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Information technology — Biometric data interchange formats —

Part 7: Signature/sign time series data

AMENDMENT 1: XML encoding

*Technologies de l'information — Formats d'échange de données
biométriques —*

Partie 7: Données de série chronologique de signature/sign

AMENDEMENT 1: Codage XML



Reference number
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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Amendment 1 to ISO/IEC 19794-7:2014 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

The corrected version of ISO/IEC 19794-7:2014/Amd 1:2015 incorporates the following corrections.

"Table A.2.2" in AMD 1-8 has been corrected to read "Table A.3".

"Table A.2.3" in AMD 1-9 has been corrected to read "Table A.4".

The sentence in AMD1-9 has been replaced with: "Rename clause "A.2.3 Conformance test assertions for compression format (binary format)" and "Table A.2.3 – Conformance test assertions for compression format (binary format)" in "Annex A".

"Table A.2.4" in AMD 1-10 has been corrected to read "Table A.5".

Information technology — Biometric data interchange formats — Part 7: Signature/sign time series data

AMENDMENT 1: XML encoding

AMD1-1: Insert the following text as introduction to AMENDMENT 1: XML encoding

Additionally, this part of the ISO/IEC standard supports both binary and XML encoding, to support a spectrum of user requirement. With XML, this part will meet the requirements modern IT architectures. With binary encoding this part will also be able to be used in bandwidth or storage constrained environments. Annex E specifies the schema that XML encoded signature/sign time series data record must conform to, and Annex F provides an example of a valid XML encoded signature/sign time series data record.

AMD1-2: Replace in clause “1 Scope” “three data formats” with “three binary data formats”

Replace in the first listing the second bullet point “three data formats” with “three binary data formats”.

AMD1-3: Add in clause “1 Scope” in the first listing a fourth bullet point”

Add in clause “1 Scope” as fourth bullet point of the first listing following:

- *an XML schema definition*

AMD1-4: Insert the following text into clause “2 Conformance” as second paragraph

An XML document conforms to this part of ISO/IEC 19794 if it satisfies the format requirements with respect to its structure, relations among its fields, and relations between its fields and the underlying input that are specified within Annex E of this part of ISO/IEC 19794.

AMD1-5: Insert the following text in the appropriate alphabetical order of Clause , Normative reference:

- <http://www.w3.org/XML/Schema>

AMD1-6: Replace "Table A.1 – Table of requirements" in "Annex A"

Table A.1– Table of requirements

Requirement ID	Reference in main body	Requirement summary	Level	Status	Applicable to format type				IUT support	Supported range	Test result
					Full	Compact	Compression	XML			
R-1	6.1	The coordinate system used to express the pen position shall be a three-dimensional Cartesian coordinate system.	3B	M	Y	Y	Y	Y		N/A	
R-2	6.1	The x axis shall be the horizontal axis of the writing plane, with x coordinates increasing to the right.	3B	M	Y	Y	Y	Y		N/A	
R-3	6.1	The y axis shall be the vertical axis of the writing plane, with y coordinates increasing upwards.	3B	M	Y	Y	Y	Y		N/A	
R-4	8.2.2	The format ID shall be recorded in four bytes. The format ID shall consist of three characters "SDI" followed by Null (00 _{Hex}) as a string terminator.	1	M	Y	N	N	N			
R-5	10.2	The format ID shall be recorded in four bytes. The format ID shall consist of three characters "SCD" followed by Null (00 _{Hex}) as a string terminator.	1	M	N	N	Y	N			
R-6	8.2.3, 10.2	The number for the version of this part of ISO/IEC 19794 shall be placed in four bytes. The version number shall consist of the three characters "020" followed by Null as a string terminator (3032 3000 _{Hex}).	1	M	Y	N	Y	N			
R-7	8.2.4, 10.2	The length (in bytes) of the entire BDIR shall be recorded in four bytes. This count shall be the total length of the BDIR including the general record header and one or more representation records.	2	M	Y	N	Y	N			
R-8	8.2.5, 10.2	The total number of representation records contained in the BDIR shall be recorded in two bytes. A minimum of one representation is required.	2	M	Y	N	Y	N			
R-9	8.2.6, 10.2	The one-byte certification flag shall indicate whether each Representation Header includes a certification record. A value of 00 _{Hex} shall indicate that no representation contains a certification record. A value of 01 _{Hex} shall indicate that all representations contain a certification record.	2	M	Y	N	Y	N			
R-10	8.3.1, 10.3.1	A Representation Header shall precede each representation providing information for that representation. There shall be one header for each representation contained in the BDIR.	1	M	Y	N	Y	N			

Requirement ID	Reference in main body	Requirement summary	Level	Status	Applicable to format type				IUT support	Supported range	Test result
					Full	Compact	Compression	XML			
R-11	8.3.2.2, 10.3.2.1	The total number of bytes in the entire representation, including the Representation Header, shall be recorded in four bytes.	2	M	Y	N	Y	N			
R-12	8.3.2.3, 10.3.2.1	The Gregorian calendar year of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-13	8.3.2.3, 10.3.2.1	The month of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-14	8.3.2.3, 10.3.2.1	The day of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-15	8.3.2.3, 10.3.2.1	The hour of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-16	8.3.2.3, 10.3.2.1	The minute of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-17	8.3.2.3, 10.3.2.1	The second of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-18	8.3.2.3, 10.3.2.1	The millisecond of the capture date and time field shall be encoded in the form given in ISO/IEC 19794-1:2011.	1	M	Y	N	Y	N			
R-19	8.3.2.3, 10.3.2.1	The capture date and time field shall indicate when the capture of this representation started in Coordinated Universal Time (UTC).	3C	M	Y	N	Y	N			
R-20	8.3.2.4, 10.3.2.1	The capture device technology ID shall be encoded in one byte. A value of 00 _{Hex} indicates unknown or unspecified technology. See Table 3 for the list of possible values.	1	M	Y	N	Y	N			
R-21	8.3.2.4, 10.3.2.1	The capture device technology ID shall indicate the class of capture device technology used to acquire the captured biometric sample.	3C	M	Y	N	Y	N			
R-22	8.3.2.5, 10.3.2.1	The capture device vendor ID shall be encoded in two bytes. A value of all zeros shall indicate that the capture device vendor is unreported.	1	M	Y	N	Y	N			

Requirement ID	Reference in main body	Requirement summary	Level	Status	Applicable to format type				IUT support	Supported range	Test result
					Full	Compact	Compression	XML			
R-23	8.3.2.5, 10.3.2.1	The capture device vendor ID shall be registered by IBIA or other approved registration authority.	3C	M	Y	N	Y	N			
R-24	8.3.2.6, 10.3.2.1	The capture device type ID shall be encoded in two bytes. A value of all zeros shall indicate that the capture device type is unreported.	1	M	Y	N	Y	N			
R-25	8.3.2.6, 10.3.2.1	The capture device type ID shall be assigned by the registered product owner or other approved registration authority.	3C	M	Y	N	Y	N			
R-26	8.3.2.7, 10.3.2.1	A quality record shall begin with a length field. The length field shall consist of one byte. It shall represent the number of quality blocks as an unsigned integer.	2	M	Y	N	Y	N			
R-27	8.3.2.7, 10.3.2.1	A quality score shall be encoded in one byte as an unsigned integer. Allowed values are – 0 to 100 with higher values indicating better quality, – 255, i.e. ff _{Hex} , for indicating that an attempt to calculate a quality score failed.	1	M	Y	N	Y	N			
R-28	8.3.2.7, 10.3.2.1	The quality algorithm vendor ID shall be encoded in two bytes. A value of all zeros shall indicate that the quality algorithm vendor is unreported.	1	M	Y	N	Y	N			
R-29	8.3.2.7, 10.3.2.1	The quality algorithm vendor ID shall be registered by IBIA or other approved registration authority.	3C	M	Y	N	Y	N			
R-30	8.3.2.7, 10.3.2.1	The quality algorithm ID shall be encoded in two bytes. A value of all zeros shall indicate that the quality algorithm is unreported.	1	M	Y	N	Y	N			
R-31	8.3.2.7, 10.3.2.1	The quality algorithm ID shall be registered by IBIA or other approved registration authority.	3C	M	Y	N	Y	N			
R-32	8.3.2.8.1, 10.3.2.1	The channel inclusion field shall consist of two bytes.	1	M	Y	N	Y	N			