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AMENDMENT 2
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Information technology — Multimedia content description interface —

Part 7: Conformance testing

AMENDMENT 2: Fast access extensions conformance

Technologies de l'information — Description de l'interface du contenu multimédia —

Partie 7: Essais de conformité

AMENDEMENT 2: Conformité des extensions d'accès rapide

Reference number
ISO/IEC 15938-7:2003/Amd.2:2007(E)

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Foreword

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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.

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Amendment 2 to ISO/IEC 15938-7:2003 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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Information technology — Multimedia content description interface —

Part 7: Conformance testing

AMENDMENT 2: Fast access extensions conformance

Add the following subclause:

4.2.3 Conformance testing of random access terminals

The conformance testing involves the comparison of the result of processing (searching) an index access unit stream and search criteria with the test terminal, against the conformance pass/fail criteria associated with the stream. Pass/Fail criteria has been selected as the conformance test, rather then comparison with reference terminal, as the random access processing is not an interoperability point. As such different implementations may express the same result quite differently. The pass/fail criteria specifies what information shall and shall not be returned as the result of a searching process, and not the form that the result shall take. Figure Amd2.1 shows an overview of conformance testing of ISO/IEC 15938 terminals only composed of a systems random access decoder. Figure Amd2.2 shows an overview of conformance testing of ISO/IEC 15938 terminals composed of random access decoder, systems decoder, and a validating parser. The conformance testing of the terminal checks two things:

— Does the test terminal provide the same results set for the given search criteria as the conformance pass criteria for the index stream?

— Does the test terminal provide the same results for the reconstructed XML document representation as the reference terminal?

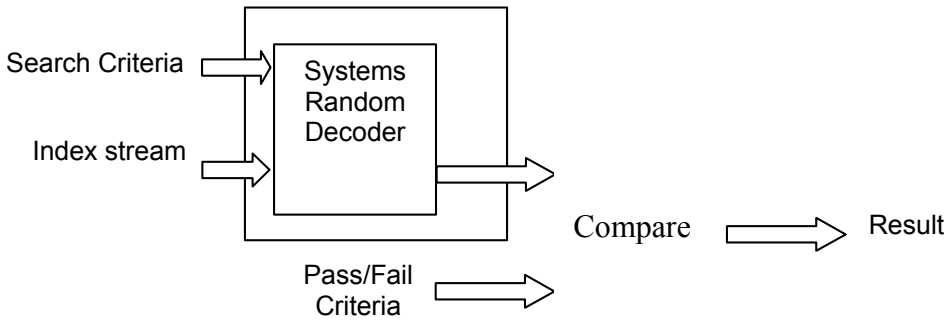

Figure Amd2.1 — Overview of conformance testing of random access terminal

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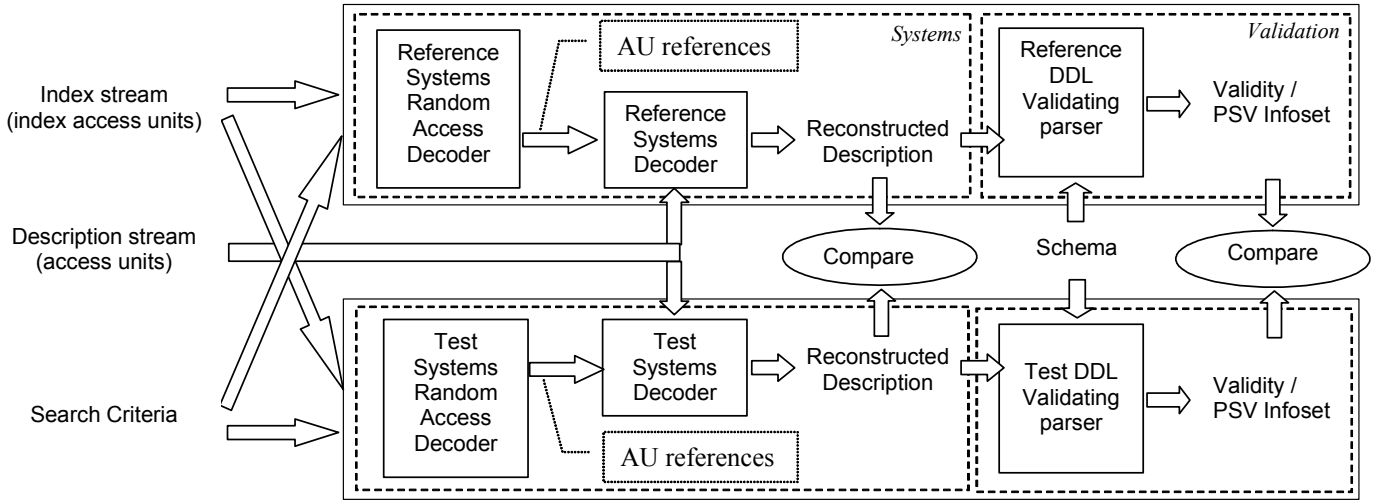

Figure Amd2.2 — Overview of conformance testing of random access systems based validating terminals

Add the following subclause:

5.10 Systems Random Access (Indexing) Encoder

The Systems Random Access (Indexing) Encoder consumes a textual XML description, producing a random access index in index access unit form and a description in binary access unit form. Conformance testing of the Systems Random Access (Indexing) Encoder is not provided.

Add the following subclause:

5.11 Systems Random Access (Indexing) in Index Access Unit Form

The bitstream in index access unit form, together with its IndexDecoderInit and associated binary access unit bitstream and DecoderInit, are fed to the binary reference systems random access decoders. The search criteria, specified in the bitstream's associated pass/fail criteria document, is fed to the binary reference systems random access decoders. The decoded information is used to create a results set of fragment references after each search criteria. Each resulting results set of fragment references is compared against the pass/fail criteria specified in the bitstreams associated pass/fail criteria document.

The following conditions must be fulfilled as a necessary condition for each binary bitstream in index access unit form:

The syntax of each index access unit as well as the syntax of the IndexDecoderInit, must have correct syntax with respect to the Indexing syntax defined in Clause 10 of ISO/IEC 15938-1:2002.

The syntax of each binary access unit as well as the syntax of the binary DecoderInit must comply with subclause 5.8 of this specification.

Each bitstream, or collection of bitstreams, in index access unit form shall be accompanied by an associated pass/fail conformance document.

The associated pass/fail conformance document shall define the search criteria and the conformance pass/fail criteria for each conformance test.

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After each search criteria defined in the associated pass/fail criteria document has been applied, the results set shall match the pass criteria specified in the associated pass/fail criteria document.

Add the following subclause:

5.12 Systems Random Access (Indexing) Decoder

The Systems Random Access (Indexing) Decoder consumes an index in index access unit form, and a search criteria and produces a results set of fragment references, as described in ISO/IEC 15938-1. Conformance testing of the Systems Random Access Decoder involves checking whether the results set of the Systems Random Access Decoder is equivalent to that specified in the pass/fail criteria document associated with the index access unit bitstream. The Test Systems Random Access Decoder is said to be compliant if it produces a results set that matches that specified in the conformance test bitstream's associated pass criteria. The Test Systems Random Access Decoder is not compliant if it returns a results set with more, or less, fragment references than stated in the pass/fail criteria document.

In 6.5.1 Introduction, replace first and second sentences with the following:

"The Systems Conformance Bitstreams consist of streams for BiM conformance, TeM conformance, and Random Access (Indexing) conformance. Table 1, Table 2 and Table Amd2.1 summarize the Systems Conformance Bitstreams."

Add the following subclause:

6.5.1.3 Systems Random Access (Indexing) Conformance Bitstreams.

Table Amd2.1 summarizes the Systems Random Access (Indexing) conformance bitstreams.

Table Amd2.1 — Systems Random Access (Indexing) Conformance Bitstreams

Conformance Stream	*Index Decoder Init*	*Index Configuration*	*String Encoding*	*Value Encoding*	*BTree Path Index*	*Literal Path Index*	*BiM Stream Reference Formats*	*Value Sub Index*
\1 IndexDecoderInit\1.1 …	✓							
…								
\1 IndexDecoderInit\1.2 …								
\2 IndexConfiguration\2.1 …		✓						
…								
\2 IndexConfiguration\2.3 …								

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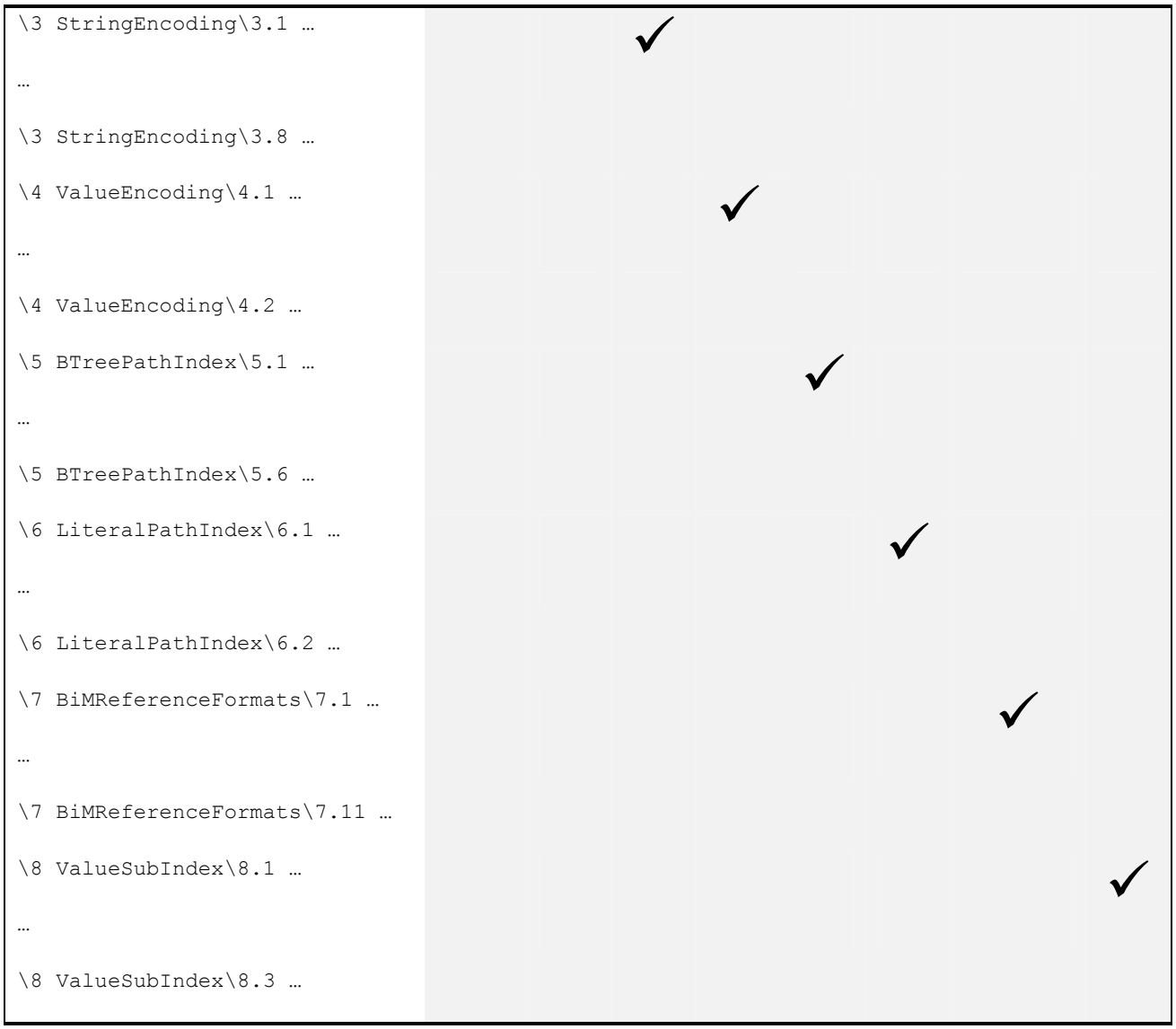

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