

**M1/02-0079**

**Project Proposal**

**Application Profile - Interoperability and Data Interchange - Biometrics Based Verification and Identification of Transportation Workers**

**1. Source of the Proposed Project**

**1.1. Title**

Application Profile - Interoperability and Data Interchange - Biometrics Verification and Identification of Transportation Workers

**1.2. Date Submitted**

May 7, 2002

**1.3. Proposer**

INCITS Technical Committee M1 - Biometrics

**2. Process Description for the Proposed Project**

**2.1. Project Type**

D - this is a standard development project.

**2.2. Type of Document**

The project is expected to result in an ANSI/INCITS standard.

**2.3. Definitions of Concepts and Special Terms**

Base Standards - define fundamentals and generalized procedures. They provide an infrastructure that can be used by a variety of applications, each of which can make its own selection from the options offered by them.

Application Profiles - define conforming subsets or combinations of base standards used to provide specific functions. Application Profiles identify the use of particular options available in the base standards, and provide a basis for the interchange of data between applications and interoperability of systems.

**2.4. Expected Relationship with Approved Reference Models, Architectures, etc.**

None

## **2.5. Recommended INCITS Development Technical Committee**

INCITS Technical Committee M1 - Biometrics

## **2.6. Anticipated Frequency and Duration of Meetings**

It is anticipated that this project would require one-day meetings approximately four times annually.

## **2.7. Target Data for Initial Public Review**

It is estimated that the draft document would be ready for submission to INCITS for Milestone 4 processing in January 2003.

## **2.8. Estimated Useful Life of Standard**

While this is a very new application area and the proposed application profile standard is a new and unique effort, it is anticipated that this standard, and subsequent updates will be useful for the foreseeable future.

## **3. Business Case for Developing the Proposed Standard**

### **3.1. Description**

The proposed standard is intended to support the deployment of biometric technologies in order to provide for significantly higher levels of interoperability and data interchange in biometric-based worker verification and identification within transportation systems (e.g., civil aviation systems).

### **3.2. Existing Practice and the Need for a Standard**

There is no existing practice.

The proposed application profile standard will describe the targeted applications and systems and will specify the use of particular options available in base standards. This is necessary to support interoperability and interchange of biometrics-based worker verification and identification between transportation applications and systems. This is especially critical in airports. Airports are owned and operated by many different organizations. There are many companies and government agencies operating in airports which have to cooperate on collective security needs. Such environments necessitate the use of application profiles.

### **3.3. Implementation Impacts of the Proposed Standard**

#### **3.3.1. Development Costs**

Technical editor labor is expected to total about one quarter of a staff-year.

### **3.3.2. Impact on Existing or Potential Markets**

The new priorities for homeland defense in transportation systems drive the potential market. Development of this proposed application profile standard should help to accelerate the deployment of standards-based biometric applications within transportation systems.

### **3.3.3. Costs and Methods for Conformity Assessment**

This application profile could provide a basis for the development of uniform, internationally recognized, interoperability and conformance tests. The willingness of vendors and end-users to jointly define testing requirements is presently unknown. The possible testing environment may range from the use of suppliers' declarations to third party testing. Therefore the cost of conformity assessment is not known at this time.

### **3.3.4. Return on Investment**

There is no known data on which to make an estimate.

## **3.4. Legal Considerations**

### **3.4.1. Patent Assertions**

Determination of patents relevant to this proposed standard will be dependent upon the selection and specification of options in base standards for use in this application profile.

### **3.4.2. Dissemination of the Standard**

Drafts of this standard will be distributed electronically. There may be distribution constraints as this document reaches different stages of development and processing within INCITS and ISO/IEC JTC1.

## **4. Related Standards Activities**

### **4.1. Existing Standards**

There are no known existing application profile standards.

Existing base standards, which may be specified in the proposed application profile standard, include:

Common Biometric Exchange File Format (CBEFF), NISTIR 6529-2001.

An augmented version of CBEFF is under development by the NIST/BC Biometric Working Group.

ANSI/INCITS 358-2002 - Information technology - BioAPI Specification

ANSI/NIST-ITL 1-2000, Standard Data Format for the Interchange of Fingerprint, Facial, & Scar mark & Tattoo (SMT) Information

ANSI/X9 X9.84-2001 - Biometric information management and security

ISO/IEC 10918 - Information technology - Digital Compression and coding of continuous-tone still images (JPEG) (Parts 1-4)

ISO/IEC 15444 - Information technology - JPEG 2000 Image Coding System (Parts 1-10)

Federal Information Processing Standard (FIPS) - FIPS 197 Advanced Encryption Standard (AES) - November 2001

ISO/IEC WD 18033 - Information technology - Security techniques - Encryption algorithms (Parts 1-3)

ISO/IEC CD 7816-11.2 - Identification cards - Integrated circuit(s) cards with contacts - Part 11 Personal verification through biometric methods in integrated circuit cards

Communication standards, such as the IETF RFCs for TCP/IP

#### **4.2. Related Standards Activity**

Related standards activity includes: INCITS Technical Committees B10, L3, and T4; ASC X9; NIST/BC Biometric Interoperability, Performance and Assurance WG, BioAPI Consortium, IETF, and NIST ITL

#### **4.3. Recommendations for Close Liaison**

INCITS Technical Committees B10, L3, and T4.

ASC X9F4

NIST/BC Biometrics WG

BioAPI Consortium

IBIA

TBF

ICAO