

Procedural Information for the Registration of biometric organizations and biometric objects within the Biometric Registration Authority (BRA)

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Purpose

This document contains procedural requirements and recommendations regarding the Biometric Registration Authority (BRA) that were extracted and removed from ISO/IEC 19785-2 (2020). This information is presented here because the JTC 1 Supplement document Annex JF 3.3. declares that Registration Authority standards, such as ISO/IEC 19785-2, shall not contain “procedures concerning the provision of Registration Services”.

Overview

The following procedural information describes the requirements and recommendations for proper registration of biometric organizations and biometric objects within the Biometric Registration Authority (BRA). Because the identification scheme is defined by ISO/IEC 19785-2, the procedural information listed here uses the same clause numbering for convenience of cross referencing, with the following considerations:

- a) ISO/IEC 19785-2 clauses 1 through 4 are not relevant to procedures and are therefore not included
- b) For a given clause where no procedural recommendations are given, the text *[no recommendation]* is listed.

Annexes A through E include specific BRA procedural requirements which do not correspond with any clauses in ISO/IEC 19785-2.

5 General

5.1 Identifiers for biometric organizations and biometric objects

5.1.1 Biometric organization identifiers

The Biometric Registration Authority (BRA) shall assign identifiers to biometric organizations and shall record such values in the biometric organization register. The biometric organization identifier format is defined in ISO/IEC 19785-2, clause 5.

5.1.2 Biometric object identifiers

Biometric object identifiers are assigned by biometric organizations. Individual biometric organizations shall assign unique identifiers to the biometric objects that they seek to register with the BRA.

5.2 ASN.1 object identifier components

5.2.1 ASN.1 object identifier components are assigned to:

- a) organizations: values assigned to Subcommittees of ISO/IEC JTC 1 shall be assigned by the BRA in sequence beginning from 257 (0101 hex) to 511 (01FF hex). Values assigned to all other biometric organizations shall be assigned in sequence beginning from one (0001 hex) to 256 (0100 hex), and 512 (0200 hex) to 61439 (EFFF hex). The BRA shall not assign the value zero (0000 hex) to any biometric organization.
- b) biometric objects: the relevant ISO/IEC JTC 1 Subcommittee formally defines each biometric object type in an international standard and requests the BRA to establish and maintain a register for that

type. International standards do not require the registration of biometric objects, but registration is possible if a CBEFF biometric organization considers that registration would be beneficial. The BRA must be capable of maintaining registers for the types of biometric objects defined by ISO/IEC 19785-2 (including clauses 5.2.7 through 5.2.11).

5.2.2 *[no recommendation]*

5.2.3 *[no recommendation]*

5.2.4 Object identifier values assigned by the BRA shall be restricted to positive integers, with a minimum value of 1 and a maximum value of 65535.

5.2.5 *[no recommendation]*

5.2.6 For biometric organizations that meet the requirements for a standards development organization (as specified in ISO/IEC 19785-2), the BRA shall register the organization as a CBEFF patron. The BRA shall permit all biometric organizations to register BDB, SB, and biometric products. However, only CBEFF patrons shall be permitted to register CBEFF patron formats (BIR formats – see ISO/IEC 19785-2, clause 5.2.7).

5.2.7 *[no recommendation]*

5.2.8 *[no recommendation]*

5.2.9 *[no recommendation]*

5.2.10 *[no recommendation]*

5.2.11 *[no recommendation]*

5.2.12 For each 16-bit identifier assigned to an object or organization, the BRA shall register the identifier as four hexadecimal digits and as equivalent positive integer value. The BRA shall provide applicants with confirmation of the identifiers upon registration.

5.3 Biometric object type identifiers

The relevant ISO/IEC JTC 1 Subcommittee may approve an international standard that defines a new type of biometric object. That standard shall include the name of the new object type and the decimal value of the new object's arc in the definition of the new biometric object type. See ISO/IEC 19785-2 for details on the identification scheme used by the BRA.

An amendment shall not be required (to these recommendations nor to ISO/IEC 19785-2) to establish the register for the new object type; the Subcommittee shall inform the BRA of the requirement to establish the new register. The Subcommittee shall also inform the BRA of any additional or different information about the new object type that will require changes to the table in which the object identifiers are to be published (table columns are: organization name, organization identifier in decimal and hexadecimal, object identifier in decimal and hexadecimal, object name, and descriptive information about the object).

6 Biometric Registration Authority

6.1 Identification

The BRA shall ensure that the registration authority information listed at <http://www.iso.org/mara> is correct, and shall notify ISO of any corrections required in a timely manner.

6.2 Services and Responsibilities

See Annexes A-E.

Annex A: Registration procedures for biometric organizations and CBEFF patrons

A.1 General

This subclause specifies the procedures to be followed in the registration of CBEFF biometric organizations and CBEFF patrons. The procedures are designed to assure openness and due process in the registration process, with review by the relevant ISO/IEC JTC 1 Subcommittee if necessary.

A.2 Application for registration

A.2.1 Submission

An organization submits an application for registration as a CBEFF biometric organization or as a CBEFF patron directly to the BRA. The content of the application is specified in C.2.

A.2.2 Biometric organizations

Any bona-fide organization concerned with the specification of biometric formats or the production or use of biometric products or any other defined type of biometric object can apply for registration as a CBEFF biometric organization.

A.2.3 Acceptance

There shall be no filter on such applications other than to establish that the organization is a bona-fide organization (preferably, but not necessarily, with some registered status within one or more countries). The sole purpose of this filter is to exclude frivolous and potentially malicious applications. If an application is made, and the BRA cannot easily determine that it is from a bona-fide organization, registration will be either rejected subject to appeal, or else referred to the relevant ISO/IEC JTC 1 subcommittee for a decision.

A.2.4 CBEFF patrons

The organization may also claim in its registration application that it is a recognized standards development organization (standards body, working group, or industry consortium) and producer of open standards. If this claim can be verified by the BRA, the applicant is assigned a "biometric organization identifier" from the same namespace, but with the "BIR format definition" privilege. Such an organization can, if it wishes, promote itself as a "CBEFF patron", and the BIR formats that it defines (and may register) are called CBEFF patron formats. It may develop open specifications of CBEFF patron formats (BIR formats), BDB formats, and/or security block formats, within its own standardisation procedures. It may assign biometric product identifiers.

A.2.5 Organization identifier

Upon successful completion of the registration procedures, a 16-bit CBEFF biometric organization identifier is registered as assigned, published, and notified to the applicant.

A.3 Review of applications

A.3.1 Procedure

- a) In order for an application to be processed, it shall contain sufficient information to enable the applicant to be identified as a bona-fide organization that is active in the biometric field, and that has good reason to require a CBEFF biometric organization registration. Evidence of this will often include a registered company identifier or equivalent in one or more countries, together with a statement of activity in the area of biometrics.

- b) If the application does not contain the information specified in C.2, the application shall be rejected and the applicant notified, citing this subclause and the specific missing information as the reason for rejection.
- c) If the BRA determines that the application is appropriate, then it is put into the confirmation process specified in A.4.
- d) If the BRA determines that the application may not be appropriate, then it shall be referred to the relevant ISO/IEC JTC 1 subcommittee for a decision at its next scheduled meeting, and the applicant shall be so informed.

A.3.2 Response time

The review of an application under the procedures specified in A.3.1 shall normally be completed within 10 working days of the receipt of the application.

A.4 Confirmation process

Details of the successful application shall be recorded (with the CBEFF biometric organization identifier that was allocated) on a website maintained by the BRA, and the applicant shall be informed of the URL of this site. Adequate back-up procedures shall be used to ensure that register data is not lost.

A.5 Objection process for CBEFF patron registrations

Following publication by the BRA of a registered CBEFF patron identifier, any ISO/IEC National Body may submit to the relevant ISO/IEC JTC 1 subcommittee, within twelve months, a statement that it considers the registration to be inappropriate. Should the relevant ISO/IEC JTC 1 Subcommittee resolve that the objection be upheld, all details of the registration shall be removed from the web-site and the applicant shall be notified of the withdrawal of the registration, but the registered value shall not be re-used. This applies only to registration of CBEFF patron identifiers, not to registration simply as a biometric organization.

Annex B: Registration procedures for biometric objects

B.1 General

This clause specifies the procedures to be followed in the registration of biometric objects. The procedures are designed to provide simple registration, with minimal administrative overhead. The biometric product identifier for a biometric product or specialised biometric product is combined with the CBEFF biometric organization identifier that has been assigned to the owner of the biometric product. The biometric product identifier or specialised biometric product identifier is uniquely assigned by a biometric organization within the context of its biometric organization identifier (and category of specialised biometric product) and can be optionally registered and published by the BRA. Registration is optional, but is strongly recommended for specialised biometric products, as the identification of these specialised biometric products is carried in fields of many BDB formats and provides information that can assist in the later processing of the BDB.

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.

B.2 Application for registration of a biometric object

B.2.1 A registered biometric organization submits an application directly to the BRA. The content of the application is specified in C.3.

B.2.2 The application shall be rejected with notification to the applicant if the applicant is not a registered biometric organization, citing this subclause as the reason for rejection.

B.2.3 Registration of a BIR format shall be rejected with notification to the applicant if the applicant is not a registered CBEFF patron, citing this subclause as the reason for rejection.

B.2.4 Upon successful completion of the registration procedures, the sixteen-bit biometric object identifier is registered and published.

B.3 Review of applications

B.3.1 Procedure

- a) If the application does not contain the information specified in C.3, the application shall be rejected and the applicant notified, citing this subclause and the specific missing information as the reason for rejection.
- b) If the BRA determines that the applicant has provided all necessary information, then it is put into the confirmation process specified in B.4.

B.3.2 Response time

The review of an application under the procedures specified in B.3.1 is expected to be completed within 10 working days of the receipt of the application.

B.4 Confirmation process

Details of the successful application shall be recorded (with the biometric object identifier) on a web site maintained by the BRA, and the applicant shall be informed of the URL of this site. Adequate back-up procedures shall be used to ensure that register data is not lost.

B.5 Objection process

Following publication by the BRA of a registered BIR format, BDB format, or SB format, any ISO/IEC National Body may submit to the relevant ISO/IEC JTC 1 Subcommittee, within twelve months, a statement that it considers the format to be inadequately or incorrectly specified. Should the relevant ISO/IEC JTC 1 Subcommittee resolve that the objection be upheld, all details of the registration shall be removed and the applicant shall be notified of the withdrawal of the registration, but the registered values shall not be re-used. It is expected that most objections will be resolved by discussion and modification of the format specification, and that withdrawal will not be necessary.

Annex C: Content of applications

C.1 General

This clause specifies the information required by the BRA to conduct the registration process. This information can be submitted by e-mail, telephone, or paper copy, or (if the BRA chooses to support these options) as a Web-based form or using Web Services protocols.

C.2 Application for registration as a biometric organization or as a CBEFF patron

The application shall include all the following information:

- a) Country in which the organization has its main headquarters;

- b) Name of organization, with country registration information if a registered company, charity, etc. or affiliation to a known international organization;
- c) Name and title, postal address, e-mail address, telephone and fax number for the contact point within the requesting organization;
- d) Free-form information establishing the bona-fides of the organization as an organization that is the producer of open standards, if registration as a CBEFF patron is being requested (this is not needed otherwise); and
- e) Free-form information stating the domain in which the organization operates.

C.3 Application for registration of a biometric object

The application shall include all the following information:

- a) The CBEFF biometric organization identifier of the applicant.
- b) The unique identifier assigned by the biometric organization to the biometric object.
- c) A document in a BRA-approved document format that describes the biometric object being registered. If use of the biometric object in an implementation requires reference to a formal specification (for example, BIR formats, BDB formats or SB formats) then the submitted document shall either include that specification or shall include instructions for obtaining it.

The BRA-approved document formats can be obtained by contacting the BRA, but at the time of publication of this document they are Microsoft Word, PDF, and HTML. The document describing the biometric object can do so by a reference to any publicly available document, such as an International Standard. The intent of this requirement is to provide the BRA with valid, useful information for inclusion in the description portion of the Registry.

Annex D: Maintenance of a web-based register

D.1 Basic registry requirements

The BRA shall maintain registers of identifiers for biometric organizations and for the several types of biometric objects.

Each entry in the BRA registers of biometric organizations and biometric objects shall be populated using information from an approved registry application and shall include all information described in C.2 and C.3 of this document, with the following exceptions:

- a) An active phone or email contact is mandatory for each entry
- b) Free-form information about an organization is required to be listed for CBEFF patrons only
- c) For biometric objects, a simple description or name of the product may be listed instead of a descriptive document

D.2 Website

The BRA shall provide a website which displays the contents of the registers. The BRA shall be responsible for determining the internal procedures necessary for the maintenance of the register in a timely and appropriate manner.

D.3 Registry Contents

The registers shall contain full details of approved applications, together with a copy of any information that is specified by a non-permanent reference, such as a URL, of any BRA allocations made to the applicant, and of any subsequent identifiers allocated and registered by a registered biometric organization. The registers shall be capable of interrogation using the value of the BRA allocation that has been made, or by a combination of an BRA allocation of a biometric organization identifier and an identifier (of a BIR format, BDB format, SB format, biometric product, or specialised biometric product with its category) allocated by the identified biometric organization.

D.4 Fees

Information about organizations involved in a registration shall be updated by the BRA free of charge if the BRA is given details of changes of company name, contact details, or similar information, with appropriate authorization for the change.

If a new version of a biometric object is to be registered with a new identifier, this shall be treated as a new registration for fee and all other purposes, but the old registration shall be modified free of charge (on request) by the BRA to indicate that it has been superseded by the later version. Its registration code shall not be re-used, and information related to it shall not be deleted from the website for legacy reasons.

D.5 Versioning

If a new version of a biometric object is to be registered as a new version, but using an existing identifier, then the following conditions are required. Otherwise, a new identifier shall be used.

- a) For a BIR format, BDB format, or SB format, the format shall include version information in such a way that any system with knowledge of only one of the currently defined versions can (as a minimum) determine that the BIR format, BDB format, or SB format is of a different version, and can determine the version number information for that version. This will generally imply a similarity of the approaches used to encode the data in the different versions.
- b) For a biometric product or specialised biometric product, the behaviour of the product or specialised biometric product in relation to the creation or processing of BDBs shall not be materially changed.
- c) In all cases, information on all previous version(s) shall be retained in the register entry.

Annex E: Other operational considerations

E.1 Requests for procedure modifications

The BRA may at any time submit to the next meeting of the relevant ISO/IEC JTC 1 Subcommittee (if it has liaison status) a request for an amendment to these procedures or to ISO/IEC 19785-2.

E.2 Registration authority operations

ISO/IEC JTC 1 shall not interfere with the operations of the BRA, which shall be a separately managed entity.