# TASPO-ATS-L System Test Plan

**Automated Targeting System-Land** 

ATS-L\_(WR\_1941)\_STP\_1.1

Document Number: ATS-L\_(WR\_1941)\_STP\_1.1

October 6, 2011



# U.S. Customs and Border Protection

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to

# TASPO-ATS-L System Test Plan Automated Targeting System-Land (WR\_1941)

#### **Executive Summary**

#### Background

The purpose of this project is to enhance the Automated Targeting System's-Land application (ATS-L) to incorporate the analysis and rule-based risk assessment of the people crossing the nation's borders in vehicles. Upon completion of the processing and checking of the license plate numbers of vehicles and the Western Hemisphere Travel Initiative (WHTI) compliant documentation of the people seeking to cross the border, ATS-L will allow U.S Customs and Border Protection (CBP) officers to **B7E** 

produce a risk assessment for each vehicle and person. These assessments will assist CBP officers at primary booths in determining whether to allow a vehicle to cross or to send the vehicle to secondary for further examination.

Among the benefits envisioned in the implementation of this enhancement are:

- Providing real-time vehicle and person risk assessment capabilities to land border ports of entry;
- improving security at U.S. land borders by assessing which vehicles and people are more likely to be security risks; and

The vehicle-only version of ATS-L is currently deployed to B71

### Deliverables

There is usually a deployment of ATS-L updates every **B7E** or as requested by the business sponsors, and each implementation is monitored by the ATS-L Project Manager and CBP executive managers on a regular basis.

### Schedule

TASPO Program Control maintains the cost estimates and budgets for this project.

#### Cost

TASPO Program Control maintains the cost estimates and budgets for this project.

# **Revision History**

Document Number	Description of Revision	Author/ Person Responsible	Government Approval Authority	Date Approved
TASPO_ATS - L_(WR_1941 )_STP_1.0.do cx	Initial Revision	(b) (6), (b) (7)(C)	(b) (6), (b) (7)(C)	5/26/2011
TASPO_ATS - L_(WR_1941 )_STP_1.1.do cx	Revised dates	(D) (C), (D) (7)(C)	(b) (6), (b) (7)(C)	11/03/11

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# TASPO-ATS-L System Test Plan

Project Name:Automated Targeting System-Land (WR\_1941)Document Number:ATS-L\_(WR\_1941)\_STP\_1.1Date Prepared:October 6, 2011

#### 1. Introduction

This System Test Plan provides an overview of the testing strategy of the Automated Targeting System – Land (ATS-L) application system. This plan describes the test environment including the supporting hardware and software necessary to test the functional and technical requirements. The test approach, test milestones, test locations, test schedules, and test evaluation criteria are documented in this plan. This document does not contain low-level details, such as test procedures and scripts, but does describe how the test procedures are used with relation to the lower level testing documents. The individual test scripts to be followed for verification of software operation will be issued separately.

#### 1.1. Purpose

The purpose of this project is to define, design, and implement ATS-L as part of a maintenance release to allow enhance existing functionality that the field users have requested.

## 1.2. Background

ATS-L has been deployed to production in 2005 and is currently under the Operations and Maintenance mode.

# 1.3. System Test Plan Overview

This System Test Plan provides an overview of the testing strategy of the ATS-L system. This document does not contain low-level details, such as test procedures and scripts, but does describe (b) (7)(E)

The following types of testing occur during each release:

- Unit Testing –
- System Acceptance Testing (SAT) Verify that the developed system operates in accordance with requirements. (b) (7)(E)
- Security Testing Verify that Customs and Border Protection (CBP) security requirements are met. Any applicable security testing is coordinated in conjunction with the Targeting and Analysis Systems Program Office (TASPO) Office of Information and Technology (OIT) security team during SAT execution.
- User Acceptance Testing (UAT) This testing is performed subsequent to the deployment to the Production environment after the Production Readiness Review (PRR).

#### 1.4. Reference Documents

The System Test Plan for the ATS-L release is developed based on information contained in latest applicable version of the following documents:

#### **Table 1: Reference Documents**

Document Name	Description
Project Plan	Provides scope, cost, schedule, and resource information pertinent to the development of the ATS-, including the
	proposed organizational structure, management and
	oversight strategies that will guide implementation. It
	includes a summary of potential risk areas for the
	development portion of the project.
Functional and Technical Requirements	Communicates the problem domain and how this translates
	into the business needs driving the development of ATS It
	also establishes a basis for system development activities.

#### 2. Milestones

The testing activities and milestones are reflected in the ATS-L project schedule.

#### 2.1. Test Location

The ATS-L testing will be performed at (b) (7)(E)

#### 3. Test Items

The ATS-L system is developed as specified, based on (b) (7)(E)

# 3.1. Features to Be Tested

(b) (7)(E)

#### (b) (7)(E)

### 3.2. Features that are "NOT" Tested

The commercial-off-the-shelf (COTS) products are not tested separately, since the vendors have previously tested the product functionality. Testing will verify the integration of these products to ensure that software and hardware are properly configured, including verifying the proper setting of configuration parameters and any customization implemented to support TASPO-ATS-L requirements. ATS-L has an exemption to Section 508 based upon its National Security System (NSS) status.

#### 4. Test Strategy and Approach

#### 4.1.1. Methodology

#### (b) (7)(E)

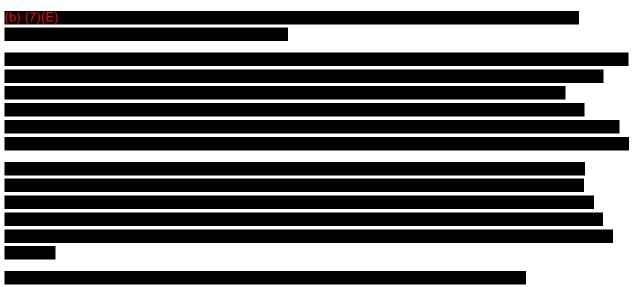
#### 4.1.2. Data Recording

Recording of the test results will be within the Unit Test Cases/SAT plan document.

#### 4.2. Unit Testing

(b) (7)(E)

### 4.3. System Acceptance Testing



• (b) (7)(E)

## 4.4. Security Testing

(b) (7)(E)

ATS-L is in compliance with the Authority to Operate (ATO) granted on 01/21/2011.

## 4.5. User Acceptance Testing

OIOC and other identified resources perform UAT. Test support to the UAT effort will be provided by the development and test teams.

#### 5. Items Pass/Fail Criteria

<b>(b)</b>	(7)(E)	
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#### 6. Suspension Criteria and Resumption Requirements



#### 7. Test Cases

Tests are described in the individual test procedures located in Team Foundation Server (TFS).

### 7.1. Documentation Testing

Review and test the documentation for accuracy and completeness, including the installation instructions, release notes, administration and user guides, and online documentation.

#### 8. Test Documentation

The following work products are prepared for testing of the ATS- system:

- System Test Plan (this document) which describes the overall testing approach that will be followed for ATS-L
- SAT Test Plan which details test steps and subsequent test results

#### 9. Testing Tasks

#### (b) (7)(E)

#### 9.1. Test Planning and Methodology

(b) (7)(E)			
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#### 9.2. Test Design

The test team identifies and describes the types of tests needed to exercise the functionality. The test cases describe the exact mechanisms and approach for testing, including identification of the following:

- Brief description of the test
- Type of test, e.g., automated, manual, batch, user interface (UI)
- Type of results, e.g., positive, negative, pass, fail
- Verification method, e.g., **B7E**, screen refresh
- Required test data, and how it will be prepared/acquired and validated
- Traceability from test cases to the requirements/use cases

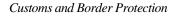
#### 9.3. Test Implementation

The test team reviews the developed test cases with the appropriate stakeholders and SMEs. Implementation includes the following:



#### 9.4. Test Execution

The test team executes the tests by performing (b) (7)(E



• (b) (7)(E)

# 9.5. Problem and Test Reporting

The test team documents the problems detected during testing, and produces progress reports during test execution. These reports detail the following:

- Problems by severity
- Number of problems
- Total number of tests run
- Tests remaining
- Tests blocked due to defects/PR's

TFS reports are used where available, and supplemented when additional needs exist. The test results and detected problems are collected and incorporated in the Test Analysis Report or identified tool of choice.

#### **10. Environmental Needs**

(b) (7)(E)

#### 10.1. Development/Integration Environment

(b) (7)(E)

#### 10.2. SAT Test Environment

(b) (7)(E)

### 10.3. Equipment

The following hardware/software will be required for testing the ATS-L system:

• (b) (7)(E)

#### 10.4. Hardware Preparations

The SAT hardware configuration baseline is established by(b) (7)(E)

### 10.5. Software Preparation

#### (b) (7)(E)

#### 10.6. Software Test Tools

The individual tools to be used for testing will be coordinated in Critical Design Review.

#### 11. Personnel

ATS-L testers will have the necessary skills and knowledge to perform their roles and responsibilities effectively and efficiently. This includes appropriate experience (b) (7)(E)

#### **12. Milestones & Schedule**

The testing activities and milestones are reflected in the ATS-L project schedule.

#### **13. Testing Location**

The ATS-L testing will be performed at an approved CBP location.

### 14. Risks and Contingencies

Risks are submitted and tracked by the project manager and are documented in accordance with the CBP risk management process. Mitigation plans are created and monitored as risks are changed and appended to the risk repository.

### **15. Assumptions and Constraints**

The assumptions and constraints associated with ATS- testing are as follows:

- Appropriate CBP resources, stakeholders, and subject matter experts (SMEs) will be available to participate in the development of the plans and procedures.
- Sufficient cleared resources, with the appropriate clearances will be required to perform the tests.

#### • (b) (7)(E)

#### **16. Requirement Traceability Matrix**

The requirements traceability matrix (RTM) serves as a cross-reference between the requirements and the tests that are used to verify them. Additionally, the RTM is used to track the verification method and the pass/fail status of the requirements.