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

## Part 1: MPEG media transport (MMT)

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

*Partie 1: Transport des médias 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 JTC 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](http://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 23008-1:2014), which has been technically revised. It also incorporates the Amendment ISO/IEC 23008-1:2014/Amd 1:2015 and the Technical Corrigendum ISO/IEC 23008-1:2014/Cor 1:2015.

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

- editorial integration of ISO/IEC 23008-1:2014/Amd 1:2015, ISO/IEC 23008-1:2014/FDAmd 2, ISO/IEC 23008-1:2014/Cor 1:2015 and ISO/IEC 23008-1:2014/CD COR 2;
- minor editorial corrections (for example, numbering in Tables and Figures).

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 specifies the MPEG media transport (MMT) technologies for the transport and delivery of coded media data for multimedia services over heterogeneous packet-switched networks including internet protocol (IP) networks and digital broadcasting networks. In this document, "coded media data" includes both timed audiovisual media data and non-timed data.

MMT is designed under the assumption that the coded media data will be delivered over a packet-switched delivery network. Several characteristics of such delivery environment, such as non-constant end-to-end delay of each packet from the sending entity to the receiving entity, have been taken into consideration.

For efficient and effective delivery and consumption of coded media data over packet-switched delivery networks, this document provides the following elements:

- the logical model to construct contents composed of components from various sources, for example, components of mash-up applications;
- the formats to convey information about the coded media data, to enable delivery layer processing, such as packetization;
- the packetization method and the structure of the packet to deliver media content over packet-switched networks supporting media and coding independent hybrid delivery over multiple channels;
- the format of the signalling messages to manage delivery and consumption of media content.