INTERNATIONAL STANDARD

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Information technology — Coding of multimedia and hypermedia information —

Part 3:
MHEG script interchange representation

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

Partie 3: Représentation d'interéchange script MHEG

Reference number
ISO/IEC 13522-3:1997(E)

Contents

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialised system for worldwide standardisation. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organisation to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organisations, 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. 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.

International Standard ISO/IEC 13522-3 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 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 procedure*
- *Part 5: Support for base-level interactive applications*
- *Part 6: Support for enhanced interactive applications*

Annexes A to G form an integral part of this part of ISO/IEC 13522. Annexes H to K are for information only.

Information technology — Coding of multimedia and hypermedia information —

Part 3:
MHEG script interchange representation

1 Scope

1.1 Context of the scope

ISO/IEC 13522 specifies the coded representation of multimedia/hypermedia information objects (MHEG objects) for interchange as final form units within or across services and applications, by any means of interchange including local area networks, wide area telecommunication or broadcast networks, storage media, etc.

MHEG objects are usually produced by computer tools taking as a source form multimedia applications designed using multimedia scripting languages. In this context, one of the MHEG object classes, the script class, is intended to complement the other MHEG classes in expressing the functionality commonly supported by scripting languages. Script objects express more powerful control mechanisms and describe more complex relationships among MHEG objects than can be expressed by MHEG action and link objects alone. Furthermore, script objects express access and interaction with external services provided by the run-time environment.

Other parts of ISO/IEC 13522 define the coded representation for script objects in an open manner so that script objects may encapsulate either standardised or proprietary script code. Script objects encapsulate scripts that may be encoded in any encoding format as registered according to ISO/IEC 13522-4.

1.2 Scope of this part of ISO/IEC 13522

The scope of this part of ISO/IEC 13522 is to extend the coded representation of the MHEG script object class defined by another part of ISO/IEC 13522, including ISO/IEC 13522-1 and ISO/IEC 13522-5.

This part of ISO/IEC 13522 specifies the MHEG script interchange representation (MHEG-SIR) for the contents of script objects, i.e. the encoding of the script data component of the MHEG script class.

MHEG engines are system or application components that handle, interpret and present MHEG objects. This part of ISO/IEC 13522 also specifies the semantics of interchanged scripts. These semantics are defined in terms of minimum requirements on the behaviour of MHEG engines that support the interpretation of interchanged scripts.

This part of ISO/IEC 13522 is applicable to all applications that interchange multimedia and hypermedia information.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 13522. At the time of publication, the editions indicated were valid. All standards are subject

to revision, and 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 standards indicated below. Members of ISO and IEC maintain registers of currently valid International Standards.

[1] ISO/IEC 8824-1:1995|ITU-T Recommendation X.680 (1994): *Information technology — Abstract Notation One (ASN.1): Specification of basic notation.*

[2] ISO/IEC 8825-1:1995|ITU-T Recommendation X.690 (1994): *Information technology — ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER).*

[3] ISO/IEC 9646:1992-1995, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework* (all parts).

[4] ISO/IEC 10646-1:1993, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane.*

[5] ISO/IEC 13522-1:1997, *Information technology — Coding of multimedia and hypermedia information — Part 1: MHEG object representation — Base notation (ASN.1).*

[6] ISO/IEC 13522-4:1996, *Information technology — Coding of multimedia and hypermedia information — Part 4: MHEG registration procedure.*

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

[8] ISO/IEC 14750:—[1)], *Information technology — Open Distributed Processing — Interface Definition Language.*

[9] IEEE 754-1985, *IEEE Standard for Binary Floating-Point Arithmetic.*

1) To be published.