

M1/06-0903

InterNational Committee for Information Technology Standards
INCITS Secretariat, Information Technology Industry Council (ITI)
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Project Proposal

Information technology - Biometric Performance Testing and Reporting - Part 7: Framework for Testing Methodologies for Specific Environments of Biometric Systems

This draft project proposal is submitted by the following M1 members:
Purdue University and Daon.

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Project Proposal

Framework for Testing Methodologies for Specific Environments of Biometric Systems

1. Source of the Proposed Project

1.1. Title

Framework for Testing Methodologies for Specific Environments of Biometric Systems

1.2. Date Submitted

October 25, 2006

1.3. Proposer

Purdue University and Daon

2. Process Description for the Proposed Project

2.1. Project Type

DT – N – This project proposal describes a proposed INCITS technical report.

2.2. Type of Document

The project is expected to result in an INCITS technical report developed by INCITS M1. It will normatively reference INCITS 1602-D – Biometric Performance Testing and Reporting Standards and ISO/IEC JTC1 SC37 19795 – 1,2, and 3 documents.

2.3. Definitions of Concepts and Special Terms

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

This technical report will sit within (and leverage) a standards suite comprising biometric testing and evaluation standards.

2.5. Recommended INCITS Development Technical Committee

INCITS Technical Committee M1 – Biometrics
INCITS M1.5 Task Group

2.6. Anticipated Frequency and Duration of Meetings

Meetings will be held as necessary and will coincide with relevant INCITS M1.5. It is anticipated that there will be approximately 4 meetings per year.

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 (Initial Public Review) in June 2007.

2.8. Estimated Useful Life of Standard

This technical report will have a useful life exceeding 5 years.

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3. Business Case for Developing the Proposed Standard

3.1. Description

The technical report will include testing under different environmental conditions, e.g. different illumination, outdoor or less controlled conditions, and other optional testing methodologies that were contained in prior iterations of 1602D documents but were outside scope but are important to the testing community. Currently, there is an international technical report that examines some of these issues, thus close collaboration between this project and the international PDTR 19795-3 will occur. This domestic technical report will use 19795-3 as the base document and enhance the material using information extracted from the earlier draft of domestic 1602D-5. This project defines specific testing methodologies for different biometric modalities.

3.2. Existing Practice and the Need for a Standard

Existing testing standards generally depend on controlled environments. This technical report examines cases outside controlled environments, which can greatly affect actual performance in operational environments.

3.3. Implementation Impacts of the Proposed Standard

3.3.1. Development Costs

Technical editor(s) labor is expected to total about 3 months of a staff-year.

3.3.2. Impact on Existing or Potential Markets

This document will enable testing to provide a higher level of confidence to end-users deploying biometrics regarding its performance under a wider range of operational environments.

3.3.3. Costs and Methods for Conformity Assessment

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

There are no known patents relevant to this standard.

3.4.2. Dissemination of the Standard

Drafts of this standard will be distributed electronically.

4. Related Standards Activities

4.1. Existing Standards

Current standards do not address this issue.

4.2. Related Standards Activity

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INCITS 409 Biometric Performance Testing and Reporting

- Part 1: Principles and Framework;
- Part 2: Technology Testing and Reporting;
- Part 3: Scenario Testing and Reporting;
- Part 4: Operational Testing Methodologies;

INCITS 1602D Biometric Performance Testing and Reporting

- Part 5: Framework for Testing and Evaluation of Biometric System for Access Control

ISO/IEC 19795-1: 2006, Biometric performance testing and reporting — part 1: principles and framework

ISO/IEC FCD 19795-2, Biometric performance testing and reporting — part 2: testing methodologies (Clause 7: Scenario Testing)

ISO/IEC PDTR 19795-3, Biometric performance testing and reporting — part 3: Specific testing methodologies

4.3. Recommendations for Close Liaison

None

5. Units of Measurement used in the Standard

Indicate units of measurement used in the Standard:

- International Systems of Units (SI)
- Inch/Pound
- Both
- Other
- Not Measurement Sensitive