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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 26237.1-2022

Replacing GB/T 26237.1-2010

**Information technology - Biometric data interchange formats -
Part 1: Framework**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" drafting.

This document is the first part of GB/T 26237 "Information Technology Biometric Data Interchange Format". GB/T 26237 has

The following parts were released.

- Part 1. Framework;
- Part 2. Fingerprint detail point data;
- Part 3. Fingerprint spectral data;
- Part 4. Fingerprint image data;
- Part 5. Face image data;
- Part 6. Iris image data;
- Part 7. Signature/signature time series data;
- Part 8. Fingerprint skeleton data;
- Part 9. Vascular image data;
- Part 10. Hand contour data;
- Part 14. DNA data;
- Part 15. Palmprint image data.

This document replaces GB/T 26237.1-2010 "Information Technology Biometric Data Interchange Format Part 1. Framework", and

Compared with GB/T 26237.1-2010, except for structural adjustment and editorial changes, the main technical changes are as follows.

a) Added the explanatory terms of conformity testing (see Chapter 1);

b) Added terms and definitions "biometric data block", "biometric data exchange record", "biometric modality", "detail

Node" "Signature/Signature" "Spatial Sampling Rate" "Transaction" "Assertion"
"Authentication" "Conformity" "Conformity Requirement" "Conformity Test"

"Conformity Test Laboratory" "Conformity Test Specification" "Conformity Test Suite" "Data
Format Specification" "Declaration" "Achieving Conformity

"Subject Implementation" "Input Biometric Data Record" "Level 1 Test" "Level 2 Test" "Level
3 Test" "Metadata Record"

"Type A Declaration of Conformity" and "Type B Declaration of Conformity" (see Chapter 3);

c) Removed terms and definitions "biometric identification(s)" "biometric identification"
"biometric identification algorithm" "biometric data"

"Biometric Item" "Biometric Item Data Unit" "Biometric Item Extraction" "Biometric
Identification" "Biometric Identity

Identification Data", "Biometric Information", "Biometric Template", "Biometric Sample",
"Biometric Recognition System", "Biometric Identification

Type", "Biometric Verification", "Biometric Verification Data", "Enrollment", "Biometric
Intermediate Sample", "Match", "Final Biometric

sample" and "raw biometric sample" (see Chapter 3 of the.2010 edition);

d) Added the abbreviations ABNF, BDIR, BIR, BMP, CTS, DNA, GIF, IBDR, ICS, IETF, IUT,
JPEG,

JPEG-LS, JPEG2000, TIFF, UTC, W3C, XML (see Chapter 4);

e) Added "Conformity" (see Chapter 5), "Use Environment of Biometric Data Exchange
Format" (see Chapter 7), "Format Class

"Binary encoding format for format type" (see Chapter 13) and "XML encoding scheme for
format type" (see Chapter 14);

f) Changed the names of "system concept diagram of general biometric identification
system" and "comparison subsystem" and "decision subsystem", and revised

Changed the relevant expressions of the corresponding subsystems (see 6.1, 6.2.5 and
6.2.6, 5.1, 5.2.5 and 5.2.6 of the.2010 edition);

g) Changed the name and related expressions of the "identification" function of the general

biometric identification system (see 6.3.3, 2010 edition

5.3.3);

h) In the overview of the use of biometric data exchange, "acquisition device type identification" (see 7.7 of the 2010 edition) and "multiple

Schema Data Structure" (see 7.8 of the 2010 edition);

i) Changed the expression and conceptual diagram of "processing level of data exchange format" (see 9.1, 8.1 of the 2010 edition);

j) Two categories of "multi-sensor" and "multi-presentation" have been added to "multi-biometric identification" (see Chapter 10);

k) Changed the name and related expressions of "Requirements for Acquisition Equipment" (see Chapter 11, Chapter 10 of the 2010 edition);

l) Added "Relationship to CBEFF" in "Format Owner and Format Type" (see 12.1).

m) Added "Conformity Test Method" (see Appendix A) and "XML Schema Common Elements" (see Appendix C).

This document is modified to adopt ISO /IEC 19794-1:2011 "Information Technology Biometric Data Interchange Format - Part 1.Box

shelf".

Compared with ISO /IEC 19794-1:2011, this document has made the following structural adjustments.

--- Chapter 6 corresponds to Chapter 5 of ISO /IEC 19794-1:2011;

--- Chapter 7 corresponds to Chapter 6 of ISO /IEC 19794-1:2011;

--- Chapter 8 corresponds to Chapter 7 of ISO /IEC 19794-1:2011;

--- Chapter 9 corresponds to Chapter 8 of ISO /IEC 19794-1:2011;

--- Chapter 10 corresponds to Chapter 9 of ISO /IEC 19794-1:2011;

--- Chapter 11 corresponds to Chapter 10 of ISO /IEC 19794-1:2011;

--- Chapter 12 corresponds to Chapter 11 of ISO /IEC 19794-1:2011;

--- Chapter 13 corresponds to Chapter 12 of ISO /IEC 19794-1:2011.

The technical differences between this document and ISO /IEC 19794-1:2011 and their reasons are as follows.

a) The normative reference document GB/T 5271.37-2021 is added, because the terms of this document are cited (see Chapter 3);

b) In ISO /IEC 19794-1.2011, "biometrics", "biometrics recognition", "biometrics collection device" and "biological

Characteristics", "Biometric Data", "Biometric Data Record", "Biometric Reference", "Biometric Sample", "Biometric Identification

There are 12 terms in total, including "identification system", "candidate", "candidate list" and "comparison", because these terms have been included in GB/T 5271.37-

It is clearly defined in the 2021 "Information Technology Vocabulary Part 37.Biometric Identification" and is commonly used in the field of biometric identification

terms, no need to repeat definitions;

c) Deleted "Biometric Identification Algorithm", "Biometric Item" and "Biometric Item Data Sheet" in ISO /IEC 19794-1.2011

Meta, Biometric Item Extraction, Biometric Pattern, Biometric Template, Cell, Continuous Tone Image, Core, Triangle

Point", "Dimension", "Friction Ridge", "Biometric Intermediate Sample", "Latent Fingerprint", "Liveness Acquisition", "Pixel", "Pixel Depth", "Ridge Bifurcation"

There are 25 terms in total, including points, ridges, bones, fingerprint images, style lines, valleys, certification, and conformity assessment.

language not cited in this document;

d) Added 9 abbreviations of BMP, GIF, IETF, JPEG, JPEG-LS, JPEG2000, TIFF, UTC and W3CX

language, in order to facilitate the understanding of this document (see Chapter 4);

e) Changed the naming and diagram of the processing level in the data exchange format so as to be consistent with the definition of processing level in GB/T 28826.1

The division is consistent and facilitates systematic understanding (see 6.1);

f) Add an example in the description of "Format Identifier", and add a coding example in the description of "Version Number", so as to facilitate the coding of two elements.

code understanding (see Table 1);

g) Replaced ISO /IEC 7816-11 with the normative reference GB/T 16649.11, the degree of consistency between the two is modified (see Clause 7

chapter, 12.1);

h) Replaced ISO /IEC 19785-2.2006 with the normative referenced GB/T 28826.2, the degree of consistency between the two is non-equivalent