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Information technology — Common Biometric Exchange Formats Framework —

Part 2:
Procedures for the operation of the Biometric Registration Authority

AMENDMENT 1: Additional registrations

Technologies de l'information — Cadre de formats d'échange biométriques communs —

Partie 2: Procédures pour le fonctionnement de l'autorité d'enregistrement biométrique

AMENDEMENT 1: Enregistrements additionnels

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Foreword

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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 1 to ISO/IEC 19785-2:2006 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

Information technology — Common Biometric Exchange Formats Framework —

Part 2:
Procedures for the operation of the Biometric Registration Authority

AMENDMENT 1: Additional registrations

Page iv, Foreword, in the list of parts replace:

The following part is under preparation:

— *Part 3: Patron Format Specifications*

with:

— *Part 3: Patron format specifications*

— *Part 4: Security Block Specifications*

Page v, Introduction

Replace the first two paragraphs with the following:

Biometric-based authentication systems and applications are expected to support multiple biometric devices, multiple biometric data formats, and multiple algorithms for feature extraction, comparison, quality determination and compression, possibly each from a different vendor. The Common Biometric Exchange Formats Framework (CBEFF) promotes interoperability of biometric-based application programs and systems developed by different vendors by facilitating biometric data interchange. This part of ISO/IEC 19785 supports such exchanges by providing unambiguous identification of biometric organizations, formats and products, with separate registration of identifiers for components of products that are capture devices, feature extraction algorithms, comparison algorithms, quality algorithms and compression algorithms.

This part of ISO/IEC 19785 specifies procedures for a Registration Authority that is responsible for the assignment of ASN.1 object identifier components to identify biometric organizations, CBEFF patrons, biometric information record formats, biometric data block formats, security block formats, biometric products capture devices, feature extraction algorithms, comparison algorithms, quality algorithms and compression algorithms to provide globally unambiguous identification in the context of the CBEFF ASN.1 object identifier.

Page 1, Scope

Replace the text with the following (where changes to existing text are highlighted with a grey background):

This part of ISO/IEC 19785 specifies the procedures to be followed by the Biometric Registration Authority in preparing, maintaining, and publishing registers of identifiers for biometric organizations, CBEFF patron formats, BDB formats, security block formats, biometric products, and specialized biometric products.

Page 1, 3.1

Delete the following terms from the list:

— biometric sample;

— CBEFF biometric organization identifier;

— CBEFF patron;

— CBEFF patron format;

— security block format identifier.

and add the following terms:

— capture device;

— capture device identifier;

— comparison algorithm;

— comparison algorithm identifier;

— feature extraction algorithm;

— feature extraction algorithm identifier;

— quality algorithm;

— quality algorithm identifier.

Page 2, 3.2

Replace the introductory sentence with the following:

For the purposes of this document, in addition to those terms given in 3.1 the following terms and definitions apply.

Page 2, after 3.2.5

Insert the following:

3.2.6
specialized biometric product
biometric product which is in one of the categories: capture device, feature extraction algorithm, comparison algorithm, quality algorithm, or compression algorithm (see the definitions of these terms)

NOTE   A specialized biometric product can be registered both as a specialized biometric product of the appropriate category and also as a (general) biometric product.

Page 2, 5.1 e)

Replace the list item with the following:

e)   Biometric products (including specialized biometric products) supported by an organization that is a registered biometric organization.

Page 3, 5.5

Delete the last sentence of the second paragraph: "Arcs identified by CBEFF biometric organization identifiers do not have arc names."

Page 4, 5.7

Change the second part of the paragraph (following the arc name) to read as follows (where changes to existing text are highlighted with a grey background):

and enables publication of a reference to the specification of that BIR format (CBEFF patron format). The <organization id> is either the decimal value of the sixteen-bit CBEFF patron identifier of the definer of the CBEFF patron format, or is an arc identifier followed by the decimal value in parentheses. The allocated object identifier value is worldwide unambiguous, but the BIR format identifier can also be used alone in contexts where the preceding arcs are implied.

Page 4, 5.8

Change the second part of the paragraph (following the arc name) to read as follows (where changes to existing text are highlighted with a grey background):

and enables publication of a reference to the specification of that BDB format. The <organization id> is either the decimal value of the sixteen-bit CBEFF biometric organization identifier of the definer of the BDB format, or is an arc identifier followed by the decimal value in parentheses. The allocated object identifier value is worldwide unambiguous, but the BDB format value can also be used alone in contexts where the preceding arcs are implied.

Page 4, 5.10

Change the second part of the paragraph (following the arc name) to read as follows (where changes to existing text are highlighted with a grey background):

The <organization id> is either the sixteen-bit CBEFF biometric organization identifier of the owner of the biometric product, or is an arc identifier followed by the decimal value in parentheses. The allocated object identifier value is worldwide unambiguous, but the biometric product identifier can also be used alone in contexts where the preceding arcs are implied.

Page 4, after 5.10

Insert the following new subclause and renumber 5.11, 5.12, 5.13 and 5.14 as 5.12, 5.13, 5.14 and 5.15 respectively:

5.11 Successful registration of a specialized biometric product by a CBEFF biometric organization records that the specialized biometric product is identified (within its category) by an arc with a CBEFF biometric product identifier allocated by the Registration Authority. This is a sixteen-bit binary value (that can be interpreted as a positive integer) for an ASN.1 object identifier arc under one of the arcs:

```
{iso registration-authority cbeff(19785) organizations(0) <organization id>
                    capture-device(4)}

{iso registration-authority cbeff(19785) organizations(0) <organization id>
                feature-extraction-algorithm(5)}

{iso registration-authority cbeff(19785) organizations(0) <organization id>
                  comparison-algorithm(6)}

{iso registration-authority cbeff(19785) organizations(0) <organization id>
                   quality-algorithm(7)}

{iso registration-authority cbeff(19785) organizations(0) <organization id>
                 compression-algorithm(8)}
```

according to the category of the specialized product.

The <organization id> is either the sixteen-bit CBEFF biometric organization identifier of the owner of the biometric product, or is an arc identifier followed by the decimal value in parentheses. The allocated object identifier value is worldwide unambiguous, but the biometric product identifier can also be used alone in contexts where the category of the specialized product (and earlier arcs) is implied.

Page 7, Clause 9

Replace the clause title with the following (where changes to existing text are highlighted with a grey background):

9 Registration procedures for BIR formats, BDB formats, SB formats, biometric products and specialized biometric products

and replace the content of 9.1.1 and 9.1.2 with the following:

9.1.1 This clause specifies the procedures to be followed in the registration of BIR formats (CBEFF patron formats), BDB formats, SB formats, biometric products and specialized biometric products. The procedures are designed to provide simple registration, with minimal administrative overhead.

9.1.2 The biometric product identifier for a biometric product or specialized biometric product is typically combined with the CBEFF biometric organization identifier that has been assigned to the owner of the biometric product. The biometric product identifier or specialized biometric product identifier is uniquely assigned by a biometric organization within the context of its biometric organization identifier (and category of specialized biometric product) and can be optionally registered and published by the RA. Registration is optonal, but is strongly recommended for specialized biometric products, as the identification of these secialized biometric products is carried in fields of many BDB formats, and provides information that can assist in the later processing of the BDB.

NOTE   Implementations of these values are encoded as determined by the CBEFF patron (the body specifying a BIR format). There are no restrictions on data encoding. The representation and assignment as 4 hexadecimal digits is not intended to specify an encoding method.

and replace the title of 9.2 with the following (where changes to existing text are highlighted with a grey background):

9.2 Application for registration of a BIR format, BDB format, SB format, biometric product, or specialized biometric product

Page 8, 10.3

Replace the subclause title with the following (where changes to existing text are highlighted with a grey background):

10.3 Application for registration of a BIR format, BDB format, SB format, biometric product or specialized biometric product

Page 9, 10.3 b)

Insert the following new list item:

5)   The category of the specialized biometric product and its identifier (unique within its category) to be registered and a document in an RA-approved document format specifying the details of the specialized biometric product for which registration is requested.

Page 9, 11.1

Replace the entire subclause with the following (where changes to existing text are highlighted with a grey background):

The RA shall maintain ten registers to include the following:

a)   biometric organizations, indicating whether they are accepted as CBEFF patrons or not;

b)   registered CBEFF patron formats;

c)   registered BDB formats;

d)   registered SB formats;

e)   registered products;

f)   a separate register for each of the five categories of specialized biometric product.

Each entry shall give the identifier information, together with a link to the full details provided in the approved application.

Page 9, 11.2

In the first sentence, insert the word "ten" before the word "registers".