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**Information technology — Biometric
Identity Assurance Services —**

**Part 1:
BIAS services**

*Technologies de l'information — Service d'assurance de l'identité
biométrique (BIAS) —*

Partie 1: Services BIAS

Reference number
ISO/IEC 30108-1:2015(E)





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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

ISO/IEC 30108 consists of the following parts, under the general title *Information technology — Biometric Identity Assurance Services*:

— *Part 1: BIAS Services*

This corrected version of ISO/IEC 30108-1:2015 incorporates the following corrections plus other minor editorial modifications.

Table A.1: The following rows were missing and have been added to the end of the table:

Get Verify Results		C*			C*		C*
Identify		X					X
Retrieve Data		X			X		
Update		X			X		X
Verify		X			X		X
Capability Information Items							
AggregateInputDataOptional		X			X		X
AggregateInputDataRequired		X			X		X
AggregateProcessingOption		X			X		X
AggregateReturnData		X			X		X
AggregateServiceDescription		X			X		X
BiographicDataSet	X	X	X	X	X		
CBEFFPatronFormat	X	X	X	X	X	X	X

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ClassificationAlgorithmType	X						
ConformanceClass	X	X	X	X	X	X	X
Gallery	X	X	X				
IdentityModel	X	X	X	X	X		
ComparisonAlgorithm	X	X	X	X	X	X	X
ComparisonScore	X	X	X	X	X	X	X
QualityAlgorithm	X						
SupportedBiometric	X	X	X	X	X	X	X
TransformOperation	X						

Introduction

This part of ISO/IEC 30108 defines the architecture, operations, data elements, and basic requirements for biometric identity assurance services – a framework for the implementation of generic, biometric-based identity services within a services-oriented environment. An identity in the context of BIAS comprises a subject, biographic data, and biometric data. Other parts are intended to define specific BIAS implementations (or bindings) within specific environments, for example, SOAP web services.

BIAS services are generic in nature, being modality neutral, and not targeted at any particular business application. These services include those related to identity data management, transformation, and biometric comparison. Services are invoked by a BIAS requester and implemented by a BIAS service provider (responder). It does not prescribe the architecture or business logic of either the requester or service provider.

Two categories of identity services are defined – primitive and aggregate. Primitive services are more atomic and well-defined, whereas the aggregate services tend to be higher level and enable more flexibility on the part of the BIAS service provider.

Two identity models are also defined – person-centric and encounter-based. Person-centric systems maintain a single up-to-date record (set of data) for a given subject, whereas an encounter-based system retains data related to each interaction the subject has with the system.

This part of ISO/IEC 30108 represents a version of BIAS subsequent to that previously standardized by INCITS and OASIS, therefore, it is denoted as version 2.0.

Information technology — Biometric Identity Assurance Services —

Part 1: BIAS services

1 Scope

This part of ISO/IEC 30108 defines biometric services used for identity assurance that are invoked over a services-based framework. It provides a generic set of biometric and identity-related functions and associated data definitions to allow remote access to biometric services.

The binding of these services to specific frameworks is not included in this part of ISO/IEC 30108, but will be the subject of subsequent parts.

Although focused on biometrics, this part of ISO/IEC 30108 will necessarily include support for other related identity assurance mechanisms such as biographic and document capabilities. BIAS is intended to be compatible with and used in conjunction with other biometric standards as described in [Clause 3](#).

Specification of biometric functionality is limited to remote (backend) services. Services between a client-side application and biometric capture devices are not within the scope of this part of ISO/IEC 30108.

Integration of biometric services as part of an authentication service or protocol is not within the scope of this part of ISO/IEC 30108.

2 Conformance

Annex A specifies the conformance requirements for systems/components claiming conformance to this part of ISO/IEC 30108.

3 Normative references

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

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

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

4 Terms and definitions

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

4.1

biometric sample

analogue or digital representation of biometric characteristics prior to biometric feature extraction

Note 1 to entry: As an example, a record containing the image of a finger is a biometric sample.