Homeland Security

US-VISIT Increment 2A

Mock POE Test Plan

Version 3.0

November 24, 2004

US-VISIT

United States Visitor and Immigrant Status Indicator Technology

Contents

Revision History

Version Number	Date	Brief Description of Change	A=Add M=Modify D=Delete	Source
1.0	10/18/2004	Initial Release	N/A	US-VISIT
2.0	11/17/2004	Updated Scenarios and Data work sheets, modifications to Test Plan to reflect.	M, D	US-VISIT

Increment 2A Mock POE Test Plan Approvals

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Comments:

1. Introduction

Purpose

The purpose of this test plan is to provide a description of the Mock POE Tests to be conducted at Baltimore Washington International (BWI) Airport from November 30 – December 2, 2004. The focus of this document is on the United States (U.S.) testing activities that will occur during this international testing event.

Background

Under the requirements of the Enhanced Border Security and Visa Entry Reform Act (Border Security Act) of 2002, as amended:

- All Visa Waiver Program (VWP) Countries must implement a program of issuing International Civil Aviation Organization (ICAO)-compliant biometrically enabled travel documents—*Extension granted to October 26, 2005*
- U.S. Ports of Entry must have the capability to read VWP ICAO-compliant biometrically enabled travel documents—*Extension granted to October 26, 2005*

In May 2004, ICAO approved a set of technical documents that define the requirements for e-Passports. Following a series of joint ICAO/International Standards Organization (ISO) meetings to resolve technical issues, Department of Homeland Security (DHS) hosted an international interoperability testing session in July 2004. This testing session allowed e-Passport and e-Passport reader manufacturers and integrators to come together and test whether their interpretations of the standards were similar and would allow for interoperability. A subsequent testing session was held in Australia in August 2004. Further operational and interoperability testing is scheduled for 2004 and 2005.

As a next step in the United States' (U.S.) efforts to satisfy these requirements of the Border Security Act, a Mock POE Test will be conducted at BWI Airport from November 30 – December 2, 2004 to examine the operational impacts of the new equipment on the current inspection processes. The Mock POE Test will be an international event, hosted by the U.S. on behalf of ICAO. The U.S. and other participating nations will test the use of such equipment based on their respective testing objectives and test procedures.

Referenced Documents

Legislative

- Enhanced Border Security and Visa Entry Reform Act ("Border Security Act") of 2002, Public Law No. 107-173
- U.S. – Australian Accord
- U.S. – German Accord

ICAO

- Biometrics Deployment of Machine Readable Travel Documents Version 2.0, ICAO Technical Advisory Group (TAG) Machine Readable Travel Documents (MRTD)/New Technologies Working Group (NTWG), 21 May 2004

US-VISIT Program Related

- Increment 2A Concept of Operations for the Mock POE Test version 1.1, US-VISIT, 5 October 2004
- Increment 2A Mock POE Test Business Requirements version 1.2, US-VISIT, 18 October 2004

2. Mock POE Test Overview

Goals of the Mock POE Test

The primary goal of this Mock Port of Entry (POE) Test is to determine the operational impact of using new equipment capable of reading e-Passports as part of the primary inspection process at air POEs. The test will allow Government personnel responsible for inspection processes in several nations to assess how to best integrate the e-Passport reader capabilities into their operations. While this test is focused on the operational impacts of reading the new e-Passports and accessing the data acquired from these documents, it will allow Government personnel to assess the feasibility of using this new equipment for reading and acquiring data from legacy machine readable travel documents (MRTDs). It will also allow Government personnel to collect preliminary data on the impact of the passport stamping process on the embedded e-chips. A summary of the business requirements for the Mock POE Test is included in Appendix A. At a minimum, the tests, for U.S. purposes, should provide answers to the following questions:

- Do the proposed readers match or exceed the performance levels achieved by current passport readers when scanning MRTDs?
- What is the impact of using the new readers to the inspection process?
    - How much additional time will it take to read and verify e-Passports?
    - What changes will need to be made to the inspection process?
    - Which e-Passport reader configuration(s) are most suitable in the airport POE environment?
    - What impact will stamping the passport have on the inspection process and the continued readability of e-chips?
- What is the viability of facial recognition technology in the airport POE environment?
    - What camera types are most viable in air POEs to capture photographs of sufficient quality to support facial recognition
    - What are the ergonomic requirements for the inclusion of facial recognition technology
- Is there anything from this test that could identify short-term improvements to current processes?

Location and Participants

The Mock POE Test will be conducted in a secure area at BWI Airport. Eight (8) Primary workstations and eight (8) inspection lanes in the Primary inspection area at BWI will be made available for the test. The physical area in which the test will be conducted will be secure and will be screened off from the traveling public. The test will not be open to representatives of the press. See Appendix F for a layout of the inspection lanes.

In addition to the U.S., the following countries are expected to participate in the test:

- Australia
- New Zealand
- The Netherlands
- United Kingdom
- France
- Germany
- Hungary
- Italy
- Belgium
- Singapore
- Japan

Test participants will include US-VISIT staff, and staff of participating U.S. organizations, as well as international test participants and observers. US-VISIT staff with inspection experience and CBP Officers will conduct the mock inspections for US-VISIT. Facial recognition test scenarios will be monitored and staffed by NIST or designated international participants.

Test Processes

The Mock POE Test will focus on those steps in the Primary inspection process from the point at which the Officer begins the swipe or scan of the travel document to the point at which the traveler's biographic and biometric data are displayed on the Primary workstation. In addition, the test will assess the operational impact of the e-Passport stamping process[1].

Test Scenarios

The following types of readers will be used in the tests:

- Currently deployed CBP MRZ readers
- Full-page readers (incorporating MRZ and e-Chip reader)
- Current CBP MRZ Readers with separate e-Chip reader

For each reader, the following types of travel documents will be tested:

- Current MRTDs including:
  - VWP passports

[1] Different countries intend to insert the e-chips in different locations within the passports. This test is not intended to provide statistically significant data on the physical effect of stamping e-Passports. However, the test should provide data that will be helpful for the development of standard operating procedures (SOPs) related to the inspection of different types of e-Passports. It may also provide useful information on the potential impacts of the stamping process on e-chips.

  - Non-VWP passports
  - Visas
  - Border Crossing Cards,
  - Legal Permanent Resident cards,
  - Re-entry permits,
  - Refuge travel documents,
- e-Passports including:
  - VWP passports
  - Non-VWP passports

e-Passports with both ISO 14443 Type A and Type B e-chips will be included in the test.

In addition, selected e-Passport security features associated with chip access and authentication will be tested: open access, basic access control, and passive authentication. See Appendix B for a description of the different e-Passport security features.

Additional standalone tests will be performed using a Facial Recognition capability to be provided by the National Institute of Standards and Technology (NIST).

Test Equipment and Documents

Sample e-passports will be provided by the following vendors:

- ST Microelectronics (France)
- SdU (Netherlands)
- OTI Global (Israel)
- Sharp (Japan)
- Setec (Finland)
- Oberthur (France)

Additionally, it is anticipated that the U.S., Austria, Australia, Belgium, France, Japan, New Zealand, and Sweden will provide sample passports. As documents are received, they will be logged and assigned a unique document control number. A sample Document Control Log and a sample Equipment Data Sheet are included in Appendix C.

The Essen Group (United Kingdom, Germany, and the Netherlands) will provide sample passports to allow the testing of facial recognition. Evaluation of the Essen Group passports for compliance with facial recognition standards will be performed by the National Institutes for Standards and Technology (NIST), who will provide results of the tests to ICAO and US-VISIT.

3. Mock POE Test Structure

A series of pre-defined test scenarios will be executed during the conduct of the Mock POE Test. The test scenarios are described in Appendix D. For each test scenario, a number of test cases will be performed. For each e-chip enabled document, at least one test case will be performed

for each combination of reader type, document type and document. Currently there are eight (8) scenarios, three (3) reader types, and seven (7) document types[2].

4. Data Collection and Analysis

During the Mock POE Test data will be collected using a variety of methods. US-VISIT personnel will be assigned to monitor the test scenarios. The monitors will capture data and obtain feedback on the test scenarios. In addition, videotaping will be used to record the activities and establish timing. Monitors will also collect anecdotal data on the ergonomic impact and ease of use of the test equipment. It is anticipated that at least one monitor will be assigned to each workstation throughout the test period to record operations and time the processes. Sample data collection sheets are included in Appendix E.

Analysis of test results will be conducted in the month following the tests. NIST will analyze the results of the facial recognition tests at their facilities and provide the results back to ICAO and US-VISIT.

[2] Since this is an operational test focused on determining the impact of using new equipment capable of reading e-Passports as part of the primary inspection process, a statistically significant sample size is not necessary to achieve the goals for the test.

Abbreviations and Acronyms

BAC	Basic Access Control
BWI	Baltimore Washington International Airport
CBP	Customs & Border Protection
DHS	Department of Homeland Security
ICAO	International Civil Aviation Organization
ISO	International Standards Organization
IT	Information Technology
MRTD	Machine Readable Travel Document
MRZ	Machine Readable Zone
NIST	National Institute of Standards and Technology
OIT	Office of Information Technology
PKI	Public Key Infrastructure
PKD	Public Key Directory
POE	Port of Entry
U.S.	United States of America
US-VISIT	United States Visitor and Immigrant Status Indicator Technology
VWP	Visa Waiver Program

Appendix A: Mock POE Business Requirements

Req. #	Responsibility	Description
1.	OIT/IT	The Mock POE Test solution shall be capable of testing a variety of e-Passport readers.
2.	Deferred	The Mock POE Test solution shall be capable of supporting a variety of peripheral configurations. Peripheral equipment and APIs will be provided by vendors.
3.	OIT/IT	The Mock POE Test solution shall be capable of retrieving the ICAO-standard data from the Machine-Readable Zone (MRZ) on Machine Readable Travel Documents (MRTD).
4.	OIT/IT	The Mock POE Test solution shall be capable of parsing the data retrieved from the MRZ.
5.	Deferred	The Mock POE Test solution shall be capable of retrieving a key from the second line of the MRZ to unlock the e-Passport contactless Integrated Circuit (IC) chip for Basic Access Control (BAC).
6.	OIT/IT	The Mock POE Test solution shall be capable of reading and displaying data from current MRTDs and e-Passports.
7.	OIT/IT	The Mock POE Test solution shall be able to read both Type A and Type B ISO 14443 chips.
8.	Deferred	The Mock POE Test solution shall provide the ability to manually enter and correct the MRZ in resident memory.
9.	Deferred	The Mock POE Test solution shall provide the capability to open the e-Passport contactless IC chip once the MRZ data capture has been corrected.
10.	OIT/IT	The Mock POE Test solution shall be capable of displaying the biographic data and photograph stored in the e-Passport contactless IC chip.
11.	Deferred	The Mock POE Test solution shall be capable of displaying an indication that the digital signature in the e-Passport has been verified.
12.	OIT/IT	The Mock POE Test shall store in a separate dataset, all photographs extracted from e-Passport contactless IC chips.
13.	NIST	The Mock POE Test shall store in a separate dataset, all photographs captured during the inspection process.
14.	Deferred	The Mock POE Test solution shall provide the capability to store the traveler's record and mark it as e-Passport verified.
15.	NIST	The Mock POE Test shall provide facial recognition technology as available.
16.	NIST	The Mock POE Test shall support a variety of camera types/set up as available.
17.	OIT/IT	The Mock POE Test shall store in a separate dataset, all photographs extracted from passport data pages when a full-page document scanner is tested.
18.	NIST	The Mock POE Test shall provide the ability to compare photographs extracted from the e-Passport contactless IC chip to the photo extracted from the data page of the passport.
19.	NIST	The Mock POE Test shall provide the ability to compare live-capture camera photographs with those captured from the travel document.

Appendix B: e-Chip Access and Authentication

E-Chip Access

E-Passport information can be ***accessed*** in three ways:

- **Open Access (OA)**: Embedded information -- such as biographical data and facial image -- can be read directly and immediately without any additional access protocols. This is the access approach the US e-Passports will use.
- **Basic Access Control (BAC)**: Information can be accessed only after a protocol is executed. It requires first reading the MRZ and then using the data on the second line as a 'key' to open the chip for reading. If the MRZ is misread, the chip will also not open, and the inspector will have to key in the MRZ data for the chip to be opened. This access approach is used to protect against skimming of the data from the chip without the holder's knowledge. BAC also protects against eavesdropping of the communications between the chip and the reader (which our tests showed is possible even 30 meters away through walls!). It sets up secure message, so that when the data is detected, it is not 'usable' without knowing the MRZ data, which is used to establish the encrypted data retrieval session. Germany and the Netherlands will use BAC on their e-Passports.
- **Extended Access Control (EAC)**: This process requires encryption of the data on the chip. Information can only be accessed with a decryption key. A nation may do this so that other nations can't read certain fields on the chip. The US probably will not use this option in reading the e-passports. The US will only use passive authentication on its passports. The United Kingdom and other European Union nations are considering use of EAC for certain data on their chips.

E-Chip Authentication

After accessing the information on the e-Passport, the reader can be programmed/instructed to authenticate the passport by verifying its digital signature against the issuing country's public key (to which the reader will have access – either via background software or by extracting the key from the chip). Using authentication controls is not a mandatory second step, but is highly desired as one of the main purposes of the e-Passport is to avoid forgery. The two authentication approaches are:

- **Passive Authentication**: This is used to read the digital signature of the issuing state to ensure that the data was authored by the issuing state and not altered. The process requires either embedding certain Public Key Infrastructure (PKI) data in the chip itself or the use of a table of country-specific public keys containing document signing certificates. These signatures, as recommended, will change at a maximum every 3 months, and the higher-level country signing certificate authority, will change every 3-5 years. ICAO is working on setting up an international PKI directory (PKD), which is anticipated for late 2005. In the meantime, the public keys will be exchanged on a bi-lateral basis to populate the U.S PKI directory. The government will need to establish a process to distribute the keys to the individual readers, which will need the ability to store them.
- **Active Authentication**: This is used to ensure that a copy of the chip is not made. In addition to the passive authentication protocol, a public-private key pair is contained on the chip. The public key is in DG15. The private key is in the 'private' area of the chip.

Thus, when a reader sends a 'random' string to the chip, it is returned from the chip using it's private key. The reader retrieves the public key from DG15 and compares the returned value. If it matches what was sent, the chip is original. If the contents of the chip were copied to another chip, the private key could not be copied and the returned signature would not match

Appendix C: Sample Document Control Log and Equipment Data Sheet

Mock POE Test – Document Control Log

Document Control #: __________

Provided by (Company/Country/POC): ____________________________

Chip Type (circle one): A B Other (e.g., 72KB, Smart MX Philips): ____________

Data on Chip (circle one): Silver Data Set Custom
Other (specify): ________________________________

Access Control (circle one): Active Passive BAC

Antenna Size: ID-1 ID-2 ID-3

Document Control #: __________

Provided by (Company/Country/POC): ____________________________

Chip Type (circle one): A B Other (e.g., 72KB, Smart MX Philips): ____________

Data on Chip (circle one): Silver Data Set Custom
Other (specify): ________________________________

Access Control (circle one): Active Passive BAC

Antenna Size: ID-1 ID-2 ID-3

Document Control #: __________

Provided by (Company/Country/POC): ____________________________

Chip Type (circle one): A B Other (e.g., 72KB, Smart MX Philips): ____________

Data on Chip (circle one): Silver Data Set Custom
Other (specify): ________________________________

Access Control (circle one): Active Passive BAC

Antenna Size: ID-1 ID-2 ID-3

Mock POE Test – Equipment Data Sheet

Vendor Information
Name:
Street Address:
City:
State/Province:
Zip:
Country:
POC Name:
POC Telephone:
POC Cell:
POC Fax:
POC Email:
URL:

Product Information
Product Name:
Product Type:
Product Version:
Supported Host Operating System(s):
Supplied Device Drivers for MS Windows 2000 or XP:
Conforms to Windows PC/SC Interface:
Connection:
RFID Reader Vendor:
Reader Form Factor:
Reader Capable of Accepting ID3 Size Passport Books (circle one): Y N
Scanner DPI:
Bands of Illumination:
Reader's Dimensions:
Reader's Weight:
Supplied Demonstration Software (circle one): Y N
Supplied API (and Language) (circle one): Y N
Supplied RF Chip Command Interface (circle one): Y N
Supplied Demonstration Contactless Card (circle one): Y N
Can read ISO 14443-A Compliant Chips (circle one): Y N
Can read ISO 14443-B Compliant Chips (circle one): Y N
List of cards/manufacturers that the reader does and does not work with:
RFID Reader Data Rate:
Received by/Date:

Appendix D: Test Scenarios

Scenario 1: Scanning and Reading the MRZ

Description: For each reader type, scan the MRZ on the document and record the time that elapses from the point at which the "Officer" initiates the scan to the point at which the data is displayed on the workstation.

Expected Results: Determine whether the proposed readers match or exceed the operational performance levels achieved by the current passport readers. Specifically, compare the ability to read MRTDs, the time it takes to read documents, and the accuracy of the read.

Data Capture: For eachrtest case collect the following data:

- Document Type (e.g., Current Passport and Visa, e-Passport, e-Visa)
- Document Control Number
- Reader Type (e.g., Current reader, Full-page reader, Reader with separate scanner, Slot reader)
- Reader ID
- Scan Success: Yes or No
- Reads to success: Number of scans to successful read
- Total Response Time: Seconds
- Accuracy (MRZ misreads): Total Count, Data Type (alpha/numeric), Error Type Count

Reference: Business Requirements 1, 2, 3, 6

Scenario 2: Reading and Stamping e-Passports

Description: For each reader type, measure the time that elapses from the point at which the e-Passport is swiped or placed on the reader to the point at which the data is displayed on the workstation. Stamp the e-Passport.

Expected Results: Determine how much time it will take to read e-Passports. Specifically, compare the ability to read documents, the time it takes to read documents, and the accuracy of the read. Determine the impact of the use of e-chip enabled documents on the stamping process.

Data Capture: For each test case collect the following data:

- Document Type
- Document Control Number
- Chip Type: A or B
- Reader Type
- Reader ID
- Scan Success: Yes or No
- Reads to success: Number of scans to successful read
- Passport stamped previously: Yes or No
- Number of times stamped
- Response Time (start to display of data on workstation): Seconds
- Accuracy: Total Count, Misread Count, Error Type (no read, partial read)

- ICAO compliant output: Data Group, Total Count, Non-compliant Count

Reference: Business Requirements 1, 2, 7, 10, 11

Scenario 3: Reading and Stamping e-Passports with Basic Access Control (BAC)

Description: For each reader type, measure the time that elapses from the point at which the e-Passport is scanned to the point at which the data is displayed on the workstation. Stamp the e-Passport.

Determine how much time it will take to read e-Passports with BAC. Specifically, compare the ability to read documents, the time it takes to read documents, and the accuracy of the read. Determine the impact of the use of e-chip enabled documents on the stamping process.

Data Capture: For each test case collect the following data:

- Document Type
- Document Control Number
- Reader Type
- Reader ID
- Read Success: Yes or No
- Reads to success: Number of scans to successful read
- Passport stamped previously: Yes or No
- Number of times stamped
- Response time (MRZ read to display of data on workstation): Seconds
- Accuracy: Total Count, Misread Count, Error Type (no read, partial read)
- ICAO compliant output: Data Group, Total Count, Non-compliant Count

Reference: Business Requirements 4, 5

Scenario 4: Observe and Identify Any Deviations from the Pre-defined Process Steps Required to Complete Document Inspection

Description: Identify any deviations from the prescribed process steps executed to complete document inspection.

Data Capture: For each procedure deviation, collect the following data:

- Document Type
- Document Control Number
- Reader Type
- Reader ID
- Process Step Name
- Process Step Sequence
- Process Step Description
- Step Impact: Time to perform

Data will collected by observation during the Mock POE Test and by reviewing the videotape following the Mock POE Test.

Reference: Increment 2A Mock POE Test CONOPS, Section 4.0

Scenario 5: Changing Physical Placement of Reader Equipment

Description: Observe the impact of alternate reader placement on the inspection process.

Data Capture: For each reader configuration, collect the following data:

- Reader Type
- Reader ID
- Physical Dimensions
- Placement on work area

Data comparing the suitability of different reader types will be gathered at the end of the Mock POE Test through a questionnaire.

- What types of problems did you encounter with inserting the documents in the reader (if applicable)?
- Were certain types of MRTDs more problematic than others? If so, which ones?
- Which reader placement was the most convenient and why?

Reference: Increment 2A Mock POE Test CONOPS, Section 4.0

Scenario 6: Determine Usability of Different Camera Types and Placement

Description: Determine what camera types and placement are most usable for airport POEs to support facial recognition. ***The test cases for this scenario will be monitored by NIST staff.***

Data Capture: For each camera type and each camera configuration, collect the following data:

- Camera Type
- Camera Position
- Number of Illumination Sources
- Type of Illumination Sources
- Traveler Position
- Time to position traveler (time it takes the Officer to instruct and position the traveler)
- Time to display image (time it takes to take the traveler's picture and display the image on the workstation)
- Ability of camera to adjust to subject height variation
- Number of times Geometric calibration required
- Number of times Photometric calibration required
- Observable benefits from Geometric calibration
- Observable benefits from Photometric calibration

For all images, determine compliance with applicable standards and profiles (analysis to be conducted at NIST facilities after test completion):

- Resolution
  - Are there enough pixels on the face?
  - What is the mean interoccular distance?
- Compression
  - Are the images correctly compressed?
- Pose

  - Are the images frontal?
  - What are the statistics of the pose angle?
- Illumination
  - Is the illumination uniform?
  - Are the images correctly exposed?

Reference: Business Requirements 12, 13, 15, 16

Scenario 7: Compare Photograph extracted from e-Passport to Photograph Extracted from Data Page of Passport

Description: Evaluate the quality and usability of the photograph extracted from the e-Passport for document authentication when comparing the photo to the photo retrieved from the e-chip. ***The test cases for this scenario will be executed at NIST facilities following the completion of the Mock POE Test.***

Data Capture: Collect the following data:

- Authentication performance
- Processing time for performing image comparison
- Quality of scanned-from-data-page images (are they suitable for recognition)

Reference: Business Requirement 17, 18

Scenario 8: Compare Photograph extracted from Passport to Photograph captured Captured by Camera.

Description: Identify the issues related to whether a photo captured from the passport and photo from a high quality camera can be integrated to execute near real-time biometric authentication of the traveler's travel document. ***Some of the test cases for this scenario will be executed at NIST facilities following the completion of the Mock POE Test.***

Data Capture: Collect the following data:

- Document Type
- Document Control Number
- Chip Type: A or B, or N/A
- Reader Type
- Reader ID
- Camera Type
- Camera Position
- Number of Illumination Sources
- Type of Illumination Sources
- Traveler Position
- Time to position traveler (time it takes the Officer to instruct and position the traveler)
- Time to display image (time it takes to take the traveler's picture and display the image on the workstation)
- Ability of camera to adjust to subject height variation
- Number of times Geometric calibration required
- Number of times Photometric calibration required

- Observable benefits from Geometric calibration
- Observable benefits from Photometric calibration
- Processing time for performing image comparison
- Usability of interface

Reference: Business Requirements 15, 19

Appendix E: Sample Data Collection Sheets

Data Collection Sheet – Mock POE Test

Scenario #1: Scanning and Reading the MRZ

Lane: ____ **Inspection #:** _____

****

Date: _____ **Test Monitor:** _____

Tester: _____

****

Reader ID: _____ **Doc. Control #:** _____

****

Initial (1st) read successful (circle one): Y N

Number of scans to successful read: _____ **No successful read** ☐

Total Response Time in Seconds (from initial scan to display of data): _____

****

MRZ Misreads (circle one): Y N

Partial Read: Line 1 Only ☐ **Line 2 Only** ☐

Misread Type (count):

Letter O to Zero 0 : _____ **Letter B to Eight 8 :** _____

Letter F to Letter P : _____ **Eight 8 to Letter B :** _____

Letter U to Letter O : _____ **Letter H to Letter A :** _____

Letter C to Letter O : _____

Other (specify): _____ _____

****

Comments:

Data Collection Sheet – Mock POE Test

Scenario #2: Reading and Stamping e-Passports

Lane: _____ **Inspection #:** _____

****

Date: _____ **Test Monitor:** _____

Tester: _____

****

Reader ID: _____ **Doc. Control #:** _____

****

Initial (1st) read successful (circle one): Y N

Number of scans to successful read: _____ **No successful read** ☐

Previously stamped? Y N **# Stamps:** _____

****

ICAO Compliant (data displays correctly):

Biographic Info (MRZ) (circle one) Y N
Biometric Info (picture) (circle one) Y N

Total Response Time in Seconds (from initial scan to digital signature verification): _____

****

MRZ Misreads (circle one): Y N N/A (test document does not have a MRZ)

Partial Read: Line 1 Only ☐ **Line 2 Only** ☐

Misread Type (count):

Letter O to Zero 0 : _____ **Letter B to Eight 8 :** _____

Letter F to Letter P : _____ **Eight 8 to Letter B :** _____

Letter C to Letter O : _____ **Letter H to Letter A :** _____

Letter U to Letter O : _____

Other (specify): _____

****

Comments:

Data Collection Sheet – Mock POE Test

Scenario #3: Reading and Stamping e-Passports with Basic Access Control

Lane: _____ **Inspection #:** _____

****

Date: _____ **Test Monitor:** _____

Tester: _____

****

Reader ID: _____ **Doc. Control #:** _____

****

Initial (1st) read successful (circle one): Y N

Number of scans to successful read: _____ **No successful read** ☐

If no, previously stamped? Y N **# Stamps:** _____

****

ICAO Compliant (data displays correctly):

Biographic Info (MRZ) (circle one) Y N
Biometric Info (picture) (circle one) Y N

Total Response Time in Seconds (from initial scan to digital signature verification): _____

****

MRZ Misreads (circle one): Y N **N/A test document does not have a MRZ)**

Partial Read: Line 1 Only ☐ **Line 2 Only** ☐

Misread Type (count):

Letter O to Zero 0 : _____ **Letter B to Eight 8 :** _____

Letter F to Letter P : _____ **Eight 8 to Letter B :** _____

Letter C to Letter O : _____ **Letter H to Letter A :** _____

Letter U to Letter O : _____

Other (specify): _____

****

Comments:

Appendix F: Lane Assignments

International Government(s)
BWI Mock POE Test