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Information technology — Coding of multimedia and hypermedia information — Part 7: Interoperability and conformance testing for ISO/IEC 13522-5

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

Partie 7: Essais d'interopérabilité et de conformité pour l'ISO/CEI 13522-5

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

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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 13522-7 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*
- *Part 7: Interoperability and conformance testing for ISO/IEC 13522-5*
- *Part 8: XML notation for ISO/IEC 13522-5*

Annexes A to F of this part of ISO/IEC 13522 are for information only.

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Information technology — Coding of multimedia and hypermedia information —

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

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.

ISO/IEC 13522-5:1997 defines the MHEG-5 object classes for interchange and use in base-level applications intended to be run on limited resource terminals such as set-top-boxes in such contexts as interactive broadband services.

Annex F of ISO/IEC 13522-5:1997 specifies the features that need to be defined by a specific MHEG-5 application domain. The informative annexes of this part of ISO/IEC 13522-5:1997 give illustrative examples of profiles of some common application domains.

1.2 Scope

MHEG-5 engines are system or application components that handle, interpret and present MHEG-5 objects. The scope of this part of ISO/IEC 13522 is to define a test suite that can be used to test an MHEG-5 engine's conformance to a specific application domain. It also defines a format for test cases that can be used to extend the test suite, either for more detailed testing or for extensions defined by the application domain.

It is beyond the scope of this part of ISO/IEC 13522 to define tests for engine performance, engine memory usage or for MHEG-5 applications that run on these engines.

This part of the ISO/IEC 13522 specifies test cases for *all* features of ISO/IEC 13522-5:1997. Application domains define a *subset* of MHEG-5 features that must be supported. In order to test conformance to a specific application domain, a corresponding *subset* of the test cases must be defined. This subset of the test suite is then used to test the conformance of the engine.

This part of ISO/IEC 13522 tests conformance of the behaviour of an MHEG engine. It does not validate the physical presentation of MHEG-5 objects.

The test suite comprises a set of test cases and a corresponding set of test objects. The test cases are defined in terms of:

- test purpose;
- objects and procedures which are to be used to test one or more MHEG-5 features;
- expected result.

A set of content data will be provided for the test objects. These content data are intended as a guide for generating a test suite and should be converted or replaced by content formats appropriate to the Application Domain.

A test suite for an Application Domain shall be generated by using the PICS template in subclause 9.2.1 PICS Template.

2 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 9646-1:1994, *Information technology - Open systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts.*

ISO/IEC 9646-2:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification.*

ISO/IEC 9646-3:1998, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation (TTCN).*

ISO/IEC 9646-4:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realization.*

ISO/IEC 9646-5:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process.*

ISO/IEC 9646-6:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification.*

ISO/IEC 9646-7:1995, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements.*

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