INTERNATIONAL STANDARD

ISO/IEC 24713-2

First edition
2008-06-01

Information technology — Biometric profiles for interoperability and data interchange —

Part 2: Physical access control for employees at airports

Technologies de l'information — Profils biométriques pour interopérabilité et échange de données —

Partie 2: Contrôle d'accès physique pour les employés aux aéroports

Reference number
ISO/IEC 24713-2:2008(E)

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Published in Switzerland

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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 shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 24713-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

ISO/IEC 24713 consists of the following parts, under the general title *Information technology — Biometric profiles for interoperability and data interchange*:

— *Part 1: Overview of biometric systems and biometric profiles*

— *Part 2: Physical access control for employees at airports*

— *Part 3: Biometrics-based verification and identification of seafarers*

Introduction

This part of ISO/IEC 24713 is one of a family of International Standards being developed by ISO/IEC JTC 1/SC 37 that support interoperability and data interchange among biometrics applications and systems.[1)] This family of standards specifies requirements that solve the complexities of applying biometrics to a wide variety of personal recognition applications, whether such applications operate in an open systems environment or consist of a single, closed system.

Biometric data interchange format standards and biometric interface standards are both necessary to achieve full data interchange and interoperability for biometric recognition in an open systems environment. The ISO/IEC JTC 1/SC 37 biometric standards family includes a layered set of standards consisting of biometric data interchange formats and biometric interfaces, as well as biometric profiles that describe the use of these standards in specific application areas.

— The biometric data interchange format standards specify biometric data interchange records for different biometric modalities. Parties that agree in advance to exchange biometric data interchange records as specified in a subset of the ISO/IEC JTC 1/SC 37 biometric data interchange format standards should be able to perform biometric recognition with each other's data. Parties should also be able to perform biometric recognition even without advance agreement on the specific biometric data interchange format standards to be used, provided they have built their systems on the layered ISO/IEC JTC 1/SC 37 family of biometric standards.

— The biometric interface standards include ISO/IEC 19785, the Common Biometric Exchange Formats Framework (CBEFF) and ISO/IEC 19784, the Biometric Application Programming Interface (BioAPI). These standards support exchange of biometric data within a system or among systems. ISO/IEC 19785 specifies the basic structure of a standardized Biometric Information Record (BIR) which includes the biometric data interchange record with added metadata, such as when it was captured, its expiry date, whether it is encrypted, etc. ISO/IEC 19784 specifies an open system API that supports communications between software applications and underlying biometric technology services. BioAPI also specifies a CBEFF BIR format for the storage and transmission of BioAPI-produced data.

The biometric profile standards facilitate implementations of the base standards (e.g. the ISO/IEC JTC 1/SC 37 biometric data interchange format and biometric interface standards, and possibly non-biometric standards) for defined applications. These profile standards define the functions of an application (e.g. physical access control for employees at airports) and then specify use of options in the base standards to ensure biometric interoperability.

1) Open systems are built on standards-based, publicly defined data formats, interfaces, and protocols to facilitate data interchange and interoperability with other systems, which may include components of different design or manufacture. A closed system may also be built on publicly defined standards, and may include components of different design or manufacture, but inherently has no requirement for data interchange and interoperability with any other system.

Information technology — Biometric profiles for interoperability and data interchange —

Part 2:
Physical access control for employees at airports

1 Scope

This part of ISO/IEC 24713 specifies the biometric profile including necessary parameters and interfaces between function modules (i.e. BioAPI based modules and an external interface) in support of token-based biometric identification and verification of employees, at local access points (i.e. doors or other controlled entrances) and across local boundaries within the defined area of control in an airport. The token is expected to contain one or more biometric references.

This part of ISO/IEC 24713 does not specify a complete Access Control System for deployment at access points within the secure area of an airport. It is assumed that such systems exist and that a biometric component that is the subject of this part of ISO/IEC 24713 is being added to an existing system. It therefore excludes such things as device features, and exception and incident reporting and handling. This information is contained in Annex C for information only.

This part of ISO/IEC 24713 includes recommended practices for enrolment, watch list checking, duplicate issuance prevention, and verification of the identity of employees at airports. It also describes architectures and business processes appropriate to the support of token-based identity management in the secure environment of an airport.

It is recommended that the confidentiality, integrity, and availability of biometric data be safeguarded in accordance with local, regional, or national policy considerations.

This part of ISO/IEC 24713 does not preclude users building applications based on this part of ISO/IEC 24713 from being able to meet such privacy/data protection requirements as may apply to their application. The specification of privacy/data protection requirements that may apply is outside the scope of this part of ISO/IEC 24713.

2 Conformance

A system conforms to this part of ISO/IEC 24713 if it correctly performs all the mandatory capabilities defined in the requirements list and supplies the profile specific Implementation Conformance Statement (ICS) in Annex A. Note that more capabilities may be required than in the base standards.

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.

ISO/IEC 19784-1:2006, *Information technology — Biometric application programming interface — Part 1: BioAPI specification*

ISO/IEC 19785-1:2006, *Information technology — Common Biometric Exchange Formats Framework — Part 1: Data element specification*

ISO/IEC 19785-3:2007, *Information technology — Common Biometric Exchange Formats Framework — Part 3: Patron format specifications*

ISO/IEC 19794-2:2005, *Information technology — Biometric data interchange formats — Part 2: Finger minutiae data*

ISO/IEC 19794-3:2006, *Information technology — Biometric data interchange formats — Part 3: Finger pattern spectral data*

ISO/IEC 19794-4:2005, *Information technology — Biometric data interchange formats — Part 4: Finger image data*

ISO/IEC 19794-5:2005, *Information technology — Biometric data interchange formats — Part 5: Face image data*

ISO/IEC 19794-6:2005, *Information technology — Biometric data interchange formats — Part 6: Iris image data*

ISO/IEC 19794-7:2007, *Information technology — Biometric data interchange formats — Part 7: Signature/sign time series data*

ISO/IEC 19794-8:2006, *Information technology — Biometric data interchange formats — Part 8: Finger pattern skeletal data*

ISO/IEC 19794-9:2007, *Information technology — Biometric data interchange formats — Part 9: Vascular image data*

ISO/IEC 19794-10:2007, *Information technology — Biometric data interchange formats — Part 10: Hand geometry silhouette data*

ISO/IEC 19795-1:2006, *Information technology — Biometric performance testing and reporting — Part 1: Principles and framework*

ISO/IEC 19795-2;2007, *Information technology — Biometric performance testing and reporting — Part 2: Testing methodologies for technology and scenario evaluation*

ISO/IEC 24713-1:2008, *Information technology — Biometric profiles for interoperability and data interchange — Part 1: Overview of biometric systems and biometric profiles*