FIPS 201 Evaluation Program -
Electromagnetically Opaque Sleeve Approval Procedure

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1 Introduction

1.1 Overview

The FIPS 201 Evaluation Program (EP) is a U.S. Government entity administered by the Office of Government-wide Policy (OGP), within the General Services Administration (GSA) agency. The goal of the FIPS 201 Evaluation Program (EP) is to evaluate products and services against the requirements outlined in FIPS 201 and its supporting documents. In addition to derived test requirements developed to test conformance to the National Institute of Standards and Technology (NIST) Standard, GSA has also established interoperability and performance metrics to further determine product suitability. A set of approval and test procedures have been developed which outline the evaluation criteria, approval mechanisms and test process employed by the Laboratory during their evaluation of a Supplier's product or service against the requirements for that category.

A Supplier desiring to submit an Electromagnetically Opaque Sleeve (hereafter referred to as the Product) for evaluation must follow the Suppliers Policies and Procedures Handbook. In addition to this handbook, Supplier also need to refer to this Approval Procedure which provides the necessary category-specific details in order to have a Supplier's Product evaluated by the EP and placed on the Approved Products List (APL).

1.2 Category Description

The *Electromagnetically Opaque Sleeve* is a hardware device whose primary function is to protect information stored on the card against skimming attacks across the contactless interface, regardless of the orientation of the PIV Card in the device. It does so by shielding the contactless interface and blocking communication to the card across it. The Electromagnetically Opaque Sleeve is intended to be issued to each cardholder at the time of PIV issuance..

1.3 Purpose

The purpose of this document is to provide the following information:

(i) Provide a list of the artifacts and/or documentation that needs to be submitted to the Evaluation Lab as part of the application package submission.

(ii) Document the list of the requirements that apply to this category

(iii) Specify the evaluation criteria along with their approval mechanisms that will be used by Evaluation Labs to verify compliance of the Product against the requirements that apply to this category.

2 Application Package Contents

The Application Package Contents include the artifacts, documentation and in some cases the product itself that needs to be submitted to the Evaluation Lab so that evaluation can be performed. The Application Package Contents for this category include the following:

- The Product itself. This should be delivered to the Lab (address can be found at http://fips201ep.cio.gov/labs.php) using a reliable method of delivery (e.g., FedEx, UPS, hand delivery);
- Completed Application Form, provided on the Evaluation Program website. (This form will be available through the web interface once users have been assigned a login credential);
- Completed and signed Lab Service Agreement (found in the application submission package ZIP file). The Lab Service Agreement should be completed and scanned into a document to be uploaded to Evaluation Program website;
- Completed and signed Attestation Form (found in the application submission package ZIP file). The Attestation Form should be completed and scanned into a document to be uploaded to Evaluation Program website;
- Completed Supplier VDR-VTDR justification worksheet (found in the application submission package ZIP file); and
- A Vendor Test Data Report, which provides test results showing that the Product complies with the requirements for this category. In this regard, the Supplier is expected to develop and document the test procedures used to determine how the Product was tested to arrive at the conclusion that it met all necessary requirements. The VTDR must at a minimum contain information as stated in the Supplier's Handbook. Wherever possible, information to be supplied as part of this Vendor Test Data Report has been described in Section 3.3.1.

3 Evaluation Procedure for Electromagnetically Opaque Sleeve

3.1 Requirements

In order to approve the Product as conformant to the requirements of PIV, it at a minimum, must comply with all the requirements listed below. The approval mechanism column describes the technique utilized by the Lab to evaluate compliance to that particular requirement.

Identifier #	Requirement Description	Source	Reqt. #	Approval Mechanism
SLV.1	An electromagnetically opaque sleeve or other technology is required to protect against any unauthorized contactless access to information stored on a contactless IC [regardless of the orientation of the device while protecting the ICC].	FIPS 201, Section 4.4.2	1.1-145	Vendor Test Data Report Lab Test Data Report
SLV.2	The sleeve shall have no other function than to provide a housing for the PIV Card only and protect the information stored on a contactless IC from unauthorized access. It shall be comprised of shield blocking material only.	Derived	N/A	Vendor Documentation Review

Table 1 - Applicable Requirements

3.2 Approval Mechanism Matrix

The table below provides an indication of the total number of requirements applicable for the Product and provides a breakup of how the evaluation will be conducted based on the different approval mechanisms available to the Lab.

Total Requirements	Approval Mechanisms					
	SV	VTDR	LDTR	VDR	C	A
2	N/A	1	1	1	N/A	1
Legend: SV – Site Visit; VTDR – Vendor Test Data Report; LTDR – Lab Test Data Report; VDR – Vendor Doc. Review; C – Certification; A - Attestation						

Table 2 - Approval Mechanism Matrix

3.3 Evaluation Criteria

This section provides details on the process employed by the Lab for evaluating the Product against the requirements enumerated above.

3.3.1 Vendor Test Data Report

The Lab will update the status in the Web-Enabled Tool to "VTDR Begun" as instructed in the Web-enabled Tool Laboratory User Guide.

3.3.1.1 SLV.1

Evaluation Procedure:	The Lab will review the documentation submitted by the Supplier to ascertain the following: • The Product prevents frequencies in the range of 13.56 MHz ± 7 KHz from passing through. At a minimum, the following test scenario must be performed to confirm compliance: a. Tests are performed using proven test methods similar to the SEED or Transfer Impedance to verify shielding effectiveness and the Supplier has submitted appropriate charts and documentation showing clearly that the Product is capable of shielding frequencies in this range. b. Tests performed verify that the Product is capable of shielding frequencies on all six (6) faces of the device when the PIV Card is inserted in four (4) possible configurations – right side up, facing forward; right side up, facing backward; upside down, facing forward; upside down, facing backward.
Expected Results:	The Product is capable of protecting against any unauthorized contactless access to information stored on a contactless IC.

The Lab will update the status in the Web-Enabled Tool to "VTDR Complete" as instructed in the Web-enabled Tool Laboratory User Guide.

3.3.2 Lab Test Data Report

Reference(s):	SLV.1
Test Procedure:	1. The Lab will update the status in the Web-Enabled Tool to "LTDR Begun" as instructed in the Web-enabled Tool Laboratory User Guide. 2. The Lab will execute test procedures for this category in accordance with the "*Electromagnetically Opaque Sleeve Test Procedure*." 3. The Lab will update the status to "LTDR Complete" as instructed in the Web-enabled Tool Laboratory User Guide.
Expected Result:	The Product passes all the tests performed by the Lab in accordance with the test procedure.

3.3.3 Vendor Documentation Review

Reference(s):	SLV.2
Evaluation Procedure:	1. The Lab will update the status in the Web-Enabled Tool to "VDR Begun" as instructed in the Web-enabled Tool Laboratory User Guide. 2. The Lab will review documentation submitted by the Supplier to determine if the Product's: • Primary function is to house the PIV Card only and protect the information stored on the card against skimming attacks across the contactless interface. 3. The Lab will update the status to "VDR Complete" as instructed in the Web-enabled Tool Laboratory User Guide.
Expected Results:	Submitted documentation demonstrates that the requirement is met by the Product.

3.3.4 Attestation

Reference(s):	N/A
Evaluation Procedure:	1. The Lab will update the status in the Web-Enabled Tool to "A Begun" as instructed in the Web-enabled Tool Laboratory User Guide. 2. Review the Attestation Form provided by the Supplier, confirming that the Product to the best of their knowledge, conforms to all the necessary requirements of the category under which the Product applies. Verify that person signing this Attestation Form has the authority to do so (a minimum "C" level [e.g. CSO, CEO, CIO, CFO, Vice-President, President, Business Partner or Owner]). 3. The Lab will update the status in the Web-Enabled Tool to "A Complete" as instructed in the Web-enabled Tool Laboratory User Guide.

Expected Results:	The Attestation Form has been signed by an authorized individual (e.g. CSO, CEO, CIO, CFO, Vice-President, President, Business Partner or Owner).