
**Information technology — Multimedia
framework (MPEG-21) —**

**Part 8:
Reference software**

*Technologies de l'information — Cadre multimédia (MPEG-21) —
Partie 8: Logiciel de référence*

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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.

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

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 21000-8 was prepared by Joint 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 21000-8:2006), which has been technically revised.

ISO/IEC 21000 consists of the following parts, under the general title *Information technology — Multimedia framework (MPEG-21)*:

- *Part 1: Vision, Technologies and Strategy [Technical Report]*
- *Part 2: Digital Item Declaration*
- *Part 3: Digital Item Identification*
- *Part 4: Intellectual Property Management and Protection Components*
- *Part 5: Rights Expression Language*
- *Part 6: Rights Data Dictionary*
- *Part 7: Digital Item Adaptation*
- *Part 8: Reference software*
- *Part 9: File Format*
- *Part 10: Digital Item Processing*
- *Part 11: Evaluation Tools for Persistent Association Technologies [Technical Report]*
- *Part 12: Test Bed for MPEG-21 Resource Delivery [Technical Report]*
- *Part 14: Conformance Testing*
- *Part 15: Event Reporting*
- *Part 16: Binary Format*
- *Part 17: Fragment Identification of MPEG Resources*
- *Part 18: Digital Item Streaming*

Introduction

The multimedia industry is increasing at a rapid pace. For this industry, the term “content” is widely used across different segments and applied in many different ways. For this reason the term is deliberately avoided within the context of ISO/IEC 21000 International Standards, where it has been replaced by the defined terms “Digital Item”, “media resource” and “resource”. Of equal importance for the specifications of the multimedia framework is the notation of the User. A User of a system includes all members of the value chain (i.e. creator, rights holders, distributors and consumers of Digital Items).

This eighth part of ISO/IEC 21000 describes the reference software. The reference software of ISO/IEC 21000 serves three main purposes:

- validation of the written specification of the several parts of ISO/IEC 21000;
- clarification of the written specification of the several parts of ISO/IEC 21000; and
- conformance testing for checking interoperability for the various applications against the reference software which aims to be compliant with ISO/IEC 21000.

Information technology — Multimedia framework (MPEG-21) —

Part 8: Reference software

1 Scope

This International Standard describes reference software implementing the normative clauses of the other parts of ISO/IEC 21000. The information provided is applicable for determining the reference software modules available for parts of ISO/IEC 21000, understanding the functionality of the available reference software modules, and utilizing the available reference software modules.

In addition to the reference software, available (integrated) utility software that utilizes the reference software is also described. This utility software can assist in understanding how to utilize the reference software, as well as providing further insight into the applicable parts of ISO/IEC 21000, e.g. informative clauses of the other parts of ISO/IEC 21000.

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/corrigenda) applies.

ISO/IEC 15938-5, *Information technology — Multimedia content description interface — Part 5: Multimedia description schemes*

ISO/IEC 21000 (all parts), *Information technology — Multimedia framework (MPEG-21)*