

ISO/IEC 19795-1:2006 Biometric Performance Testing: Principles and Framework

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What This Standard Does

- Technical Performance Testing
 - Errors
 - False positive
 - False negative
 - Failure-to-enrol
 - Failure-to-acquire
 - Penetration rate
 - Binning error rate
 - Throughput rates
 - Human interaction
 - Computer processing times

What This Standard Does Not

- Reliability, availability, maintainability
- Vulnerability
- Security
- User acceptance
- Human factors
- Cost/Benefit
- Compliance
 - Privacy
 - Standards

Importance of This Standard

- For predicting the ultimate success of a system, the factors considered in this standard may be among the least important
- Nonetheless, assessing and improving system technical performance is a reasonable goal for practitioners
- Establishing common formats and frameworks is important for the understanding and exchange of test data

Establishing Precise Definitions

- False match rate
- False non-match rate
- False acceptance rate
- False rejection rate
- Failure-to-acquire rate
- Failure-to-enrol rate
- Closed set identification
- Open set identification
- Genuine transactions
- Impostor transactions

Controlling Factors Impacting Performance

- Environment
- Population
- Technology
- Annex C (Informative): Factors Influencing Performance

Test Size

- As large as practicable
- Guidance from Rule of 3 and Rule of 30
- Guidance on collecting multiple samples per user