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Part 8: XML notation for ISO/IEC 13522-5

Technologies de l'information — Codage de l'information multimédia et hypermédia —

Partie 8: Notation XML pour l'ISO/CEI 13522-5

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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 part of ISO/IEC 13522 may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 13522-8 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*. It is based on the normative content of ISO/IEC 13522-5:1997, in constituting a new notation of MHEG-5 classes.

ISO/IEC 13522 consists of the following parts, under the general title *Information technology — Coding of multimedia and hypermedia information*:

— *Part 1: MHEG object representation — Base notation (ASN.1)*

— *Part 3: MHEG script interchange representation*

— *Part 4: MHEG registration procedures*

— *Part 5: Support for base-level interactive applications*

— *Part 6: Support for enhanced interactive applications*

— *Part 7: Interoperability and conformance testing for ISO/IEC 13522-5*

— *Part 8. XML Notation for ISO/IEC 13522-5*

Annex A forms a normative part of this part of ISO/IEC 13522. Annexes B and C are for information only.

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Introduction

This part of ISO/IEC 13522 specifies a third formal notation based on XML for ISO/IEC 13522-5:1997.

At present the normative components of ISO/IEC 13522-5:1997 are unambiguously expressed in ASN.1 and EBNF textual Notation. Both of these formats are well known to most software specialists. But it is thought that the standard would attract a wider user community if a more familiar markup language was used to express the elements of the Standard. XML has been suggested as the appropriate markup language to use because a very large number of WWW authors already use HTML; and both XML and HTML have a common ancestor in SGML. Many applications or application components may be retrieved from the Internet or written by persons who know or use HTML document formats; thus an MHEG-5 engine capable of processing objects expressed in XML would appeal to a wide audience of potential users. Material stored on Intranet servers in XML format might also be easily and quickly inserted into broadcast applications. In addition it is expected that the WWW and MHEG technologies will eventually merge. Hence an XML version of MHEG-5 may be consistent with this process when it begins to take place.

In XML, a DTD (Document Type Definition) defines a verifiable syntax for a class of XML documents. This part of ISO/IEC 13522 expresses a DTD defining a notation for encoding MHEG-5 objects; this DTD is given in Annex A.

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Information technology — Coding of multimedia and hypermedia information —

Part 8:
XML notation for ISO/IEC 13522-5

1 Scope

ISO/IEC 13522-5:1997 specifies two functionally equivalent notations for MHEG-5 objects in Annexes A and B of that document. This part of ISO/IEC 13522 specifies a third functionally equivalent notation for MHEG-5 objects in XML 1.0 ("Extensible Markup Language" as recommended by World Wide Web Consortium, W3C). This specification is unambiguously expressed in the DTD contained in Annex A.

This part of ISO/IEC 13522 in no way invalidates or substitutes for any clauses of ISO/IEC 13522-5:1997.

2 Conformance

This part of ISO/IEC 13522 defines an alternative notation to those defined in Annexes A and B of ISO/IEC 13522-5:1997. Therefore, no new conformance requirements are imposed on ISO/IEC 13522-5:1997.

However the DTD specified in this part of ISO/IEC 13522-5:1997 is required to validate any MHEG-5 application written in XML.

3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 13522. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO/IEC 13522 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 13522-5:1997, *Information technology — Coding of multimedia and hypermedia information — Part 5: Support for base-level interactive applications.*

Extensible Markup Language (XML) 1.0, W3C Recommendation, 10th-February-1998.

4 Terms and definitions

For the purposes of this part of ISO/IEC 13522, the terms and definitions given in ISO/IEC 13522-5:1997 and XML 1.0 apply.

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