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**Information technology — Biometrics —  
Tenprint capture using biometric  
application programming interface  
(BioAPI)**

*Technologies de l'information — Biométrie — Saisie de «Tenprint» à  
l'aide de l'interface de programmation d'application biométrique  
(BioAPI)*

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 29141 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

## Introduction

This International Standard specifies how a BioAPI application can interact with a BioAPI framework to support a tenprint capture (capture of the fingerprints of all ten fingers). It specifies and supports the deployment of large-scale identity management and credentialing systems (which often require a tenprint capture as part of the identity vetting and background-checking process).

This International Standard provides additional standardization of fields (that are left undefined in BioAPI), in order to standardize the support for a tenprint capture, but is in all other respects a profiling of BioAPI to support the tenprint capture.

This International Standard defines a biometric data block format for carrying the data obtained from a tenprint capture. It specifies all the parameters, function calls, and other information needed by an application for the use of BioAPI in support of tenprint capture.

It also specifies the conformance requirements on a biometric service provider that supports tenprint capture using this International Standard.

# Information technology — Biometrics — Tenprint capture using biometric application programming interface (BioAPI)

## 1 Scope

This International Standard specifies requirements for the use of ISO/IEC 19784-1, as amended by ISO/IEC 19784-1/Amd. 1 (BioAPI) for the purpose of performing a tenprint capture operation.

It specifies a BDB format that is used to interact with a BioAPI framework (and hence with BSPs) to support an application wishing to perform a tenprint capture.

It specifies a capture control block and a capture output block that conforming BSPs are required to support if they conform to this International Standard.

## 2 Conformance

Biometric Service Providers (BSPs) that claim conformance to this International Standard shall satisfy requirements specified in Clauses 6 through 10.

## 3 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.

ANSI/NIST-ITL 1-2007, *Data Format for the Interchange of Fingerprint, Facial, & Other Biometric Information*

ISO/IEC 19784-1, *Information technology — Biometric application programming interface — Part 1: BioAPI specification*