

System Design Document

***Targeting and Analysis Systems Program Office
Automated Targeting System-Land***

***Document Number:
TASPO_ATS-L_SDD_1.1***

October 5, 2011



**U.S. Customs and
Border Protection**

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System Design Document Targeting and Analysis Systems Program Office Automated Targeting System-Land

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 (b) (7)(E) to 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
- (b) (7)(E)

(b) (7)(E)

Deliverables

There is usually a deployment of ATS-L updates every (b) (7)(E) 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)_S DD_1.0.docx	Initial Revision	(b) (6), (b) (7)(C)	(b) (6), (b) (7)(C)	2/23/2011
TASPO_ATS-L_(WR_1941)_S DD_1.1.docx	Revised dates, changed OIOC to OIL	(b) (6), (b) (7)(C)	(b) (6), (b) (7)(C)	11/03/11

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Date Prepared: October 5, 2011

1. System Overview

1.1. Overview

The ATS-L application is an enterprise land targeting system for CBP, which has been developed to support multiple offices:

- Office of Field Operations (OFO)
- Office of Intelligence and Investigative Liaison (OIIL)

The system is designed with modular components to support multiple business workflows. These specific components are based on the (b) (7)(E).

1.2. Functions

The ATS-L application and various components support the following key functions and capabilities:

- (b) (7)(E)
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

1.3. System/Subsystem Logic

1.3.1. ATS-L Context Diagram

(b) (7)(E) [Redacted] (b) (7)(E) [Redacted]
[Redacted]

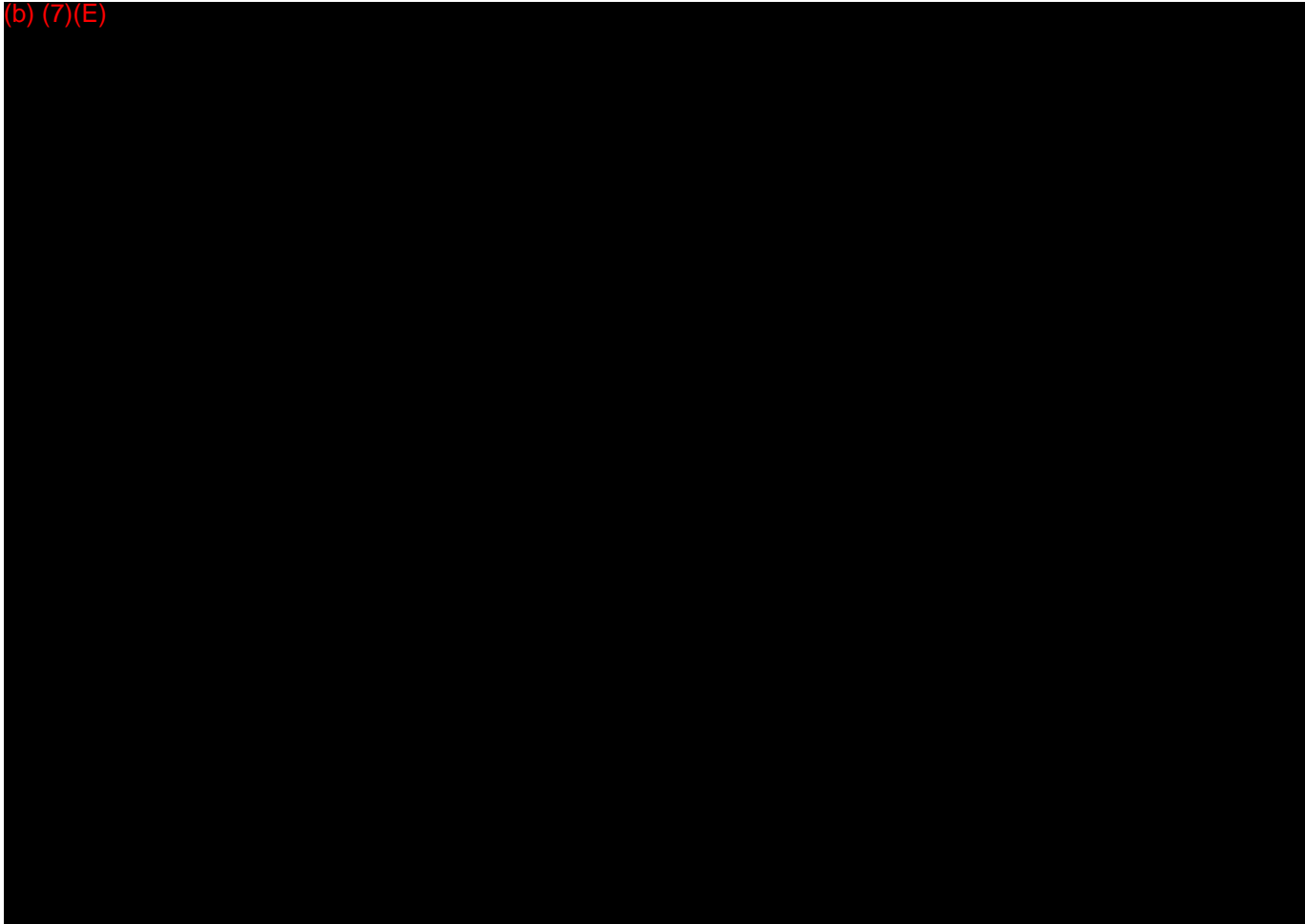


Figure 1 - ATS-L Context Diagram

1.3.2. ATS-L Functional Architecture

The ATS-L Functional Architecture shows the (b) (7)(E) [Redacted]
[Redacted]
[Redacted]

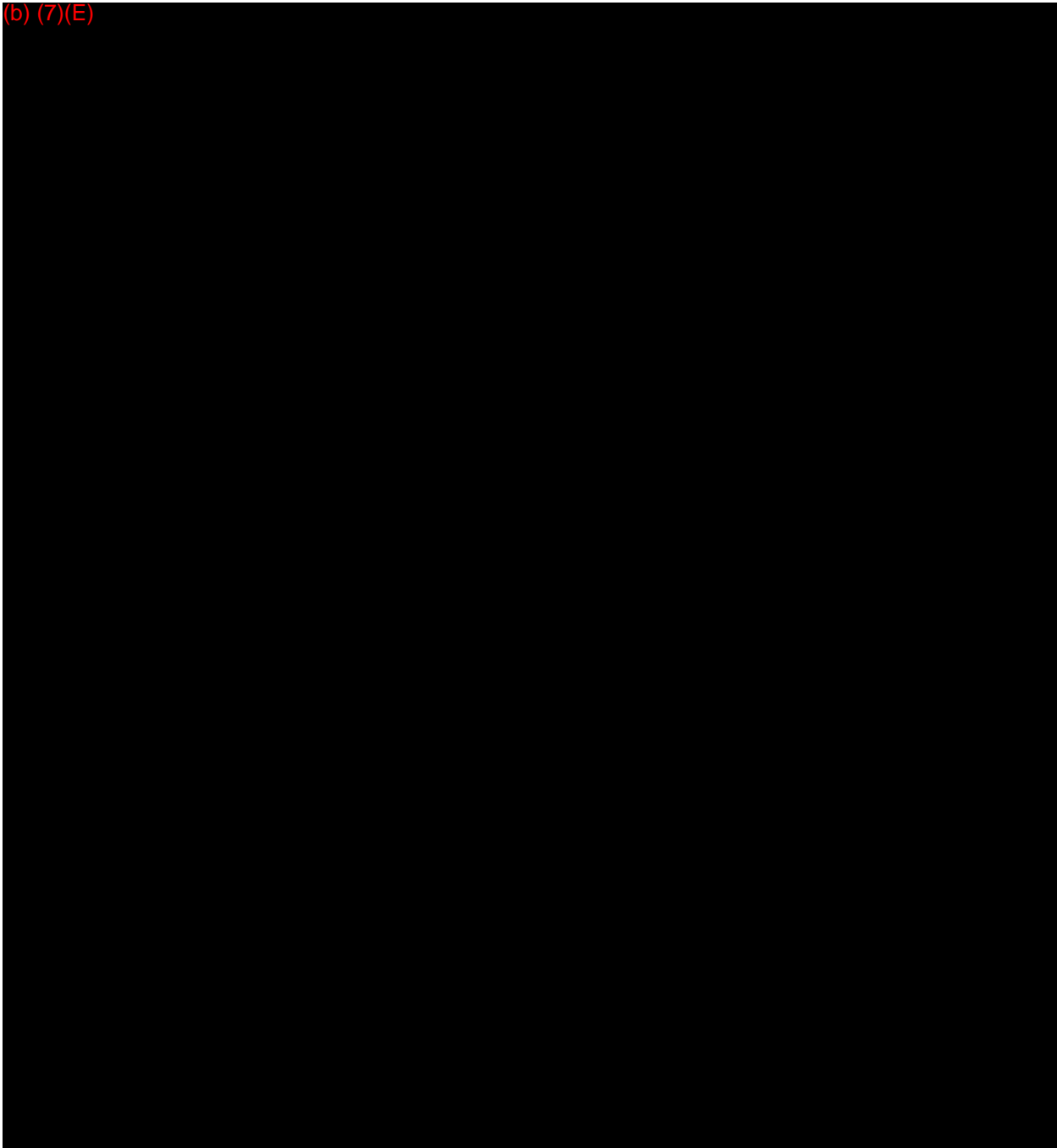


Figure 2 : ATS-L Application Architecture

The following are components included within the ATS-L security boundary:

1.3.2.1. ATS-L Front End Components

(b) (7)(E)

1.3.2.1.1. ATS4 Framework

(b) (7)(E) [Redacted]

1.3.2.2. ATS-L Back End Components

(b) (7)(E) [Redacted]

- [Redacted]

1.4. Flexibility

Any requests to enhance or modify ATS-L functionality that affects the ATS-L system design will be sent to the ATS-L Project Manager (PM) within CBP/OIT/TASPO. If (b) (7)(E) [Redacted]

[Redacted]

1.4.1. Modes of Operation

The ATS-L application operates in a limited user login mode. Most of the current users are land modal users.

1.4.2. Operating Environment

(b) (7)(E) [Redacted]

2. Operational Environments

2.1. Operations

(b) (7)(E) [Redacted]
[Redacted]
[Redacted]

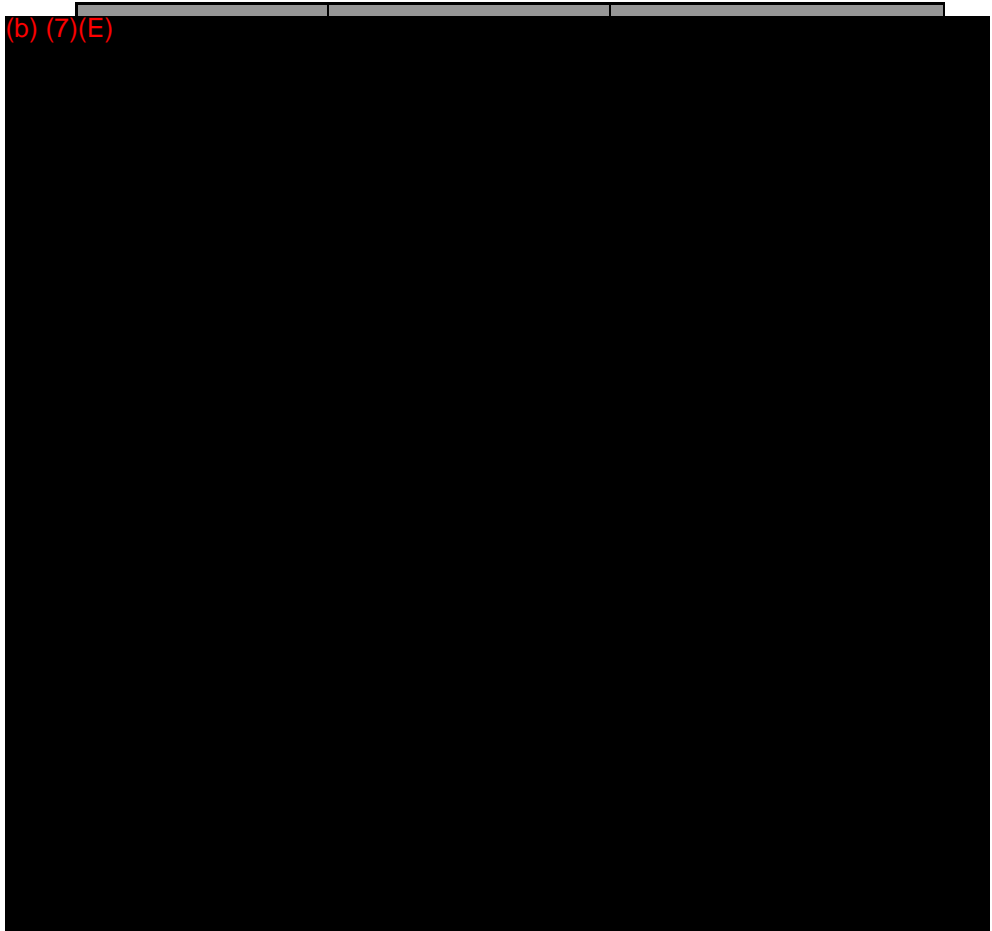
1. Development
2. Production

All users of ATS-L will access the systems (b) (7)(E) [Redacted]
[Redacted]
[Redacted]

2.2. Equipment

(b) (7)(E) _____ :

(b) (7)(E)



2.3. Network Context

ATS-L servers are hosted (b) (7)(E) The following diagram shows the context for network interconnectivity among the different ATS-L servers.

(b) (7)(E)



Figure 3 - ATS-L Network Context

2.5. Security and Privacy

For information about security requirements, including system architecture, data, checks and audit trails, and Privacy Act issues, see (b) (7)(E) [REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

3. ATS-L Database Subsystem Design

3.1. Databases

ATS-L uses data from a wide variety of data sources and systems. The following diagram shows the different databases accessed by ATS-L.

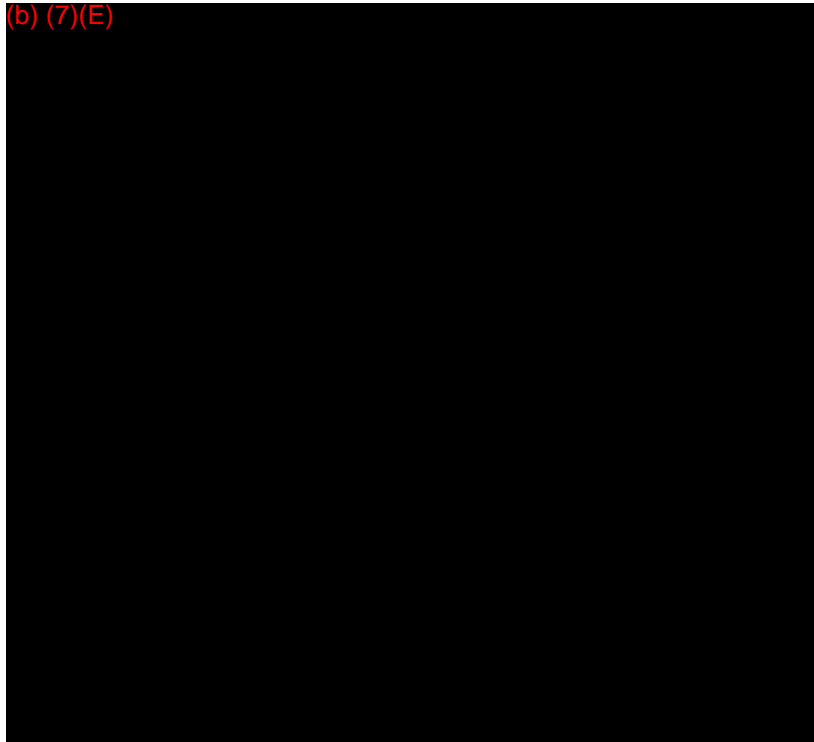


Figure 4 - Databases

3.2. Database Overview

(b) (7)(E)

3.3. Database Behavioral Design Descriptions

Database behavioral design decisions include decisions to assure the quality of the data. Data quality efforts are integral components of the system design. Each business area thoroughly reviews design considerations to ensure that data quality is achieved. Data quality assessments will be performed, the results will be documented, and the findings will be reported to CBP. Data quality includes data completeness, data integrity, data consistency, and data currency. Data cleansing efforts may be required in future releases for the legacy data.

3.3.1. Data Completeness

Data completeness is achieved through verification that the data models and dictionaries are traceable to the Logical Data Model, which identifies the data required to support the business processes.

3.3.2. Data Integrity

Data integrity categories include data structure integrity, data value integrity, data synchronization integrity, and data audit integrity.

3.3.3. Data Structure Integrity

(b) (7)(E) [Redacted]

3.3.4. Data Value Integrity

(b) (7)(E) [Redacted]

3.3.5. Data Audit Integrity

(b) (7)(E) [Redacted]

3.3.6. Data Consistency

(b) (7)(E) [Redacted]

3.3.7. Backup and Transaction Recovery

(b) (7)(E) [Redacted]

3.3.8. Data Availability and Retention

(b) (7)(E) [Redacted]
[Redacted]
[Redacted]

3.4. Data Quality Assurance

The ATS Quality Assurance Plan is on file (b) (7)(E) [Redacted].

3.5. Sensitive Data

(b) (7)(E) [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]