

# Identity Verification - Face Biometric Evaluation Report Template (IDV-Face BERT)

Version 1.5

May 2024

# **Template Revision History**

| Date       | Version | Description   |
|------------|---------|---|
| 2019-11-24 | 1.0     | Minor updates after feedback from lab   |
| 2020-01-13 | 1.2     | Minor updates, first public version   |
| 2021-10-08 | 1.3     | Added new information to chapter 6.3  |
| 2023-11-29 | 1.3.1   | Minor updates   |
| 2024-04-11 | 1.4     | Created IDV-Face program version, added Evaluation of Differential Performance across Demographic Groups, and other minor edits |
| 2024-05-29 | 1.5     | Minor updates; IDV - Face program launch  |

# **Evaluation Revision History**

| Date       | Version | Author | Description |
|------------|---------|--------|-------------|
| 20XX-XX-XX | 1.0     |        |             |
|            |         |        |             |
|            |         |        |             |

# **Table of Contents**

| 1 Introduction  | 5  |
|---|----|
| 1.1 Audience  | 5  |
| 1.2 Confidentiality & Copyright Notice                      | 5  |
| 1.3 Contacts  | 5  |
| 1.3.1 FIDO Identity Verification Secretariat                | 5  |
| 1.3.2 FIDO Biometric Secretariat                            | 6  |
| 1.3.3 FIDO Certification Secretariat                        | 6  |
| 1.3.4 FIDO Accredited Laboratory                            | 6  |
| 1.3.5 Vendor, Sponsor, Developer                            | 6  |
| 1.4 IDV-Face BERT Instructions and Structure                | 6  |
| 2 Executive Summary (FINAL REPORT ONLY)                     | 7  |
| 3 Evaluation Details  | 7  |
| 3.1 Laboratory Details                                      | 7  |
| 3.2 Vendor Details  | 7  |
| 3.3 Evaluation Type   | 9  |
| 4 FIDO IDV-Face Component Overview                          | 9  |
| 4.1 Description of the FIDO IDV-Face Component Architecture | 9  |
| 4.2 Target of Evaluation "TOE" Overview                     | 10 |
| 4.3 Verification of Version Information                     | 10 |
| 4.4 Evaluated Configuration                                 | 10 |
| 4.5 Target Population                                       | 11 |
| 4.6 Intended Environment                                    | 11 |
| 4.7 Physical Environment                                    | 11 |
| 4.8 Common Test Harness                                     | 11 |
| 4.9 Coverage of Allowed Integration                         | 12 |
| 5 Test Procedures for Remote Subjects (IF APPLICABLE)       | 12 |
| 5.1 Remote Subject Testing                                  | 12 |
| 6 Test Procedures for FAR/FRR                               | 12 |
| 6.1 Report  | 12 |
| 6.2 Test Setup Description                                  | 13 |
| 6.3 Test Crew   | 13 |
| 6.4 FRR Results (FINAL REPORT ONLY)                         | 13 |
| 6.5 FAR Results (FINAL REPORT ONLY)                         | 13 |
| 6 6 Self-Attestation (MANDATORY)                            | 13 |

| 6.7 Limitations, Exceptions, and Exclusions                                   | 13 |
|---|----|
| 7 FIDO Presentation Attack Detection (PAD) Criteria                           | 14 |
| 7.1 Report  | 14 |
| 7.2 Test Setup Description  | 14 |
| 7.3 Test Crew   | 14 |
| 7.4 Impostor Attack Presentation Accept Rate (IAPAR) (FINAL REPORT ONLY)      | 14 |
| 7.5 Limitations, Exceptions, and Exclusions                                   | 14 |
| 7.6 Injection Attacks   | 15 |
| 8 Evaluation of Differential Performance across Demographic Groups (OPTIONAL) | 15 |
| 8.1 Report  | 15 |
| 8.2 Test Setup Description  | 15 |
| 8.3 Test Crew   | 15 |
| 8.4 Differential Performance Results (FINAL REPORT ONLY)                      | 15 |
| 9 Conclusion and Final Verdict (FINAL REPORT ONLY)                            | 16 |
| 9.1 Final Verdict   | 16 |
| 9.2 Observations, Limitations, Exceptions, and Exclusions                     | 16 |
| 9.3 Recommendations   | 16 |
| 10 Evaluation Evidence  | 16 |
| 11 Appendices   | 17 |
| 11.1 Appendix A: References   | 17 |
| 11.2 Appendix B: Terms & Abbreviations  | 17 |

# 1 Introduction

This document defines the FIDO Biometric Evaluation Report (FBER) scope and contents for the Identity Verification (IDV) Certification Program. This document SHALL serve as a template for an FBER for a FIDO Accredited Laboratory while fulfilling an evaluation of a vendor's Identity Verification—Face (IDV-Face) component.

The guidelines herein are intended to provide a common ground, language, and continuity among all FIDO Accredited Laboratories completing Biometricc Evaluations and provide consistent results that follow FIDO Requirements.

Alternative file formats are available upon request and are also made available to FIDO Accredited Laboratories.

#### 1.1 Audience

The primary audience of this document is FIDO Accredited Laboratories, but it may be useful to all parties involved in the FIDO Biometric and Identity Verification Certification Programs to have a deeper understanding of the Biometric Evaluation process.

Once complete, evolving from an approved test plan concept to the final evaluation report, the intermediate audience of this document is the FIDO Identity Verification Secretariat to validate the final results, approve the report, and issue an Evaluation Verdict.

The end audience of this document is the vendors with a reference to the certificate.

# 1.2 Confidentiality & Copyright Notice

Confidentiality of this document SHALL be maintained by the FIDO Certification Team, FIDO Accredited Laboratory, and Vendor involved in FIDO Certification.

#### 1.3 Contacts

#### 1.3.1 FIDO Identity Verification Secretariat

The FIDO Identity Verification Secretariat is FIDO Staff responsible for reviewing and approving certification applications/test plan documentation, questionnaires, monitoring security threats, and acting as an independent subject matter expert (SME) for the FIDO Identity Verification Certification Program.

For help and support, visit the FIDO Website [FIDO Cert] or contact the FIDO Identity Verification Secretariat at idv-secretariat@fidoalliance.org.

#### 1.3.2 FIDO Biometric Secretariat

The FIDO Biometric Secretariat is FIDO Staff responsible for reviewing and approving certification applications/test plan documentation, questionnaires, monitoring security threats, and acting as an independent subject matter expert (SME) for the FIDO Biometric Component Certification Program.

For help and support, visit the FIDO Website [FIDO Cert] or contact the FIDO Biometric Secretariat at biometric-secretariat@fidoalliance.org.

#### 1.3.3 FIDO Certification Secretariat

The FIDO Certification Secretariat is FIDO Staff responsible for implementing, operating, and managing all FIDO Certification Programs.

For help and support, visit the FIDO Website [FIDO Cert] or contact the FIDO Certification Secretariat at <a href="mailto:certification@fidoalliance.org">certification@fidoalliance.org</a>.

#### 1.3.4 FIDO Accredited Laboratory

A FIDO Accredited Laboratory is a laboratory that successfully completed the FIDO Laboratory Accreditation Process and has a valid Certificate and Letter of Accreditation.

#### 1.3.5 Vendor, Sponsor, Developer

Implementers seeking FIDO Certification that may be a FIDO Member or Non-member organization.

#### 1.4 IDV-Face BERT Instructions and Structure

The FIDO IDV-Face Biometric Evaluation Report Template (FBERT) MUST be completed based on the structure and content of this document and by an Approved Evaluator of a FIDO Accredited Laboratory.

However, before it becomes a Biometric Evaluation Report, this template SHALL be used as the test plan concept that SHALL be agreed between the FIDO Accredited Laboratory and FIDO Identity Verification Secretariat before testing can start. Evaluation testing may proceed once the FIDO Identity Verification Secretariat provides approval over email and/or returns an endorsed copy to the Laboratory.

Some chapters of this template are marked as "FINAL REPORT ONLY", and those chapters SHALL be left blank in the test plan concept step, as the required data does not yet exist.

Including tables, graphs, charts, figures, and/or pictures is encouraged for achieving a comprehensive and well-documented test plan concept. Please include adequate references, context, and/or descriptions for each.

# 2 Executive Summary (FINAL REPORT ONLY)

#### **Evaluator Instructions:**

The Executive Summary should summarize the whole evaluation process in a short (usually one-page) summary. It should include details on the evaluated IDV-Face component, the tests that were performed, and the final results of the evaluation.

Please note that how the Executive Summary is drafted SHALL allow understanding it without dedicated knowledge of the rest of the FBER. Please also remember that the Executive Summary is the part of the report that may be used to give interested parties a short summary of the evaluation; it should therefore be sufficiently self-contained.

# 3 Evaluation Details

#### **Evaluator Instructions:**

Please provide the following details:

# 3.1 Laboratory Details

| <b>Laboratory Company Name</b> |  |
|--------------------------------|--|
| Evaluator(s) - Full Name(s)    |  |
| Evaluator(s) - Email(s)        |  |
| <b>Evaluation Start Date</b>   |  |
| <b>Evaluation End Date</b>     |  |
| (FINAL REPORT ONLY)            |  |

#### 3.2 Vendor Details

| Vendor Company Name                     |  |
|---|--|
| Vendor Contact(s) - Full<br>Name(s)     |  |
| Vendor Contact(s) -<br>Email(s)         |  |
| Implementation name(s) for the IDV-Face |  |

| component(s) that will be evaluated.  |  |
|---|--|
| Indicate the Reference Type(s) that will be evaluated.  |  |
| (SELECT REFERENCE TYPE 1<br>AND/OR REFERENCE TYPE<br>2)   |  |
| If Reference Type 1 is selected above, indicate the document types supported by the implementation. |  |
| Indicate the IDV Level(s) that will be evaluated.  (SELECT IDV LEVEL 1 AND/OR IDV LEVEL 2)          |  |
| Indicate the number of operating points evaluated per implementation per Reference Type.            |  |
| Indicate software per evaluated implementation per Reference Type.                                  |  |
| (SOFTWARE ELEMENT,<br>VERSION, USED FOR,<br>VERIFICATION OF THE<br>VERSION)                         |  |
| FIDO Biometric<br>Requirements Version #  |  |
| FIDO Biometric Policy<br>Version #  |  |
| Indicate if evaluation of differential performance across demographic groups will be completed.     |  |
| (OPTIONAL)  |  |

| If only IDV Level 1 is      |  |
|-----------------------------|--|
| selected above, confirm     |  |
| the integration or          |  |
| attachment of the           |  |
| Self-Attestation reporting. |  |
| (FINAL REPORT ONLY)         |  |
| (FINAL REPORT ONLY)         |  |

# 3.3 Evaluation Type

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL identify and describe the evaluation type. Evaluation type SHALL be a minimum of one, or more of the below options. Multiple Base, Delta, and Derivative evaluations may be identified, and in the case of one or more Delta and Derivative evaluations, the base evaluation(s) SHALL be clearly identified.

- Base Evaluation,
- Delta Evaluation
- Derivative Evaluation

# **4 FIDO IDV-Face Component Overview**

#### **Evaluator Instructions:**

This section SHALL provide an overview of the FIDO IDV-Face Component under evaluation. The exact requirements that the information in this chapter covers are contained in Section 3.3.2 and Section 4 of [BiometricReq].

# 4.1 Description of the FIDO IDV-Face Component Architecture

#### **Evaluator Instructions:**

The FIDO Accredited Laboratory SHALL provide an overview of the IDV-Face component under evaluation. Specific attention should be paid to a description of the TOE. The description given here should allow gaining a sufficient understanding of the TOE to understand the rest of the report's content. Knowledge of the relevant FIDO criteria can be assumed. An architecture diagram would be appreciated.

The Target of Evaluation (TOE) for the purpose of the FIDO IDV-Face Certification Program SHALL include all functionality required for biometrics: the Biometric Data Capture, Signal Processing, Comparison, and Decision functionality, whether implemented in hardware or software.

# 4.2 Target of Evaluation "TOE" Overview

#### **Evaluator Instructions:**

Please provide a short overview of the TOE and its use case. Please make sure to cover:

- A general overview,
- the type(s) of input, Biometric Reference Type(s) that is supported,
- specific information about its operating (remote or local) mode, transmission and/or deriving of biometric data,
- specific information about the types of devices that are allowed for integration, could be supported,
- the process of enrollment and document capture,
- for optical capture, Reference Type 1, scope and quality of document types that are supported by the TOE
- verification of transaction adherence,
- specific information about the transaction concept of the TOE (i.e. how many attempts are allowed per transaction),
- all timeouts that may occur during operation (including their values),
- the logging capabilities,
- the storage of biometric information,
- is there a fixed operating point? If not, document the selected operating point(s).

If a TOE comes in multiple configurations, sufficient information SHALL be provided for all configurations. This will allow the Laboratory to develop a dedicated test concept covering all allowed configurations or the range of allowed configurations.

#### 4.3 Verification of Version Information

#### **Evaluator Instructions:**

Please provide a short description of how a user can verify/check the version information of the component.

# 4.4 Evaluated Configuration

#### **Evaluator Instructions:**

This section is intended to clarify the configuration(s) of the FIDO IDV-Face component covered by the evaluation. (e.g., test configuration, configuration excluding/including a specific feature, final usage configuration, etc.)

# 4.5 Target Population

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL summarize the target population of the IDV-Face component.

#### 4.6 Intended Environment

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL summarize the intended environment of the IDV-Face component. Special attention SHALL be paid to identifying the environmental characteristics that are relevant for testing.

# 4.7 Physical Environment

#### **Evaluator Instructions:**

Please briefly describe the environment in which the TOE is intended to be used in. This specifically includes the definition of all environmental aspects relevant to the performance of the biometric mechanism.

Examples of such aspects include lighting conditions and power constraints (such as if the device can be only operated on a battery or can be operated with a power source). Please note that this list is not meant to be complete but tailored to customer deployments that are active today and to those that would result in a potential physical environment impact in the future.

If the TOE is intended for use in multiple environments, please specify each environment in a separate subchapter, identifiable by titling/naming each, and the intended environment(s) chosen for testing will be identified on the certificate using this title/name.

#### 4.8 Common Test Harness

#### **Evaluator Instructions:**

This section is intended for the FIDO Accredited Laboratory to describe the specific aspects of the test harness provided to the Laboratory. The exact requirements that the information in this chapter SHALL cover are contained in Section 4.2 of [BiometricReq].

# 4.9 Coverage of Allowed Integration

FIDO Accredited Laboratory SHALL justify why the test harness used for testing is an adequate equivalent of the IDV-Face component in real-time production. Such a justification can be simple in cases where the test harness is identical to the TOE but more complex in cases where the test harness differs from the biometric component.

# 5 Test Procedures for Remote Subjects (IF APPLICABLE)

#### **Evaluator Instructions:**

This chapter contains the report about the test procedures performed for remote subject testing.

# 5.1 Remote Subject Testing

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL summarize the processes and procedures related to remote subject testing, including how the intended environment was considered. Special attention SHALL be paid to identifying the environmental characteristics that are relevant for testing.

# 6 Test Procedures for FAR/FRR

#### **Evaluator Instructions:**

This chapter contains the report about the tests performed on the performance aspects.

# 6.1 Report

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL provide a summary report on performance testing (FRR and FAR) for the IDV-Face component. This summary report can also serve as a point of reference for other chapters in this report.

# **6.2 Test Setup Description**

The FIDO Accredited Laboratory SHALL provide an overview of the complete test setup. The overview SHALL comprise a description of the location of the tests (images and sketches are appreciated) and the basic processes that will be followed.

#### 6.3 Test Crew

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL report details on the test crew utilized for testing.

# **6.4 FRR Results (FINAL REPORT ONLY)**

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL include a short summary of the results of the FRR tests.

### 6.5 FAR Results (FINAL REPORT ONLY)

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL include a summary of the results of the FAR tests.

# 6.6 Self-Attestation (MANDATORY)

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL provide a checklist for the self-attestation part. Please refer to [ChecklistSelfAttestation]. In addition, this chapter SHALL contain a short statement about the result of the checklist and whether the self-attestation claim can be supported.

# 6.7 Limitations, Exceptions, and Exclusions

#### **Evaluator Instructions:**

Please identify any limitations, exceptions, or exclusions for the test results that you find relevant.

# 7 FIDO Presentation Attack Detection (PAD) Criteria

# 7.1 Report

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL provide a summary report on IAPAR testing for the IDV-Face component, including any additional details related to Section 5.1.7.1. Enrollment & Document Capture of [BioReq] not previously documented. This summary report can also serve as a point of reference for other chapters in this report.

# 7.2 Test Setup Description

#### **Evaluator Instructions:**

The FIDO Accredited Laboratory SHALL summarize the test setup (pictures and sketches are appreciated). The description SHALL allow an understanding of the complete setup and the procedures that will be followed.

#### 7.3 Test Crew

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL report details on the test crew utilized for testing. The exact requirements that the information in this chapter SHALL cover are contained in Sections 5.1.1.2 and 5.1.2 of [BiometricReq].

# 7.4 Impostor Attack Presentation Accept Rate (IAPAR) (FINAL REPORT ONLY)

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL include a summary of the results of IAPAR tests.

# 7.5 Limitations, Exceptions, and Exclusions

Please identify any limitations, exceptions, or exclusions for the test results that you find relevant.

# 7.6 Injection Attacks

#### **Evaluator Instructions:**

The Vendor and FIDO Accredited Laboratory SHALL document the security projections implemented around the TOE to protect from injection and replay attacks. The exact requirements that the information in this chapter SHALL cover are contained in Section 3.5.3 of [BiometricReq].

# 8 Evaluation of Differential Performance across Demographic Groups (OPTIONAL)

# 8.1 Report

#### **Evaluator Instructions:**

The FIDO Accredited Laboratory SHALL provide a summary report on Differential Performance testing. The exact requirements that the information in this chapter SHALL cover are contained in Sections 3.6 and 3.6.1 of [BiometricReq].

# 8.2 Test Setup Description

#### **Evaluator Instructions:**

The FIDO Accredited Laboratory SHALL summarize the test setup (pictures and sketches are appreciated). The description SHALL allow an understanding of the complete setup and the procedures that will be followed.

#### 8.3 Test Crew

#### **Evaluator Instructions:**

FIDO Accredited Laboratory SHALL report details on the test crew utilized for testing. The exact requirements that the information in this chapter SHALL cover are contained in Section 3.6 of [BiometricReq].

# 8.4 Differential Performance Results (FINAL REPORT ONLY)

FIDO Accredited Laboratory SHALL include a summary of the results of differential reporting tests.

# 9 Conclusion and Final Verdict (FINAL REPORT ONLY)

#### 9.1 Final Verdict

#### **Evaluator Instructions:**

This section outlines the overall verdict of the evaluation, which will relate to whether the TOE has satisfied the requirements.

# 9.2 Observations, Limitations, Exceptions, and Exclusions

#### **Evaluator Instructions:**

This section allows the FIDO Accredited Laboratory to describe any observations that may be of relevance for the certification. FIDO Accredited Laboratory SHALL also list a summary of important observations, limitations, exceptions, and exclusions that have already been mentioned elsewhere in the report.

#### 9.3 Recommendations

#### **Evaluator Instructions:**

This section allows the FIDO Accredited Laboratory to describe any recommendations that may be relevant for the certification or the secure operation of the TOE. FIDO Accredited Laboratory SHALL also list a summary of important recommendations that have already been mentioned elsewhere in the report.

# 10 Evaluation Evidence

#### **Evaluator Instructions:**

This FIDO Accredited Laboratory SHALL report each element provided by the vendor and used as part of evaluation testing/evidence. For each element, provide the following information.

the vendor/developer/author name

- the title;
- the unique reference (e.g., issue date and version number)

# 11 Appendices

#### **Evaluator Instructions:**

The FIDO Accredited Laboratory SHALL provide updated appendices based on relevant references, terms & abbreviations, graphs, configuration setups, etc.

# 11.1 Appendix A: References

| Reference   | Title                        | URL                                     |
|-------------|------------------------------|---|
| [FIDO Cert] | FIDO Certification Website   | https://fidoalliance.org/certification/ |
| [BioReq]    | FIDO Biometrics Requirements |   |

# **11.2** Appendix B: Terms & Abbreviations

| Term / Abbreviation   | Definition  |
|---|---|
| Certification Working Group (CWG)                               | FIDO working group responsible for approving policy documents and maintaining them after a certification program is launched.   |
| Biometrics Working<br>Group (BWG)                               | FIDO working group responsible for defining the Biometric Requirements and Test Procedures related to the Biometric Component Certification Program and acting as a subject matter expert (SME) following the program's launch.   |
| Identity Verification<br>and Binding<br>Working Group<br>(IDWG) | FIDO working group responsible for defining the Biometric Requirements and Test Procedures related to the Identity Verification Certification Program and acting as a subject matter expert (SME) following the program's launch. |
| FER   | FIDO Evaluation Report  |

| FIDO Accredited<br>Laboratory Program                        | A makeup of laboratories that have successfully completed the FIDO Laboratory Accreditation Process and have a valid Certificate and Letter of Accreditation.  |
|--|--|
| FIDO Laboratory<br>Accreditation                             | Formal recognition that a laboratory is competent to carry out specific tests, calibrations of types of tests, or calibrations.  |
| ISO/IEC 17025  | General requirements that demonstrate competence in testing and calibration laboratories and it is a prerequisite for applying to the FIDO Laboratory Accreditation Program. It enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world. |
| Certificate of Accreditation / Letter of Accreditation (LoA) | A Certificate of Accreditation and LoA is issued to a laboratory that has passed and been approved for the FIDO Laboratory Accreditation Program by FIDO Certification.  |