

National Biometric Security Project

Published Standards Relevant to Biometrics



Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Non M1 US Standards					
AAMVA DL/ID-2005	AAMVA International Specification — DL/ID Card	Voluntary standard for drivers' licenses that includes recommended guidelines for biometric data to be stored on the license	Published	http://www.aamva.org/KnowledgeCenter/DLIDStandards/DL-IDStandard2005.htm	Drivers' Licenses
2009 DL/ID Card Design Standard (CDS)	Personal Identification – AAMVA North American Standard – DL/ID Card Design	The intent of the standard is to improve the security of the DL/ID cards issued by AAMVA's members and to improve the level of interoperability among cards issued by all jurisdictions.	Published	http://www.aamva.org/aamva/DocumentDisplay.aspx?id={6B1585D2-1BCE-4F77-A8CD-BDD325139972}	Drivers' Licenses

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Registry of USG Standards v2.0		This Registry lists recommended biometric standards for USG-wide use.	Published	http://www.biometrics.gov/Standards/Biometric_Standards_Registry_v2.pdf	This document is a useful tool that demonstrates what and how specific standards are being used by the USG
ANSI / NIST ITL 1-2000	Data Format for the Interchange of Fingerprint, Facial, & Scar Mark & Tattoo (SMT) Information	Format for exchanging information in a criminal justice environment	Published	http://www.itl.nist.gov/ANSIASD/sp500-245-a16.pdf	Law Enforcement
ANSI / NIST-ITL 1-2000 Interpol Interpretation	Data Format for the Interchange of Fingerprint, Facial, & Scar Mark & Tattoo (SMT) Information	Format for exchanging information in a criminal justice environment	Published	http://www.interpol.int/Public/Forensic/fingerprints/RefDoc/implementation6.pdf	Interpol Interpretation of the NIST standard.
ANSI / NIST ITL 1-2007	Data Format for the Interchange of Fingerprint Facial, & Other Biometric Information – Part 1	Content, format, and units of measurement for the exchange of fingerprint, palmprint, facial/mugshot, scar mark & tattoo (SMT), iris, and other biometric sample information	Published	http://fingerprint.nist.gov/standard/Approved-Std-20070427.pdf	Revision of ANSI/NIST ITL 1-2000

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ANSI / NIST ITL 2-2008	Data Format for the Interchange of Fingerprint, Facial, & Other Biometric Information – Part 2: XML Version .	Defines in XML format the content and units of measurement for the exchange of information that may be used in the identification process of a subject.	Published	http://fingerprint.nist.gov/standard/xml/index.html	
DoD (EBTS 2.0)	Electronic Biometric Transmission Specification	The DoD EBTS is a transmission specification to be used between DoD systems that capture biometric data and repositories of biometric data.	Published	http://www.biometrics.dod.mil/Files/Documents/Standards/DoD_ABIS_EBTS_v2.0.pdf	Replaces DOD EBTS 1.2
CJIS (EBTS 9.1) IAFIS-DOC-01078-9.1	Electronic Biometric Transmission Specification	This document contain all the information needed regarding a particular type of electronic transaction when communicating with the FBI.	Published	https://fbibiospecs.org/docs/EBTS_v9-1_Final.pdf	

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CJIS (EBTS 9.1) IAFIS-DOC-01078-9.1 (XML version)	Electronic Biometric Transmission Specification	This document contain all the information needed regarding a particular type of electronic transaction when communicating with the FBI.	Published	https://fbibiospecs.org/docs/IEPD_EBTS9.1FinalXML.zip	XML Version
CJIS (EBTS 9.0)	Electronic Biometric Transmission Specification	This document contain all the information needed regarding a particular type of electronic transaction when communicating with the FBI.	Published	http://fbibiospecs.org/docs/EBTS_v9_0_User_Services_Final_11_30_2009.pdf	Update from EBTS 8.1

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CJIS (EBTS 8.1)	CJIS Electronic Biometric Transmission Specification (EBTS)	This document specifies the file and record content, format, and data codes necessary for the exchange of fingerprint, palmprint, facial, and iris information between federal, state, and local users and the FBI.	Published	http://www.fbibiospecs.org/fbibiometric/documents/EBTS_v8.1_11-24-08.pdf	Replaces FBI IAFIS-DOC-01078-7.1
FBI IAFIS-DOC-01078-7.1 Replaces CJIS-RS-0010 (v)7	FBI Electronic Fingerprint Transmission Specification	Definitions for ensuring reliability and quality of fingerprints submitted to the FBI	Published	http://www.fbi.gov/hq/cjisd/iafis/efts71/efts71.pdf	Law Enforcement
CJIS / FBI IAFIS-IC-0110	IAFIS WSQ Gray-Scale Fingerprint Image Compression Specification	Compression standard for fingerprint images	Published	http://citeseer.ist.psu.edu/cache/papers/cs/117/ftp:zSzzSzftp.c3.lanl.govzSzpubzSzWSQzSzdocumentszSzwsqSpec2.pdf/ws-q-gray-scale-fingerprint.pdf	Law Enforcement

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IXM 3.1	Ident Exchange Messaging	Describes standard messaging format for interacting with the US-VISIT/IDENT systems. This guide is intended for the external users who are creating a client application that will interface with one or more US-VISIT/IDENT messaging services	Published	http://www.biometrics.gov/Standards/IXM_Spec_3_1.pdf	
FIPS PUB 201	Federal Information Processing Standards Publication 201 - Personal Identity Verification (PIV) of Federal Employees and Contractors	Standard for Implementing Smart Card Based Personal Identification in the US Government, including biometrics on the cards	Published	http://csrc.nist.gov/publications/fips/fips201-1/FIPS-201-1-chng1.pdf	Federal Government ID
NIST SP 800-73-3	NIST Special Publication 800-73-3 - Interfaces for Personal Identity Verification	Standard for Interfacing with a FIPS 201 Smart Card. Includes data objects for biometrics and a means of calling a match on card.	Published	http://csrc.nist.gov/publications/nistpubs/800-73-3/sp800-73-3_PART1_piv-card-applic-namespace-date-model-rep.pdf	Federal Government ID

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NIST SP 800-76-1	NIST Special Publication 800-76-1 - Biometric Specification for Personal Identity Verification	Detailed technical specifications for the biometrics used in FIPS PUB 201	Published	http://csrc.nist.gov/publications/nistpubs/800-76-1/SP800-76-1_012407.pdf	Note that a very important errata sheet is also available at http://csrc.nist.gov/piv-program/fips201-support-docs.html
NIST SP 800-116	Describe a strategy allowing agencies to PIV-enable their PACS, and migrate to government-wide interoperability.		Published	http://csrc.nist.gov/publications/nistpubs/800-116/SP800-116.pdf	
Global JXDM (version 3.0.3)	Global Justice XML Data Model version 3.0.3	Removes the burden from agencies to independently create exchange standards	Published	http://www.it.ojp.gov/jxdm/3.0.3/jxdm-3.0.3.xls	
NIEM (version 2.0)	National Information Exchange Model version 2.0	Develop and support enterprise wide information exchange standards and processes enabling jurisdictions to share critical information	Published	http://www.niem.gov/niem/index.html	
NIEM (version 2.1)	National Information Exchange Model version 2.1		Published	http://www.niem.gov/niem/index.html	Update from NIEM 2.0

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NIST SP 800-122	Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)	Intended to identify PII and determining what level of protection each instance of PII requires.	Published	http://csrc.nist.gov/publications/nistpubs/800-122/sp800-122.pdf	
ICAO Standards					
ICAO Document 9303 Part 1 Volume 1	Passports with Machine Readable Data Stored in Optical Character Recognition Format	General specification for physical characteristics and layout of passports. Should be used in conjunction with Volume 2 for biometric enabled passports	Published	http://icaodsu.openface.ca/documentItemView.ch2?ID=7986	
ICAO Document 9303 Part 1 Volume 2	Specifications for Electronically Enabled Passports with Biometric Identification Capability	Defines the logical data structure, security and other elements related to biometric enabled electronic passports	Published	http://icaodsu.openface.ca/documentItemView.ch2?ID=9749	

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ICAO Document 9303 Part 2 Volume 1	Machine Readable Visas	Contains the specifications for visas which include specifications for a Format-A visa (the original full-size visa) and an alternative, smaller, Format-B visa	Published	http://icaodsu.openface.ca/documentItemView.ch2?ID=7991	
ICAO Document 9303 Part 3 Volume 1	MRtds with Machine Readable Data Stored in Optical Character Recognition Format.	Updates and replaces the specifications for machine readable official travel documents as published in the second edition	Published	http://icaodsu.openface.ca/documentItemView.ch2?ID=9932	
ICAO Document 9303 Part 3 Volume 2	Size 1 and Size 2 Machine Readable Official Travel Documents	Defines the technical specifications for two sizes (TD-1 and TD-2) of machine readable official travel documents, including the crew member certificate.	Published	http://icaodsu.openface.ca/documentItemView.ch2?ID=7996	
Other Standards					

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OASIS XCBF 1.1	OASIS XML Common Biometric Format	Provides an XML encoding of CBEFF patron formats	Published	http://www.oasis-open.org/committees/download.php/3353/oasis-200305-xcbf-specification-1.1.doc	
X9.84 - 2010	ANSI X9.84-2010 Biometric Information Management and Security for the Financial Services Industry	This Standard describes the security framework for using biometrics for authentication of individuals in financial services	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+X9.84-2010	Revises X9.84 - 2003
ISO 19092:2008	ISO 19092:2008 Financial Services - Biometrics - Part 1 - Security Framework	Describes the security framework for using biometrics for authentication of individuals in financial services	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50145	Revision of ISO 19092-2:2006
ISO 7816-11:2004	ISO / IEC 7816-11:2004 Identification Cards – Integrated circuit cards – Part 11: Personal verification through biometric methods	Biometrics commands and data objects to use with smartcards	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ISO%2FIEC+7816%2D11%3A2004	Produced by ISO/IEC JTC 1 SC 17 WG 4.
SIA BIO-01-1993.02(R2000.06)	Biometric Standard - Vocabulary for Testing	Defines terminology to be used with biometric technology testing and evaluation	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=SIA+BIO%2D01%2D1993%2E02%28R2000%2E06%29	This standard is being rapidly outdated by work in M1, SC 27 and SC 37

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ILO SID-0002	Seafarers' Identity Documents Convention (Revised), 2003 (No. 185) - The standard for the biometric template required by the Convention	Standard for using fingerprints in a two dimensional bar code in a Seafarers' Identity Document for verification of seafarers. Includes draft versions of ISO 19794-2 and 19794-4	Published	http://www.ilo.org/public/english/dialogue/sector/papers/maritime/sid0002.pdf	Uses a specific form of ISO 19794-2 to store a two finger minutiae template
ISO 18013-1	Information technology -- Personal identification -- ISO compliant driving licence -- Part 1: Physical characteristics and basic data set	establishes the design format and data content of an ISO-compliant driving licence (IDL) with regard to the human-readable (visual) features and the placement of ISO machine-readable technologies on the card	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41920	

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ISO/IEC 18013-2	Information technology -- Personal identification -- ISO compliant driving licence -- Part 2: Machine-readable technologies	Establishes guidelines for the content and formatting of data stored on an ISO compliant driving licence (IDL) using machine-readable technologies.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42199	
ISO/IEC 11694-6	Identification cards -- Optical memory cards -- Linear recording method -- Part 6: Use of biometrics on an optical memory card	Describes the parameters for optical memory cards and the use of such cards for the storage and interchange of digital data.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42204	

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ISO/IEC 24761-2009	Security Techniques – Authentication Context for Biometrics	Defines a methodology for remotely exchanging information about the devices and process (the context) used in biometric authentication to allow security evaluation by remote authenticators.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41531	
ISO/IEC 19792-2009	Security Techniques - Security Evaluation of Biometrics	Framework for evaluating security of biometric technology when used for physical or logical access to put it on a similar footing to other security techniques	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51521	

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ISO/IEC 18013-3	Information technology -- Personal identification -- ISO compliant driving licence -- Part 3: Access control, authentication and integrity validation	Establishes guidelines for the design format and data content of an ISO-compliant driving licence (IDL) with regard to human-readable features	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50351	
INCITS M1 STANDARDS					
M 1.2 Standards - Biometric Technical Interfaces					
ANSI / INCITS 358-2002 (R2007)	BioAPI Specification (change control held by the BioAPI Consortium)	Defines an application programming interface for biometric software	Revised and Amended	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+358-2002+(R2007)	
ANSI / INCITS 358-2002/AM1-2007	BioAPI Specification (Version 1.1) - Amendment 1 - Support for Biometric Fusion	Adds support to BioAPI for multibiometrics or biometric fusion	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+358-2002%2fAM1-2007	Product of 1703-D project.
ANSI / INCITS 429-2008	Conformance Testing Methodology for INCITS 358:2002 BioAPI Specification	Standardized methods of determining whether a software system conforms to the BioAPI standard INCITS 358-2002	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+429-2008	

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ANSI / INCITS 398-2008	American National Standard for Information Technology - Common Biometric Exchange Formats Framework (CBEFF) Revision	Specifies a common set of data elements necessary to support multiple biometric technologies	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+398-2008	Revision of 398-2005
ANSI / INCITS 442-2008	Information technology - Biometric Identity Assurance Services (BIAS)	Defines a framework for deploying and invoking identity assurance capabilities that can be readily accessed using services-based frameworks (e.g. Web services)	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+442-2008	
ANSI / INCITS 434-2007	Information technology - Tenprint Capture Using BioAPI	Specifies how to use BioAPI for capturing tenprints, as commonly practiced by law enforcement and other government agencies	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+434-2007	

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ANSI / INCITS 383-2008	Biometric Profile - Interoperability and Data Interchange Biometrics-Based Verification and Identification of Transportation Workers	Profile for Using Other Biometric Standards in Applications Involving Transportation Workers (primarily for TSA)	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+383-2008	Replaces INCITS 383-2004
INCITS 421-2006	Biometric Profile - Interoperability and Data Interchange - DoD Implementations	Profile for Using other Biometric Standards in Department of Defence Applications	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+421%2D2006	Replaces INCITS 1676-D
ANSI / INCITS 422-2007	Application Profile for Commercial Biometric Physical Access Control	Profile for Using other Biometric Standards in Applications Related to Physical Access Control	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+422-2007	Replaces INCITS 1706-D
M 1.3 Standards - Biometric Data Interchange Formats					
INCITS 377-2009	Finger Pattern Based Interchange Format	A data interchange format for fingerprint systems using a pattern based approach	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+377-2009	Revision of 377-2004

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ANSI / INCITS 378-2009	Finger Minutiae Format for Data Interchange	A data interchange format for fingerprint systems using a minutiae based approach	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+378-2009	Revision of 378-2004
ANSI / INCITS 379-2004	Iris Image Interchange Format	A data interchange format for iris recognition systems that standardizes a rectangular or polar image of the iris	Withdrawn	http://www.techstreet.com/standards/INCITS/379_2004?product_id=1161046	
ANSI / INCITS 381-2009	Finger Image Based Data Interchange Format	A data interchange format for fingerprint images	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+381-2009	Revision of 381-2004
ANSI / INCITS 385-2004	Face Recognition Format for Data Interchange	A data interchange format for images of faces	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+385%2D2004	

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ANSI / INCITS 395-2005	Information Technology - Biometric Data Interchange Formats - Signature/Sign Data	This Standard specifies a data interchange format for representation of digitized sign or signature data, for the purposes of biometric enrollment, verification or identification through the use of Raw Signature/Sign Sample Data or Common Feature Data.	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+395-2005	
ANSI / INCITS 394-2004	Information technology - Application Profile for Interoperability, Data Interchange and Data Integrity of Biometric Based Personal Identification for Border Management	Application Profile for Interoperability, Data Interchange and Data Integrity of Biometric-Based Personal Identification for Border Management	Published	http://www.techstreet.com/standards/INCITS/394_2004?product_id=1184720	
ANSI / INCITS 396-2005	Hand Geometry Format for Interchange	A data interchange format for use with hand geometry verification	Published	http://www.techstreet.com/standards/INCITS/396_2005?product_id=1215406	

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ANSI/INCITS 439-2008	Information technology - Fusion Information Format for Data Interchange	A data interchange format to pass score level information to any fusion algorithm	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+439-2008	
INCITS 423	Conformance Testing Methodology Standard for Biometric Data Interchange Format Standards				
ANSI / INCITS 423.1-2008	Generalized Conformance Testing Methodology	Common elements and framework for conformance testing of data interchange format standards	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+423.1-2008	
ANSI / INCITS 423.2-2008	Conformance Testing Methodology for INCITS 378:2004, Finger Minutia Format for Data Interchange	Standardized methods of determining whether a biometric system conforms to the finger minutiae data interchange format	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+423.2-2008	

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ANSI / INCITS 423.3-2009	Conformance Testing Methodology for ANSI INCITS 377-2004, Finger Pattern Data Interchange Format	Testing of implementations claiming conformance to the Finger Pattern Data Interchange Format specification defined in ANSI INCITS 377-2004.	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+423.3-2009	
ANSI / INCITS 423.4-2009	Conformance Testing Methodology for INCITS 381-2004, Finger Image-Based Data Interchange Format	Testing of implementations claiming conformance to the Finger Image-Based Data Interchange Format specification as per ANSI INCITS 381-2004.	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=INCITS+423.4-2009	
ANSI INCITS 456	Speaker Recognition Format for Raw Data Interchange (SIVR)	Standard defines a method of representing raw speaker identification and verification (SIV) data using the concept of Session and Instances within a Session	Published	http://www.techstreet.com/standards/INCITS/456_Draft_3?product_id=1632185	Revision 8 (456:200x)
M 1.5 Standards - Biometric Performance Testing and Reporting					

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ANSI / INCITS 409	Biometric Performance Testing and Reporting			Replaces INCITS 1602-D	
ANSI / INCITS 409.1-2005	Principles and Framework	Defines the overall framework for performance testing and reporting, including definitions, general guidelines, etc.	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+409+-+Biometric+Performance+Testing+And+Reporting+Package	Pending Withdrawal
ANSI / INCITS 409.2-2005	Technology Testing and Reporting	Specific standards for testing a specific technology, usually involving exhaustive off-line tests	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+409+-+Biometric+Performance+Testing+And+Reporting+Package	Pending Withdrawal
ANSI / INCITS 409.3-2005	Scenario Testing and Reporting	Specific standards for tests that try to simulate specific usage scenarios and thus typically involve live capture, environmental issues , etc.	Published	http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+INCITS+409+-+Biometric+Performance+Testing+And+Reporting+Package	Pending Withdrawal
ANSI / INCITS 409.4-2006	Operational Testing Methodologies	Specific standards for tests conducted under operational conditions when the biometric system is being used in the field	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+409%2E4%2D2006	

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ANSI / INCITS TR-45 - 2009	Framework for Testing Methodologies for Specific Modalities	Provides guidance for development of modality-specific biometric testing methodologies.	Published	http://www.techstreet.com/standards/INCITS/TR_45_2009?product_id=1635706	an ANSI Technical Report for Part 7 of INCITS 409
M 1.6 Standards - Cross Jurisdictional and Societal Aspects of Biometric Implementations					
ISO/IEC JTC 1 SC 37 STANDARDS					
WG 2 Standards - Biometric technical interfaces					
ISO/IEC 19784	Biometric Application Programming Interface (BioAPI)	Defines an Application Programming Interface for biometric software			
Part 1	BioAPI Specification	Defines the architecture and all of the API/SPI calls	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=33922&ICS1=35&ICS2=40&ICS3=	
Part 1 Amendment 1	BioGUI Specification	Modifies GUI call-back functions to allow the Graphical User Interface in a BioAPI system to be controlled by the application rather than the biometric software	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43613	

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Part 1 Amendment 2	Framework Free BioAPI	Adds support for BioAPI on some limited capacity devices by leaving out the overhead of the framework	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50786	
Part 1 Amendment 3	Support for the interchange of certificates and security assertions, and other security aspects	Adds support for encryption and digital signatures to BioAPI	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50787	
Part 2	Biometric Archive Function Provider Interface	Augments BioAPI to define function calls for interfacing with an archiving module that stores biometric data	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43303&ICS1=35&ICS2=40&ICS3=	
ISO/IEC 19785	Common Biometric Exchange Formats Framework (CBEFF)	To allow biometric data to be exchanged with clearly understood header elements defined in a registry of formats			

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 1	Data Element Specification	Defines the elements permitted in CBEFF structures and which ones are mandatory and which ones are optional	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41047&ICS1=35&ICS2=40&ICS3=	
Part 1 Amendment 1	Data element specification - Amendment 1	Defines structures and data elements for biometric information records	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=53729	
Part 2	Procedures for the Operation of the Biometric Registration Authority	Explains how the registration authority will operate, how to register a new format, etc	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41048&ICS1=35&ICS2=40&ICS3=	IBIA will serve as the registration authority
Part 2 Amendment 1	Procedures for the Operation of the Biometric Registration Authority - Amendment 1	Specifies the procedures to be followed by the Biometric Registration Authority	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=53730	
Part 3	Patron Format Specifications	Gives examples, in various notations, of specific patron formats that may be useful	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43615	

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Part 3 Amendment 1	Patron Format Specifications - Amendment 1	Specifies and publishes registered CBEFF patron formats	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=53731	
Part 4	Security Block Format Specifications	Provides information on the specific techniques that can be used to define a CBEFF security block	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50860	
ISO/IEC 24708	BioAPI Interworking Protocol (BIP)	Protocol for Interworking Between BioAPI Systems and a Central Repository - Defines a communications protocol for exchanging information between BioAPI systems	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43611	
ISO/IEC 24709	Conformance Testing for BioAPI	Standardized methods of determining whether a software system conforms to the BioAPI standard			

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Part 1	Methods & Procedures	Defines overall test methodology and a test assertion language	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38819&ICS1=35&ICS2=40&ICS3=	
Part 2	Test Assertions for Biometric Service Providers	Defines specific assertions that must be tested in order to verify conformance for BSPs	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43352&ICS1=35&ICS2=40&ICS3=	
ISO/IEC TR 24722: 2007	Information Technology - Biometrics - Multi-Modal and other Multi-Biometric Fusion	This Technical Report is a general primer on biometric fusion that may identify standardization requirements in this area	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38832	
ISO/IEC TR 24741: 2007	Technical Report for a Biometrics Tutorial	An overview of biometrics, biometric technologies, modes, processes, applications, and some related topics.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38851	

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ISO/IEC 29141:2009	Information Technology — Tenprint Capture Using BioAPI	Specifies requirements for the use of BioAPI 2.1, specified in ISO/IEC 19784-1 with Amd. 1, a software interface standard, for the purpose of performing a tenprint capture operation.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=45164	
WG 3 Standards - Biometric Data Interchange Formats					
ISO/IEC 19794	Biometric Data Interchange Formats	Data interchange formats to allow exchange of biometric data and interoperability between different biometric systems using a particular modality or, in some cases, a specific sub-type of a modality			
Part 1	Framework	Describes overall framework, including parts of a biometric system and other generalities	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38745&ICS1=35&ICS2=40&ICS3=	

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 2	Finger Minutiae Data	Uses minutiae points from a fingerprint	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38746&ICS1=35&ICS2=40&ICS3=	
Part 2:2005 Correction 1:2009	Finger Minutiae Data Technical Corrigendum 1	to correct technical errors and ambiguities in ISO/IEC 19794-2:2005, which were inadvertently introduced in drafting and could lead to incorrect application of that International Standard.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50378	
Part 2 - Amendment 1	Detailed Description of Finger Minutiae Location, Direction and Type	Provides supplementary guidance on the definition of minutiae points in a fingerprint image	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=52537	
Part 3	Finger Pattern Spectral Data	Uses spectral analysis (Fourier components, Gabor wavelets, etc.) of a fingerprint	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38747	
Part 4	Finger Image Data	Uses an image of a fingerprint	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38748	

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Part 5	Face Image Data	Uses an image of a face	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38749	
Part 5 Amendment 1, 2007	Conditions for Taking Photographs for Face Image Data	Specifies details on how to take photographs either in a photographer's studio or a photo booth to give optimal face recognition performance	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43057	
Part 5 Amendment 2, 2009	3 Dimensional Face Image Data Interchange Format	Supports face image data in the third dimension (z-axis) in addition to the current two dimensional data (x-axis and y-axis)	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50376	

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 5 Correction 1, 2008	Face Image Data — Technical Corrigendum 1	to correct technical errors and ambiguities in ISO/IEC 19794-5:2007, which were inadvertently introduced in drafting and could lead to incorrect application of that International Standard.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=44907	
Part 5 Correction 2, 2008	Face Image Data — Technical Corrigendum2	to correct technical errors and ambiguities in ISO/IEC 19794-5:2007, which were inadvertently introduced in drafting and could lead to incorrect application of that International Standard.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51410	
Part 6	Iris Image Data	Uses a rectilinear or polar image of an iris	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38750	

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 7	Signature/Sign Time Series Data	Uses time based series of data such as x and y positions on a signature pad	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38751	
Part 7 Correction 1, 2009	Signature/Sign Time Series Data		Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=54505	
Part 8	Finger Pattern Skeletal Data	Uses a skeletal decomposition of a finger (based on thinned ridges)	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40715&ICS1=35&ICS2=40&ICS3=	
Part 9	Vascular Image Data	Uses an image of sub-surface veins	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43637&ICS1=35&ICS2=40&ICS3=	
Part 10	Hand Geometry Silhouette Data	Uses a silhouette of a hand or part of a hand	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43638	
ISO/IEC 29109	Conformance Testing Methodology for Biometric Data Interchange Records as defined in ISO/IEC 19794 Biometric Data Interchange Format Standard	Defines a conformance testing methodology, including test procedures, test assertions and in some cases, test data, for testing conformance to each of the data interchange formats defined in ISO 19794			

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 1	Generalized Conformance Testing Methodology	Provides overall guidance on test methodology and a syntax for defining test assertions	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=45132	
Part 2	Finger Minutiae Data	Conformance assertions and specific tests for ISO 19794-2	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50878	
Part 4	Finger Image Data	Conformance assertions and specific tests for ISO 19794-4	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50906	
ISO/IEC 29159	Information Technology — Biometric Calibration, Augmentation and Fusion Data — Part 1: Fusion Information Format	Establishes machine readable data formats to describe the statistics of similarity score inputs to a fusion process.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=45238	
ISO/IEC 29794	Biometric Sample Quality	Methods for use of ISO/IEC 19794 Biometric Data Interchange Format Standards for interchange and interpretation of biometric sample quality scores			

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Part 1	Framework	Defines aspects of biometric sample quality that are not modality specific.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43583	
Part 4	Technical Report on Fingerprint Image Data	Defines specific methods for developing quality scores for fingerprint images.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50911	
Part 5	Technical Report on Face Image Data	Defines specific methods for developing quality scores for face images.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50912	
WG 4 Standards - Biometric Function Architecture and Related Profiles					
ISO/IEC 24713	Biometric profiles for interoperability and data interchange				
Part 1	Overview of biometric systems and biometric profiles	Defines the overall architecture of a biometric system and defines appropriate terms, etc.	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38823	
Part 2	Physical Access Control for Employees at Airports	Designed for employees in a highly secure workplace such as the airside of an airport	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46330	

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 3	Biometric-Based Verification and Identification of Seafarers	Designed for seafarers in their unique environment on ships and at ports where they may use a Seafarers' Identity Document (International Labour Organization is the main client)	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=50683	
WG 5 Standards - Biometric Testing and Reporting					
ISO/IEC 19795	Biometric Performance Testing & Reporting				
Part 1	Principles & Framework	Defines the scientific philosophies and principles that are fundamental to biometric testing	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41447&ICS1=35&ICS2=40&ICS3=	
Part 2	Testing Methodologies for Technology and Scenario Evaluation	Gives specific details on methods and techniques for conducting a scenario or technology test	Published	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=41448&ICS1=35&ICS2=40&ICS3=	

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document (Note that documents are not necessarily available to everyone. Where a direct link is unavailable, follow the link and look for the document number. A password or payment may be required.)	Remarks
Part 3 Technical Report	Technical Report on Modality-Specific Testing	Attempts to define a taxonomy of biometric applications so that different testing methods can be specified where appropriate	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=41449	
Part 4	Interoperability Performance Testing	Specifies how to conduct performance based interoperability testing for biometric systems	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=46329	
WG 6 Standards - Cross- Jurisdictional and Societal Aspects of Biometrics					
ISO/IEC 24714-1	Jurisdictional and societal considerations for commercial applications -- Part 1: General guidance	A complex report that defines guidelines for data privacy, providing support for those with disabilities, and similar societal or legal issues related to biometrics	Published	http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=38824	

RED FONT INDICATES A CHANGE (normally an addition) FROM PREVIOUS REPORT.