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

Part 11: **IPMP on MPEG-2 systems**

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

Partie 11: IPMP sur les systèmes MPEG-2

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO/IEC 13818-11 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

ISO/IEC 13818 consists of the following parts, under the general title *Information technology — Generic coding of moving pictures and associated audio information*:

- *Part 1: Systems*
- *Part 2: Video*
- *Part 3: Audio*
- *Part 4: Conformance testing*
- *Part 5: Software simulation*
- *Part 6: Extensions for DSM-CC*
- *Part 7: Advanced Audio Coding (AAC)*
- *Part 9: Extension for real time interface for systems decoders*
- *Part 10: Conformance extensions for Digital Storage Media Command and Control (DSM-CC)*
- *Part 11: IPMP on MPEG-2 systems*

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

Part 11: IPMP on MPEG-2 systems

1 Scope

This International Standard specifies IPMP (Intellectual Property Management and Protection) on the MPEG-2 system, including:

- a) syntax and semantics for IPMP control information which includes tool list, tool container and rights container;
- b) syntax and semantics for IPMP descriptors, which facilitates IPMP protection signalling;
- c) syntax and semantics of IPMP data extending from the common base class IPMP_Data_BaseClass to support the following functionalities:
 - mutual authentication for IPMP tool to IPMP tool as well as IPMP tool to terminal communication,
 - the requesting by IPMP tools of the connection/disconnection to requested IPMP tools,
 - the notification to IPMP tools of the connection/disconnection of IPMP tools,
 - common IPMP processing,
 - IPMP tool to/from user interaction;
- d) syntax and semantics for IPMP information carriage to and from IPMP tools;
- e) syntax and semantics for the request and transfer of content and IPMP tools between terminals;
- f) XML syntax and semantics for the description of the environment in which the MPEG-2 Terminal/application is operating;
- g) a list of registration authorities required for the support of the specifications found herein.

This document is organized as follows.

Clause 1 provides an introduction to the document. Clause 4 explains the compatibility between the Conditional Access framework and MPEG-2 IPMP framework. Clause 5 provides an overview of the process supported by the IPMP framework, and identifies different normative elements in this process. Clause 6 provides specifications for components identified in Clause 5. Clause 7 provides specifications for the messaging architecture and all supported messages.

2 Normative references

The following referenced documents are indispensable for the application 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 10646-1:2000, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 13818-1, *Information technology — Generic coding of moving pictures and associated audio information: Systems*

ISO/IEC 14496-1:2001, *Information technology — Coding of audio-visual objects — Part 1: Systems*

ISO/IEC 14496-13¹⁾, *Information technology — Coding of audio-visual objects — Part 13: Intellectual Property Management and Protection (IPMP) extensions*

XML Schema Part 0: Primer, Part 1: Structures, and Part 2: Datatypes, W3C Recommendation, 2 May 2001, available at <<http://www.w3.org/TR/2001/REC-xmlschema-0-20010502>>, <<http://www.w3.org/TR/2001/REC-xmlschema-1-20010502>>, and <<http://www.w3.org/TR/2001/REC-xmlschema-2-20010502>>, respectively

1) To be published.