
Information technology — Object oriented BioAPI —

Part 1: Architecture

AMENDMENT 1: Additional specifications and conformance statements

Technologies de l'information — Objet orienté BioAPI —

Partie 1: Architecture

*AMENDEMENT 1: Spécifications et déclarations de conformité
complémentaires*



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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

A list of all parts in the ISO/IEC 30106 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Page 1, Clause 2 Normative references

Update the listing for ISO/IEC 19785-3 to the following:

ISO/IEC 19785, *Information technology — Common Biometric Exchange Formats Framework (CBEFF) — Part 3: Patron format specifications*

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Add new Clause 5 Conformance with the following text and renumber subsequent clauses.

Clause 5 Conformance

Those products that claim conformance with any of the parts in the ISO/IEC 30106 series, shall comply with the requirements stated in Annex A.

Page 8, Clause 6

Replace Clause 6 with the following:

Clause 6 Object Oriented BioAPI CBEFF Patron Formats

Object Oriented BioAPI is able to use biometric data coded as Self-Identifying BIRs, either Simple BIRs or Complex BIRs, following the structure and definition of CBEFF (i.e. ISO/IEC 19785). In particular, Object Oriented BioAPI shall use the following CBEFF Patron Formats:

- For Simple BIRs the patron format to be used is the one called "Self-identifying Tag-oriented Simple BIR", registered as Patron Format Owner 257 and Patron Format Type 12, and described in ISO/IEC 19785-3.
- For Complex BIRs the patron format to be used is the one called "Self-identifying Tag-oriented Complex BIR", registered as Patron Format Owner 257 and Patron Format Type 13, and described in ISO/IEC 19785-3.

The particular tagged format (e.g. TLV, XML or JSON) to be used will be determined by the application and/or platform used.

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Insert the following clause after 8.7, to become Clause 9.

Clause 9 Additional specifications

9.1 Standardized control codes for additional functionality

9.1.1 General

When a BSP or BFP requires the addition of further functionality to the one already defined in previous clauses, the method to be used is:

byte[] ControlUnit (int unitID, int controlCode, byte[] inputData)

The method can be used by different vendors, providing different functionalities. In order to minimize interoperability issues, the control codes shall be defined to allow both standardized behaviour, and proprietary functionality.

Therefore, control codes shall have the same format:

Code (in hex)	Description
00 01 XX XX	Standardized functionality for Archive units
00 02 XX XX	Standardized functionality for Processing units
00 03 XX XX	Standardized functionality for Comparison units
00 04 XX XX	Standardized functionality for Capture units
00 0X XX XX	RFU for SC37 standardized functionality
(01-FF) XX XX XX	Proprietary functionality (out of the scope of SC37 description)

9.1.2 Control codes for Archive Units

The following codes are standardized for Archive units:

Code	Input data	Output data	Description
00 01 00 01			

9.1.3 Control codes for Processing Units

The following codes are standardized for Archive units:

Code	Input data	Output data	Description
00 02 00 01	Byte threshold	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Change the quality threshold to accept a BIR as in input for Processing. The algorithm may have its own threshold and also rules to accept new thresholds (e.g. not accepting thresholds below a determined minimum value).

9.1.4 Control codes for Comparison Units

The following codes are standardized for Archive units:

Code	Input data	Output data	Description
00 03 00 01	int minimumFMR	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Change the comparison threshold to determine the minimum FMR to allow a match. The unit may have its own threshold and also rules to accept new thresholds (e.g. not accepting thresholds below a determined minimum value).

9.1.5 Control codes for Capture Units

The following codes are standardized for Archive units:

Code	Input data	Output data	Description
00 04 00 01	Message (string)	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Message to be shown by the acquisition unit to request a trait to be presented
00 04 00 02	Message (string)	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Message to be shown by the acquisition unit to ask the user to wait while presenting the trait
00 04 00 03	Message (string)	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Message to be shown by the acquisition unit to ask the user to remove the trait
00 04 00 04	Message (string)	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Message to be shown by the acquisition unit to ask the user to retry the presentation of the trait
00 04 01 (01 – 04)	Byte string with the acoustic information of the message	00 – OK 01 – Not accepted by unit 02 – Not available in unit 03 – Other error	Same as codes 00 04 00 (01 – 04) but instead of a text message, an acoustic signal.