

Project Proposal – Application Profile for Interoperability, Data Interchange and Data Integrity of Biometric Based Personal Identification for Border Crossing

1. Source of the Proposed Project

1.1. Title

“Application Profile for Interoperability, Data Interchange and Data Integrity of Biometric Based Personal Identification for Border Crossing”

1.2. Date Submitted

**August 21, 2002**

1.3. Proposer

M1

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

None

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

None

2.5. Recommended INCITS Development Technical Committee

M1

2.6. Anticipated Frequency and Duration of Meetings

It is anticipated that this project would require one-day meetings approximately quarterly.

2.7. Target Date for Initial Public Review

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

2.8. Estimated Useful Life of Standard

There is no known limitation on the useful life of this proposed standard.

3. Business Case for Developing the Proposed Standard

3.1. Description

This proposed Application Profile will define the functional requirements for biometrics-based verification and identification of persons within border crossing

applications and systems and will reference the use of specific requirements and/or options in relevant base standards in order to provide for biometric interoperability and data interchange in border crossing systems.

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

Currently, there is no standard addressing the interoperability of biometric functions and the interchange of biometric data between border crossing applications.

In the post September 11, 2001 environment, interoperability and data interchange in biometrics-based border crossing verification and identification systems are critical to increasing security and supporting the evolution of new and improved systems. Border crossing systems are the individual responsibility of each nation, but many nations will want to develop or acquire systems that interoperate with other nations' systems. Also, since both policy and technology evolve, it is important that earlier systems be developed according to well designed technical standards and methods of original data capture so as to accommodate interoperability with later, improved systems. The existence of this Application Profile will also facilitate policy decisions that can reference a fixed (or thoughtfully evolving) standard defining the technological functions and interoperability of biometrics-based personal verification and identification.

### 3.3. Implementation Impacts of the Proposed Standard

#### 3.3.1. Development Costs

Since relevant work has already been performed within existing standards groups and federal agencies, it is expected that the costs related to further development would be low.

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

Existing markets for biometric technology should experience added impetus from the benefits of interoperability. New markets (such as interstate driver license verification and passport verification) will open as a result of this standard.

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

Conformity assessment has not yet been defined. It is possible that the standard will define some testing concepts, and allow vendors and customers to jointly define testing to their own requirements.

#### 3.3.4. Return on Investment

There is no data on which to make an estimate.

### 3.4. Legal Considerations

#### 3.4.1. Patent Assertions

There are no known patents relevant to this standard.

#### 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. There are no known IPR issues.

#### 4. Related Standards Activities

##### 4.1. Existing Standards

- ICAO (International Civil Aviation Organization) Document 9303, Machine Readable Travel Documents (reported to be under revision)
- ISO/IEC FDIS 9594-8 Information technology - Open Systems Interconnection - The Directory: Public-key and attribute certificate frameworks
- NISTIR 6529-2001, Common Biometric Exchange File Format
- 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)
- 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
- NIST SP 800-25 – Federal Agency Use of Public Key Technology for Digital Signature and Authentication

##### 4.2. Related Standards Activity

This proposed standard is expected to be compatible with the augmented version of CBEFF (Common Biometric Exchange File Format) being developed by the NIST/Biometric Consortium Biometric Interoperability and Performance Assurance Working Group.

ICAO is chartered by the United Nations to develop standards for Machine Readable Travel Documents (e.g., visas and passports); this proposed standard will consider the ICAO MRTD standard.

##### 4.3. Recommendations for Close Liaison

INCITS Technical Committee B10

INCITS Technical Committee L3

INCITS Technical Committee T4

ICAO (International Civil Aviation Organization) Technical Advisory Group (TAG) on Machine Readable Travel Documents

ASC X9F4

NIST/BC Biometrics Working Group

BioAPI Consortium

M1/02-0177

International Biometrics Industry Association

The Biometric Foundation

International Civil Aviation Organization

Center for Identification Technology Research