

Australian Standard<sup>®</sup>

**Information technology—Biometric data  
interchange formats**

**Part 1: Framework**



This Australian Standard® was prepared by Committee IT-032, Biometric and Identification. It was approved on behalf of the Council of Standards Australia on 9 March 2007. This Standard was published on 2 July 2007.

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- AUSTROADS
  - Attorney General's Department
  - Australian Business Limited
  - Australian Electrical and Electronic Manufacturers Association
  - Centrelink
  - The Biometric Institute
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This Standard was issued in draft form for comment as DR 06643.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

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**OF**

**AS ISO/IEC 19794.1—2007**

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

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## NOTES

Australian Standard<sup>®</sup>

# Information technology—Biometric data interchange formats

## Part 1: Framework

First published as AS ISO/IEC 19794.1—2007.

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Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8261 2

## PREFACE

This Standard was prepared by the Standards Australia Committee IT-032, Biometric and Identification.

The objective of this Standard is to make to the Australian biometrics community the core ISO SC37 standards published over the last 24 months, specifically the biometric data interchange formats framework.

This Standard is identical with, and has been reproduced from ISO/IEC 19794-1:2006, *Information technology— Biometric data interchange formats— Part 1: Framework*.

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this part of ISO/IEC 19794’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

| <i>Reference to International Standard</i> |                                                                    | <i>Australian Standard</i> |                                                                    |
|--------------------------------------------|--------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------|
| ISO/IEC                                    |                                                                    | AS ISO/IEC                 |                                                                    |
| 19785                                      | Information technology—Common Biometric Exchange Formats Framework | 19785                      | Information technology—Common Biometric Exchange Formats Framework |
| 19785-1                                    | Part 1: Data element specification                                 | 19785.1                    | Part 1: Data element specification                                 |

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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## INTRODUCTION

This part of ISO/IEC 19794 is intended to describe the general aspects and requirements for defining biometric data interchange formats.

The notation and transfer formats provide platform independence and separation of transfer syntax from content definition. This part of ISO/IEC 19794 defines what is commonly applied for biometric data formats, i.e. the standardization of the common content, meaning, and representation of biometric data formats of biometric types considered in the specific parts of ISO/IEC 19794.

Figure 1 shows the interrelation of biometric-related ISO/IEC standardization fields. Biometric data complying with a biometric data interchange format of ISO/IEC 19794 represent the core component of biometric interoperability. Biometric formats frameworks such as ISO/IEC 19785 (CBEFF) serve as a wrapper around biometric data. Since biometric data are sensitive data and subject to attack, cryptographic protection is required in interchange environments. Biometric properties with respect to profiles, security evaluation and performance also play an important role. Biometric interfaces are essential to facilitate easy integration and usage of biometric components. The emerging harmonized vocabulary is recommended for use in describing biometric technology. The deployment of applications using biometric verification or identification takes place within the context of societal and cross-jurisdictional requirements.

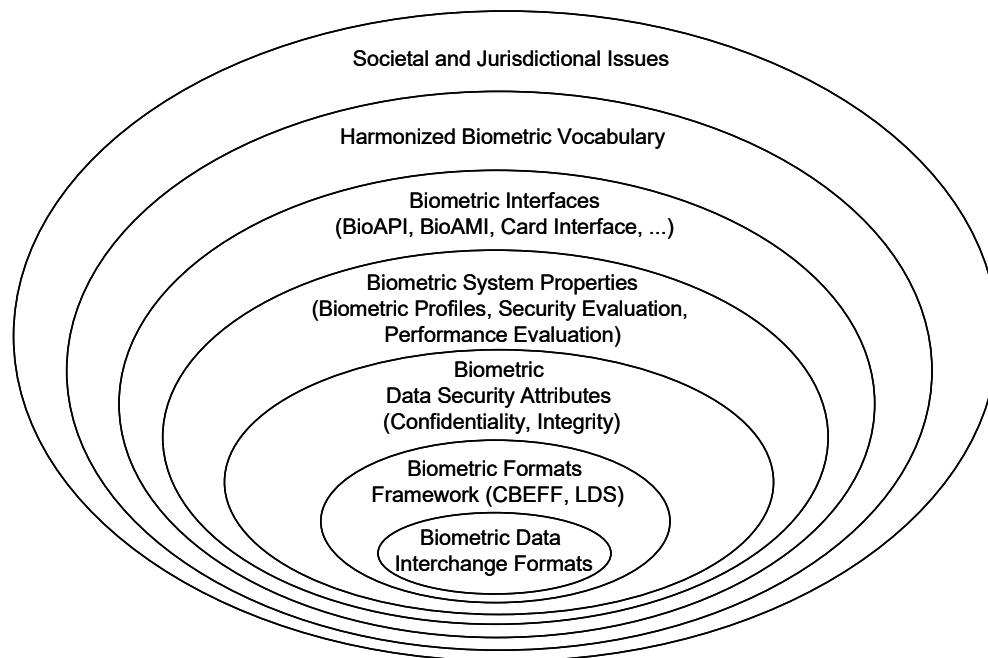


**Figure 1 — General interrelation model of biometric issues**

## AUSTRALIAN STANDARD

**Information technology — Biometric data interchange formats —****Part 1:  
Framework****1 Scope**

This part of ISO/IEC 19794 specifies

- general aspects for the usage of biometric data structures,
- the types of biometric data structure,
- a naming concept for biometric data structures,
- a coding scheme for format types.

Biometric data include but are not limited to finger minutiae, finger pattern, finger image, face image, iris image and signature/sign behavioural data.

**2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7816-11:2004, *Identification cards – Integrated circuit cards – Part 11: Personal verification through biometric methods*

ISO/IEC 19785-1:—, *Information technology – Common Biometric Exchange Formats Framework – Part 1: Data element specification*<sup>1</sup>

ISO/IEC 19785-3:—, *Information technology – Common Biometric Exchange Formats Framework – Part 3: Patron format specifications*<sup>1</sup>

**3 Terms and definitions**

For the purposes of this document, the following terms and definitions apply.

**3.1****biometric**

pertaining to the field of biometrics

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<sup>1</sup> To be published.