

## M1/04-0297

### Project Proposal – Conformance Testing Methodology for ANSI INCITS 358-2002, BioAPI Specification

#### 1. Source of the Proposed Project

##### 1.1. Title

“Conformance Testing Methodology for ANSI INCITS 358-2002, BioAPI Specification”

##### 1.2. Date Submitted

May 6, 2004

##### 1.3. Proposer

INCITS M1

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

##### 2.1. Project Type

D – This is a standards 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

*Conformance*- The fulfillment of a product, process or service of specified requirements

*Conformance Testing*: Evaluation of conformance by means of testing.

*Assertions* – The specification (description) for testing a conformance requirement. These are specific class of conditions that can be tested.

*Test case* – a description of the actions (e.g., condition of the test, expected results) required to achieve a specific test purpose or combination of test purposes.

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

The standard will be aligned with the framework described in ANSI INCITS 358-2002, BioAPI Specification

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

INCITS Technical Committee M1, Biometrics  
(INCITS Technical Committee M1.2 – Biometrics Technical Interfaces)

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

It is anticipated that this project would require half-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 in January 2005.

#### 2.8. Estimated Useful Life of Standard

It is anticipated that this standard could be superseded by an international standard within the next five years.

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

#### 3.1. Description

The proposed standard would establish the specification of a conformance testing methodology for ANSI INCITS 358-2002, BioAPI Specification. The proposed standard will include a core set of critical test assertions to verify conformance of applications, frameworks and Biometric Service Providers primarily focused on one-to-one (verification) functions. In summary, it would include concepts, framework, requirements, conformance testing procedures, test parameters, and criteria to achieve claim of conformance to the standard, a description of the assertion language, and the core set of critical assertions.

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

Currently there are no existing standards specifying conformance testing methodologies for ANSI INCITS 358-2002. A project is underway in JTC 1 SC37 to develop a similar testing methodology for ISO/IEC FCD 19784-1 (the international version of the BioAPI specification). The proposed standard would limit its scope of work to the national version of BioAPI and to only document test procedures for critical characteristics of the ANSI version of the BioAPI standard. Further, the proposed standard would focus on verification functions. By focusing primarily on verification functions, the proposed standard can be completed in a timely fashion in support of near term market requirements.

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

##### 3.3.1. Development Costs

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

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

It is expected that this proposed standard for a conformance testing methodology for the ANSI INCITS version of the BioAPI standard will encourage wider and earlier adoption of BioAPI-conformant solutions. The proposed standard should promote industry development of BSPs

and applications claiming conformance to BioAPI based on test tools that implement the methodology described in this standard.

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

The standard will describe, in addition to the testing methodology, concepts on conformity assessment to help vendors and customers to define their own testing requirements. There is no data at this time on which to make an estimate of the cost of any future conformity assessment program.

#### 3.3.4. Return on Investment

There is no data at this time 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 Standards

The drafts of this standard will be distributed electronically. There may be distribution constraints as this document reaches different stages of development within INCITS.

## 4. Related Standards Activities

### 4.1. Existing Standards

- ANSI INCITS 358-2002, BioAPI Specification
- NISTIR 6529-A, Common Biometric Exchange File Format

### 4.2. Related Standards Activity

- ISO/IEC FCD 19784.1 BioAPI Specification – Part 1
- ISO/IEC FCD 19784.1 BioAPI Specification – Part 2, BioAMI Biometric Archive Module Interface
- ISO/IEC WD 24709-1 BioAPI Conformance Testing – Part 1, Methods and Procedures
- ISO/IEC FCD 19785.1, Common Biometric Exchange File Formats Framework: Part1: Data Element Specification
- ISO/IEC FCD 19785.2, Common Biometric Exchange File Formats Framework: Part2: Procedures for the Operation of the Biometrics Registration Authority

### 4.3. Recommendations for Close Liaison

The BioAPI Consortium  
The International Biometric Industry Association  
National Institute of Standards and Technology

## 5. Units of Measurement used in the Standard

It is not anticipated that units from a physical dimensioning system will be needed for specifying the requirements of this standard. If necessary, the goal would be to use the International System of Units (SI).