adaptation

Technical Corrigendum 2 to ISO/IEC 13818-1:2015/Amd.1:2015 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*. The identical text is published as Rec. ITU-T H.222.0 (2014)/Amd.1 (2015)/Cor.2 (07/2016).

ICS 35.040 **Ref. No. ISO/IEC 13818-1:2015/Amd.1:2015/Cor.2:2016(E)**

© ISO/IEC 2016 – All rights reserved

Published in Switzerland

Documents
Document Sharing Hub

Full document details: ISO_IEC 13818-1_2015_AMD1_2015_COR2_2016

Documents
Document Sharing Hub

Full document details: ISO_IEC 13818-1_2015_AMD1_2015_COR2_2016

INTERNATIONAL STANDARD
ITU-T RECOMMENDATION

Information technology – Generic coding of moving pictures and associated audio information: Systems

Amendment 1

Delivery of timeline for external data

Corrigendum 2

Clarifications and corrections on pause flag, URL construction and adaptation field syntax

Replace Annex U with the following modified text:

Annex U

Carriage of timeline and external media information over MPEG-2 transport streams

(This annex forms an integral part of this Recommendation | International Standard.)

U.1 Introduction

This annex specifies a format for carriage of timeline and location of external media resource that may be used as a synchronized enhancement of an MPEG-2 transport stream. The possible resolving, consumption and rendering of external media indicated in the stream are out of scope of this Recommendation | International Standard.

The format specifies the mapping of the transport stream program clock to an embedded timeline, the signalling of associated external resources, hereafter called add-on(s), and the signalling of prefetching events. The format is designed to be compact in order to fit within one TS packet for common use cases. The mapping of the embedded timeline indicated in the PES packet payload or in the adaptation field descriptor with the PTS value of the PES header of the PES packet provides a stable timeline for media streams in the program, regardless of PCR discontinuities or other timestamps rewriting that may happen in the network.

In the context of this annex, the "timeline and external media information" ~~stream~~ is called TEMI ~~stream~~.

TEMI data may be carried directly in the adaptation field of a media component or carried in a dedicated PES, called TEMI stream.

The TEMI stream describes external data and associated timing for the program in the MPEG-2 Transport Stream with which the TEMI stream is associated through the Program Map Table.

TEMI data carried in adaptation field of a media component describes external data and associated timing for the program in the MPEG-2 Transport Stream carrying this media component.

U.2 TEMI access unit and TEMI elementary stream

The format of the TEMI access unit is defined in Table U.1. TEMI access units shall be carried as PES packets using private_stream_1 streamID and identified in the program map table by the stream type 0x26. There shall be at most one TEMI elementary stream declared in the program map table.

The payload of a TEMI PES packet is a single complete TEMI_AU, i.e., there shall be one and only one complete TEMI access unit in a TEMI PES packet.

The TEMI PES packet header shall contain a PTS timestamp, whose value is used to match the current system time clock with the timeline value embedded in the TEMI packet payload, as defined in Table U.1.

A TEMI_AU is made of one or several AF descriptors. These AF descriptors may be sent in different access units and at different rates, and are independently decodable. All TEMI access units are therefore random access points.

NOTE 1 – In order to avoid interpolation issues when frame-accurate synchronization is required, the indicated PTS should be the same as the PTS of the associated video or audio stream for which frame accurate sync is needed.

Documents
Document Sharing Hub
Full document details: ISO_IEC 13818-1_2015_AMD1_2015_COR2_2016