

Published Standards Relevant to Biometrics

Standard Number or Project Code	Official Name of Standard	Purpose	Current Status	Link to Latest Document <i>(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.)</i>	Remarks
Non M1 US Standards					
AAMVA DL/ID-2005	National Standard for the Drivers License/Identification Card	Voluntary standard for drivers' licenses that includes recommended guidelines for biometric data to be stored on the license	Published	http://www.aamva.org/Documents/std2005DL-IDCardSpecV2FINAL.pdf	Drivers' Licenses
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://it.ojp.gov/servlet/ShowDocument?attachment_id=106	Law Enforcement. A project to review and update this standard began in April, 2005
CJIS / FBI IAFIS-IC-0110	FBI WSQ (Wavelet Scalar Quantization)	Compression standard for fingerprint images	Published	Link not available	Law Enforcement
CJIS-RS-0010 (v)7	FBI Electronic Fingerprint Transmission Standard.	Definitions for ensuring reliability and quality of fingerprints submitted to the FBI	Published	http://www.fbi.gov/hq/cjisd/iafis/efts_70.pdf	Law Enforcement
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://www.csrc.nist.gov/publications/fips/fips201/FIPS-201-022505.pdf	Federal Government ID

NISTIR 6529-A	CBEFF (Common Biometric Exchange Formats Framework)	Definition of a standard framework of registered file formats containing known header elements and biometric data	Published	http://www.itl.nist.gov/div893/biometrics/documents/NISTIR6529A.pdf	IBIA acts as registrar of format owners and types. Now essentially replaced by INCITS 398
NIST SP 800-73	NIST Special Publication 800-73 - 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/SP800-73-Final.pdf	
NIST SP 800-76	NIST Special Publication 800-76 - Biometric Data 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/sp800-76.pdf	
Other Standards					
OASIS XCBF 1.1	OASIS XML Common Biometric Format	Provides an XML encoding of CBEFF patron formats	Published	http://www.oasis-open.org/committees/documents.php?wg_abbrev=xcbf	
X9.84 - 2003	ANSI X9.84-2003 Biometric Information Management and Security for the Financial Services Industry	Security standards for the collection, distribution and processing of biometric data within the financial services industry	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+X9%2E84%2D2003	A newer version is underway in ISO, which includes the OASIS XCBF format.
ISO 7816-11:2004	ISO / IEC 7816-11:2004 Identification Cards – Integrated circuit cards – Part 11: Personal verification through biometric methods	Biometrics guidelines for 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

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
M1.2 Standards					
INCITS 358-2002	BioAPI Specification (Version 1.1)	Defines an application programming interface for biometric software	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+358%2D2002	
INCITS 398-2005	Common Biometric Exchange Formats Framework (CBEFF)	Describes a set of data elements for describing biometric data in various file structures to support exchange of biometric data	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+398%2D2005	
M1.3 Standards					
INCITS 377-2004	Finger Pattern Based Interchange Format	A data interchange format for fingerprint systems using a pattern based approach	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+377%2D2004	
INCITS 378-2004	Finger Minutiae Format for Data Interchange	A data interchange format for fingerprint systems using a minutiae based approach	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+378%2D2004	
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	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+379%2D2004	
INCITS 381-2004	Finger Image Based Interchange Format	A data interchange format for fingerprint images	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+381%2D2004	
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	
INCITS 395-2005	Biometric Data Interchange Formats - Signature/Sign Data	A data interchange format for signatures or signs when used in biometrics	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+395%2D2005	
INCITS 396-2005	Hand Geometry Format for Data Interchange	A data interchange format for use with hand geometry verification	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+396%2D2005	

M1.4 Standards					
INCITS 383-2004	Application Profile - Biometric 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/ansidocstore/product.asp?sku=ANSI+INCITS+383%2D2004	
INCITS 394-2004	Application Profile - Biometric Based Personal Identification for Border Management	Profile for Using Other Biometric Standards in Applications Involving Border Management (primarily for State Department and DHS)	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+394%2D2004	
M1.5 Standards					
INCITS 1602-D	Multi-Part Standard on Biometric Performance Testing and Reporting				
INCITS 409.1-2005	Principals and Framework	Defines the overall framework for performance testing and reporting, including definitions, general guidelines, etc.	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+409%2E1%2D2005	
INCITS 409.2-2005	Biometric Testing Methodologies	Specific standards for testing a specific technology, usually involving exhaustive off-line tests	Published	http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+INCITS+409%2E2%2D2005	
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/ansidocstore/product.asp?sku=ANSI+INCITS+409%2E3%2D2005	
ISO 19794	Multi-part 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 (e.g. finger minutiae, finger pattern spectral, finger image, finger pattern skeletal). Many modalities are supported.		http://isotc.iso.org/livelink/livelink/fetch/2000/2122/327993/2262372/customview.html?func=ll&objId=2262372&objAction=browse&sort=name	

Part 2	Finger Minutiae Data	Uses minutiae points from a fingerprint	ISO Standard	http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=38746&ICS1=35&ICS2=40&ICS3=	See INCITS 378-2004
Part 4	Finger Image Data	Uses an image of a fingerprint	ISO Standard	http://webstore.ansi.org/ansidocsstore/product.asp?sku=ISO%2FIEC+19794%2D4%3A2005	See INCITS 381-2004
Part 5	Face Image Data	Uses an image of a face	ISO Standard	http://webstore.ansi.org/ansidocsstore/product.asp?sku=ISO%2FIEC+19794%2D5%3A2005	See INCITS 385-2004
Part 6	Iris Image Data	Uses a rectilinear or polar image of an iris	ISO Standard	http://webstore.ansi.org/ansidocsstore/product.asp?sku=ISO%2FIEC+19794%2D6%3A2005	See INCITS 379-2004