



Safety and Fitness Electronic Records (SAFER) Safer Software version 9.2 Interface Control Document

DRAFT Version 9.2

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Prepared for:
US Department of Transportation
Federal Motor Carrier Safety Administration
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Washington, DC 20590



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The Motor Carrier Safety Improvement Act was signed into law on December 9, 1999. This act established a new Federal Motor Carrier Safety Administration (FMCSA) within the US Department of Transportation (DOT), effective January 1, 2000. Prior to that, the motor carrier and highway safety program was administered under the Federal Highway Administration (FHWA).

The mission of the FMCSA is to improve truck and commercial passenger carrier safety on our nation's highways through information technology, targeted enforcement, research and technology, outreach, and partnerships. The FMCSA manages the ITS/Commercial Vehicle Operations (CVO) Program, a voluntary effort involving public and private partnerships that uses information systems, innovative technologies, and business practice reengineering to improve safety, simplify government administrative systems, and provide savings to states and motor carriers. The FMCSA works closely with the FHWA's ITS JPO to ensure the integration and interoperability of ITS/CVO systems with the national ITS program.

NOTE ON VERSION NUMBERING

Originally, the software, database and interface control document were synchronized and released simultaneously. That is no longer the case and the version numbers for the software, the database and the document therefore vary:

- The current software version number is 8.1.
- The current database version number is 4.2.3.
- The current document version number 8.1.

It is important to remember that this is a preliminary document. The material presented here will undergo several iterations of review and comment before a baseline version is published.

The document is disseminated in the interest of information exchange only.

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Safety and Fitness Electronic Records (SAFER) Version 9.2 Interface Control Document

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INTRODUCTION

This document describes the interface specifications for systems that interface to the Safety and Fitness Electronic Records (SAFER) version 8.1 System, a component of the Intelligent Transportation System (ITS), which is part of the Commercial Vehicle Information Systems and Networks (CVISN) architecture.

1.1 DOCUMENT PURPOSE AND SCOPE

The purpose of this document is to describe the eXtensible Markup Language (XML), Web Services, and File Transport Protocol (FTP) interfaces between the SAFER system and a CVIEW or equivalent system.

1.2 DOCUMENT ORGANIZATION

The remainder of this Interface Control Document is organized into the following sections:

- Section 2: Applicable Documentation
- Section 3: General Interface Description
- Section 4: Interface Specification
- Appendix A: Data Dictionary
- Appendix B: Jurisdiction Codes
- Appendix C: IFTA Status Codes
- Appendix D: IRP Vehicle Status Codes
- Appendix E: Vehicle Use Class Codes
- Appendix F: IRP Fleet Codes
- Appendix G: Carrier Classification Codes
- Appendix H: Cargo Classification Codes
- Appendix I: Hazmat Codes
- Appendix J: Time Zone Codes
- Appendix K: Compression Format
- Appendix L: Transaction Samples and Schemas

1.3 DOCUMENT HISTORY, STATUS AND SCHEDULE

This document, prepared by the John A. Volpe National Transportation Systems Center, is based on a previous version of the SAFER Interface Control Document Safety and Fitness Electronic Records (SAFER) System Interface Control Document version 8.1. This version specifically includes updated documentation on the transactions, specifications for transactions that have been added or modified to the system since the last revision.

This document is considered to be preliminary. The material will undergo several iterations of review and comment before a baseline version can be published.

| Document History | Date | Comments |
|------------------|------------------|-----------------------------|
| SAFER 4.2 ICD | 2003 | Created by JHUAPL |
| SAFER 5.1 ICD | March 2007 | Updated by the Volpe Center |
| SAFER 8.1 ICD | February 2008 | Updated by the Volpe Center |
| SAFER 9.1 ICD | October 24, 2011 | Updated by the Volpe Center |
| SAFER 9.2 ICD | July 10, 2012 | Updated by the Volpe Center |

1.4 DOCUMENTATION CONVENTIONS

1.4.1 ACRONYMS, ABBREVIATIONS, AND TERMS

| | |
|-----------|------------------------------------------------------------------------|
| AAMVA | The American Association of Motor Vehicle Administrators |
| CVIEW | Commercial Vehicle Information Exchange Window |
| CVISN | Commercial Vehicle Information Systems and Networks |
| CVO | Commercial Vehicle Operations |
| FMCSA | Federal Motor Carrier Safety Administration |
| FTP | File Transfer Protocol |
| FTS2001 | Federal Technology Services |
| ICD | Interface Control Document |
| IFTA | International Fuel Tax Agreement |
| IRP | International Registration Plan |
| ITS | Intelligent Transportation Systems |
| LSI | Legacy System Interface |
| MCMIS | Motor Carrier Management Information Systems |
| DOS | Disk Operating System |
| POP3 | Post Office Protocol, version 3 |
| PPTP | Point-to-Point Tunneling Protocol |
| PRISM | Performance and Registration Information Management System |
| SAFER | Safety And Fitness Electronic Records |
| SCAPI AFF | SAFER/CVIEW Applications Programming Interface Application File Format |
| SMTP | Simple Mail Transfer Protocol |
| SOAP | Simple Object Access Protocol |
| SOWG | SAFER Option Working Group |
| TCP/IP | Transmission Control Protocol/ Internet Protocol |
| TS | Transaction Set |
| TZ | Time Zone |
| URL | Universal Resource Locator |
| USDOT | United States Department of Transportation |
| VIN | Vehicle Identification Number |
| VPN | Virtual Private Network |
| WSDL | Web Services Definition Language |
| XML | eXtensible Markup Language |

1.4.2 DATA STRUCTURE NOTATION CONVENTIONS

Each transaction type is described in terms of a high-level data-structure notation. This convention is used to describe the data structure in terms of content (each element separated by “+”) and the order of the elements, and indicates where data elements can be defined as an iteration “{...}”, i.e., a repeatable group.

For example, the IRP Account Transaction consists of an IRP account, name, and address. This information shall be structured in a file as follows:

```
Interface Header + IRP Account Transaction Header + {IRP Account + {IRP Account Name + {IRP Account Address}}}
```

1.4.3 DATA-ELEMENT NOTATION

Each data structure consists of one or more data elements. Each data element will be prefixed with an indication of the table used in SAFER: “<table name>.<data element name>”

The names of all data-element fields are provided in Appendix A – Data Dictionary.

“Mandatory” indicates that a field is mandatory, i.e., the information contained in the record is not useful without it. Records will be rejected if the field is missing.

“Conditional Mandatory” indicates that a field is mandatory, i.e., the information contained in the record is not useful without it, if the participating state is participating in the PRISM program in addition to CVISN.

“Optional” indicates that the record is less useful without the data in this field, but the information is not necessary.

Note: ALL optional fields should be included in the record structure whenever possible.

1.4.4 UNIVERSAL RESOURCE LOCATOR (URL) NOTATION

Each state, province or other jurisdiction utilizes a user ID and password to access the SAFER FTP server. The user ID will be “CVIEWxx,” where xx is the two-character postal code for the jurisdiction. For instance, the user ID for the state of Kentucky is CVIEWKY, and for Maryland it is CVIEWMD.

Each user ID will have an associated password, which will be assigned by the Volpe Center at the time the user ID is created. Users may change their passwords by contacting FMCSA Technical Support.

In this document, Universal Resource Locators, or URLs, will be used to show examples of file names and directories on the SAFER FTP server. The URL can be typed into the “address” bar on a web browser to explore the FTP server. In examples, “CVIEWxx” will be used as the user id and “****” as the password, thus: “ftp://CVIEWxx:****@ftp.safersys.org/SAFER”

*Note: “xx” represents the two-character state code; “****” represents the user name and password.*

1.5 ASSUMPTIONS, LIMITATIONS, AND RESTRICTIONS

Limitation: Country and Jurisdiction Codes will be limited to the USA, Mexico, Canada, and US Territories.

Assumption: Appendix L provides sample XML transactions and schemas. This document assumes that interface developers have a working knowledge of XML implementation techniques, and it therefore does not contain a detailed tutorial on how to implement these XML transactions.

Note: [References 5 and 6](#) were used as a guide to developing the details provided in Appendix L.

Assumption: Appendix M – SOAP Messages provides sample SOAP messages, which are exchanged with the Web Services interface. This document assumes that interface developers have a working knowledge of Web Services implementation techniques including SOAP, WSDL and XML, and it therefore does not contain a detailed tutorial on how to implement these SOAP transactions.

Specific restrictions are not identified in this section.

1.6 COMMERCIAL VEHICLE INFORMATION SYSTEMS AND NETWORKS (CVISN)

Documentation regarding the CVISN Program can be obtained from the CVISN Web Site that is at <http://cvisn.fmcsa.dot.gov>.

1.7 POINTS OF CONTACT

FMCSA Technical Support for SAFER and CVISN applications

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Email: <mailto:fmctechsup@volpe.dot.gov>

<http://fmcsa-ts.dot.gov/>- Technical Support and Operational Information

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2 APPLICABLE DOCUMENTATION

1.1 PARENT DOCUMENTS

[1] User and Systems Requirement Document for the Safety and Fitness Electronic Records (SAFER) System-Version 2, The Johns Hopkins University Applied Physics Laboratory, SSD-POR-00-7288, V1.0, dated June 2001

[2] Safety and Fitness Electronic Records (SAFER) Version 4.2 External Interface and Security Requirements Document, Draft, the Johns Hopkins University Applied Physics Laboratory, dated August 2002

2.1 RELATED DOCUMENTS

[3] Safety and Fitness Electronic Records (SAFER) System Interface Control Document, The Johns Hopkins University Applied Physics Laboratory, SSD-POR-99-7129, Baseline V1.0, dated June 2001

The following documents have been superseded by this document:

T0022D - SAFER Transaction T0022D Specification. Vehicle IRP (Cab Card) Delete Transaction

T0028D - SAFER Transaction T0028D Specification. Vehicle IRP (Cab Card) Delete Output Transaction

Safety and Fitness Electronic Records (SAFER) Interface Version 4.2. Interface Control Document SAFER Web Services document

2.2 REFERENCE DOCUMENTS

[4] Internet Engineering Task Force, *STD0009: File Transfer Protocol, October 1985*. Available on the Internet via FTP at URL <ftp://ftp.isi.edu/in-notes/std/std9.txt>.

[5] *Beginning XML 2nd Edition*, David Hunter, Kurt Cagle, Chris Dix, Roger Kovack, Jonathan Pinnock, and Jeff Rafter, Copyright 2001, Wrox Press

[6] *Essential XML Quick Reference*, Aaron Skonnard and Martin Gudgin, Copyright 2002, Pearson Education, Inc.

[7] SAFER-PRISM Central Site Software Design Document, Baseline V1.0, SSD-POR-02-7348, the Johns Hopkins University Applied Physics Laboratory, dated July 2002

[8] SAFER Option Working Group Proposed State – SAFER Flat File and XML Interfaces Control Document, Bill Goforth and Doug Deckert, Washington State Department of Transportation Management Information Services, dated July 2001

[9] SAFER Option Working Group Data Dictionary, accompanies reference 8

[10] SAFER Option Working Group Reference Spreadsheet (code values), accompanies reference 8

[11] PRISM 41P doc.

3 GENERAL INTERFACE DESCRIPTION

3.1 OVERVIEW OF INTERFACING SYSTEMS

The interfaces between the following systems are the subject of this document. Each is discussed in this section:

- SAFER Interface Version 9.2
- CVIEW or equivalent system

3.2 SAFER

The SAFER system is being developed as a component of the Intelligent Transportation System (ITS). One of its primary functions is to increase the efficiency and effectiveness of the inspection process at roadside. The SAFER system currently provides information on carriers, vehicles, driver safety, and supporting credentials to fixed and mobile roadside inspection stations. This allows roadside inspectors and other potential users to focus their efforts on high-risk areas; i.e., selecting vehicles and/or drivers for inspection based on the number of prior inspections and safety and credential history. As a result, inspection resources will be directed at drivers and vehicles associated with carriers that have had few prior inspections or with poor safety/credential records, while minimizing inspections of carriers with many prior inspections and good safety/credential histories. This will improve the overall cost-effectiveness of the inspection process and will provide an incentive to safe and legal carriers to continue their practices.

SAFER Version 9.2 was developed to support an eXtensible Markup Language (XML) and File Transport Protocol (FTP) interface for the exchange of commercial carrier and vehicle safety and supporting credentials information. This interface is the primary subject of this document. It supersedes the interface types, which the SAFER system no longer supports, that are described in reference 3 above.

Note: Safer version 5.1 supports CVISN interface version 4.2.

3.3 CVIEW

The Commercial Vehicle Information Exchange Window (CVIEW) is an electronic data-exchange system that provides information about carriers and vehicle safety and credentials to fixed and mobile roadside inspection stations, state agencies, and other third-party users. This information allows roadside inspectors to select vehicles and/or drivers for inspection based on the number of the carrier's previous inspections, as well as on historical data for the carrier, the vehicle, driver safety records and other credentials. It permits state agencies to perform safety checks before issuing certain types of credentials and also helps third-party users such as insurers obtain safety data to support their underwriting processes.

CVIEW is owned by and located in each state that elects to use it to exchange data. CVIEW is being designed to facilitate the exchange of inter- and intra-state safety and credential data within the state and among CVISN core infrastructure systems, e.g., SAFER.

The FMCSA, and previously the FHWA Office of Motor Carriers (OMC), has provided carrier safety data to industry and the public for many years through telephone requests and paper reports. The CVIEW system makes it possible to offer this information, as well as credential data, electronically.

Access is currently provided to carrier and vehicle snapshots, a concise electronic record of safety and credential data, including identification, size, commodity, safety record (including any safety rating), and roadside out-of-service inspection data, registration and permit information.

The SAFER Interface Version 9.2 will continue to support carrier and vehicle data exchange with CVIEW systems that are modified to support the XML / FTP interface and the XML / Web services interface.

Previously deployed CVIEW system Version 3.3, and the communication through the Remote Procedure Call (RPC) interface, are obsolete and have been replaced by Web services and FTP interface.

A graphical depiction of the system interfaces described in section 3.2 is shown in Figure 3-1.

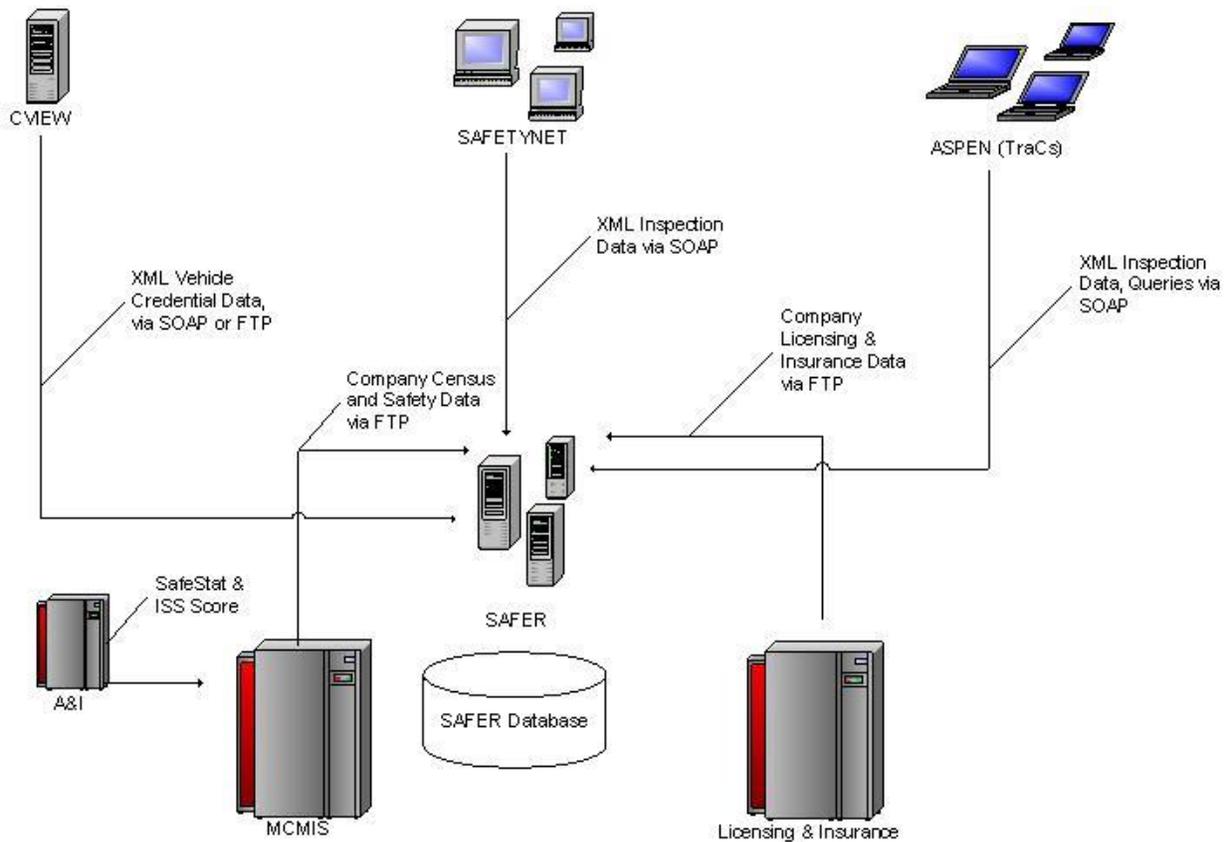


Figure 3–1. SAFER Version 9.2 Input Transactions

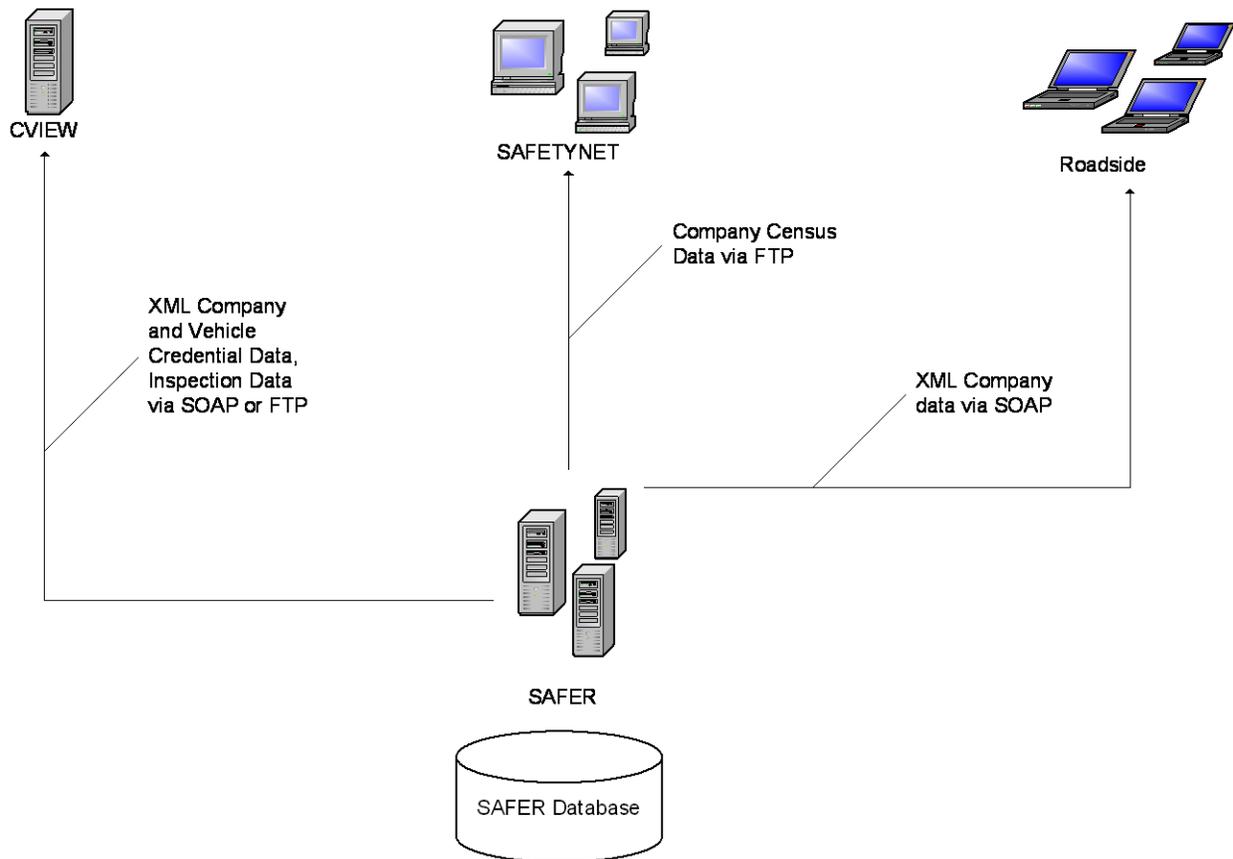


Figure 3–2. SAFER Version 9.2 Output Transactions

3.4 APPLICABLE STANDARDS AND CONSTRAINTS

The following standards apply:

- Internet Engineering Task Force, STD0009: File Transfer Protocol, October 1985.
- XML: The following link hosted by OASIS (<http://www.oasis-open.org/>) provides an XML core standard reference: <http://xml.coverpages.org/xml.html>
- SOAP 1.1 Specification <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>
- WSDL 1.1 Specification <http://www.w3.org/TR/wsdl>

4 INTERFACE SPECIFICATIONS

The SAFER Version 9.2 supports several external interfaces: the new Web Services and the interface previously supported by SAFER Version 4.2, which includes the XML / FTP interface.

The next sections define these types of interfaces.

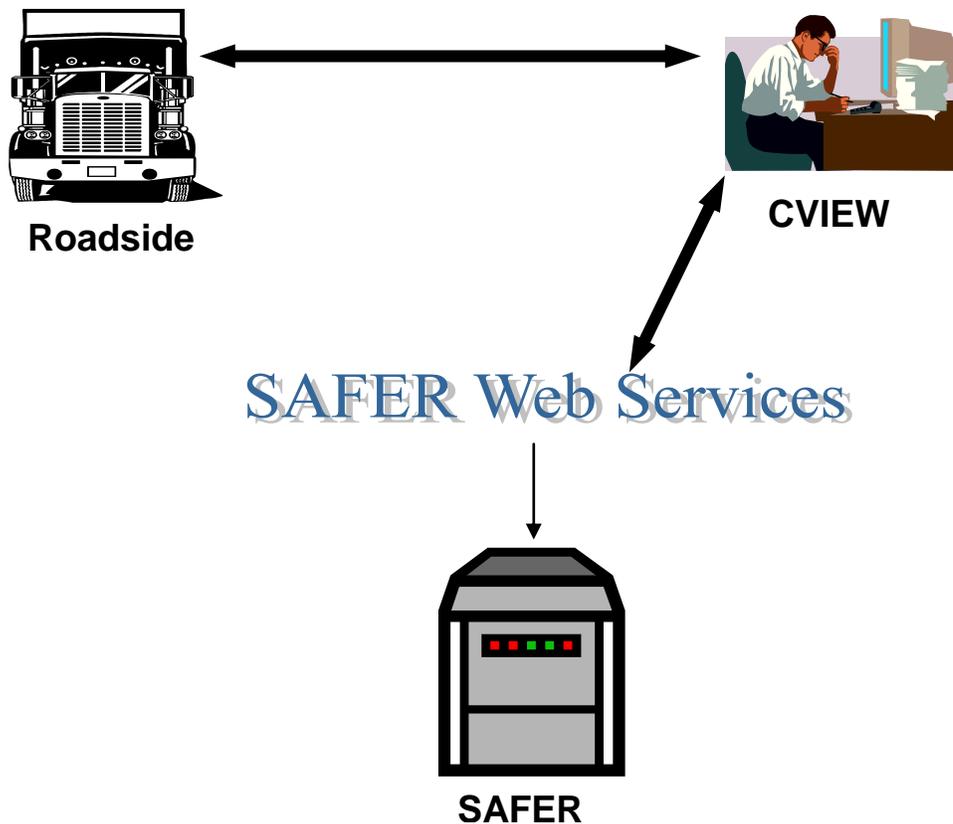
4.1 WEB SERVICES INTERFACE

This section specifies the interface for SAFER Web Services. The SAFER Web Services interface is intended to allow near real-time queries for client systems accessing SAFER. It is intended to augment the FTP interface specified in the SAFER Version 4.2 Interface Control Document (ICD), and is intended

to eventually provide all of the functionality provided by the FTP Interface for those states who may prefer to use it.

4.1.1 PURPOSE OF THE SAFER WEB SERVICES INTERFACE

SAFER Web Services is intended to allow state systems to conduct near real-time queries. In a typical scenario, a roadside user queries a CVIEW server for data, and when it is not found in the CVIEW database, the CVIEW server performs a Web Service query to SAFER Web Services and passes the response back to the roadside.



4.1.2 INTERFACE SUMMARY

A CVIEW or equivalent system, hereafter referred to as a “state system,” will use this interface to perform two basic operations: near real-time queries to obtain XML output file, near real-time uploads. The XML input or output files will conform to the specifications of the SAFER XML output transactions. The state system shall interact with the SAFER system in the manner described below.

4.1.2.1 QUERIES

A state system connects to the SAFER Web Services Interface using the standard SOAP and WSDL protocols. There are two levels of authentication that may be required. If a user has a persistent VPN or other trust relationship with the FMCSA network, then the user will not be required to authenticate in order to reach the SAFER Web Services server. Other users will need to authenticate with the UAS system before being allowed to connect to the SAFER Web Services Interface. The other level of authentication is in the transaction SOAP message itself that requires a UAS username and password. Instructions on how to apply for accounts can be obtained from the FMCSA Technical Support web site.

Note: A sample SAFER Web Service Client will be provided for states to assist in their integration efforts.

4.1.2.2 UPLOADS

To upload information to be used by other jurisdictions, the state system will connect to the SAFER Web Services Interface using the standard SOAP and WSDL protocols. There are two levels of authentication that may be required. If a user has a persistent VPN or other trust relationship with the FMCSA network, then the user will not be required to authenticate in order to reach the SAFER Web Services server. Other users will need to authenticate with the UAS system before being allowed to connect to the SAFER Web Services Interface. The other level of authentication is in the transaction SOAP message itself that requires a UAS username and password. Instructions on how to apply for accounts can be obtained from the FMCSA Technical Support web site.

4.1.3 QUERY RESPONSE

Queries will either retrieve results that conform to the specification of the SAFER output transactions, or an XML error message. These XML error messages will be formatted to support automated operation by the state system.

4.1.3.1 BATCH RESPONSE

Uploading large files through the SAFER Web Services is done asynchronously using the method SAFERXMLUploadDeferred. The response message to the state client system indicates that the data has been queued for processing. Log files are produced on the SAFER server processing these asynchronous uploads, and communication of the status of these uploads still needs to be worked out with the state users.

4.1.4 PROCESSING OVERVIEW

The steps in a SAFER Web Services transaction are:

1. The state system makes a method or function call invoking a web service client method.
2. The state system constructs a SOAP message containing the method name and parameters for the desired transaction.
3. The state system sends the SOAP message to SAFER over the network using the HTTP protocol.
4. SAFER Web Services extracts the XML transaction parameters from the incoming SOAP message.
5. SAFER Web Services uses that information to create an instance of an XML transaction class and uses attributes of the class to perform the transaction, producing an XML output document. If the transaction is a SAFER output transaction, the output document contains the data resulting from the query, or a response if the query failed or did not return any data. If the transaction is a SAFER input transaction, the output document is a status or error message.
6. SAFER Web Services bundles the XML output file into an outgoing SOAP message.
7. The SOAP message is sent to the state system over the Internet using the HTTP protocol.
8. The state system's toolkit-generated code extracts the XML output from the SOAP message.
9. The original method or function called by the state system receives an XML document as its return value.

4.1.5 CLIENT SYSTEM DEVELOPMENT

Example clients and other information for client system developers will be made available on the CVISN Web Site.

4.1.6 CVISN STATE PROGRAMS

There are four CVISN programs currently SAFER supported, Non-IRP states, CVISN-ONLY states, PRISM-ONLY states and CVISN-PRISM states. Appendix M listed all states and their program.

4.2 XML / FTP INTERFACE

This section documents the XML/FTP interface to SAFER. For some states this may be the only interface used.

4.2.1 XML / FTP SUMMARY

CVIEW or equivalent system, hereafter referred to as a “state system,” will use this interface to perform two basic operations: downloading files containing information from various sources including other states, and uploading files containing information to be shared among participating jurisdictions. The state system will interact with the SAFER system in the manner described below.

4.2.1.1 DOWNLOADING XML FILES

A state system connects to the SAFER FTP server using the standard TCP/IP FTP protocol.

When it logs in, it will be automatically pointed to a default directory. For each XML Output transaction a separate directory will be maintained on the server.

Using the standard FTP “change directory command”, the state system can change to the directory that contains the desired type of information and download the files for a given XML output transaction type. The standard FTP protocols are used to transfer the files.

Most download directories will be accessible to all jurisdictions; however, each jurisdiction will have a unique directory to which it alone has “read-access.” That directory will contain files specifically for that jurisdiction that other jurisdictions may not receive. The state system can change to this directory and download its files. Other state systems will be denied access to that directory.

Section 4.3.2 in this document (Directories) describes the directory structure on the SAFER 9.2 FTP server. For instance, IFTA files would be found in ftp://CVIEWxx:****@ftp.safersys.org/T0025.

4.2.1.2 UPLOADING XML FILES

To share information with other jurisdictions, a state system first logs into the SAFER FTP server and is pointed to a default directory. The SAFER FTP server will maintain a special directory specifically for the purpose of receiving uploaded state files. The state system uses the FTP “change directory” command to change to this directory and then uses the standard FTP protocol to upload one or more files.

All jurisdictions will have the “add privilege” for accessing the SAFER input directory, which will only allow them to add files to that directory; all other access will be denied so as to prevent sensitive information from being read outside of a jurisdiction-specific directory.

After completing a sequence of operations the state system will log out of the SAFER FTP server.

The Directories section of this document (4.3.2) describes the directory structure on the SAFER 9.2 FTP server. For instance, upload files may be deposited in ftp://CVIEWxx:****@ftp.safersys.org/SAFER.

4.2.1.3 LOGGING AND ERROR REPORTING

As uploaded files are processed, a log is created which describes the status of each transaction and any errors that might have occurred. Jurisdictions can access these logs to verify and correct errors. A file-naming convention will relate the log file to the input transaction file deposited by the jurisdiction. The log file may be downloaded from the FTP server in the same manner as previously described for downloading XML files. The log file will contain readable text (not XML), and will not be formatted specifically for machine applications.

4.2.1.4 SECURITY CONSIDERATIONS

The scenarios described in this section, if performed on the Internet, require a VPN connection or other trusted network relationship with the FMCSA network in order to connect to the SAFER system. All interactions, including logging into the SAFER FTP server, occur within a VPN or other trusted security environment.

For further information about setting up an Internet VPN connection to SAFER, please contact FMCSA Technical Support (see section 1.7 of this document).

4.3 FTP SERVER

A state system interfaces with the SAFER system by logging onto the SAFER FTP server and using the FTP protocol to upload and download files. Each transaction utilizes files operations in a specific FTP directory. This section gives an overview of the FTP server.

4.3.1 USER IDS AND PASSWORDS

Each state, province or other jurisdiction utilizes a user ID and password to access the SAFER FTP server. The user ID will be “CVIEWxx” where xx is the two character postal code for the jurisdiction. For instance, the user ID for the state of Kentucky is CVIEWKY, and for Maryland is CVIEWMD.

Each user ID will have an associated password, which will be assigned by the Volpe Center at the time the user ID is created. A user password can be changed by contacting FMCSA Technical Support.

In this document, Universal Resource Locaters (URLs) will be used to show examples of file names and directories on the SAFER FTP server. The URL can be typed into the “address” bar on a web browser to explore the FTP server.

In these examples “CVIEWxx” will be used as the user id and “****” as the password, thus:
“ftp://CVIEWxx:****@ftp.safersys.org/SAFER”

4.3.2 DIRECTORIES

The SAFER FTP site consists of a root directory and several subdirectories. Each subdirectory is associated with certain transactions, and files are either downloaded from, or uploaded to, it. All input transactions, in which a state system sends information to SAFER, take place in one directory that is common to all states. Each output transaction has a particular directory that identifies the type of information it contains. For instance, IFTA XML output transaction files are placed in a directory called “T0025” since that is the interface-identifier for the output IFTA transaction.

In the case of sensitive information that cannot be shared across jurisdictions, an XML output transaction directory will further be divided into separate subdirectories for each jurisdiction. A particular jurisdiction’s files are placed in that jurisdiction’s subdirectory for retrieval. Currently, only the state subscription folders contain state-specific information.

In addition to the input and output transaction directories, a separate directory will provide access to logs that report on the results of the input transactions.

Figure 4-1 and Table 4-2 describe the FTP directory output folders structure.

- ftp://ftp.safersys.org/
- Directory LOGS (Input transaction log file location)
- Directory SAFER (Input transaction file location)
- Directory T0025 (IFTA Output Transaction file location)
- Directory T0025D (IFTA Delete Output Transaction file location)
- Directory T0026 (IRP Account Output Transaction file location)
- Directory T0027 (IRP Fleet Output Transaction file location)
- Directory T0028DV3 (Vehicle Registration Delete Output Transaction file location)
- Directory T0028V3 (Vehicle Registration Output Transaction file location)
- Directory T0029V2 (Vehicle Transponder Output transaction file location)
- Directory T0030 (Vehicle Inspection Summary Output transaction file location)

- Directory T0031V3 (MCMIS Census & Safety Output transaction file location)
- Directory T0032 (Licensing & Insurance Output transaction file location)
- Directory T0033 (Vehicle Inspection Detail Output transaction file location)

Figure 4-1 – FTP Directory Structure

Table 4-2. Transactions Supported by FTP and Web Services

The following table provides an overview of transactions users may employ, with the implementation status for each transaction and interface.

| Transaction ID | Type | Transaction | FTP | Web Services |
|----------------|---------------|-----------------------------------------|-------------|--------------------------|
| T0019 | Input | International Fuel Tax Agreement (IFTA) | Implemented | Implemented |
| T0019D | Delete | International Fuel Tax Agreement (IFTA) | Implemented | Implemented |
| T0020 | Input | IRP Account | Implemented | Implemented |
| T0021 | Input | IRP Fleet | Implemented | Implemented |
| T0022V3 | Input | IRP Registration (Cab Card) | Implemented | Implemented |
| T0022DV3 | Delete | IRP Registration (Cab Card) | Implemented | Implemented |
| T0024V2 | Input | Vehicle Transponder ID | Implemented | Not Implemented |
| T0025 | Output | International Fuel Tax Agreement (IFTA) | Implemented | Implemented (Query Only) |
| T0025D | Delete Output | International Fuel Tax Agreement (IFTA) | Implemented | N/A |
| T0026 | Output | IRP Account | Implemented | Implemented (Query Only) |
| T0027 | Output | IRP Fleet | Implemented | Implemented (Query Only) |
| T0028V3 | Output | IRP Registration (Cab Card) | Implemented | Implemented (Query Only) |
| T0028DV3 | Delete Output | IRP Registration (Cab Card) | Implemented | N/A |

| | | | | |
|---------|--------|----------------------------|-------------|--------------------------|
| T0029V2 | Output | Vehicle Transponder ID | Implemented | Implemented (Query Only) |
| T0030 | Output | Vehicle Inspection Summary | Implemented | Implemented (Query Only) |
| T0031V3 | Output | MCMIS Safety and Census | Implemented | Implemented (Query Only) |
| T0032 | Output | Licensing and Insurance | Implemented | Implemented (Query Only) |
| T0033 | Output | Inspection Detail | Implemented | Implemented (Query Only) |

Table 4-3. Input / Output Transactions for XML/FTP Interface

| ID | Type | Transaction | URL |
|----------|--------|-----------------------------------------|-------------------------------------------------------------------------------------------------------|
| T0019 | Input | International Fuel Tax Agreement (IFTA) | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0019D | Input | International Fuel Tax Agreement (IFTA) | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0020 | Input | IRP Account | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0021 | Input | IRP Fleet | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0022DV3 | Input | Vehicle IRP (Cab Card) | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0022V3 | Input | IRP Registration (Cab Card) | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| T0024V2 | Input | Vehicle Transponder ID | ftp://CVIEWxx:****@ftp.safersys.org/SAFER |
| | Logs | Input Transaction Processing Results | ftp://CVIEWxx:****@ftp.safersys.org/LOGS |
| T0025 | Output | International Fuel Tax Agreement (IFTA) | ftp://CVIEWxx:****@ftp.safersys.org/T0025 |
| T0025D | Output | International Fuel Tax Agreement (IFTA) | ftp://CVIEWxx:****@ftp.safersys.org/T0025D |
| T0026 | Output | IRP Account | ftp://CVIEWxx:****@ftp.safersys.org/T0026 |
| T0027 | Output | IRP Fleet | ftp://CVIEWxx:****@ftp.safersys.org/T0027 |
| T0028DV3 | Output | Vehicle IRP (Cab Card) | ftp://CVIEWxx:****@ftp.safersys.org/T0028DV3 |
| T0028V3 | Output | Vehicle IRP (Cab Card) | ftp://CVIEWxx:****@ftp.safersys.org/T0028V3 |
| T0029V2 | Output | Vehicle Transponder ID | ftp://CVIEWxx:****@ftp.safersys.org/T0029V2 |
| T0030 | Output | Vehicle Inspection Summary | ftp://CVIEWxx:****@ftp.safersys.org/T0030 |
| T0031V3 | Output | MCMIS Safety and Census | ftp://CVIEWxx:****@ftp.safersys.org/T0031V3 |
| T0032 | Output | Licensing and Insurance | ftp://CVIEWxx:****@ftp.safersys.org/T0032 |
| T0033 | Output | Inspection Detail | ftp://CVIEWxx:****@ftp.safersys.org/T0033 |

4.4 FILES, FILE NAMES AND FORMATS

State systems interact with the FTP server by uploading to and downloading files from the directories. The contents and format of the files are indicated by the name of the directory in which they are placed, by the file name and by the file extension.

4.4.1 INPUT TRANSACTION FILES

Input transaction files are placed by state systems into the directory ftp://ftp.safersys.org/SAFER using the file-naming convention CVIEW<XX><SEQUENCE>.ZIP where:

- <XX> is the jurisdiction's two-letter postal code, and

- <SEQUENCE> is a 10-decimal number used to differentiate the file from others recently uploaded by the jurisdiction.

Note: SAFER will not use the file name to prioritize processing. The file-naming convention simply prevents two files from having the same name.

Files contained in the directories are compressed using the PK Zip format. See Appendix K, Compression Format. The file in the zip file should have the same name as the zip file, but with the “.XML” extension.

Examples: The following files, containing various transactions, might reside in <ftp://ftp.safersys.org/SAFER>. The name of the file in the zip file is also shown:

- CVIEWKY0000000001.ZIP (contains file CVIEWKY0000000001.XML)
- CVIEWKY0000000002.ZIP (contains file CVIEWKY0000000002.XML)
- CVIEWOR0000000018.ZIP (contains file CVIEWOR0000000018.XML)
- CVIEWOR0000000019.ZIP (contains file CVIEWOR0000000019.XML)
- CVIEWMD00000000557.ZIP (contains file CVIEWMD00000000557.XML)
- CVIEWMD00000000558.ZIP (contains file CVIEWMD00000000558.XML)

4.4.2 INPUT TRANSACTION LOG FILES

The results of each input transaction file are reported in a log that is available on the SAFER FTP server. Each input transaction file has a name that incorporates the two-letter postal code of the jurisdiction sending it, as well as a sequence indicator (*Input Transaction Files*). The log for a particular input transaction file will have the same file name with the file extension “.LOG”. The logs will not be compressed.

Examples: The logs corresponding to the input files shown above would be found in the <ftp://ftp.safersys.org/LOGS> directory:

- CVIEWKY0000000001.LOG
- CVIEWKY0000000002.LOG
- CVIEWOR0000000018.LOG
- CVIEWOR0000000019.LOG
- CVIEWMD00000000557.LOG
- CVIEWMD00000000558.LOG

4.4.3 OUTPUT FILES

Each output directory contains a baseline file and one or more update files.

A baseline file contains all of the relevant information for a transaction in the SAFER database at a specific time. An update file contains transactions for each change to the SAFER database since the last update was produced. A new update file containing new changes since the last update is created simultaneously whenever a baseline is produced. In this way, states that only want updates can skip the baseline. The baseline will never contain information that is not in the full sequence of update files.

By establishing a local data store from the baseline file and updating it with update files, a state system can keep its data base or files completely up to date. By consistently updating the local data store from the update files, only one baseline file need be downloaded during the entire life of the state system. A state system may however be synchronized more frequently with the SAFER database by periodically downloading the baseline file, though this should not have to be done often.

Files contained in the output directories are compressed utilizing the PK Zip format. See Appendix K, Compression Format. The file contained within the zip file should have the same name as the zip file, but with the “.XML” extension.

The files in an XML output transaction directory and in the ZIP file will be named according to the following convention: <transaction_ID><YYYYMMDD><HHMMSS>.<Content>.<Type>, where

- <YYYYMMDD> is the date,
- <HHMMSS> is the time, in 24-hour format, hours, minutes, and seconds.
- <Content> is either “BL” for baseline or “UD” for Update, and
- <Type> is either “ZIP” for compressed archive files in the directory or “XML” for the uncompressed transaction file contained in the zip file.

Examples: T0028_200410062345_1.bl.xml

Note that a single MCMIS update may span several files (due to the 5,000 record limit per file) and thus several update files may have time-stamps within seconds of each other. The first two examples also show the name of the file contained in the zip file.

Baseline Vehicle Transponder ID and three updates for user CVIEWxx:

- Directory: ftp://ftp.safersys.org/T0029V2
- T0029_YYYYMMDDHH24MISS_1.BL.ZIP
- Directory: ftp://ftp.safersys.org/T0029V2
- T0029_YYYYMMDDHH24MISS_1.BL.ZIP
- T0029_YYYYMMDDHH24MISS_1.UD.ZIP
- T0029_YYYYMMDDHH24MISS_2.UD.ZIP
- T0029_YYYYMMDDHH24MISS_200.UD.ZIP

Note that the first baseline and the first update file in each directory have the same date and time-stamp. Users who have already established their local data stores may use the update files instead of the baseline. (They do not need to download the baseline file.)

4.4.4 XML SUBSCRIPTION OUTPUT FILES

XML subscription output files follow the same standards as the output files. The XML Subscription output files are located in a folder for each subscriber inside the parent transaction folder on the FTP site. The following section describes the interfaces used to configure subscription options.

4.5 XML SUBSCRIPTION CONFIGURATION

Click the “XML Subscriptions” link on the SAFER Web Site to see and modify XML subscription configurations. The user can access their subscription using a credential issued by a member of the E-Authentication Federation, or through a FMCSA UAS Account.

4.5.1 VIEW XML SUBSCRIPTION CONFIGURATION

The XML subscription configuration view will have the following steps:

4.5.1.1 AUTHENTICATION

-User enters the approved user-account code to access the subscription-site (using a state or federal user-site subscription)

4.5.1.2 SELECT XML SUBSCRIPTIONS

-User clicks on the link to select XML subscriptions

4.5.1.3 SELECT TRANSACTION SET

-User clicks on transaction ID for the desired transaction set

4.5.1.4 VIEW XML SUBSCRIPTION SUMMARY

-User views the subscription summary page

4.5.1.5 CLICK CHANGE (IF DESIRED)

-User clicks CHANGE if they want to change any information

4.5.2 CHANGE XML SUBSCRIPTION CONFIGURATION

The XML subscription request will have the following steps:

4.5.2.1 AUTHENTICATION

-User enters the approved user-account code to access the subscription-site (using a state or federal user-site subscription). Authentication is available using a FMCSA UAS account or e-authentication credentials.

4.5.2.2 SELECT XML SUBSCRIPTIONS

-User clicks on the link to select XML subscriptions

4.5.2.3 SELECTION TRANSACTION SET

-User clicks on the transaction ID for the desired transaction set

4.5.2.4 VIEW SUBSCRIPTION SUMMARY

-User views existing subscription configuration and decides what changes they want to make

4.5.2.5 INCLUDE/EXCLUDE OPERATING STATE

-User can include or exclude records based on their operating state

4.5.2.6 SELECT STATES

-If the user wants to include or exclude records based on their operating state, the system presents a screen with check boxes so they can select the states they want to include or exclude

4.5.2.7 INCLUDE/EXCLUDE IRP BASE STATES

-User includes or excludes records based on IRP base state

4.5.2.8 SELECT STATES

-If the user wants to include or exclude records based on IRP base state, the system presents a screen with check boxes so they can select the states they want to include or exclude

4.5.2.9 SELECT OPTIONAL FIELDS

-User selects which optional data they want to receive

4.5.2.10 SUBSCRIBE

-User clicks SUBSCRIBE

4.5.2.11 VIEW SUBSCRIPTION SUMMARY

-User views the subscription summary page

4.5.2.12 CONFIRM SUBSCRIPTION

-User confirms the subscription

4.5.2.13 LANDING

-User ends at the Transaction Set Selection page

4.5.3 REQUEST XML SUBSCRIPTION

The XML subscription request will have the following steps:

4.5.3.1 AUTHENTICATION

-User enters the approved user-account code to access the subscription-site (using a state or federal user-site subscription). Authentication is available using a FMCSA UAS account or e-authentication credentials.

4.5.3.2 SELECTION OF TRANSACTION ID

-User clicks on the transaction ID for the desired transaction set they wish to subscribe to

4.5.3.3 SELECTION OF OPERATING STATE EXCLUDE/INCLUDE

-User may include or exclude records based on their operating state

4.5.3.4 SELECT STATES

-If the user wants to include or exclude records based on their operating state, the system presents a screen with check boxes so they can select the states they want to include or exclude

4.5.3.5 SELECTION OF IRP BASE STATE EXCLUDE/INCLUDE

-User can include or exclude records based on their IRP base state

4.5.3.6 SELECT STATES

-If the user wants to include or exclude records based on their IRP base state, the system presents a screen with check boxes so they can select the states they want to, include or exclude

4.5.3.7 SELECT OPTIONAL FIELDS

-User selects which optional field-data they would like to receive

4.5.3.8 SUBSCRIBE

-User clicks SUBSCRIBE

4.5.3.9 VIEW SUMMARY

-User views the subscription summary page

4.5.3.10 CONFIRM SUBSCRIPTION

-User clicks CONFIRM to confirm their selection

4.5.3.11 LANDING

-User ends at the Transaction Selection Page

4.6 STANDARDS AND CONVENTIONS FOR INPUT AND OUTPUT TRANSACTIONS

For input transactions, XML parsers expect Unicode by default -- either UTF-8 or UTF-16. Any character set other than UTF-8 or UTF-16 must be specified with the "encoding" attribute in the XML header. For example:

`<?xml version="1.0" encoding="US-ASCII"?>` would be used if the ASCII character set were used to encode the document.

For output transactions, encoding attribute in the XML header will be always ISO-8859-1 which matches SAFER Oracle database character set WE8MSWIN1252.

The File Transfer Protocol (FTP) shall be used.

4.6.1 CONDITIONAL PROCESSING

The SAFER database will not be updated if the existing record has a more recent update date than does the transaction record. Refer to the specific transaction for details about processing.

4.6.2 DATA VALIDATION

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L.

4.6.3 ERROR PROCESSING / RECOVERY

Records that do not conform to the schema for this transaction shall not be processed, and an entry about the error will be made in the log.

4.6.4 SCHEDULE/FREQUENCY

It is recommended that the state system not send a file containing transactions for this interface more than once every five minutes.

The SAFER system generally is on-line and processing transactions between 8 AM and 8 PM EST (or DST) seven days a week, 52 weeks per year. Outside of these hours the system may discontinue service for maintenance.

4.6.5 INITIATION METHOD FOR INPUT TRANSACTIONS FOR FTP

To initiate this transaction, the state system will log onto the SAFER FTP site at this URL:
`ftp://CVIEWxx:****@ftp.safersys.org/SAFER`

4.6.6 INITIATION METHOD FOR OUTPUT TRANSACTIONS FOR FTP

To initiate this transaction, the state system will log onto the SAFER FTP site at this URL:
`ftp://CVIEWxx:****@ftp.safersys.org/T00xx`

4.6.7 SYNCHRONIZATION / DEPENDENCIES

Records within the file are not guaranteed to be processed in the same sequence as in the file. If there are two or more records for the same entity with the same update date the processing order is indeterminate.

4.6.8 PRIORITY

All transactions in this interface are processed on a first-come, first-served basis, i.e., they all have the same priority.

4.6.9 MAXIMUM TRANSACTION SIZE

No more than 5,000 records may exist in the transaction file.

4.6.10 SOURCE

A state system, such as CVIEW or its equivalent.

4.6.11 DESTINATION

SAFER Version 9.2

4.6.12 COMMUNICATION / TRANSMISSION PROCESS

4.6.12.1 FORMAT / RECORD LAYOUT

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.7 TRANSACTIONS AND INTERFACE IDENTIFICATION

The following transactions are supported by SAFER Version 9.2 through the Web Services (Except T0024V2) and XML / FTP interfaces. Collectively, these transactions constitute the SAFER 9.2 XML / FTP transaction set.

Each transaction in the transaction set has an identifier (e.g. “T0024V2” for the Vehicle Transponder ID input transaction) that is unique in the SAFER system. This identifier is used throughout the interface to identify a specific transaction in the transaction set.

Only one transaction per input or output file is allowed.

Table 4–1. SAFER Version 9.2 XML/FTP Transaction Set

| ID | Type | Transaction | Transaction Data Tag |
|----------|---------------|-----------------------------------------|----------------------------|
| T0019 | Input | International Fuel Tax Agreement (IFTA) | IFTA_LICENSE |
| T0019D | Input Delete | International Fuel Tax Agreement (IFTA) | IFTA_LICENSE |
| T0020 | Input | IRP Account | IRP_ACCOUNT |
| T0021 | Input | IRP Fleet | IRP_FLEET |
| T0022DV3 | Input Delete | IRP Registration (Cab Card) | IRP_REGISTRATION |
| T0022V3 | Input | IRP Registration (Cab Card) | IRP_REGISTRATION |
| T0024V2 | Input | Vehicle Transponder ID | VEHICLE_TRANSPONDER_ID |
| T0025 | Output | International Fuel Tax Agreement (IFTA) | IFTA_LICENSE |
| T0025D | Delete Output | International Fuel Tax Agreement (IFTA) | IFTA_LICENSE |
| T0026 | Output | IRP Account | IRP_ACCOUNT |
| T0027 | Output | IRP Fleet | IRP_FLEET |
| T0028DV3 | Delete Output | IRP Registration (Cab Card) | IRP_REGISTRATION |
| T0028V3 | Output | IRP Registration (Cab Card) | IRP_REGISTRATION |
| T0029V2 | Output | Vehicle Transponder ID | VEHICLE_TRANSPONDER_ID |
| T0030 | Output | Vehicle Inspection Summary | VEHICLE_INSPECTION_SUMMARY |
| T0031V3 | Output | MCMIS Safety and Census | MCMIS_SAFETY_CENSUS |
| T0032 | Output | Licensing and Insurance | LICENSING_INSURANCE |
| T0033 | Output | Inspection Detail | INSPECTION |

4.8 XML FORMATS

SAFER Version 9.2 XML consists of three elements: the interface header, the transaction header, and the transaction data. These three XML segments are contained in an over-all transaction root transaction tag based on the transaction identification number (ID) from Table 4-1 above.

4.8.1 INTERFACE HEADER

The interface header specifies the transaction set and version of the transactions contained in the file. If the interface changes, or if a new set of transactions is defined, the software determines which version of which transaction set it is dealing with and processes it accordingly. It consists of an <INTERFACE> element containing a <NAME> and a <VERSION> element.

The <NAME> element specifies the name of the transaction set, and the <VERSION> element is the interface version that specifies the version of the transaction set in the file. Interfaces defined in this section have the <NAME> “SAFER” and the <VERSION> “04.02”.

Example:

```
<INTERFACE>
<NAME>SAFER</NAME>
<VERSION>04.02</VERSION>
</INTERFACE>
```

Note: If there were a future version of SAFER beyond 04.02 (e.g., if it were advanced to “04.03”), the specifics of each individual transaction might differ from those specified in this document, even if the transaction version were the same.

4.8.2 TRANSACTION HEADER

A particular transaction set defines several kinds of transactions. The transaction header specifies which kind of transaction is in the file and provides information that can help track and log transactions. It consists of a <TRANSACTION> element containing the following sub-elements and values:

- <VERSION> Transaction Version
- <OPERATION> Operation (“Replace” and “Delete” are supported)
- <DATE> Submission Date
- <TIME> Submission Time
- <TZ> Submission Time Zone

The value of the <VERSION> sub-element is the version specified in this ICD for the particular transaction. For instance, the version for the Vehicle Transponder ID input transaction, as specified in this ICD, is “01.00”.

The value of the <OPERATION> sub-element specifies what action will be performed by the receiving system with the information in the transaction. The SAFER Version 9.2 transaction set supports the “REPLACE” and “DELETE” operations.

The values of the <DATE>, <TIME>, and <TZ> sub-elements specify the date and time, within the time zone specified, that the transaction file was generated and sent to SAFER. The date (YYYYMMDD) and time (HH:MM, 24 hours) specified should be either the same as or more recent than the update date and time of any time-stamp in the transaction information itself.

The value of <TZ> will be used to interpret *all* dates and times in the transaction information. Appendix J specifies the appropriate time-zone values.

Example:

```
<TRANSACTION>
<VERSION>01.00</VERSION>
```

```
<OPERATION>REPLACE</OPERATION>
<DATE>20020211</DATE>
<TIME>15:05</TIME>
<TZ>ED</TZ>
  </TRANSACTION>
```

If the transaction version for a particular transaction differs from that specified in this document, the specifics of that transaction may be different from those described in this document, even if the interface version is the same. The version number for an individual transaction may be advanced independent of the version numbers of the other transactions within one interface version. If both the interface and the transaction version numbers are as specified in this document, then the details specified here apply.

4.8.3 TRANSACTION DATA

A transaction is a sequence of data-record tags each containing a sequence of field tags that together define a single record to be processed. Multiple data-record tags (with the enclosed field tags) may be included in a transaction file.

The record and field name-tags for each transaction are identified in the Format / Record Layout section of the interface specifications (below). The valid values for the field tags are defined in Appendix A, Data Dictionary.

For instance, for the Vehicle Transponder ID input transaction the record tag is defined as <VEHICLE_TRANSPONDER_ID >, which enclose the two field tags, <VIN> and <TRANSPONDER_ID>. The values for a specific record would be contained in a <VIN> and a <TRANSPONDER_ID> tag. Multiple <TRANSPONDER> tags may exist in the transaction, one for each record.

Example (two records):

```
<VEHICLE_TRANSPONDER_ID>
  <VIN>1XP5DB9XXPN327460</VIN>
  <TRANSPONDER_ID>1A0020F3</TRANSPONDER_ID>
</VEHICLE_TRANSPONDER_ID>
<VEHICLE_TRANSPONDER_ID>
  <VIN>1WUGDEJF5JN128864</VIN>
  <TRANSPONDER_ID></TRANSPONDER_ID>
</VEHICLE_TRANSPONDER_ID>
```

4.8.4 NULL FIELD VALUES

In the Vehicle Transponder ID example above, the <TRANSPONDER_ID> tag value is set to null, which will cause the transponder ID for the vehicle with the VIN 1WUGDEJF5JN128864 to be set to NULL (i.e., it will be erased) from the SAFER database. The vehicle itself will not be deleted, but the transponder ID that was previously associated with it will be.

In general, optional fields can have empty tag values in order to set the database field values to NULL, in effect deleting or erasing the values for those specific fields in the SAFER database. The tag, without a value, must be included in the transaction. Field tags cannot be left out, even if they do not contain a value.

4.8.5 REPEATING GROUPS

In some cases, the information contained in one record is related to multiple instances of information in another record type. For example, multiple states and legal weights exist for each state (called the “proration” record in this document) in which a vehicle is registered. The vehicle is the “parent” record and the multiple states / weights related to it are the “child” records. Child records are structured just as described above, with a record name-tag containing field name tags, but they are embedded in the parent record. A single parent record may contain multiple child records.

4.8.6 ROOT TRANSACTION AND FULL EXAMPLE

The three elements of a transaction (interface header, transaction header and transaction data) are tied together by the root transaction tag. The root tag is the transaction ID from table 4-1.

In the case of the vehicle transponder ID transaction, the ID is T0024, so the starting and ending tags for the transaction as a whole would be <T0024> </T0024> with the headers and data in between.

This is illustrated in the following example, Vehicle Transponder ID Transaction:

```
<T0024>
  <INTERFACE>
<NAME>SAFER</NAME>
<VERSION>04.02</VERSION>
  </INTERFACE>
  <TRANSACTION>
<VERSION>01.00</VERSION>
<OPERATION>REPLACE</OPERATION>
<DATE>20020211</DATE>
<TIME>15:05</TIME>
<TZ>ED</TZ>
</TRANSACTION>
<VEHICLE_TRANSPONDER_ID>
  <VIN>1XP5DB9XXPN327460</VIN>
  <TRANSPONDER_ID>1A0020F3</TRANSPONDER_ID>
</VEHICLE_TRANSPONDER_ID>
<VEHICLE_TRANSPONDER_ID>
  <VIN>1WUGDEJF5JN128864</VIN>
  <TRANSPONDER_ID></TRANSPONDER_ID>
</VEHICLE_TRANSPONDER_ID>
</T0024>
```

4.9 TRANSACTION SPECIFICATIONS

4.9.1 T0019, IFTA INPUT TRANSACTION

This interface is SAFER 04.03, T0019 01.00

Root Transaction Tag: T0019
Interface Name: SAFER
Interface Version: 04.03
Transaction Version: 01.00
Transaction Data Tags: IFTA_LICENSE

4.9.2 TRANSACTION PARAMETERS

4.9.2.1 INPUT FOR WEB SERVICES AND FOR WEB SERVICES ASYNCHRONOUS TRANSACTIONS

The SAFER Web Services Transaction T0019 transaction, and asynchronous transaction, input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

| Argument | Contents |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TransactionID | T0019 |
| XmlData | XML input conforming to T0019 schema For asynchronous transactions: XML input conforming to T0019 schema, compressed using the ZIP format and MIME encoded for transfer |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.2.2 INPUT FOR XML / FTP

The T0019 schema is specified in Appendix L.

4.9.2.3 INTERFACE TERMINALS

| Item | Value |
|--------------------|----------------------------------------------|
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output destination | A state system, such as CVIEW, or equivalent |

4.9.2.4 BUSINESS RULES

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a set of incoming data is subjected to a number of tests, any of which may mark the record's reserved status code in a way that affects how the final data-load logic treats the record. The list of possible status codes varies according to the transaction.

The domain of values is listed in the descriptions of conditional processing for each transaction (refer to the following sections). Status codes are only applied to input transactions.

There are two types of status codes. The first type determines validity. Only valid records are applied against the database. The second type determines the type of processing that the record will undergo. For these the values are 'Update,' 'Delete,' and 'Insert.'

Note that the conditional processing occurs in the order shown below for this transaction. Violation detection for business rules supersedes further checks of business rules.

Rejection:

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data are older than what is in the database. |
| Check | If there's a match on ifta_license_number, ifta_base_country, ifta_base_state with an existing record and new ifta_update_date < existing ifta_update_date. |
| Result | Displays "Older than existing data" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Primary keys must be unique |
| Check | If there's a match on ifta_license_number, ifta_base_country, ifta_base_state in the incoming data feed all will be marked as duplicates |
| Result | Displays "Duplicate keys within transaction" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Name types must be unique |
| Check | If there's a match on duplicate ifta_license_number, ifta_base_country, ifta_base_state, name_type in the incoming data feed all will be marked as duplicates |
| Result | Displays "Non-unique name-types within a base record group" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Address types must be unique |
| Check | If there's a match on duplicate ifta_license_number, ifta_base_country, ifta_base_state, name_type, address_type in the incoming data feed all will be marked as duplicates |
| Result | Displays "Non-unique address-types within a base record group" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Address information must be provided |
| Check | Incoming XML records with null street_line_1, street_line_2, and po_box are rejected |
| Result | Displays "No street or PO Box information was provided in address" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | IFTA_CARRIER_ID_NUMBER presented. |
| Check | If it has leading zeros/spaces, trailing spaces, non-numeric value. |
| Result | Displays " IFTA_CARRIER_ID_NUMBER failed data standards rule 1 - leading zeroes/spaces, trailing spaces, non-numeric value" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------|
| Condition | IFTA_LICENSE_NUMBER is mandatory. |
| Check | If IFTA_LICENSE_NUMBER is present. |
| Result | Displays " IFTA_LICENSE_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------|
| Condition | IFTA_LICENSE_NUMBER should not have leading/trailing spaces. |
| Check | If IFTA_LICENSE_NUMBER has leading/trailing spaces. |
| Result | Displays " IFTA_LICENSE_NUMBER failed data standards rule 2 - leading/trailing spaces" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | SENDING_STATE must be authorized to send data for itself or other states |
| Check | If SENDING_STATE is authorized to send data for itself or other states |
| Result | Displays "XX is not authorized sending state. " in the XML logfile as Error message if state XX sending data for itself. Displays "XX is not authorized sending state for base state YY." in the XML logfile as Error message if state XX sending data for base state YY. |

Warning:

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------|
| Condition | IFTA_LICENSE_NUMBER must be in standard format |
| Check | If the first 11 characters of IFTA_LICENSE_NUMBER are two character jurisdiction code plus 9 digits number. |
| Result | Displays "IFTA License Number must be valid state code plus 9 digit number " in the XML logfile as Warning message. |

| | |
|-----------|--------------------------------------------------------------------------------------------|
| Condition | IFTA_CARRIER_ID_NUMBER must be a valid dot |
| Check | If IFTA_CARRIER_ID_NUMBER is a valid dot number if there is a data in this field. |
| Result | Displays "IFTA DOT Number is not valid dot number " in the XML logfile as Warning message. |

For certified states, data quality checking is enforced on certain data elements to ensure, for example, that illegal characters or incorrect data types are not given entry to the database.

4.9.2.4.1 Data Requirements

| Tag Name | Mandatory / Optional | Transaction | Data Requirement |
|------------------------|----------------------|-------------|---------------------------------------------------------------------------------|
| IFTA_CARRIER_ID_NUMBER | Optional | T0019 | Data field shall not contain leading zeroes, leading spaces or trailing spaces. |
| IFTA_LICENSE_NUMBER | Mandatory | T0019 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |

4.9.2.5 CONDITIONAL PROCESSING

The SAFER database will not be updated if the update for the existing record is more recent than the update for the transaction record. If the existing record was updated on the same date as the transaction record the database will be updated.

4.9.2.6 INFORMATION TRANSMITTED

The IFTA transaction shall consist of IFTA account, name, and address information structured within a file. See the example under *Format / Record Layout* below. The format of each tag value is explained in Appendix A - Data Dictionary.

Interface Header + IFTA Transaction Header + {IFTA Account + {IFTA Name + {IFTA Address}}}

The following IFTA Account information shall be provided:

Table 4–2. IFTA Account (Input)

| Description | Type | XML Tag |
|--------------------------------------------|-----------|------------------------|
| USDOT NUMBER of Associated Carrier | Optional | IFTA_CARRIER_ID_NUMBER |
| Base Country Code | Optional | IFTA_BASE_COUNTRY |
| Base Jurisdiction (State/Province) Code | Mandatory | IFTA_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Mandatory | SENDING_STATE |
| IFTA Account Number | Mandatory | IFTA_LICENSE_NUMBER |
| IFTA Status Code | Mandatory | IFTA_STATUS_CODE |
| IFTA Status Code Update Date | Mandatory | IFTA_STATUS_DATE |
| IFTA Account Issue Date | Optional | IFTA_ISSUE_DATE |
| IFTA Account Expiration Date | Optional | IFTA_EXPIRE_DATE |
| IFTA Update Date | Mandatory | IFTA_UPDATE_DATE |

A particular jurisdiction (state /province) may establish no more than one carrier (US DOT Number) for an IFTA account. Since it is possible that two or more jurisdictions may maintain separate IFTA accounts for the same carrier, the same US DOT Number may exist for more than one IFTA account.

The following IFTA Name information shall be provided:

Table 4-3. IFTA Name (Input)

| Description | Type | XML Tag |
|-------------|----------|-----------|
| Name Type | Optional | NAME_TYPE |
| Name | Optional | NAME |

If a transaction contains name information then both the Name Type and Name fields must be filled.

All of the names in the transaction shall completely replace all names previously established for an account. If a name does not appear in the transaction, it will be deleted from the database for that account.

The following IFTA Address information shall be provided:

Table 4-4. IFTA Address (Input)

| Description | Type | XML Tag |
|---------------------------------|----------|---------------|
| Address Type | Optional | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Optional | CITY |
| Jurisdiction (State / Province) | Optional | STATE |
| Postal Code | Optional | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

All of the addresses in the transaction shall completely replace all addresses previously established for a given account. All of the addresses for a particular account will be related to the names for that account according to the structure of the transaction. If an address does not appear in the transaction, it will be deleted from the database for that account.

If any address information is provided, the Address Type field must be filled.

4.9.3 T0020, IRP ACCOUNT INPUT TRANSACTION

This interface is SAFER 04.03, T0020 01.00

Root Transaction Tag: T0020
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 01.00
 Transaction Data Tag: IRP_ACCOUNT

4.9.3.1 TRANSACTION PARAMETERS

4.9.3.1.1 Input for Web Services and for Web Services Asynchronous transactions

The SAFER Web Services Transaction T0020 transaction, and asynchronous transaction, input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

| Argument | Contents |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TransactionID | T0020 |
| XmlData | XML input conforming to T0020 schema For asynchronous transactions: XML input conforming to T0020 schema, compressed using the ZIP format and MIME encoded for transfer |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.3.1.2 Input for XML / FTP

The T0020 schema is specified in Appendix L.

4.9.3.1.3 Interface Terminals

| Item | Value |
|--------------------|----------------------------------------------|
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output destination | A state system, such as CVIEW, or equivalent |

4.9.3.1.4 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.3.1.5 Business Rules

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a set of incoming data is subjected to a number of tests, any of which may mark the record's reserved status code in a way that affects how the final data-load logic treats the record. The list of possible status codes varies according to transaction.

The domain of values is listed in the descriptions of conditional processing for each transaction (refer to the following sections). Status codes are only applied to input transactions.

There are two types of status codes. The first type determines validity. Only valid records are applied against the database. The second type determines the type of processing the record will undergo. For these the values are 'Update,' 'Delete,' and 'Insert.'

Note that the conditional processing occurs in the order shown below for this transaction:

Rejection:

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data are older than what is in the database |
| Check | If there is a match on irp_account_number, irp_base_country, and irp_base_state and irp_update_date is older than that of existing record |
| Result | Displays "Older than existing data" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data contain duplicate key data |
| Check | If there is a match on irp_account_number, irp_base_country, and irp_base_state all but one such record will be marked as a duplicate |
| Result | Displays "Duplicate keys within transaction" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Name Type must be unique |
| Check | If there's a match on irp_account_number, irp_base_country, irp_base_state, and name_type in the incoming data feed all but one such record will be marked as a duplicate |
| Result | Displays "Non-unique name-types within a base record group" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Address Type must be unique |
| Check | If there is a match on irp_account_number, irp_base_country, irp_base_state, and address_type in the incoming data feed all but one such record will be marked as a duplicate |
| Result | Displays "Non-unique address-types within a base record group" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------------------------|
| Condition | Address data must be populated |
| Check | If all attributes from PO Box, Street_1, or Street_2 are null or missing the record status will be marked as below |
| Result | Displays "No street or PO Box information was provided in address" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | IFTA_CARRIER_ID_NUMBER presented. |
| Check | If it has leading zeros/spaces, trailing spaces, non-numeric value. |
| Result | Displays " IFTA_CARRIER_ID_NUMBER failed data standards rule 1 - leading zeroes/spaces, trailing spaces, non-numeric value" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------|
| Condition | IRP_ACCOUNT_NUMBER is mandatory. |
| Check | If IRP_ACCOUNT_NUMBER is present. |
| Result | Displays " IRP_ACCOUNT_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------|
| Condition | IRP_ACCOUNT_NUMBER should not have leading/trailing spaces. |
| Check | If IRP_ACCOUNT_NUMBER has leading/trailing spaces. |
| Result | Displays " IRP_ACCOUNT_NUMBER failed data standards rule 2 - leading/trailing spaces" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | SENDING_STATE must be authorized to send data for itself or other states |
| Check | If SENDING_STATE is authorized to send data for itself or other states |
| Result | Displays "XX is not authorized sending state." in the XML logfile as Error message if state XX sending data for itself. Displays "XX is not authorized sending state for base state YY." in the XML logfile as Error message if state XX sending data for base state YY. |

4.9.3.1.6 Data Requirements

| Tag Name | Mandatory / | Transaction | Data Requirement |
|----------|-------------|-------------|------------------|
|----------|-------------|-------------|------------------|

| | Optional | | |
|-----------------------|-----------|-------|---------------------------------------------------------------------------------|
| IRP_ACCOUNT_NUMBER | Mandatory | T0020 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| IRP_CARRIER_ID_NUMBER | Optional | T0020 | Data field shall not contain leading zeroes, leading spaces or trailing spaces. |

IRP status code: SAFER will convert IRP status code to standard status code using following logic:

Any code <900, convert to 100.

950 and 961 keep same.

Any code >=900 (except 950 and 961) convert to 900.

4.9.3.1.7 Conditional Processing

The SAFER database will not be updated if the existing record was updated more recently than the transaction record. If the existing record was updated on the same date the database will be updated.

4.9.3.2 INFORMATION TRANSMITTED

The IRP Account transaction shall consist of the IRP account, name, and address information structured in a file as follows:

Interface Header + IRP Account Transaction Header + {IRP Account + {IRP Account Name + {IRP Account Address}}}

The following IRP Account information shall be provided:

Table 4-5. IRP Account (Input)

| Description | Type | XML Tag |
|--------------------------------------------|-----------|-----------------------|
| Base Country | Optional | IRP_BASE_COUNTRY |
| Base Jurisdiction (State / Province) | Mandatory | IRP_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Mandatory | SENDING_STATE |
| Account Number | Mandatory | IRP_ACCOUNT_NUMBER |
| Account Type | Mandatory | IRP_ACCOUNT_TYPE |
| Status Code | Mandatory | IRP_STATUS_CODE |
| Status Code Update Date | Mandatory | IRP_STATUS_DATE |
| USDOT Number of Account Owner | Optional | IRP_CARRIER_ID_NUMBER |
| IRP Account Update Date | Mandatory | IRP_UPDATE_DATE |

A particular jurisdiction (state /province) may associate no more than one carrier (US DOT Number) to an IRP account. Since it is possible that two or more jurisdictions may maintain separate IRP accounts for the same carrier, the same US DOT Number may exist for more than one IRP account.

The following IRP Name information shall be provided:

Table 4-6. IRP Name (Input)

| Description | Type | XML Tag |
|-------------|----------|-----------|
| Name Type | Optional | NAME_TYPE |
| Name | Optional | NAME |

If a transaction contains name information then both the Name Type and Name fields must be filled.

All of the names in the transaction shall completely replace all existing names previously established for a given account. If a name does not appear in the transaction, it will be deleted from the database for that account.

The following IRP Account Address information shall be provided:

Table 4–7. IRP Account Address (Input)

| Description | Type | XML Tag |
|---------------------------------|-------------|----------------|
| Address Type | Optional | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Optional | CITY |
| Jurisdiction (State / Province) | Optional | STATE |
| Postal Code | Optional | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

All of the addresses in the transaction shall completely replace all existing addresses previously established for a given account. All of the addresses for a particular account will be related to the names for that account according to the structure of the transaction. If an address does not appear in the transaction, it will be deleted from the database for that account.

If any address information is provided, the Address Type field must be filled.

4.9.4 T0021, IRP FLEET INPUT TRANSACTION

This interface is SAFER 04.03, T0021 01.00

Root Transaction Tag: T0021
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 01.00
 Transaction Data Tags: IRP_FLEET

4.9.4.1 TRANSACTION PARAMETERS

4.9.4.1.1 Input for Web Services and for Web Services Asynchronous transactions

The SAFER Web Services Transaction T0020 transaction, and asynchronous transaction, input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

| Argument | Contents |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TransactionID | T0021 |
| XmlData | XML input conforming to T0021 schema For asynchronous transactions: XML input conforming to T0022 schema, compressed using the ZIP format and MIME encoded for transfer. |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.4.1.2 Input for XML / FTP

The T0021 schema is specified in Appendix L.

4.9.4.2 INTERFACE TERMINALS

| Item | Value |
|--------------------|----------------------------------------------|
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output destination | A state system, such as CVIEW, or equivalent |

4.9.4.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.4.2.2 Business Rules

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a set of incoming data is subjected to a number of tests, any of which may mark the record's reserved status code in a way that affects how the final data-load logic treats the record. The list of possible status codes varies according to the transaction.

The domain of values is listed in the descriptions of conditional processing for each transaction (refer to the following sections). Status codes are only applied to input transactions.

There are two types of status codes. The first type determines validity. Only valid records are applied against the database. The second type determines the type of processing the record will undergo. For these the values are 'Update,' 'Delete,' and 'Insert.'

Note that the conditional processing occurs in the order shown below for this transaction.

Rejection:

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Primary keys must be unique |
| Check | If there's a match on irp_account_number, irp_base_country, irp_base_state, fleet_number in the incoming data feed all will be marked as duplicates |
| Result | Displays "Duplicate keys within transaction" in the XML logfile |

| | |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Name types must be unique |
| Check | If there's a match on duplicate irp_account_number, irp_base_country, irp_base_state, fleet_number, name_type in the incoming data feed all will be marked as duplicates |

| | |
|--------|--------------------------------------------------------------------------------|
| Result | Displays "Non-unique name-types within a base record group" in the XML logfile |
|--------|--------------------------------------------------------------------------------|

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Address types must be unique |
| Check | If there's a match on duplicate irp_account_number, irp_base_country, irp_base_state, fleet_number, name_type, address_type in the incoming data feed all will be marked as duplicates |
| Result | Displays "Non-unique address-types within a base record group" in the XML logfile |

| | |
|-----------|-----------------------------------------------------------------------------------------|
| Condition | Address information must be provided |
| Check | Incoming XML records with null street_line_1, street_line_2, and po_box are rejected |
| Result | Displays " No street or PO Box information was provided in address " in the XML logfile |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data are older than what is in the database |
| Check | If there is a match on irp_account_number, irp_base_country, irp_base_state and fleet_number and fleet_update_date is older than that of existing record |
| Result | Displays "Older than existing data" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| Condition | FLEET_NUMBER should not have leading/trailing spaces |
| Check | If it has leading spaces, trailing spaces. |
| Result | Displays " FLEET_NUMBER failed data standards rule 2 - leading/trailing spaces" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------|
| Condition | FLEET_NUMBER is mandatory. |
| Check | If FLEET_NUMBER is present. |
| Result | Displays "FLEET_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------|
| Condition | IRP_ACCOUNT_NUMBER is mandatory. |
| Check | If IRP_ACCOUNT_NUMBER is present. |
| Result | Displays "IRP_ACCOUNT_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------|
| Condition | IRP_ACCOUNT_NUMBER should not have leading/trailing spaces. |
| Check | If IRP_ACCOUNT_NUMBER has leading/trailing spaces. |
| Result | Displays " IRP_ACCOUNT_NUMBER failed data standards rule 2 - leading/trailing spaces" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------|
| Condition | Referenced IRP ACCOUNT (T0020 record) should exist for CVIEW-ONLY states and CVIEW-PRISM states. |
| Check | If IRP Base state is CVIEW-ONLY state or CVIEW-PRISM state, IRP account (T0020) does not exist. |
| Result | Displays "Referenced IRP Account does not exist" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------|
| Condition | SENDING_STATE must be authorized to send data for itself or other states |
| Check | If SENDING_STATE is authorized to send data for itself or other states |

| | |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Result | Displays "XX is not authorized sending state." in the XML logfile as Error message if state XX sending data for itself. Displays "XX is not authorized sending state for base state YY." in the XML logfile as Error message if state XX sending data for base state YY. |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Warning:

| | |
|-----------|---------------------------------------------------------------------------------------|
| Condition | Referenced IRP ACCOUNT (T0020 record) may exist for PRISM-ONLY states. |
| Check | If IRP Base state is PRISM-ONLY state, IRP account (T0020) does not exist. |
| Result | Displays "Referenced IRP Account does not exist" in the XML logfile as Error message. |

For certified states, data quality checking is enforced on certain data elements to ensure, for example, that illegal characters or incorrect data types are not given entry to the database.

4.9.4.2.3 Data Requirements

| Tag Name | Mandatory/Optional | Transaction | Data Requirement |
|--------------------|--------------------|-------------|--------------------------------------------------------------------------------|
| IRP_ACCOUNT_NUMBER | Mandatory | T0021 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| FLEET_NUMBER | Mandatory | T0021 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |

Fleet status code: SAFER will convert FLEET status code to standard status code using following logic:

- Any code <900, convert to 100.
- 950 and 961 keep same.
- Any code >=900 (except 950 and 961) convert to 900.

4.9.4.2.4 Conditional Processing

The SAFER database will not be updated if the existing record has a more recent IRP_STATUS_UPDATE_DATE than does the transaction record. If the existing record was updated on the same date the database will be updated.

4.9.4.3 INFORMATION TRANSMITTED

The IRP Fleet transaction shall consist of IRP fleet, name, and address information structured within a file as follows:

Interface Header + IRP Fleet Transaction Header + {IRP Fleet + {IRP Fleet Name + {IRP Fleet Address}}}

The following IRP Fleet information shall be provided:

Table 4-8. IRP Fleet (Input)

| Description | Type | XML Tag |
|--------------------|-----------|--------------------|
| IRP Account Number | Mandatory | IRP_ACCOUNT_NUMBER |

| | | |
|--------------------------------------------|-----------|-------------------|
| Base Country | Mandatory | IRP_BASE_COUNTRY |
| Base State | Mandatory | IRP_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Mandatory | SENDING_STATE |
| Fleet Number | Mandatory | FLEET_NUMBER |
| Fleet Status Code | Mandatory | FLEET_STATUS_CODE |
| Fleet Status Code Update Date | Mandatory | FLEET_STATUS_DATE |
| Fleet Expiration Date | Mandatory | FLEET_EXPIRE_DATE |
| Update Date | Mandatory | FLEET_UPDATE_DATE |

Many fleets may exist for a particular IRP account number. Only one account may exist for a particular fleet.

The following IRP Fleet Name information shall be provided:

Table 4–9. IRP Fleet Name (Input)

| Description | Type | XML Tag |
|-------------|-----------|-----------|
| Name Type | Mandatory | NAME_TYPE |
| Name | Mandatory | NAME |

IRP Fleet Name information is optional. However, if a transaction contains name information then both the Name Type and Name must be provided.

All of the names in the transaction shall completely replace all existing names previously established for a given fleet. If a name does not appear in the transaction, it will be deleted from the database for that fleet.

The following IRP Fleet Address information shall be provided:

Table 4–10. IRP Fleet Address (Input)

| Description | Type | XML Tag |
|---------------------------------|-----------|---------------|
| Address Type | Mandatory | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Mandatory | CITY |
| Jurisdiction (State / Province) | Mandatory | STATE |
| Postal Code | Mandatory | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

IRP Fleet Address information is optional. However, if Address information is included in the transaction, the fields identified as mandatory in Table 4-11 must be filled. In addition, either STREET_LINE_1, or STREET_LINE_2 or PO_BOX must be provided.

All of the addresses in the transaction shall completely replace all existing addresses previously established for a given fleet. All of the addresses for a particular fleet will be related to the names for that fleet according to the structure of the transaction. If an address does not appear in the transaction, it will be deleted from the database for that fleet.

If any address information is provided, the Address Type field must be filled.

4.9.5 T0022V3, IRP REGISTRATION (CAB CARD) INPUT TRANSACTION

This interface is SAFER 04.03, T0022V3 01.00

Root Transaction Tag: T0022
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 03.00
 Transaction Data Tags: IRP_REGISTRATION
 Transaction Data Tag: IRP_REGISTRATION

4.9.5.1 TRANSACTION PARAMETERS

4.9.5.1.1 Input for Web Services and for Web Services Asynchronous Transactions

Please note that the T0022V3 transaction was created in September 2007 to support the vehicle registration business rule changes. The SAFER Web Services T0022V3 transaction has been updated to support the new rule in the SAFER beta environment when this version of ICD is complete. The SAFER Web Services T0022V3 transaction will be deployed into production the end of March 2008.

The SAFER Web Services T0022V3 transaction, and asynchronous transaction, input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

| Argument | Contents |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TransactionID | T0022V3 |
| XmlData | XML input conforming to T0022V3 schema For asynchronous transactions: XML input conforming to T0022V3 schema, compressed using the ZIP format and MIME encoded for transfer. |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.5.1.2 Input for XML / FTP

The T0022V3 schema is specified in Appendix L.

4.9.5.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.5.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.5.2.2 Business Rules

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a set of incoming data is subjected to a number of tests, any of which may mark the reserved status code for the record in a way that affects how the final data load logic treats the record. The list of possible status codes varies according to transaction.

The domain of values is listed in the descriptions of conditional processing for each transaction (see the following sections). Status codes are only applied to input transactions.

There are two types of status codes. The first type determines validity. Only valid records are applied against the database. The second determines the type of processing the record will undergo. The values are 'Update,' 'Delete,' and 'Insert.'

Note that the conditional processing occurs in the order shown below for this transaction by each business rule.

Business Rule #1: SAFER shall NOT allow multiple IRP records with the same VIN within the same jurisdiction unless the records have different License Plate and Safety Carrier values.

| SAFER Business Rule 1: Multiple Registrations per VIN Conditions for Database Update or Add | | | | | |
|---------------------------------------------------------------------------------------------------|----------|-----|------------|------------|----------------------|
| | State | VIN | Plate | Carrier | Action on New Record |
| Existing Record | A | 123 | TEMP | XYZ | N/A |
| New record submitted; Changes in bold green | A | 123 | TEMP | ABC | Update (Scenario 8) |
| | A | 123 | NEW | XYZ | Update (Scenario 2) |
| | A | 123 | NEW | ABC | Add (Scenario 1) |
| | B | 123 | TEMP | ABC | Add (Scenario 5) |
| | B | 123 | NEW | XYZ | Add (Scenario 3) |
| | B | 123 | NEW | ABC | Add (Scenario 4) |

Business Rule #2: SAFER shall NOT allow multiple IRP records with the same License Plate but different VIN values to exist in the database within the same jurisdiction. Action should be UPDATE. Corrections required to both XML and PVF processing.

| SAFER Business Rule 2: Multiple Registrations per Plate Conditions for Database Update or Add | | | | | |
|-----------------------------------------------------------------------------------------------------|----------|------------|-------|------------|----------------------|
| | State | VIN | Plate | Carrier | Action on New Record |
| Existing Record | A | 123 | TEMP | XYZ | N/A |
| New record submitted; changes in bold green | A | 999 | TEMP | ABC | Update (Scenario 9) |
| | A | 999 | TEMP | XYZ | Update (Scenario 10) |
| | B | 999 | TEMP | ABC | Add |
| | B | 999 | TEMP | XYZ | Add |

Business Rule #3: States using CVIEW or equivalent systems to upload IRP vehicle transactions to SAFER shall maintain the IRP Status Code of those records in the event that the registration submitted to SAFER is no longer active, by sending an updated transaction to SAFER with the correct IRP Status Code.

This is because the PRISM and CVISN programs use data maintenance processes that are based on different approaches (complete replace versus transactional process logic).

The follow user cases are supported in the SAFER T0022V3 transaction based on the above registration business rule revision.

| Scenario 1 | | |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| A Registrant registers a vehicle that was already in SAFER, but was operated by a different carrier within the same base state. | matching VIN matching IRP_BASE_STATE different SAFETY_CARRIER different LICENSE_PLATE_NUMBER | XML- Previous record UPDATED |

| Scenario 2 | | |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| Registrant gets a new license plate for a vehicle that is already in their fleet (i.e. plate fell off and is being replaced). | matching VIN matching IRP_BASE_STATE matching SAFETY_CARRIER different LICENSE_PLATE_NUMBER | XML- Previous record UPDATED; |

| Scenario 3 | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| Vehicle moved to a different base State. The Registrant re-registers a vehicle in SAFER, which is already in its fleet in a different State and gets a different plate. | matching VIN different IRP_BASE_STATE matching SAFETY_CARRIER different LICENSE_PLATE_NUMBER | XML- New record ADDED |

| Scenario 8 | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| A vehicle that was already in SAFER is transferred to a different Carrier, but keeps the same license plate. This could be an owner operator hiring on to a different carrier. | matching VIN matching IRP_BASE_STATE different SAFETY_CARRIER matching LICENSE_PLATE_NUMBER | XML- Previous record UPDATED |

| Scenario 9 | | |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| A Registrant transfers a license plate from a vehicle in SAFER to a new vehicle in a different carrier's fleet. | different VIN matching IRP_BASE_STATE different SAFETY_CARRIER matching LICENSE_PLATE_NUMBER | XML- New Record Added |

| Scenario 10 | | |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Business Description | Relevant Data Elements | SAFER Vehicle Registration Table Changes |
| A Registrant transfers a license plate from a vehicle previously in their fleet to a vehicle that was not in SAFER already. | different VIN matching IRP_BASE_STATE matching SAFETY_CARRIER matching LICENSE_PLATE_NUMBER | XML- New record Added |

The following conditional checking are continued supported in SAFER T0022V3 transactions in addition to the above registration business rule changes:

Rejection:

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data are older than what is in the database. |
| Check | If there's a match on vin, license_plate_number, irp_base_state with an existing record and new last_update_date < existing last_update_date. |
| Result | Displays "Older than existing data" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | IRP_JURISDICTION is mandatory. |
| Check | If IRP_JURISDICTION is present. |
| Result | Displays "IRP_JURISDICTION is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------|
| Condition | IRP_WEIGHT_CARRIED is mandatory. |
| Check | If IRP_WEIGHT_CARRIED is present. |
| Result | Displays "IRP_WEIGHT_CARRIED is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------|
| Condition | IRP_WEIGHT_CARRIED should be at least 1000 lb for all Jurisdictions except CAQC which sends axle numbers. |
| Check | IRP_WEIGHT_CARRIED < 1000 for all jurisdiction except CAQC. |
| Result | Displays "IRP_WEIGHT_CARRIED must be a non-null numeric with a value of at least 1000 " in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------|
| Condition | IRP_WEIGHT_CARRIED should be at least 2 for CAQC. |
|-----------|---------------------------------------------------|

| | |
|--------|------------------------------------------------------------------------------------------------------------|
| Check | IRP_WEIGHT_CARRIED < 2 for CAQC. |
| Result | Displays "IRP_WEIGHT_CARRIED (NUMBERS of AXLES) is out of the range " in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Condition | SAFETY_CARRIER (CVIS_DEFAULT_CARRIER)is mandatory for PRISM states. |
| Check | If SAFETY_CARRIER (CVIS_DEFAULT_CARRIE) is present for PRISM states. |
| Result | Displays "CVIS Default Carrier is mandatory data for this transaction " in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field SAFETY_CARRIER (CVIS_DEFAULT_CARRIE) shall not contain leading zeroes, leading spaces or trailing spaces. |
| Check | If SAFETY_CARRIER (CVIS_DEFAULT_CARRIE) contain leading zeroes, leading spaces or trailing spaces. |
| Result | Displays "CVIS Default Carrier can have no leading/trailing/embedded blanks, or leading zeroes, and must be numeric value " in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field IFTA_LICENSE_NUMBER shall not contain leading/trailing spaces. |
| Check | If IFTA_LICENSE_NUMBER contain leading/trailing spaces. |
| Result | Displays "IFTA_LICENSE_NUMBER failed data standards rule 2 - leading/trailing spaces" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Data field INTERSTATE_FLAG is mandatory. |
| Check | If INTERSTATE_FLAG is present. |
| Result | Displays "INTERSTATE_FLAG is mandatory data for this transaction " in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_ACCOUNT_NUMBER is mandatory. |
| Check | If IRP_ACCOUNT_NUMBER is present. |
| Result | Displays "IRP_ACCOUNT_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_ACCOUNT_NUMBER shall not contain leading/trailing spaces. |
| Check | If IRP_ACCOUNT_NUMBER contain leading/trailing spaces. |
| Result | Displays "IRP_ACCOUNT_NUMBER failed data standards rule 2 - leading/trailing spaces " in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_BASE_COUNTRY is mandatory for CVIEW states (CVIEW ONLY or CVIEW-PRISM states). |
| Check | If IRP_BASE_COUNTRY is present for CVIEW states. |
| Result | Displays "IRP_BASE_COUNTRY is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_BASE_STATE is mandatory. |
| Check | If IRP_BASE_STATE is present. |
| Result | Displays "IRP_BASE_STATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------|
| Condition | Data field IRP_CARRIER_ID_NUMBER shall not contain leading zeroes, leading |
|-----------|----------------------------------------------------------------------------|

| | |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | spaces or trailing spaces. |
| Check | If IRP_CARRIER_ID_NUMBER contain leading zeroes, leading spaces or trailing spaces. |
| Result | Displays "IRP_CARRIER_ID_NUMBER failed data standards rule 1 - leading zeroes/spaces, trailing spaces, non-numeric value" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_FLEET_NUMBER is mandatory. |
| Check | If IRP_FLEET_NUMBER is present. |
| Result | Displays "IRP_FLEET_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_FLEET_NUMBER shall not contain leading or trailing spaces. |
| Check | If IRP_FLEET_NUMBER contain leading or trailing spaces. |
| Result | Displays "IRP_FLEET_NUMBER failed data standards rule 2 - leading/trailing spaces " in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_STATUS_CODE is mandatory. |
| Check | If IRP_STATUS_CODE is present. |
| Result | Displays " IRP_STATUS_CODE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------|
| Condition | Data field LICENSE_PLATE_NUMBER is mandatory. |
| Check | If LICENSE_PLATE_NUMBER is present. |
| Result | Displays "LICENSE_PLATE_NUMBER is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field LICENSE_PLATE_NUMBER shall not contain leading or trailing spaces. |
| Check | If LICENSE_PLATE_NUMBER contain leading or trailing spaces. |
| Result | Displays " LICENSE_PLATE_NUMBER failed data standards rule 2 - leading/trailing spaces " in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------|
| Condition | Data field VIN is mandatory. |
| Check | If VIN is present. |
| Result | Displays "VIN is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------|
| Condition | Data field VIN shall not contain leading or trailing spaces. |
| Check | If VIN contain leading or trailing spaces. |
| Result | Displays "VIN failed data standards rule 2 - leading/trailing spaces " in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------|
| Condition | Data field MAKE is mandatory. |
| Check | If MAKE is present. |
| Result | Displays "MAKE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------|
| Condition | Data field MODEL_YEAR is mandatory. |
| Check | If MODEL_YEAR is present. |
| Result | Displays "MODEL_YEAR is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_WEIGHT_EXPIRE_DATE is mandatory. |
| Check | If IRP_WEIGHT_EXPIRE_DATE is present. |
| Result | Displays "IRP_WEIGHT_EXPIRE_DATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------------|
| Condition | Data field IRP_STATUS_DATE is mandatory. |
| Check | If IRP_STATUS_DATE is present. |
| Result | Displays "IRP_STATUS_DATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------|
| Condition | Data field LAST_UPDATE_DATE is mandatory. |
| Check | If LAST_UPDATE_DATE is present. |
| Result | Displays "LAST_UPDATE_DATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------|
| Condition | Data field REGISTRATION_EXPIRE_DATE is mandatory. |
| Check | If REGISTRATION_EXPIRE_DATE is present. |
| Result | Displays "REGISTRATION_EXPIRE_DATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------|
| Condition | Data field REGISTRATION_START_DATE is mandatory. |
| Check | If REGISTRATION_START_DATE is present. |
| Result | Displays "REGISTRATION_START_DATE is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check that at least one of the proration records is for the base state. |
| Check | If there is no match on vehicle_seq_number, license_seq_number, prism_state, irp_base_state between the incoming registration record and the set of related vehicle_irp_juris records, mark the status code as below. |
| Result | Displays "No proration record for vehicle reporting state" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check that intrastate registrations have only one proration |
| Check | If there is a match on vehicle_seq_number, license_seq_number, prism_state and interstate_flag = '0', mark all but one of these records as below. |
| Result | Displays "Multiple prorations found for intrastate IRP registration" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check incoming records for valid IRP data for CVIEW states (CVISN ONLY or CVISN-PRISM). |
| Check | If the incoming record has an irp_account_number, but there is no match on irp_base_state and irp_account_number, mark the record as below. |

| | |
|--------|---------------------------------------------------------------------------------------|
| Result | Displays "Referenced IRP Account does not exist" in the XML logfile as Error message. |
|--------|---------------------------------------------------------------------------------------|

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check incoming records for valid Fleet data (CVISN ONLY or CVISN-PRISM). |
| Check | If the incoming record has an <u>irp_fleet_number</u> , but there is no match on <u>irp_base_state</u> , <u>irp_account_number</u> , and <u>irp_fleet_number</u> , mark the record as below |
| Result | Displays "Referenced IRP Fleet does not exist" in the XML logfile as Error message. |

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | SENDING_STATE must be authorized to send data for itself or other states |
| Check | If SENDING_STATE is authorized to send data for itself or other states |
| Result | Displays "XX is not authorized sending state. " in the XML logfile as Error message if state XX sending data for itself. Displays "XX is not authorized sending state for base state YY." in the XML logfile as Error message if state XX sending data for base state YY. |

Warning:

| | |
|-----------|-----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should not contain special characters. |
| Check | If VIN contains special charaters. |
| Result | Displays "VIN character(s) outside of range A-Z and 0-9" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------|
| Condition | Data field VIN shall have 17 characters excluding I, O and Q. |
| Check | If VIN contain I,O or Q and length. |
| Result | Displays "VIN should be 17 characters and exclude the letters I,O, and Q " in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should have correct check digit |
| Check | If VIN has correct check digit. |
| Result | Displays "VIN has invalid check digit (9 th character)" in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check incoming records for valid IFTA data for CVIEW states (CVISN ONLY or CVISN-PRISM). |
| Check | If the incoming record has an <u>ifta_account_number</u> , but there is no match on <u>irp_base_state</u> and <u>ifta_account_number</u> , mark the record as below. |
| Result | Displays "Referenced IFTA Account does not exist" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check incoming records for valid IRP data for PRISM states (PRISM ONLY) |
| Check | If the incoming record has an <u>irp_account_number</u> , but there is no match on <u>irp_base_state</u> and <u>irp_account_number</u> , mark the record as below. |
| Result | Displays "Referenced IRP Account does not exist" in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Check incoming records for valid Fleet data for PRISM states (PRISM ONLY). |
| Check | If the incoming record has an <u>irp_fleet_number</u> , but there is no match on <u>irp_base_state</u> , <u>irp_account_number</u> , and <u>irp_fleet_number</u> , mark the record as below |

| | |
|--------|-------------------------------------------------------------------------------------|
| Result | Displays "Referenced IRP Fleet does not exist" in the XML logfile as Error message. |
|--------|-------------------------------------------------------------------------------------|

4.9.5.2.3 Data Requirements

| Tag Name | Mandatory / Optional | Transaction | Data Requirement |
|--------------------------|--------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| IFTA_LICENSE_NUMBER | Optional | T0022V3 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| IRP_ACCOUNT_NUMBER | Mandatory | T0022V3 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| IRP_CARRIER_ID_NUMBER | Optional | T0022V3 | Data field shall not contain leading zeroes, leading spaces or trailing spaces. |
| TITLE_NUMBER | Optional | T0022V3 | |
| TITLE_JURISDICTION | Optional | T0022V3 | |
| OWNER_NAME | Optional | T0022V3 | |
| MODEL_YEAR | Mandatory | T0022V3 | |
| MAKE | Mandatory | T0022V3 | |
| TYPE | Optional | T0022V3 | |
| MODEL | Optional | T0022V3 | |
| FUEL | Optional | T0022V3 | |
| UNLADEN_WEIGHT | Optional | T0022V3 | |
| NUMBER_OF_AXLES | Optional | T0022V3 | |
| IRP_BASE_COUNTRY | Conditional Mandatory | T0022V3 | Not mandatory for PRISM-only states using PVF |
| IRP_BASE_STATE | Mandatory | T0022V3 | |
| UNIT_NUMBER | Optional | T0022V3 | |
| LAST_UPDATE_DATE | Mandatory | T0022V3 | |
| INTERSTATE_FLAG | Mandatory | T0022V3 | |
| IRP_STATUS_CODE | Mandatory | T0022V3 | |
| IRP_STATUS_DATE | Mandatory | T0022V3 | |
| REGISTRATION_START_DATE | Mandatory | T0022V3 | |
| REGISTRATION_EXPIRE_DATE | Mandatory | T0022V3 | |
| OPERATOR_NAME | Optional | T0022V3 | |
| GVW | Optional | T0022V3 | |
| GVW_EXPIRE_DATE | Optional | T0022V3 | |
| IRP_JURISDICTION | Mandatory | T0022V3 | |
| IRP_WEIGHT_CARRIED | Mandatory | T0022V3 | Must be greater than 4,000 pounds. |
| IRP_WEIGHT_EXPIRE_DATE | Mandatory | T0022V3 | |
| VIN | Mandatory | T0022V3 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. Warn on special characters that are not in A-Z, 0-9 ranges. |
| LICENSE_PLATE_NUMBER | Mandatory | T0022V3 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| IRP_FLEET_NUMBER | Mandatory | T0022V3 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. |
| SAFETY_CARRIER | Conditional Mandatory | T0022V3 | Data field shall not contain leading zeroes, leading spaces or trailing spaces, or |

| | | | |
|---------------------|-----------|---------|------------------------------------------------------|
| SENDING_STATE | Mandatory | T0022V3 | embedded blanks. Not mandatory for CVISN-only states |
| VERIFICATION_SOURCE | Optional | T0022V3 | |
| VERIFICATION_DATE | Optional | T0022V3 | |

Note: "Conditional Mandatory" means that the item is mandatory for PRISM; it is not mandatory for CVISN.

Fleet status code: SAFER will convert FLEET status code to standard status code using following logic:

Any code <900, convert to 100.

950 and 961 keep same.

Any code >=900 (except 950 and 961) convert to 900.

Vehicle Type Code Conversion in SAFER:

If states send old vehicle type codes, SAFER will convert them into new set of vehicle type codes based on below logic. After states start sending new vehicle type codes, SAFER will stop the conversion. In order to do that, states must inform SAFER to remove the state from the conversion list.

| Code | Definition | SAFER Change |
|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BU | Bus | Change SAFER code from BS to BU for bus. |
| ST | Semi-Trailer | Change SAFER code from SR to ST for semi-trailer and discontinue use of SR for semi-trailer. |
| TR | Straight truck | Change SAFER code from ST to TR for straight truck; discontinue use of ST for straight truck. |
| TT | Truck Tractor | No change. |
| FT | Full Trailer | Change SAFER code from TR to FT and discontinue use of TR for trailer. |
| OT | Other | Change SAFER code from ZZ to OT. |
| — | Any thing else | Discontinue use of all other Vehicle Type Codes in SAFER. The process to enforce the code use is TBD. Possibilities include mapping unrecognized codes to OT for other, or quarantine, and notify the sender. |

BS → BU

TR → FT

ST → TR

SR → ST

FT → FT

TT → TT

All others (2B, 2F....) → OT

Each state shall be able to use the new code at different time.

4.9.5.2.4 Conditional Processing

The SAFER database will not be updated if the existing record has a more recent IRP_STATUS_UPDATE_DATE than the transaction record. If the existing record was updated on the same date, the database will be updated.

4.9.5.3 INFORMATION TRANSMITTED

The IRP Registration transaction shall consist of VIN, registration, and proration information structured within a file as follows:

Interface Header + IRP-Registration Transaction Header + {IRP-VIN + IRP-Registration + {IRP-Proration}}

In the transaction, there must be one and only one registration per VIN (i.e., per vehicle), but in SAFER there may be more than one registration per VIN since a vehicle can be registered simultaneously in more than one jurisdiction.

The vehicle's transponder ID shall not appear in this transaction. The transponder ID shall only be available through the electronic screening enrollment transaction.

The following IRP VIN information shall be provided:

Table 4-11. IRP VIN (Input)

| Description | Type | XML Tag |
|-------------------------------------|-----------|--------------------|
| Vehicle Identification Number (VIN) | Mandatory | VIN |
| Title Number | Optional | TITLE_NUMBER |
| Title Country Code | Optional | TITLE_JURISDICTION |
| Title Jurisdiction Code | Optional | TITLE_JURISDICTION |
| Owner Name | Optional | OWNER_NAME |
| Model Year | Mandatory | MODEL_YEAR |
| Make | Mandatory | MAKE |
| Vehicle Use Class Code | Optional | TYPE |
| Model | Optional | MODEL |
| Power Type Code | Optional | FUEL |
| Unladen Weight | Optional | UNLADEN_WEIGHT |
| Number of Axles or Seats | Optional | NUMBER_OF_AXLES |

Please note that although the TITLE_JURISDICTION is optional, if the tag is present, the value must be one of the valid jurisdiction codes to pass the XML schema validation. Empty string would fail.

The following IRP Registration information shall be provided:

Table 4–12. IRP Registration (Input)

| Description | Type | XML Tag |
|--------------------------------------------------------------------------------|--------------------------|--------------------------|
| License Plate Number | Mandatory | LICENSE_PLATE_NUMBER |
| Base Country | Conditional Mandatory | IRP_BASE_COUNTRY |
| License Plate Base Jurisdiction (State/Province) | Mandatory | IRP_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Mandatory | SENDING_STATE |
| Carrier Vehicle Unit Number | Optional | UNIT_NUMBER |
| Vehicle Last Update Date | Mandatory | LAST_UPDATE_DATE |
| Interstate / Intrastate Flag | Mandatory | INTERSTATE_FLAG |
| Vehicle Status Code | Mandatory | IRP_STATUS_CODE |
| Vehicle Status Update Date | Mandatory | IRP_STATUS_DATE |
| IRP Account Number | Mandatory | IRP_ACCOUNT_NUMBER |
| IRP Fleet Number | Mandatory | IRP_FLEET_NUMBER |
| Vehicle Registration Start Date | Mandatory | REGISTRATION_START_DATE |
| Base Vehicle Registration Expiration Date | Mandatory | REGISTRATION_EXPIRE_DATE |
| Operator's Name | Optional | OPERATOR_NAME |
| Safety USDOT Number | Conditional Mandatory | SAFETY_CARRIER |
| Account Owner USDOT Number | Optional | IRP_CARRIER_ID_NUMBER |
| IFTA Account Number | Optional | IFTA_LICENSE_NUMBER |
| Base Jurisdiction Licensed Gross Vehicle Weight | Optional | GVW |
| Base Jurisdiction Licensed GVW Expiration Date | Optional | GVW_EXPIRE_DATE |
| The State that sends the vehicle registration data for the authoritative state | Optional | SENDING_STATE |
| The type of mechanism used to verify the registration data | Optional | VERIFICATION_SOURCE |
| The date the registration data is verified by an authoritative source | Optional | VERIFICATION_DATE |

Note: “Conditional Mandatory” means that the item is mandatory for PRISM; it is not mandatory for CVISN.

Note that the Interstate/Intrastate flag allows this transaction to hold either interstate or intrastate information. The information in this transaction is designed for use with interstate registrations. If used for intrastate registrations, the intrastate information used must be consistent with the IRP information. In the case of intrastate vehicles, one and only one proration record for the base jurisdiction will exist.

Note that the sending state, verification source and verification date are the new data elements added to the T0022v3 transaction to help track the if the state is sending vehicles to SAFER on behalf of another state that does not have CVIEW to send data to SAFER.

The base jurisdiction licensed gross vehicle weight and expiration date is redundant with the proration information. If this information exists, then one of the associated proration records will have the same values for the base jurisdiction.

The following IRP Proration information shall be provided:

Table 4–13. IRP Proration (Input)

| Description | Type | XML Tag |
|----------------------------------------------------|-----------|------------------------|
| Prorate Country Code + Prorate Jurisdiction Code | Mandatory | IRP_JURISDICTION |
| Prorate Jurisdiction Prorated Gross Vehicle Weight | Mandatory | IRP_WEIGHT_CARRIED |
| Prorate Jurisdiction Prorated GVW Expiration Date | Mandatory | IRP_WEIGHT_EXPIRE_DATE |

At least one proration for the base state shall be provided. The information in this proration shall be redundant with the Base Jurisdiction Licensed Gross Vehicle Weight (REG.GVW) and Base Jurisdiction Licensed GVW Expiration Date (REG.GVW_EXPIRE_DATE) in the associated IRP-Reg record, if they are provided.

In the case of an intrastate vehicle one and only one proration for the base state shall be provided.

4.9.6 T0024V2, VEHICLE TRANSPONDER ID INPUT TRANSACTION

This interface is SAFER 04.02, T0024V2 02.00

Root Transaction Tag: T0024V2
 Interface Name: SAFER
 Interface Version: 04.02
 Transaction Version: 02.00
 Transaction Data Tags: VEHICLE_TRANSPONDER_ID

4.9.6.1 TRANSACTION PARAMETERS

4.9.6.1.1 Input for XML / FTP

The T0024V2 schema is specified in Appendix L.

4.9.6.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.6.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.6.2.2 Business Rules

During the March workshop 2007, the CVISN stakeholders has decided to discontinue the SAFER T0023 transaction, and enhance the business logic for T0024 transaction to support the following functions:

1. For every transponder number submitted via a T0024V2 transaction, the XML service should check in the SAFER database if such transponder exists.
2. If the T0024V2 transaction contains a null value for the transponder ID, SAFER should check for the existence of a record with a matching VIN. If the record exists, SAFER will check whether the transponder jurisdiction matches. If they do match, SAFER will delete the existing transponder record and create a new one with the information from the T0024v2 transaction. If they don't match, SAFER will retain the existing transponder record. In this case, the transponder number in the existing record will be deleted and the TRANSPONDER_UPDATE_DATE and LAST_CHANGE_JURISDICTION will be updated using values from the T0024v2 transaction.

3. If the transponder number does not exist, SAFER will 1) delete any transponder record with a matching VIN (if one exists) and 2) create a new transponder record in SAFER for the vehicle the new transponder number is assigned to.
4. If the transponder number already exists and the VIN matches, SAFER will check if the transponder jurisdictions match. If they do match, SAFER will delete the existing transponder record and create a new one using the values in the T0024v2 record (correcting an invalid LAST_UPDATE_DATE and/or LAST_CHANGE_JURISDICTION). If the transponder jurisdictions do not match, SAFER will retain the existing transponder record and update the TRANSPONDER_UPDATE_DATE and LAST_CHANGE_JURISDICTION with the values from the T0024v2 transaction (again correcting an invalid LAST_UPDATE_DATE and/or LAST_CHANGE_JURISDICTION).
5. If the transponder number already exists with a different VIN, SAFER will always retain the existing transponder record and will 1) delete the existing transponder number and update the TRANSPONDER_UPDATE_DATE and LAST_CHANGE_JURISDICTION on the existing transponder record (using values from the T0024v2 transaction) and 2) SAFER will create a new transponder record for the new VIN using the data in the T0024v2 transaction.
6. Transponder number is the unique identifier for the T0024v2 transaction. A vehicle cannot have more than one transponder associated with it at a given time (in SAFER). It is also true that a transponder cannot have more than one VIN associated with it at a given time.
7. The T0029V2 transaction should include all new and changed transponder information since the last subscription pulling. If the transponder is removed from a vehicle, the T0029v2 update should contain a blank (null) value for the transponder ID in the next subscription generation.
8. SAFER should remove records from the database for which a transponder ID does not exist after the records are 3 months old.
9. State CVIEW systems should implement the same update logic as SAFER when processing the SAFER T0029v2 transaction.

It was determined that the state is responsible maintain the opt_out jurisdiction data for the transponder. Shall there be changes to the opt out jurisdiction list, the state will submit the updates via T0024v2 to SAFER to replace the previous op-out jurisdictions for the transponder.

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a set of incoming data is subjected to a number of tests, any of which may mark the reserved status code for the record in a way that affects how the final data load logic treats the record. The list of possible status codes varies according to the transaction. The values are listed in the descriptions of conditional processing for each transaction that follow. Status codes only apply to input transactions.

There are two types of these status codes. The first type determines validity. Only valid records are applied against the database. The second determines the type of processing the record will undergo. For these the values are 'Update,' 'Delete,' and 'Insert.'

Note that the conditional processing occurs in the order shown below for this transaction.

Rejection:

| | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Incoming data are older than what is in the database. |
| Check | If there's a match on vin, transponder_number with an existing record and new transponder_update_date < existing transponder_update_date. |
| Result | Displays "Older than existing data" in the XML logfile as Error message. |

| | |
|-----------|--------------------------------------------------------------------------------------------|
| Condition | Data field VIN is mandatory. |
| Check | If VIN is present. |
| Result | Displays "VIN is mandatory data for this transaction" in the XML logfile as Error message. |

| | |
|-----------|-------------------------------------------------------------------------------------------------------------|
| Condition | Data field VIN shall not contain leading or trailing spaces. |
| Check | If VIN contain leading or trailing spaces. |
| Result | Displays "VIN failed data standards rule 2 - leading/trailing spaces " in the XML logfile as Error message. |

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Condition | Data field TRANSPONDER_NUMBER shall not contain leading or trailing spaces, no numbers and no A-F. |
| Check | If TRANSPONDER_NUMBER contain leading or trailing spaces, numbers or A-F. |
| Result | Displays " TRANSPONDER_NUMBER failed data standards rule 6 - leading/trailing spaces, not(0-9) and not(A-F)" in the XML logfile as Error message. |

Warning:

| | |
|-----------|-----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should not contain special characters. |
| Check | If VIN contains special charaters. |
| Result | Displays "VIN character(s) outside of range A-Z and 0-9" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------|
| Condition | Data field VIN shall have 17 characters excluding I, O and Q. |
| Check | If VIN contain I,O or Q and length. |
| Result | Displays "VIN should be 17 characters and exclude the letters I,O, and Q " in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should have correct check digit |
| Check | If VIN has correct check digit. |
| Result | Displays "VIN has invalid check digit (9 th character)" in the XML logfile as Error message. |

Warning:

| | |
|-----------|-----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should not contain special characters. |
| Check | If VIN contains special charaters. |
| Result | Displays "VIN character(s) outside of range A-Z and 0-9" in the XML logfile as Error message. |

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------|
| Condition | Data field VIN shall have 17 characters excluding I, O and Q. |
| Check | If VIN contain I,O or Q and length. |
| Result | Displays "VIN should be 17 characters and exclude the letters I,O, and Q " in the XML logfile as Error message. |

| | |
|-----------|----------------------------------------------------------------------------------------------|
| Condition | Data field VIN should have correct check digit |
| Check | If VIN has correct check digit. |
| Result | Displays "VIN has invalid check digit (9 th character)" in the XML logfile as Error message. |

4.9.6.2.3 Data Requirements

| Tag Name | Mandatory / Optional | Transaction | Data Requirement |
|------------------------|----------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VIN | Mandatory | T0024 | Data field shall not contain leading or trailing spaces. Allow leading zeroes. Warn on special characters that are not in A-Z, 0-9 ranges, contains I,O,Q, incorrect check digit, length. |
| TRANSPONDER_NUM BER | Optional | T0024 | Data field shall not contain leading or trailing spaces, numbers or A-F. Allow leading zeroes and Null. |

4.9.6.2.4 Conditional Processing

The SAFER database will not be updated if the existing record has more recent data.

4.9.6.3 INFORMATION TRANSMITTED

The Vehicle Transponder ID transaction shall consist of transponder information structured within a file as follows:

Interface Header + Vehicle Transponder ID Transaction Header + { Vehicle Transponder ID }

The following Vehicle Transponder ID information shall be provided:

Table 4-14. Vehicle Transponder ID (Input)

| Description | Type | XML Tag |
|---------------------------------------|-----------|--------------------------|
| Vehicle VIN | Mandatory | VIN |
| Vehicle Transponder ID | Optional | TRANSPONDER_NUMBER |
| Update Date | Mandatory | TRANSPONDER_UPDATE_DATE |
| Jurisdiction that issues transponder | Mandatory | TRANSPONDER_JURISDICTION |
| Jurisdiction that on the opt out list | Optional | OPT_OUT_JURISDICTION |

SAFER shall store no more than one transponder ID for a particular vehicle. The transponder ID will replace any previously established transponder ID for a given VIN.

The VIN is mandatory and the transponder ID may be NULL to indicate that a transponder is no longer associated with a particular vehicle.

4.9.7 T0025, IFTA OUTPUT TRANSACTION

This interface is SAFER 04.03, T0025 01.00

Root Transaction Tag: T0025

Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 01.00
 Transaction Data Tags: IFTA_LICENSE

4.9.7.1 TRANSACTION PARAMETERS

4.9.7.1.1 Input for Web Services

The SAFER Web Services Transaction T0025 query transaction input shall consist of an invocation of following methods:

SaferQueryByIFTAService:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0025 |
| IFTA | IFTA License Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

SaferQueryByDOT method with the following arguments:

| Argument | Contents |
|----------------|----------------------------------------|
| TransactionID | T0025 |
| DotNumber | USDOT Number of motor carrier |
| LastUpdateDate | Date of last update received by client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.7.1.2 Input for XML / FTP

The T0025 schema is specified in Appendix L.

4.9.7.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.7.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.7.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the lastUpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the lastUpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

There is no server side conditional processing for this transaction yet.

Client Side Conditional Processing

Conditional processing is at the discretion of the state system. The IFTA_UPDATE_DATE may be used to ensure that the local data store is not updated with old information.

4.9.7.3 INFORMATION TRANSMITTED

The IFTA transaction shall consist of IFTA account, name, and address information structured within a file. See the example under *Format / Record Layout* below. The format of each tag value is explained in Appendix A - Data Dictionary.

Interface Header + IFTA Transaction Header + {IFTA Account + {IFTA Name + {IFTA Address}}}

The following IFTA Account information shall be provided:

Table 4–15. IFTA Account (Input)

| Description | Type | XML Tag |
|--------------------------------------------|-----------|------------------------|
| USDOT NUMBER of Associated Carrier | Optional | IFTA_CARRIER_ID_NUMBER |
| Base Country Code | Optional | IFTA_BASE_COUNTRY |
| Base Jurisdiction (State/Province) Code | Mandatory | IFTA_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Optional | SENDING_STATE |
| IFTA Account Number | Mandatory | IFTA_LICENSE_NUMBER |
| IFTA Status Code | Mandatory | IFTA_STATUS_CODE |
| IFTA Status Code Update Date | Mandatory | IFTA_STATUS_DATE |
| IFTA Account Issue Date | Optional | IFTA_ISSUE_DATE |
| IFTA Account Expiration Date | Optional | IFTA_EXPIRE_DATE |
| IFTA Update Date | Mandatory | IFTA_UPDATE_DATE |

A particular jurisdiction (state /province) may establish no more than one carrier (US DOT Number) for an IFTA account. Since it is possible that two or more jurisdictions may maintain separate IFTA accounts for the same carrier, the same US DOT Number may exist for more than one IFTA account.

The following IFTA Name information shall be provided:

Table 4–16. IFTA Name (Input)

| Description | Type | XML Tag |
|-------------|----------|-----------|
| Name Type | Optional | NAME_TYPE |
| Name | Optional | NAME |

If a transaction contains name information then both the Name Type and Name fields must be filled.

All of the names in the transaction shall completely replace all names previously established for an account. If a name does not appear in the transaction, it will be deleted from the database for that account.

The following IFTA Address information shall be provided:

Table 4–17. IFTA Address (Input)

| Description | Type | XML Tag |
|---------------------------------|----------|---------------|
| Address Type | Optional | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Optional | CITY |
| Jurisdiction (State / Province) | Optional | STATE |
| Postal Code | Optional | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

All of the addresses in the transaction shall completely replace all addresses previously established for a given account. All of the addresses for a particular account will be related to the names for that account according to the structure of the transaction. If an address does not appear in the transaction, it will be deleted from the database for that account.

If any address information is provided, the Address Type field must be filled.

4.9.8 T0026, IRP ACCOUNT OUTPUT TRANSACTION

This interface is SAFER 04.03, T0026 01.00

Root Transaction Tag: T0026
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 01.00
 Transaction Data Tags: IRP_ACCOUNT

4.9.8.1 TRANSACTION PARAMETERS

4.9.8.1.1 Input for Web Services

The SAFER Web Services Transaction T0026 query transaction input shall consist of an invocation of following methods:

SaferQueryByIRPService:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0026 |
| IRP | IRP Account Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

SaferQueryByDOT method with the following arguments:

| Argument | Contents |
|----------------|----------------------------------------|
| TransactionID | T0026 |
| DotNumber | USDOT Number of motor carrier |
| LastUpdateDate | Date of last update received by client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.8.1.2 Output

The T0026 schema is specified in Appendix L.

4.9.8.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.8.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.8.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the last UpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the last UpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

There is no server side conditional processing for this transaction yet.

Client Side Conditional Processing

Conditional processing is at the discretion of the state system. The IRP_UPDATE_DATE may be used to ensure that the local data store is not updated with old information.

4.9.8.3 INFORMATION TRANSMITTED

The IRP Account transaction shall consist of IRP account, name, and address information structured within a file as follows:

Interface Header + IRP Account Transaction Header + {IRP Account + {IRP Account Name + {IRP Account Address}}}

The following information shall be provided:

Table 4–18. IRP Account (Output)

| Description | Type | XML Tag |
|--------------------------------------------|-----------|-----------------------|
| Base Country | Mandatory | IRP_BASE_COUNTRY |
| Base Jurisdiction (State / Province) | Mandatory | IRP_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Optional | SENDING_STATE |
| Account Number | Mandatory | IRP_ACCOUNT_NUMBER |
| Account Type | Optional | IRP_ACCOUNT_TYPE |
| Status Code | Mandatory | IRP_STATUS_CODE |
| Status Code Update Date | Mandatory | IRP_STATUS_DATE |
| USDOT Number of Account Owner | Optional | IRP_CARRIER_ID_NUMBER |
| IRP Account Update Date | Optional | IRP_UPDATE_DATE |

A particular jurisdiction (State / Province) may associate no more than one carrier (USDOT Number) to an IRP account. Since it is possible that two or more separate jurisdictions may be maintaining separate IRP accounts for the same carrier, the same USDOT Number may exist for more than one IRP account.

The following IRP Name information shall be provided:

Table 4–19. IRP Name (Output)

| Description | Type | XML Tag |
|-------------|-----------|-----------|
| Name Type | Mandatory | NAME_TYPE |
| Name | Mandatory | NAME |

If a transaction contains name information then both the Name Type and Name will be provided.

SAFER shall return between zero and two names for a particular IRP account in the IRP Account Output Transaction. The following information shall be provided:

Table 4–20. IRP Address (Output)

| Description | Type | XML Tags |
|---------------------------------|-----------|---------------|
| Address Type | Mandatory | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Mandatory | CITY |
| Jurisdiction (State / Province) | Mandatory | STATE |
| Postal Code | Mandatory | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

SAFER shall return between zero and two addresses for a particular IRP account in the IRP Account Output Transaction.

If Address information is included in the transaction, the fields identified as mandatory in Table 4-22 must be provided. In addition, either STREET_LINE_1, or STREET_LINE_2 or PO_BOX must be provided.

4.9.9 T0027, IRP FLEET OUTPUT TRANSACTION

This interface is SAFER 04.03, T0027 01.00

Root Transaction Tag: T0027
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 01.00
 Transaction Data Tags: IRP_FLEET

4.9.9.1 TRANSACTION PARAMETERS

4.9.9.1.1 Input for Web Services

The SAFER Web Services Transaction T0027 query transaction input shall consist of an invocation of following methods:

SaferQueryByIRPFleetService:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0027 |
| IRP | IRP Account Number |
| Fleet | Fleet Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

SaferQueryByIRPService:

| Argument | Contents |
|---------------|--------------------|
| TransactionID | T0027 |
| IRP | IRP Account Number |

| | |
|----------------|-------------------------------------------|
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.9.1.2 Output

The T0027 schema is specified in Appendix L.

4.9.9.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.9.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.9.2.2 FTP Output File Types

Server Side Conditional Processing

There is no server side conditional processing for this transaction.

Client Side Conditional Processing

Conditional processing is at the discretion of the state system. The IRP_STATUS_UPDATE_DATE may be used to ensure that the local data store is not updated with old information.

4.9.9.3 INFORMATION TRANSMITTED

The IRP Fleet transaction shall consist of IRP fleet, name, and address information structured within a file as follows:

Interface Header + IRP Fleet Transaction Header + {IRP Fleet + {IRP Fleet Name + {IRP Fleet Address}}}

The following IRP Fleet information shall be provided:

Table 4–21. IRP Fleet (Output)

| Description | Type | XML Tag |
|--------------------------------------------|-----------|--------------------|
| IRP Account Number | Mandatory | IRP_ACCOUNT_NUMBER |
| Base Country | Mandatory | IRP_BASE_COUNTRY |
| Base State | Mandatory | IRP_BASE_STATE |
| Sending Jurisdiction (State/Province) Code | Optional | SENDING_STATE |
| Fleet Number | Mandatory | FLEET_NUMBER |
| Fleet Status Code | Mandatory | FLEET_STATUS_CODE |
| Fleet Status Code Update Date | Mandatory | FLEET_STATUS_DATE |
| Fleet Expiration Date | Mandatory | FLEET_EXPIRE_DATE |
| Update Date | Mandatory | FLEET_UPDATE_DATE |

Many fleets may exist for a particular IRP account number. Only one account may exist for a particular fleet. The following IRP Fleet Name information shall be provided:

Table 4–22. IRP Fleet Name (Output)

| Description | Type | XML Tag |
|-------------|-----------|-----------|
| Name Type | Mandatory | NAME_TYPE |
| Name | Mandatory | NAME |

If a transaction contains name information both the Name Type and Name will be provided.

SAFER shall return between zero and two names for a particular IRP Fleet, in the IRP Fleet Output Transaction. The following IRP Fleet Address information shall be provided:

Table 4-23. IRP Fleet Address (Output)

| Description | Type | XML Tag |
|---------------------------------|-----------|---------------|
| Address Type | Mandatory | ADDRESS_TYPE |
| Street Address Line 1 | Optional | STREET_LINE_1 |
| Street Address Line 2 | Optional | STREET_LINE_2 |
| PO Box | Optional | PO_BOX |
| City | Mandatory | CITY |
| Jurisdiction (State / Province) | Mandatory | STATE |
| Postal Code | Mandatory | ZIP_CODE |
| County | Optional | COUNTY |
| Colonia | Optional | COLONIA |
| Country | Optional | COUNTRY |

SAFER shall return between zero and two addresses for a particular IRP fleet, in the IRP Fleet Output Transaction.

If Address information is included in the transaction, the fields identified as Mandatory in Table 4-25 must be provided. In addition, either STREET_LINE_1, or STREET_LINE_2 or PO_BOX must be provided.

4.9.10 T0028V3, IRP REGISTRATION (CAB CARD) OUTPUT TRANSACTION

This interface is SAFER 04.03, T0028 03.00

Root Transaction Tag: T0028
 Interface Name: SAFER
 Interface Version: 04.03
 Transaction Version: 03.00
 Transaction Data Tags: IRP_REGISTRATION

4.9.10.1 TRANSACTION PARAMETERS

Please note that the T0028V3 web service query has not yet been updated to reflect the changes made for T0022V3. The update of T0028V3 will be complete in 2008.

4.9.10.1.1 Input – Web Services Query By State and License Plate Number

The SAFER Web Services Transaction T0028V3 transaction input method call shall contain the following arguments to below methods:

SaferWebQueryByStatePlate method:

| Argument | Contents |
|---------------|----------------------------|
| TransactionID | T0028 |
| State | State code for the vehicle |

| Argument | Contents |
|----------------|----------------------------------------|
| Plate | License plate number for the vehicle |
| LastUpdateDate | Date of last update received by client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

SaferQueryByVIN:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0028, |
| VIN | Vin Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

SaferQueryByDOT:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0028 |
| DOT | DOT Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.10.1.2 Output

The T0028V3 schema is specified in Appendix L.

4.9.10.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.10.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.10.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the lastUpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the lastUpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

There is no conditional processing for this transaction on the server side.

Client Side Conditional Processing

Conditional processing is at the discretion of the state system. The LAST_UPDATE_DATE may be used to ensure that the local data store is not updated with old information.

4.9.10.3 INFORMATION TRANSMITTED

The IRP Registration transaction shall consist of VIN, registration, and proration information structured within a file as follows:

Interface Header + IRP-Reg Transaction Header + { IRP-VIN + IRP-Registration + {IRP-Proration} }

Since a vehicle can be registered simultaneously in more than one jurisdiction, several records with the same VIN and different license plates may exist in any particular file. However, only one license plate from any one jurisdiction may exist at a single time. It is recommended that data stores allow multiple IRP-Reg records to be stored per vehicle. If the license plate for a particular vehicle from a particular state already exists, the IRP-Reg and IRP-Proration information should be considered to be an update to and should not affect registrations from other states. If a license plate does not exist for the state, the IRP-Reg and IRP-Proration information should be inserted in the data store without affecting any other registrations for the same vehicle.

Note that the vehicle transponder ID shall not appear in this transaction. The transponder ID shall only be available through the electronic screening Vehicle Transponder ID Transaction to those jurisdictions that one or more of the vehicle carriers has authorized it to receive.

Note that the TITLE_JURISDICTION, if present in the transaction, may be either a full 4 character value (i.e., a 2 character Country code + a 2 character State Jurisdiction code as specified in Appendix B) or just the 2 character State Jurisdiction code, depending upon the original source of the IRP vehicle registration information.

The following IRP VIN information shall be provided:

Table 4–24. IRP VIN (Output)

| Description | Type | XML Tag |
|-------------------------------------|-----------|--------------------|
| Vehicle Identification Number (VIN) | Mandatory | VIN |
| Title Number | Optional | TITLE_NUMBER |
| Title Country Code | Optional | TITLE_JURISDICTION |
| Title Jurisdiction Code | Optional | TITLE_JURISDICTION |
| Owner Name | Optional | OWNER_NAME |
| Model Year | Mandatory | MODEL_YEAR |
| Make | Mandatory | MAKE |
| Vehicle Use Class Code | Optional | TYPE |
| Model | Optional | MODEL |
| Power Type Code | Optional | FUEL |
| Unladen Weight | Optional | UNLADEN_WEIGHT |
| Number of Axles or Seats | Optional | NUMBER_OF_AXLES |

The following IRP Registration information shall be provided:

Table 4–25. IRP Registration (Output)

| Description | Type | XML Tag |
|-----------------------------------------------------|--------------------------|----------------------|
| License Plate Number | Mandatory | LICENSE_PLATE_NUMBER |
| Base Country | Conditional Mandatory | IRP_BASE_COUNTRY |
| License Plate Base Jurisdiction (State/Province) | Mandatory | IRP_BASE_STATE |

| | | |
|--------------------------------------------------------------------------------|--------------------------|--------------------------|
| Carrier Vehicle Unit Number | Optional | UNIT_NUMBER |
| Vehicle Last Update Date | Mandatory | LAST_UPDATE_DATE |
| Interstate / Intrastate Flag | Mandatory | INTERSTATE_FLAG |
| Vehicle Status Code | Mandatory | IRP_STATUS_CODE |
| Vehicle Status Update Date | Mandatory | IRP_STATUS_DATE |
| IRP Account Number | Mandatory | IRP_ACCOUNT_NUMBER |
| IRP Fleet Number | Mandatory | IRP_FLEET_NUMBER |
| Vehicle Registration Start Date | Mandatory | REGISTRATION_START_DATE |
| Base Vehicle Registration Expiration Date | Mandatory | REGISTRATION_EXPIRE_DATE |
| Operator's Name | Optional | OPERATOR_NAME |
| Safety USDOT Number | Conditional Mandatory | SAFETY_CARRIER |
| Account Owner USDOT Number | Optional | IRP_CARRIER_ID_NUMBER |
| IFTA Account Number | Optional | IFTA_LICENSE_NUMBER |
| Base Jurisdiction Licensed Gross Vehicle Weight | Optional | GVW |
| Base Jurisdiction Licensed GVW Expiration Date | Optional | GVW_EXPIRE_DATE |
| The State that sends the vehicle registration data for the authoritative state | Mandatory | SENDING_STATE |
| The type of mechanism used to verify the registration data | Optional | VERIFICATION_SOURCE |
| The date the registration data is verified by an authoritative source | Optional | VERIFICATION_DATE |
| Target Indicator | Optional | TH_INDICATOR |

Note: "Conditional Mandatory" means that the item is mandatory for PRISM; it is not mandatory for CVISN.

Note that the Interstate/Intrastate Flag allows this transaction to hold either interstate or intrastate information. The information in this transaction is designed for use with interstate registrations. If it is used for intrastate registrations the intrastate information should be compatible with the IRP information, but no checks or validations will be performed to ensure that this is the case. Client systems ideally should not retain intrastate vehicles from other jurisdictions in their data store.

The base jurisdiction licensed gross vehicle weight and expiration date is redundant with the proration information. If this information exists in the record, then one of the associated proration records will have the same values for the base jurisdiction.

The following IRP Proration information shall be provided:

Table 4–26. IRP Proration (Output)

| Description | Type | XML Tag |
|----------------------------------------------------|-----------|------------------------|
| Prorate Country Code + Prorate Jurisdiction Code | Mandatory | IRP_JURISDICTION |
| Prorate Jurisdiction Prorated Gross Vehicle Weight | Mandatory | IRP_WEIGHT_CARRIED |
| Prorate Jurisdiction Prorated GVW Expiration Date | Optional | IRP_WEIGHT_EXPIRE_DATE |

Zero or more sets of proration information shall be provided.

4.9.11 T0029V2, VEHICLE TRANSPONDER ID OUTPUT TRANSACTION

This interface is SAFER 04.02, T0029 02.00

Root Transaction Tag: T0029

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 02.00

Transaction Data Tags: VEHICLE_TRANSPONDER_ID

4.9.11.1 TRANSACTION PARAMETERS

4.9.11.1.1 Input – Web Services Query By VIN Number

The SAFER Web Services Transaction T0029V2 transaction input method call shall contain the following arguments to below methods:

SaferQueryByVIN:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0029 |
| VIN | Vin Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.11.1.2 Output

The T0029 schema is specified in Appendix L.

4.9.11.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.11.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.11.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the lastUpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the lastUpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

The query runs for specific values of JURISDICTION_CODE that have been authorized for some carriers. Output includes only records with matching CVIS_DEFAULT_CARRIER and IRP_CARRIER_ID_NUMBER from the VEHICLE_REGISTRATION and CARRIER tables.

Client Side Conditional Processing

Regarding conditional processing on the receiving side: the SAFER database does not maintain a separate update date-field for the transponder id field; so conditional processing does not apply. The most recently processed information will be provided to the state system and should be used to update the local data store.

4.9.11.3 INFORMATION TRANSMITTED

The Vehicle Transponder ID transaction shall consist of transponder information structured within a file as follows:

Interface Header + Vehicle Transponder ID Transaction Header + {Vehicle Transponder ID}

The following Vehicle Transponder ID information shall be provided:

Table 4–27. Vehicle Transponder ID (Output)

| Description | Type | XML Tag |
|---------------------------------------|-----------|--------------------------|
| Vehicle VIN | Mandatory | VIN |
| Vehicle Transponder ID | Optional | TRANSPONDER_NUMBER |
| Update Date | Mandatory | TRANSPONDER_UPDATE_DATE |
| Jurisdiction that issues transponder | Mandatory | TRANSPONDER_JURISDICTION |
| Jurisdiction that on the opt out list | Optional | OPT_OUT_JURISDICTION |

SAFER shall store no more than one transponder ID for a particular vehicle. The transponder ID will replace any previously established transponder ID for a given VIN.

The VIN is mandatory; the Transponder ID may be NULL to indicate that a transponder is no longer associated with a particular vehicle.

The transponder ID is sensitive information. It shall only be sent to jurisdictions authorized by the carrier to receive it. A carrier authorizes a jurisdiction to receive its vehicle transponder IDs through the Carrier Authorization transaction. The transponder ID may be sent to a jurisdiction if a vehicle registrant or safety carriers has authorized the action.

4.9.12 T0030, VEHICLE INSPECTION SUMMARY OUTPUT TRANSACTION

This interface is SAFER 04.02, T0030 01.00

Root Transaction Tag: T0030

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: VEHICLE_INSPECTION_SUMMARY

4.9.12.1 TRANSACTION PARAMETERS

4.9.12.1.1 Input – Web Services Query by State and License Plate Number

The SAFER Web Services Transaction T0030 transaction input method call shall contain the following arguments to the SaferQueryByStatePlate method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0030 |
| State | State code for the vehicle |
| Plate | License plate number for the vehicle |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.12.1.2 Input – Web Services Query By VIN

The SAFER Web Services Transaction T0030 transaction input method call shall contain the following arguments to the SaferQueryByVIN method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0030 |
| VIN | VIN for the vehicle |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.12.1.3 Input – Web Services SaferQueryByDOT:

| Argument | Contents |
|----------------|-------------------------------------------|
| TransactionID | T0030 |
| DOT | DOT Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.12.1.4 Input – Web Services SaferQueryByInspRepNum:

| Argument | Contents |
|------------------------|-------------------------------------------|
| TransactionID | T0030 |
| InspectionReportNumber | Inspection Report Number |
| LastUpdateDate | blank |
| StylesheetURL | URL for user defined style-sheet or blank |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.12.1.5 Output

The T0030 schema is specified in Appendix L.

4.9.12.2 INTERFACE TERMINALS

| Item | Value |
|--------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output destination | A state system, such as CVIEW, or equivalent |

4.9.12.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.12.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the lastUpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the lastUpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

On the SAFER side, the query results include only jurisdictions that match the data and which exist in the PRISM_JURISDICTION_LOOKUP table.

Client Side Conditional Processing

Regarding conditional processing on the receiving side: the SAFER database is the sole source of this information. It is therefore unnecessary to use update date to prevent old data from overwriting newer data. The most recently processed information will be provided to the state system and should be used to update the local data store.

4.9.12.3 INFORMATION TRANSMITTED

The Inspection Report Summary transaction shall consist of information structured within a file as follows:

Interface Header + Vehicle Inspection Summary Transaction Header + {IR Summary + Recent IR + Recent OOS }

Note that the information in this transaction is derived only from inspection reports that were sent to SAFER. SAFER may not receive all inspection reports pertaining to a particular vehicle, so the summary only applies to a subset of the inspection reports that may exist.

The following IR Summary information, summarizing inspection reports received by SAFER for the identified license plate, shall be supplied:

Table 4–28. IR Summary (Output)

| Description | Type | XML Tag |
|-------------------------------------------------------|-----------|---------------------------|
| License Plate Number | Mandatory | LICENSE_PLATE_NUMBER |
| License Plate Base Country | Mandatory | LICENSE_PLATE_COUNTRY |
| License Plate Base Jurisdiction (State/Province) | Mandatory | LICENSE_PLATE_STATE |
| Summary Start Date | Optional | INSP_SUM_START_DATE |
| Summary End Date | Optional | INSP_SUM_END_DATE |
| Total Inspections Received | Optional | INSP_SUM_INSPECTION_TOTAL |
| Total Inspections involving Hazardous Materials | Optional | INSP_SUM_HM_INSPS |
| Total Inspections in which the vehicle was placed OOS | Optional | INSP_SUM_OOS_VEH_INSPS |
| Total number of OOS orders | Optional | INSP_SUM_OOS_ORDER_COUNT |
| Total number of OOS violations | Optional | INSP_SUM_OOS_VIOL_COUNT |

The following Recent IR information describing the most recent inspection shall be provided:

Table 4–29. Recent IR (Output)

| Description | Type | XML Tag |
|-----------------------------------|----------|---------------------|
| Date and Time of Inspection | Optional | INSPECTION_DATETIME |
| Location of Inspection | Optional | INSPECTION_LOCATION |
| Report Number of Inspection | Optional | INSPECTION_RPTNUM |
| VIN Recorded in Inspection | Optional | INSPECTION_VIN |
| DOT Number recorded in inspection | Optional | CARRIER_ID_NUMBER |
| Issuance of CVSA certification | Optional | CVSA_CERT_FLAG |
| Resulted in OOS, Yes / No | Optional | INSPECTION_OOS_FLAG |

The fields CARRIER_ISSUING_AUTHORITY and TERMINAL_ID, which are part of the analogous EDI transaction, are obsolete and shall not be included.

The following Recent OOS information about the most recent inspection that has resulted in an OOS order shall be provided:

Table 4–30. Recent OOS (Output)

| Description | Type | XML Tag |
|----------------------------------------------------|----------|-----------------|
| Report Number of Inspection | Optional | OOS_RPTNUM |
| VIN Recorded in Inspection | Optional | OOS_VIN |
| Condition / Time for OOS to be removed | Optional | OOS_UNTIL |
| Date and Time of Inspection | Optional | OOS_DATETIME |
| Date OOS condition was verified to no longer exist | Optional | OOS_VERIFY_DATE |

4.9.13 T0031, MCMIS SAFETY AND CENSUS OUTPUT TRANSACTION

This interface is SAFER 04.02, T0031 03.00:

Root Transaction Tag: T0031

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 03.00

Transaction Data Tags: MCMIS_CENSUS_AND_SAFETY

4.9.13.1 TRANSACTION PARAMETERS

4.9.13.1.1 Input: Web Services Query by US DOT Number

The SAFER Web Services Transaction T0031V3 transaction input method call will issue the following arguments to the SaferQueryByDOT method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0031V3 |
| DotNumber | DOT number for the motor carrier |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.13.1.2 Output

The T0031V3 schema is specified in attached schema file in Appendix L.

4.9.13.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A State system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A State system, such as CVIEW, or equivalent |

4.9.13.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.13.2.2 FTP Output File Types

There are two modes of operation—baseline and update—in all output transactions. The descriptions below apply in either case:

Server Side Conditional Processing

On the SAFER side, the query includes only records with REVIEW_TYPE in the CARRIER_REVIEW table that are NOT equal to 'F'.

Client Side Conditional Processing

Conditional processing on the receiving side is at the discretion of the State system. The FILE_CREATE_DATE may be used to ensure that the local data store is not updated with old information.

4.9.13.3 INFORMATION TRANSMITTED

The Carrier Safety and Census transaction will consist of information structured within a file as follows:

Interface Header + T0031 V3 Transaction Header + {Carrier + {BASICS + {BASICS_DETAIL + {Violation}}}} + {Classification} + {Cargo} + {HazMat} + {Review}}

The following Carrier information will be provided:

Figure 1. T0031V3 Schema

Monthly SMS & T31 Transaction Processing

March 25, 2009

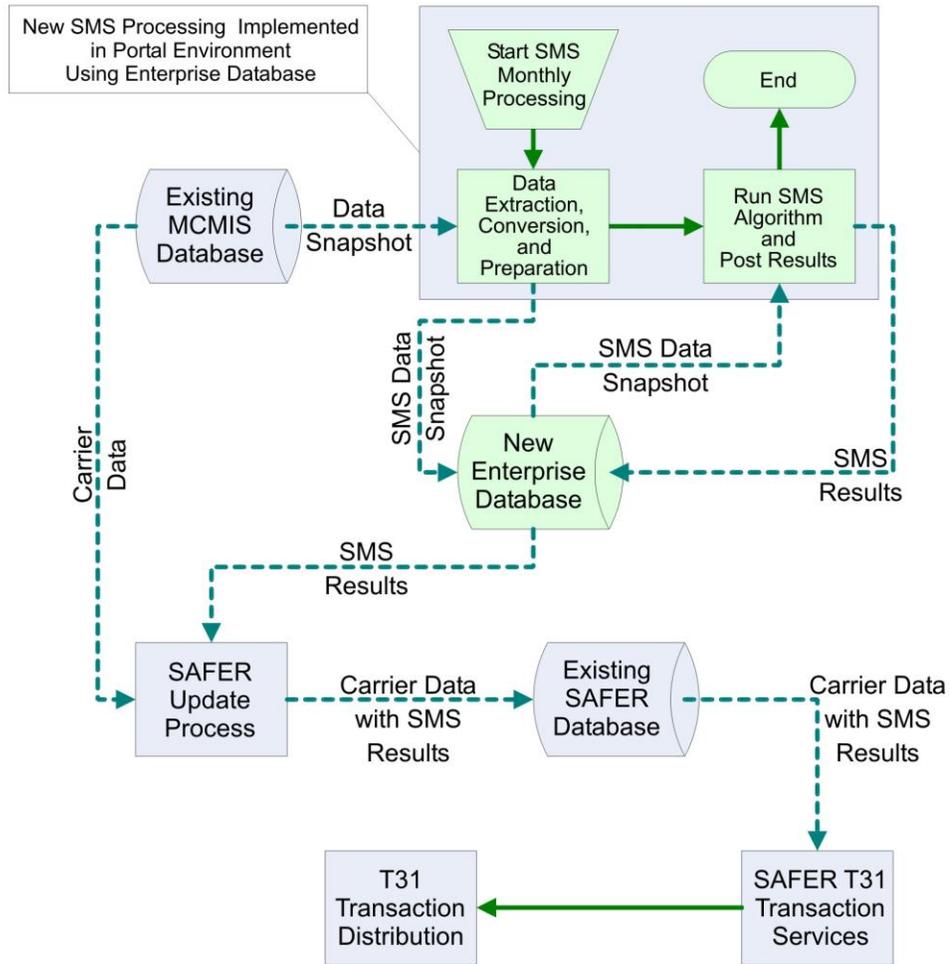


Table 1. Carrier (Output)

| Description | Type | XML Tag | Data Definition | Comment |
|----------------------------------------|-----------|---------------------------|-----------------|---------|
| Bus | Optional | BUS | CHAR(1) | |
| Carrier Placarded | Optional | CARRIER_HAZMAT_PLACARDED | CHAR(1) | |
| USDOT Number | Mandatory | CARRIER_ID_NUMBER | VARCHAR2(12) | |
| Carrier Operations - Interstate | Optional | CARRIER_INTERSTATE | CHAR(1) | |
| Carrier Operations - Intrastate HM | Optional | CARRIER_INTRASTATE_HM | CHAR(1) | |
| Carrier Operations - Intrastate Non-HM | Optional | CARRIER_INTRASTATE_NHM | CHAR(1) | |
| Legal Name | Mandatory | CARRIER_NAME | VARCHAR2(120) | |
| Physical City | Mandatory | CITY | VARCHAR2(25) | |
| Colonia | Optional | COLONIA | VARCHAR2(25) | |
| Country | Optional | COUNTRY | CHAR(1) | |
| Physical County | Optional | COUNTY_CODE | NUMBER(3) | |
| Date Added | Mandatory | DATE_ADDED | DATE | |
| Census DBA Name | Optional | DBA_NAME | VARCHAR2(120) | |
| Driver Inspections, 15 Months | Optional | DRIVER_INSPECTIONS_LAST15 | NUMBER(5) | |
| Driver Inspections, 24 Months | Optional | DRIVER_INSPECTIONS_LAST24 | NUMBER(5) | |
| Driver Inspections, 30 Months | Optional | DRIVER_INSPECTIONS_LAST30 | NUMBER(5) | |
| Dun and Bradstreet Num | Optional | DUNS_NUMBER | CHAR(9) | |
| E-Mail | Optional | EMAIL_ADDRESS | VARCHAR2(80) | |
| Entity / Company Type | Mandatory | ENTITY_TYPE | CHAR(1) | |
| Fax # | Optional | FAX_NUMBER | VARCHAR2(13) | |
| File Created Date | Mandatory | FILE_CREATE_DATE | DATE | |
| Follow-up Code | Optional | FOLLOW_UP_CODE | CHAR(1) | |
| MCMIS Census and Safety | Optional | HAZMAT_REG_DATE | DATE | |
| HazMat Status | Optional | HAZMAT_STATUS | CHAR(1) | |
| ICC Docket #1 | Optional | ICC_NUMBER_1 | NUMBER(6) | |
| ICC Docket #2 | Optional | ICC_NUMBER_2 | NUMBER(6) | |
| ICC Docket #3 | Optional | ICC_NUMBER_3 | NUMBER(6) | |
| ISS Indicator | Optional | ISS_INDICATOR | CHAR(1) | |
| ISS Value/Score | Optional | ISS_SCORE | NUMBER(3) | |
| ISS Date | Optional | ISS_SCORE_DATE | DATE | |
| Last Update Date / MCMIS Transact Date | Optional | LAST_UPDATE_DATE | DATE | |
| LU UserID | Optional | LAST_UPDATE_USERID | CHAR(8) | |
| Mail City | Optional | MAIL_CITY | VARCHAR2(25) | |
| Mail Colonia | Optional | MAIL_COLONIA | VARCHAR2(25) | |
| Mail Country | Optional | MAIL_COUNTRY | CHAR(1) | |
| Mail County Code | Optional | MAIL_COUNTY_CODE | NUMBER(3) | |
| Mail State | Optional | MAIL_STATE | CHAR(2) | |
| Mail Street | Optional | MAIL_STREET | VARCHAR2(50) | |
| Mail Zip Code | Optional | MAIL_ZIP_CODE | VARCHAR2(10) | |
| Status Reason | Optional | MCMIS_REASON_INACTIVATED | CHAR(3) | |
| Status | Mandatory | MCMIS_STATUS | CHAR(1) | |
| Status Date | Optional | MCMIS_STATUS_DATE | DATE | |

| Description | Type | XML Tag | Data Definition | Comment |
|------------------------------------------|----------|--------------------------------|-----------------|---------|
| MCMIS Census and Safety Transaction Date | Optional | MCMIS_TRANSACTION_DATE | DATE | |
| MCS 150 Mileage | Optional | MCS150_MILEAGE | NUMBER(10) | |
| MCS 150 Mileage Year | Optional | MCS150_MILEAGE_YEAR | CHAR(4) | |
| MCS 150 Update Date | Optional | MCS150_UPDATE_DATE | DATE | |
| MCSIP Entry Date | Optional | MCSIP_ENTRY_DATE | DATE | |
| MCSIP Flag | Optional | MCSIP_FLAG | CHAR(1) | |
| MCSIP Level | Optional | MCSIP_LEVEL | NUMBER(2) | |
| MCSIP Level Date | Optional | MCSIP_LEVEL_DATE | DATE | |
| Mileage | Optional | MILEAGE | NUMBER(10) | |
| FHWA OIC Code | Optional | OIC_NUMBER | CHAR(2) | |
| OOS Inspections, All Types, 15 Month | Optional | OOS_ALL_TYPES_LAST15 | NUMBER(5) | |
| OOS Inspections | Optional | OOS_ALL_TYPES_LAST24 | NUMBER(5) | |
| OOS Inspections, All Types, 30 Months | Optional | OOS_ALL_TYPES_LAST30 | NUMBER(5) | |
| OOS Inspections, Driver, 15 Months | Optional | OOS_DRIVER_INSPECTIONS_LAST15 | NUMBER(5) | |
| OOS Driver Inspections | Optional | OOS_DRIVER_INSPECTIONS_LAST24 | NUMBER(5) | |
| OOS Inspections, Driver, 30 Months | Optional | OOS_DRIVER_INSPECTIONS_LAST30 | NUMBER(5) | |
| OOS Inspections, Hazmat, 15 Months | Optional | OOS_HAZMAT_INSPECTIONS_LAST15 | NUMBER(5) | |
| OOS HM Inspections | Optional | OOS_HAZMAT_INSPECTIONS_LAST24 | NUMBER(5) | |
| MCMIS Census and Safety | Optional | OOS_HAZMAT_INSPECTIONS_LAST30 | NUMBER(5) | |
| MCMIS Census and Safety | Optional | OOS_RESCIND_DATE | DATE | |
| OOS Inspections, Vehicle, 15 Months | Optional | OOS_VEHICLE_INSPECTIONS_LAST15 | NUMBER(5) | |
| OOS Vehicle Inspections | Optional | OOS_VEHICLE_INSPECTIONS_LAST24 | NUMBER(5) | |
| OOS Inspections, Vehicle, 30 Months | Optional | OOS_VEHICLE_INSPECTIONS_LAST30 | NUMBER(5) | |
| Preventable Crashes | Optional | PREVENTABLE_CRASHES | NUMBER(3) | |
| Prior Date | Optional | PRIOR_DATE | DATE | |
| Enforcement, Prior Cases | Optional | PRIOR_ENFORCEMENT_CASES | NUMBER(2) | |
| Qty Cars | Optional | QUANTITY_CARS | NUMBER(6) | |
| Qty Drivers | Optional | QUANTITY_DRIVERS | NUMBER(5) | |
| Qty CDL Drivers | Optional | QUANTITY_DRIVERS_CDL | NUMBER(5) | |
| Qty Interstate Drivers | Optional | QUANTITY_DRIVERS_INTERSTATE | NUMBER(5) | |
| Qty Intrastate Drivers | Optional | QUANTITY_DRIVERS_INTRASTATE | NUMBER(5) | |
| Qty Hazmat Present, 15 Months | Optional | QUANTITY_HAZMAT_PRESENT_LAST15 | NUMBER(5) | |
| Qty HM Present, 24 Months | Optional | QUANTITY_HAZMAT_PRESENT_LAST24 | NUMBER(5) | |
| Qty Hazmat Present, 30 Months | Optional | QUANTITY_HAZMAT_PRESENT_LAST30 | NUMBER(5) | |
| Qty HM Tank Trailers | Optional | QUANTITY_HAZMAT_TANK_TRAILERS | NUMBER(6) | |
| Qty HM Tank Trucks | Optional | QUANTITY_HAZMAT_TANK_TRUCKS | NUMBER(6) | |
| Qty Inspections, 15 Months | Optional | QUANTITY_INSPECTIONS_LAST15 | NUMBER(5) | |
| Qty Inspections, 24 Months | Optional | QUANTITY_INSPECTIONS_LAST24 | NUMBER(5) | |
| Qty Inspections, 30 Months | Optional | QUANTITY_INSPECTIONS_LAST30 | NUMBER(5) | |
| Qty Power Units | Optional | QUANTITY_POWER_UNITS | NUMBER(7) | |
| Qty Trucks | Optional | QUANTITY_TRUCKS | NUMBER(6) | |

| Description | Type | XML Tag | Data Definition | Comment |
|---------------------------------------|----------|-------------------------------|-----------------|---------|
| Qty Limos | Optional | QUANTITY_LIMOS | NUMBER(6) | |
| Qty Motor Coaches | Optional | QUANTITY_MOTOR_COACHES | NUMBER(6) | |
| Qty School Buses | Optional | QUANTITY_SCHOOL_BUSES | NUMBER(6) | |
| Qty Trailers | Optional | QUANTITY_TRAILERS | NUMBER(6) | |
| Qty Truck Tractors | Optional | QUANTITY_TRUCK_TRACTORS | NUMBER(6) | |
| Qty Vans | Optional | QUANTITY_VANS | NUMBER(6) | |
| Rating Date | Optional | RATING_DATE | DATE | |
| Recordable Crashes | Optional | RECORDABLE_CRASHES | NUMBER(5) | |
| FHWA Region Code | Optional | REGION_CODE | CHAR(2) | |
| REVIEW Cargo Tank | Optional | REVIEW_CARGO_TANK | CHAR(1) | |
| Review Date | Optional | REVIEW_DATE | DATE | |
| REVIEW Drug Alcohol | Optional | REVIEW_DRUG_ALCOHOL | CHAR(1) | |
| REVIEW Hours | Optional | REVIEW_HOURS | CHAR(1) | |
| Investigator Code | Optional | REVIEW_INVESTIGATOR_CODE | CHAR(6) | |
| REVIEW License | Optional | REVIEW_LICENSE | CHAR(1) | |
| REVIEW Logs | Optional | REVIEW_LOGS | CHAR(1) | |
| REVIEW Medical Cert | Optional | REVIEW_MEDICAL_CERTIFICATE | CHAR(1) | |
| REVIEW Other | Optional | REVIEW_OTHER | CHAR(1) | |
| REVIEW Papers | Optional | REVIEW_PAPERS | CHAR(1) | |
| REVIEW Placards | Optional | REVIEW_PLACARDS | CHAR(1) | |
| REVIEW Traffic | Optional | REVIEW_TRAFFIC | CHAR(1) | |
| Review Type | Optional | REVIEW_TYPE | CHAR(1) | |
| Safety Rating | Optional | SAFETY_RATING | CHAR(1) | |
| Shipper Operations Interstate | Optional | SHIPPER_INTERSTATE | CHAR(1) | |
| Shipper Operations Intrastate HM | Optional | SHIPPER_INTRASTATE_HM | CHAR(1) | |
| Safetynet Fatalities, 15 Month | Optional | SNET_FATAL_ACCIDENTS_LAST15 | NUMBER(4) | |
| Safetynet Fatalities, 24 Month | Optional | SNET_FATAL_ACCIDENTS_LAST24 | NUMBER(4) | |
| Safetynet Fatalities, 30 Month | Optional | SNET_FATAL_ACCIDENTS_LAST30 | NUMBER(4) | |
| Safetynet Injuries, 15 Month | Optional | SNET_INJURY_ACCIDENTS_LAST15 | NUMBER(4) | |
| Safetynet Injuries, 24 Month | Optional | SNET_INJURY_ACCIDENTS_LAST24 | NUMBER(4) | |
| Safetynet Injuries, 30 Month | Optional | SNET_INJURY_ACCIDENTS_LAST30 | NUMBER(4) | |
| Safetynet Other, 15 Month | Optional | SNET_OTHER_ACCIDENTS_LAST15 | NUMBER(4) | |
| Safetynet Other, 24 Month | Optional | SNET_OTHER_ACCIDENTS_LAST24 | NUMBER(4) | |
| Safetynet Other, 30 Month | Optional | SNET_OTHER_ACCIDENTS_LAST30 | NUMBER(4) | |
| Safetynet Total, 15 Month | Optional | SNET_TOTAL_ACCIDENTS_LAST15 | NUMBER(4) | |
| Safetynet Total Accidents, 24 Month | Optional | SNET_TOTAL_ACCIDENTS_LAST24 | NUMBER(4) | |
| Safetynet Total, 30 Month | Optional | SNET_TOTAL_ACCIDENTS_LAST30 | NUMBER(4) | |
| Safetynet Towaway, 15 Month | Optional | SNET_TOWAWAY_ACCIDENTS_LAST15 | NUMBER(4) | |
| Safetynet Towaway Accidents, 24 Month | Optional | SNET_TOWAWAY_ACCIDENTS_LAST24 | NUMBER(4) | |
| Safetynet Towaway, 30 Month | Optional | SNET_TOWAWAY_ACCIDENTS_LAST30 | NUMBER(4) | |

| Description | Type | XML Tag | Data Definition | Comment |
|---------------------------------------|-----------|---------------------------------------|-----------------|---------|
| State | Mandatory | STATE | CHAR(2) | |
| State Carrier ID | Optional | STATE_CARRIER_ID | VARCHAR2(12) | |
| State Data | Optional | STATE_DATA | VARCHAR2(30) | |
| Physical Street | Mandatory | STREET | VARCHAR2(50) | |
| Taxpayer ID, Federal Employer or SSN | Optional | TAX_ID_NUMBER | VARCHAR2(9) | |
| Tax ID type | Optional | TAX_ID_TYPE | CHAR(1) | |
| Telephone # | Optional | TELEPHONE_NUMBER | VARCHAR2(13) | |
| FHWA Territory Code | Optional | TERRITORY_CODE | VARCHAR2(2) | |
| Vehicle Inspections, 15 Months | Optional | VEHICLE_INSPECTIONS_LAST15 | NUMBER(5) | |
| Vehicle Inspections, 24 Months | Optional | VEHICLE_INSPECTIONS_LAST24 | NUMBER(5) | |
| Vehicle Inspections, 30 Months | Optional | VEHICLE_INSPECTIONS_LAST30 | NUMBER(5) | |
| Violation Brakes | Optional | VIOLATION_BRAKES | NUMBER(6) | |
| Violation Drugs | Optional | VIOLATION_DRUGS | NUMBER(6) | |
| Violation Hours | Optional | VIOLATION_HOURS | NUMBER(6) | |
| Violation License | Optional | VIOLATION_LICENSE | NUMBER(6) | |
| Violation Lights | Optional | VIOLATION_LIGHTS | NUMBER(6) | |
| Violation Logs | Optional | VIOLATION_LOGS | NUMBER(6) | |
| Violation Medical Cert | Optional | VIOLATION_MEDICAL_CERTIFICATE | NUMBER(6) | |
| Violation Op Emer Resp | Optional | VIOLATION_OP_EMER_RESP | NUMBER(6) | |
| Violation Other | Optional | VIOLATION_OTHER | NUMBER(6) | |
| Violation Papers | Optional | VIOLATION_PAPERS | NUMBER(6) | |
| Violation Placards | Optional | VIOLATION_PLACARDS | NUMBER(6) | |
| Violation Steering | Optional | VIOLATION_STEERING | NUMBER(6) | |
| Violation Tank | Optional | VIOLATION_TANK | NUMBER(6) | |
| Violation Traffic | Optional | VIOLATION_TRAFFIC | NUMBER(6) | |
| Violation Wheels | Optional | VIOLATION_WHEELS | NUMBER(6) | |
| Physical Zip Code | Mandatory | ZIP_CODE | VARCHAR2(10) | |
| HM permit effective date | Optional | HM_PERMIT_EFFECTIVE_DATE | DATE | |
| HM permit expiration date | Optional | HM_PERMIT_EXPIRATION_DATE | DATE | |
| HM permit number | Optional | HM_PERMIT_NUMBER | VARCHAR2(20) | |
| HM permit operating under appeal flag | Optional | HM_PERMIT_OPERATING_UNDER_APPEAL_FLAG | CHAR(1) | |
| HM permit status | Optional | HM_PERMIT_STATUS | CHAR(1) | |
| Qty HM cargo trucks owned | Optional | QUANTITY_HM_CARGO_TRUCKS_OWNED | NUMBER(6) | |
| Qty HM cargo trucks leased | Optional | QUANTITY_HM_CARGO_TRUCKS_TERM_LEASED | NUMBER(6) | |
| Qty HM cargo trucks leased | Optional | QUANTITY_HM_CARGO_TRUCKS_TRIP_LEASED | NUMBER(6) | |
| Qty 16 passenger limo owned | Optional | QUANTITY_LIMOS_16P_OWNED | NUMBER(6) | |
| Qty 16 passenger limo leased | Optional | QUANTITY_LIMOS_16P_TERM_LEASED | NUMBER(6) | |
| Qty 16 passenger limo leased | Optional | QUANTITY_LIMOS_16P_TRIP_LEASED | NUMBER(6) | |
| Qty 1-8 passenger limo owned | Optional | QUANTITY_LIMOS_1TO8P_OWNED | NUMBER(6) | |

| Description | Type | XML Tag | Data Definition | Comment |
|--------------------------------------|----------|------------------------------------------|-----------------|---------|
| Qty 1-8 passenger limo leased | Optional | QUANTITY_LIMOS_1TO8P_TERM_LEASED | NUMBER(6) | |
| Qty 1-8 passenger limo leased | Optional | QUANTITY_LIMOS_1TO8P_TRIP_LEASED | NUMBER(6) | |
| Qty 9-15 passenger limo owned | Optional | QUANTITY_LIMOS_9TO15P_OWNED | NUMBER(6) | |
| Qty 9-15 passenger limo leased | Optional | QUANTITY_LIMOS_9TO15P_TERM_LEASED | NUMBER(6) | |
| Qty 9-15 passenger limo leased | Optional | QUANTITY_LIMOS_9TO15P_TRIP_LEASED | NUMBER(6) | |
| Qty mini buses owned | Optional | QUANTITY_MINI_BUSES_OWNED | NUMBER(6) | |
| Qty mini buses leased | Optional | QUANTITY_MINI_BUSES_TERM_LEASED | NUMBER(6) | |
| Qty mini buses leased | Optional | QUANTITY_MINI_BUSES_TRIP_LEASED | NUMBER(6) | |
| Qty motor coach owned | Optional | QUANTITY_MOTOR_COACHES_OWNED | NUMBER(6) | |
| Qty motor coach leased | Optional | QUANTITY_MOTOR_COACHES_TERM_LEASED | NUMBER(6) | |
| Qty motor coach leased | Optional | QUANTITY_MOTOR_COACHES_TRIP_LEASED | NUMBER(6) | |
| Qty 16 passenger school bus owned | Optional | QUANTITY_SCHOOL_BUSES_16P_OWNED | NUMBER(6) | |
| Qty 16 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_16P_TERM_LEASED | NUMBER(6) | |
| Qty 16 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_16P_TRIP_LEASED | NUMBER(6) | |
| Qty 1-8 passenger school bus owned | Optional | QUANTITY_SCHOOL_BUSES_1TO8P_OWNED | NUMBER(6) | |
| Qty 1-8 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_1TO8P_TERM_LEASED | NUMBER(6) | |
| Qty 1-8 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_1TO8P_TRIP_LEASED | NUMBER(6) | |
| Qty 9-15 passenger school bus owned | Optional | QUANTITY_SCHOOL_BUSES_9TO15P_OWNED | NUMBER(6) | |
| Qty 9-15 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_9TO15P_TERM_LEASED | NUMBER(6) | |
| Qty 9-15 passenger school bus leased | Optional | QUANTITY_SCHOOL_BUSES_9TO15P_TRIP_LEASED | NUMBER(6) | |
| Qty straight trucks owned | Optional | QUANTITY_STRAIGHT_TRUCKS_OWNED | NUMBER(6) | |
| Qty straight trucks leased | Optional | QUANTITY_STRAIGHT_TRUCKS_TERM_LEASED | NUMBER(6) | |
| Qty straight trucks leased | Optional | QUANTITY_STRAIGHT_TRUCKS_TRIP_LEASED | NUMBER(6) | |
| Qty HM trailer owned | Optional | QUANTITY_TRAILERS_HM_OWNED | NUMBER(6) | |
| Qty HM trailer leased | Optional | QUANTITY_TRAILERS_HM_TERM_LEASED | NUMBER(6) | |
| Qty HM trailer leased | Optional | QUANTITY_TRAILERS_HM_TRIP_LEASED | NUMBER(6) | |
| Qty trailer owned | Optional | QUANTITY_TRAILERS_OWNED | NUMBER(6) | |
| Qty trailer leased | Optional | QUANTITY_TRAILERS_TERM_LEASED | NUMBER(6) | |
| Qty trailer leased | Optional | QUANTITY_TRAILERS_TRIP_LEASED | NUMBER(6) | |
| Qty truck tractor owned | Optional | QUANTITY_TRUCK_TRACTORS_OWNED | NUMBER(6) | |

| Description | Type | XML Tag | Data Definition | Comment |
|-------------------------------|----------|-------------------------------------|-----------------|---------|
| Qty truck tractor leased | Optional | QUANTITY_TRUCK_TRACTORS_TERM_LEASED | NUMBER(6) | |
| Qty truck tractor leased | Optional | QUANTITY_TRUCK_TRACTORS_TRIP_LEASED | NUMBER(6) | |
| Qty 1-8 passenger van owned | Optional | QUANTITY_VANS_1TO8P_OWNED | NUMBER(6) | |
| Qty 1-8 passenger van leased | Optional | QUANTITY_VANS_1TO8P_TERM_LEASED | NUMBER(6) | |
| Qty 1-8 passenger van leased | Optional | QUANTITY_VANS_1TO8P_TRIP_LEASED | NUMBER(6) | |
| Qty 9-15 passenger van owned | Optional | QUANTITY_VANS_9TO15P_OWNED | NUMBER(6) | |
| Qty 9-15 passenger van leased | Optional | QUANTITY_VANS_9TO15P_TERM_LEASED | NUMBER(6) | |
| Qty 9-15 passenger van leased | Optional | QUANTITY_VANS_9TO15P_TRIP_LEASED | NUMBER(6) | |
| Cell phone number | Optional | TELEPHONE_NUMBER_CELLULAR | VARCHAR2(13) | |
| Officer Name's title | Optional | OFFICER_NAME_TITLE_1 | VARCHAR2(151) | |
| Officer Name's title | Optional | OFFICER_NAME_TITLE_2 | VARCHAR2(151) | |
| New Entrant Code | Optional | NEW_ENTRANT_CODE | CHAR(1) | |
| New Entrant End Date | Optional | NEW_ENTRANT_END_DATE | DATE | |
| New Entrant Start Date | Optional | NEW_ENTRANT_START_DATE | DATE | |
| Out of Service Date | Optional | OOS_DATE | DATE | |
| Out of Service Flag | Optional | OOS_FLAG | CHAR(1) | |
| CSA Letters | Optional | CSA_LETTERS | NUMBER(2) | |
| CSA Letter Date | Optional | CSA_LETTERS_DATE | DATE | |
| Carrier BASICS | Optional | CARRIER_BASICS | See table 2 | |
| Carrier Classification | Optional | CARRIER_CLASS | See table 5 | |
| Carrier Cargo | Optional | CARRIER_CARGO | See table 6 | |
| Carrier Hazmat | Optional | CARRIER_HAZMAT | See table 7 | |
| Carrier Review | Optional | CARRIER_CLASS | See table 8 | |

The following CARRIER BASICS information shall be provided:

Table 2. CARRIER_BASICS (Output)

| Description | Type | XML Tag | Data Definition |
|------------------------|----------|-----------------------|-----------------|
| BASICS DATE | Optional | BASICS_DATE | DATE |
| Carrier BASICS Details | Optional | CARRIER_BASICS_DETAIL | See Table 3 |

Table 3. CARRIER_BASICS_DETAIL (Output)

| Description | Type | XML Tag | Data Definition |
|-------------|----------|-------------|-----------------|
| BASICS Code | Optional | BASICS_CODE | VARCHAR2(50) |

| Description | Type | XML Tag | Data Definition |
|----------------------------------------|----------|--------------------------------|-----------------|
| BASICS Short Description | Optional | BASICS_SHORT_DESC | VARCHAR2(200) |
| BASICS Percentile | Optional | BASICS_PERCENTILE | NUMBER(5,2) |
| BASICS Deficiency Indicator | Optional | BASICS_DEFICIENCY_IND | CHAR(1) |
| On-Road Performance Display Text | Optional | ROAD_DISPLAY_TEXT | VARCHAR2(64) |
| Investigation Performance Display Text | Optional | INVESTIGATION_DISPLAY_T EXT | VARCHAR2(64) |
| Overall Display Text | Optional | OVERALL_DISPLAY_TEXT | VARCHAR2(64) |
| Violation | Optional | VIOLATION | See Table 4 |

Table 4. VIOLATION (Output)

| Description | Type | XML Tag | Data Definition |
|-----------------------|----------|------------------|-----------------|
| Violation Code | Optional | BASICS_VIOL_CODE | VARCHAR2(25) |
| Violation Description | Optional | BASICS_VIOL_DESC | VARCHAR2(200) |

The following Classification information will be provided:

Table 5. Classification (Output)

| Description | Type | XML Tag | Data Definition |
|--------------------------------------------|-----------|------------------|-----------------|
| Work Classification Code | Mandatory | CLASS_CODE | VARCHAR2(3) |
| Work Classification Description (if Other) | Optional | CLASS_OTHER_DESC | VARCHAR2(10) |

The following Cargo information will be provided:

Table 6. Cargo (Output)

| Description | Type | XML Tag | Data Definition |
|---------------------------------------------|-----------|------------------|-----------------|
| Cargo Classification Code | Mandatory | CARGO_CODE | VARCHAR2(3) |
| Cargo Classification Description (if Other) | Optional | CARGO_OTHER_DESC | VARCHAR2(16) |

The following HazMat information will be provided:

Table 7. HazMat (Output)

| Description | Type | XML Tag | Data Definition |
|--------------|-----------|------------------------|-----------------|
| HM Format | Mandatory | BULK_NONBULK | CHAR(1) |
| HM Operation | Mandatory | HAZMAT_CARRIED_SHIPPED | CHAR(1) |
| HM Code | Mandatory | HAZMAT_CODE | VARCHAR2(3) |

The following Review information will be provided:

Table 8. Review (Output)

| Description | Type | XML Tag | Data Definition |
|----------------------------------------------------|----------|-----------------------------------|-----------------|
| Review Mileage | Optional | MILEAGE | NUMBER(10) |
| Review OOS Vehicles - Checked during Review | Optional | OOS_VEH_CHECKED_DURING_REVI EW | NUMBER(3) |
| Review OOS Vehicles - Checked From Profile (MCMIS) | Optional | OOS_VEH_CHECKED_FROM_PROFIL E | NUMBER(3) |

| Description | Type | XML Tag | Data Definition |
|------------------------------------------------|----------|-------------------------------|-----------------|
| Review Action - Administrative Handling | Optional | PLANNED_ACTION_ADMIN_HANDLING | CHAR(1) |
| Review Action - Compliance Monitoring | Optional | PLANNED_ACTION_COMPLIANCE_MON | CHAR(1) |
| Review Action - OOS Order | Optional | PLANNED_ACTION_OOS_ORDER | CHAR(1) |
| Review Action - Prosecution | Optional | PLANNED_ACTION_PROSECUTION | CHAR(1) |
| Review Rating Date | Optional | RATING_DATE | DATE |
| Review Recordable Crashes | Optional | RECORDABLE_CRASHES | NUMBER(5) |
| Review Date | Optional | REVIEW_DATE | DATE |
| Review Investigator Code | Optional | REVIEW_INVESTIGATOR_CODE | CHAR(6) |
| Review Reason – Subject Request | Optional | REVIEW_REASON_CARRIER_REQUEST | NUMBER(1) |
| Review Reason - Complaint | Optional | REVIEW_REASON_COMPLAINT | NUMBER(1) |
| Review Reason - Enforcement Follow-Up | Optional | REVIEW_REASON_ENF_FOLLOW_UP | NUMBER(1) |
| Review Reason - Initial | Optional | REVIEW_REASON_INITIAL_CONTACT | NUMBER(1) |
| Review Reason Not Rated | Optional | REVIEW_REASON_NOT_RATED | VARCHAR2(2) |
| Review Reason - Other | Optional | REVIEW_REASON_OTHER | NUMBER(1) |
| Review Reason - Other Text | Optional | REVIEW_REASON_OTHER_DESC | VARCHAR2(20) |
| Review Reason - Priority List | Optional | REVIEW_REASON_PRIORITY_LIST | NUMBER(1) |
| Review Type | Optional | REVIEW_TYPE | CHAR(1) |
| Review Safety Rating | Optional | SAFETY_RATING | CHAR(1) |
| Review Safety Factor 1 Rating | Optional | SAFETY_RATING_FACTOR_1 | CHAR(1) |
| Review Safety Factor 2 Rating | Optional | SAFETY_RATING_FACTOR_2 | CHAR(1) |
| Review Safety Factor 3 Rating | Optional | SAFETY_RATING_FACTOR_3 | CHAR(1) |
| Review Safety Factor 4 Rating | Optional | SAFETY_RATING_FACTOR_4 | CHAR(1) |
| Review Safety Factor 5 Rating | Optional | SAFETY_RATING_FACTOR_5 | CHAR(1) |
| Review Safety Factor 6 Rating | Optional | SAFETY_RATING_FACTOR_6 | CHAR(1) |
| Review Vehicles - Checked during Review | Optional | VEH_CHECKED_DURING_REVIEW | NUMBER(3) |
| Review Vehicles - Checked From Profile (MCMIS) | Optional | VEH_CHECKED_FROM_PROFILE | NUMBER(4) |

4.9.13.4 CVISN XML SUBSCRIPTION SERVICE

- The SAFER XML subscription page will be modified to list the data elements for T0031V3.
- The SAFER XML subscription service will be modified to process T0031V3 for the subscription States.

4.9.14 T0032, LICENSING AND INSURANCE OUTPUT TRANSACTION

This interface is SAFER 04.02, T0032 01.00

Root Transaction Tag: T0032
 Interface Name: SAFER
 Interface Version: 04.02
 Transaction Version: 01.00
 Transaction Data Tags: LICENSING_INSURANCE

4.9.14.1 TRANSACTION PARAMETERS

4.9.14.1.1 Input – Web Services Query By US DOT Number

The SAFER Web Services Transaction T0032 transaction input shall consist of an invocation of the SaferQueryByDOT method with the following arguments:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0032 |
| DotNumber | USDOT Number of motor carrier |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.14.1.2 Input - Web Services Query By ICC Number

The SAFER Web Services Transaction T0032 transaction input method call shall issue the following arguments to the SaferQueryByICC method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0032 |
| IccNumber | ICC number for the motor carrier |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.14.1.3 Output

The T0032 schema is specified in Appendix L.

4.9.14.2 INTERFACE TERMINALS

| Item | Value |
|-------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output source | A state system, such as CVIEW, or equivalent |

4.9.14.2.1 Format / Record Layout

Refer to the schema for this transaction in Appendix L for the complete XML specification.

4.9.14.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions. SAFER Web Services responds with a baseline if the lastUpdateDate parameter of the query method is null, otherwise it responds with any records that have been updated in the SAFER data store since the date specified in the lastUpdateDate parameter of the query method. The descriptions below apply in either case:

Server Side Conditional Processing

There is no conditional processing in SAFER for this transaction yet. The output is derived from the carrier_li_detail and carrier_li_detail.

Client Side Conditional Processing

Conditional processing on the receiving side is at the discretion of the state system.

4.9.14.3 INFORMATION TRANSMITTED

The Licensing and Insurance (LI) information shall be structured within a file as follows:

Interface Header + Licensing and Insurance Transaction Header + {Licensing and Insurance - Primary +
 {Licensing and Insurance - Detail } }

The following Licensing and Insurance – Primary information shall be provided:

Table 4–31. Licensing and Insurance – Primary (Output)

| Description | Type | XML Tag |
|------------------------------|-----------|-------------------------------|
| USDOT Number | Mandatory | CARRIER_ID_NUMBER |
| ICC DOCKET Number | Mandatory | DOCKET_NUMBER |
| Docket Number Prefix | Optional | PREFIX |
| Canadian ID | Optional | CANADIAN_ID |
| Mexican RFC | Optional | MEXICAN_RFC |
| Mexican Op Authority | Optional | MEXICAN_OP_AUTHORITY |
| Legal Name | Optional | INSURANCE_ENTITY_NAME |
| DBA Name | Optional | INSURANCE_DBA_NAME |
| Mexican Territory | Optional | MEXICAN_TERRITORY |
| Common Authority Status | Mandatory | COMMON_AUTH_STATUS |
| Common Reason Inactive | Optional | COMMON_AUTH_REASON_INACTIVE |
| Common Date Inactive | Optional | COMMON_AUTH_DATE_INACTIVE |
| Contract Authority Status | Mandatory | CONTRACT_AUTH_STATUS |
| Contract Reason Inactive | Optional | CONTRACT_AUTH_REASON_INACTIVE |
| Contract Date Inactive | Optional | CONTRACT_AUTH_DATE_INACTIVE |
| Broker Authority Status | Mandatory | BROKER_AUTH_STATUS |
| Broker Reason Inactive | Optional | BROKER_AUTH_REASON_INACTIVE |
| Broker Date Inactive | Optional | BROKER_AUTH_DATE_INACTIVE |
| Liability Insurance Amount | Optional | LIABILITY_INSURANCE_AMOUNT |
| Liability Insurance Required | Mandatory | LIABILITY_INSURANCE_REQD |
| Liability Insurance Status | Mandatory | LIABILITY_INSURANCE_STATUS |
| Liability Insurance Summary | Mandatory | LIABILITY_INSURANCE_SUMMARY |
| Cargo Insurance Required | Mandatory | CARGO_INSURANCE_REQD |
| Cargo Insurance Status | Mandatory | CARGO_INSURANCE_STATUS |
| Cargo Insurance Summary | Mandatory | CARGO_INSURANCE_SUMMARY |
| Bond/Trust Fund Required | Mandatory | BOND_TRUST_FUND_REQD |
| Bond/Trust Fund Status | Mandatory | BOND_TRUST_FUND_STATUS |
| Bond / Trust fund Summary | Mandatory | BOND_TRUST_FUND_SUMMARY |
| Data Effective Date | Mandatory | DATA_EFFECTIVE_DATE |

The following Licensing and Insurance – Detail information shall be provided:

Table 4–32. Licensing and Insurance – Detail (Output)

| Description | Type | XML Tag |
|-----------------------------|----------|-----------------------------|
| Insurance Type | Optional | INSURANCE_TYPE |
| Insurer | Optional | INSURER |
| Policy Number | Optional | POLICY_NUMBER |
| Effective Date | Optional | POLICY_EFFECTIVE_DATE |
| Coverage Low Amount | Optional | COVERAGE_LOW_AMOUNT |
| Coverage High Amount | Optional | COVERAGE_HIGH_AMOUNT |
| Cancellation Effective Date | Optional | CANCELLATION_EFFECTIVE_DATE |
| Data Effective Date | Optional | DATA_EFFECTIVE_DATE |

4.9.15 T0033, LICENSING AND INSURANCE OUTPUT TRANSACTION

This interface is SAFER 09.40, T0033 01.00

Root Transaction Tag: T0033
 Interface Name: SAFER
 Interface Version: 04.02
 Transaction Version: 01.00
 Transaction Data Tags: INSPECTION

4.9.15.1 TRANSACTION PARAMETERS

4.9.15.1.1 Web Services Input

Query By DOT Number

The SAFER Web Services Transaction T0033 transaction input method call shall issue the following arguments to the SaferQueryByDot method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0033 |
| DotNumber | Dot Number |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

Query By VIN Number

The SAFER Web Services Transaction T0033 transaction input method call shall issue the following arguments to the SaferQueryByVIN method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0033 |
| Vin | Vin Number |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

Query By State and Plate Number

The SAFER Web Services Transaction T0033 transaction input method call shall issue the following arguments to the SaferQueryByStatePlate method:

| Argument | Contents |
|----------------|--------------------------------------------|
| TransactionID | T0033 |
| State | License State |
| Plate | License Plate Number |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

Query By Inspect Report Number

The SAFER Web Services Transaction T0033 transaction input method call shall issue the following arguments to the SaferQueryByInspRepNum method:

| Argument | Contents |
|------------------------|--------------------------------------------|
| TransactionID | T0033 |
| InspectionReportNumber | Inspection Report Number |
| LastUpdateDate | Date of last update received by the client |
| StylesheetURL | URL for user defined style-sheet |
| Username | Username for authentication |
| Password | Password for authentication |

4.9.15.1.2 Output

The T0033V1 schema is defined in Appendix L.

4.9.15.2 INTERFACE TERMINALS

| Item | Value |
|--------------------|----------------------------------------------|
| Input source | A state system, such as CVIEW, or equivalent |
| Input destination | SAFER 9.2 |
| Output source | SAFER 9.2 |
| Output destination | A state system, such as CVIEW, or equivalent |

4.9.15.2.1 Format / Record Layout

Refer to the schema for this transaction for the complete XML specification.

4.9.15.2.2 FTP Output File Types

There are two modes of operation – baseline and update – in all output transactions.

The Inspection Detail transaction shall consist of information structured within a file as follows:

```

Interface Header + T0033 V1 Transaction Header +
{ INSPECTION
+ { IR_BRAKE }
+ { IR_BRAKE_PBBT }
+ { IR_HAZARDOUS_MATERIAL }
+ { IR_OOS_TEXT }
+ { IR_RAM_DATA }
+ { IR_RAM_PACKAGE }
+ { IR_RAM_READING }
+ { IR_SHIPPER }
+ { IR_VEHICLE }
+ { IR_VIOLATION }
}
    
```

The following Inspection information shall be provided.

Table 1. Inspection (Output)

| Description | Type | XML Tag | Field Format | Comment |
|-------------------------------|-----------|-----------------------------|--------------|---------|
| Inspection Report Number | Mandatory | INSPECTION_RPTNUM | VARCHAR2(12) | |
| Inspection Date Time | Optional | INSPECTION_DATE_TIME | DATE TIME | |
| Inspection Finish Date Time | Optional | INSPECTION_END_DATE_TIME | DATE TIME | |
| Insp duration in minutes | Optional | INSPECTION_DURATION | Integer | |
| Inspection Type (1-7) | Optional | INSPECTION_LEVEL | CHAR(1) | |
| Inspection Location Time Zone | Optional | LOCATION_TIME_ZONE | CHAR(2) | |
| Inspection Location | Optional | INSPECTION_LOCATION | VARCHAR2(6) | |
| Inspection Location Desc | Optional | INSPECTION_LOCATION_DESC | VARCHAR2(30) | |
| INSPECTION HIGHWAY LOCATION | Optional | INSPECTION_HIGHWAY_LOCATION | VARCHAR2(30) | |
| HIGHWAY MILEPOST | Optional | HIGHWAY_MILEPOST | VARCHAR2(6) | |
| FACILITY | Optional | FACILITY | CHAR(1) | |
| INSPECTION STATE | Optional | INSPECTION_STATE | CHAR(2) | |
| COUNTY NAME | Optional | COUNTY_NAME | VARCHAR2(25) | |

| Description | Type | XML Tag | Field Format | Comment |
|-----------------------|----------|-----------------------|---------------|---------|
| COUNTY CODE | Optional | COUNTY_CODE | VARCHAR2(3) | |
| COUNTY CODE STATE | Optional | COUNTY_CODE_STATE | VARCHAR2(3) | |
| INSPECTOR NAME | Optional | INSPECTOR_NAME | VARCHAR2(36) | |
| INSPECTOR CODE | Optional | INSPECTOR_CODE | VARCHAR2(6) | |
| ALC SUB CHK | Optional | ALC_SUB_CHK | CHAR(1) | |
| DRUG SEARCH | Optional | DRUG_SEARCH | CHAR(1) | |
| DRUG ARREST | Optional | DRUG_ARREST | CHAR(1) | |
| SIZE ENF | Optional | SIZE_ENF | CHAR(1) | |
| TRAFFIC ENF | Optional | TRAFFIC_ENF | CHAR(1) | |
| LOCAL JURISD | Optional | LOCAL_JURISD | CHAR(1) | |
| ACCIDENT | Optional | ACCIDENT | CHAR(1) | |
| BORDERGRANT | Optional | BORDERGRANT | CHAR(1) | |
| HM INSPECTION | Optional | HM_INSPECTION | CHAR(1) | |
| CARRIER ID NUMBER | Optional | CARRIER_ID_NUMBER | VARCHAR2(8) | |
| STATE CARRIER ID | Optional | STATE_CARRIER_ID | VARCHAR2(12) | |
| ICC NUMBER | Optional | ICC_NUMBER | VARCHAR2(6) | |
| INTERSTATE | Optional | INTERSTATE | CHAR(1) | |
| CARRIER NAME | Optional | CARRIER_NAME | VARCHAR2(120) | |
| CARRIER STREET | Optional | CARRIER_STREET | VARCHAR2(50) | |
| CARRIER BARRIO | Optional | CARRIER_BARRIO | VARCHAR2(100) | |
| CARRIER CITY | Optional | CARRIER_CITY | VARCHAR2(25) | |
| CARRIER STATE | Optional | CARRIER_STATE | CHAR(2) | |
| CARRIER ZIP | Optional | CARRIER_ZIP | VARCHAR2(10) | |
| CARRIER COUNTRY | Optional | CARRIER_COUNTRY | CHAR(2) | |
| CARRIER PHONE | Optional | CARRIER_PHONE | VARCHAR2(13) | |
| CARRIER FAX | Optional | CARRIER_FAX | VARCHAR2(13) | |
| SHIPPER NAME | Optional | SHIPPER_NAME | VARCHAR2(120) | |
| SHIPPING PAPER NUMBER | Optional | SHIPPING_PAPER_NUMBER | VARCHAR2(15) | |
| DRIVER LNAME | Optional | DRIVER_LNAME | VARCHAR2(20) | |
| DRIVER FNAME | Optional | DRIVER_FNAME | VARCHAR2(20) | |
| DRIVER MI | Optional | DRIVER_MI | CHAR(1) | |
| DRIVER LICENSE NUMBER | Optional | DRIVER_LICENSE_NUMBER | VARCHAR2(25) | |
| DRIVER LICENSE STATE | Optional | DRIVER_LICENSE_STATE | CHAR(2) | |
| DRIVER DOB | Optional | DRIVER_DOB | DATE | |
| CODRIVER LNAME | Optional | CODRIVER_LNAME | VARCHAR2(20) | |
| CODRIVER FNAME | Optional | CODRIVER_FNAME | VARCHAR2(20) | |
| CODRIVER MI | Optional | CODRIVER_MI | CHAR(1) | |
| CODRIVER LIC NUMBER | Optional | CODRIVER_LIC_NUMBER | VARCHAR2(25) | |
| CODRIVER LIC STATE | Optional | CODRIVER_LIC_STATE | CHAR(2) | |
| CODRIVER DOB | Optional | CODRIVER_DOB | DATE | |
| TRIP ORIGIN | Optional | TRIP_ORIGIN | VARCHAR2(25) | |
| TRIP DESTINATION | Optional | TRIP_DESTINATION | VARCHAR2(25) | |
| CARGO TYPE | Optional | CARGO_TYPE | VARCHAR2(25) | |
| PLACARDS | Optional | PLACARDS | CHAR(1) | |
| HM CARGO TANK | Optional | HM_CARGO_TANK | VARCHAR2(3) | |
| GCWR | Optional | GCWR | Integer | |
| NUMBER OF AXLES | Optional | NUMBER_OF_AXLES | CHAR(2) | |
| TRUCKBUS | Optional | TRUCKBUS | CHAR(1) | |

| Description | Type | XML Tag | Field Format | Comment |
|-----------------------|----------|-----------------------|--------------|---------|
| TOTAL HM | Optional | TOTAL_HM | Integer | |
| TOTAL VEHICLES | Optional | TOTAL_VEHICLES | Integer | |
| TOTAL VIOLATION | Optional | TOTAL_VIOLATION | Integer | |
| TOTAL OOS VIO | Optional | TOTAL_OOS_VIO | Integer | |
| TOTAL VEHICLE OOS VIO | Optional | TOTAL_VEHICLE_OOS_VIO | Integer | |
| TOTAL DRIVER OOS VIO | Optional | TOTAL_DRIVER_OOS_VIO | Integer | |
| ASPEN VERSION | Optional | ASPEN_VERSION | VARCHAR2(10) | |
| CENSUS MATCH | Optional | CENSUS_MATCH | CHAR(1) | |
| ASPENFIELD1 | Optional | ASPENFIELD1 | VARCHAR2(10) | |
| ASPENFIELD2 | Optional | ASPENFIELD2 | VARCHAR2(10) | |
| DRIVER OOS UNTIL | Optional | DRIVER_OOS_UNTIL | VARCHAR2(40) | |
| VEHICLE OOS | Optional | VEHICLE_OOS | CHAR(1) | |
| DRIVER OOS | Optional | DRIVER_OOS | CHAR(1) | |
| OFFICE NAME | Optional | OFFICE_NAME | VARCHAR2(50) | |
| OFFICE ADDR LINE1 | Optional | OFFICE_ADDR_LINE1 | VARCHAR2(50) | |
| OFFICE ADDR LINE2 | Optional | OFFICE_ADDR_LINE2 | VARCHAR2(50) | |
| OFFICE ADDR LINE3 | Optional | OFFICE_ADDR_LINE3 | VARCHAR2(50) | |
| OFFICE PHONE NUMBER | Optional | OFFICE_PHONE_NUMBER | VARCHAR2(50) | |
| SOURCE OFFICE ID | Optional | SOURCE_OFFICE_ID | VARCHAR2(10) | |
| CONVERTED INSPECTION | Optional | CONVERTED_INSPECTION | CHAR(1) | |
| CARRIER SEARCH CODE | Optional | CARRIER_SEARCH_CODE | CHAR(1) | |
| REPORT INPUT DATE | Optional | REPORT_INPUT_DATE | DATE | |
| INPUT USER ID | Optional | INPUT_USER_ID | VARCHAR2(10) | |
| REPORT STATUS | Optional | REPORT_STATUS | CHAR(1) | |
| LAST EDIT DATE TIME | Optional | LAST_EDIT_DATE_TIME | DATE TIME | |
| LAST EDIT USER ID | Optional | LAST_EDIT_USER_ID | VARCHAR2(10) | |
| IS VERIFIED | Optional | IS_VERIFIED | CHAR(1) | |
| VERIFY DATE | Optional | VERIFY_DATE | DATE | |
| VERIFY TIME | Optional | VERIFY_TIME | TIME | |
| VERIFIER USER ID | Optional | VERIFIER_USER_ID | VARCHAR2(10) | |
| UPLOAD REQUIRED | Optional | UPLOAD_REQUIRED | CHAR(1) | |
| UPLOAD DATE TIME | Optional | UPLOAD_DATE_TIME | DATE TIME | |
| UPLOAD_SAFER_REQUIRED | Optional | UPLOAD_SAFER_REQUIRED | CHAR(1) | |
| INSURANCE VERIFY FLAG | Optional | INSURANCE_VERIFY_FLAG | CHAR(1) | |
| INSURANCE VERIFY TYPE | Optional | INSURANCE_VERIFY_TYPE | CHAR(1) | |
| INSURANCE VERIFY DESC | Optional | INSURANCE_VERIFY_DESC | VARCHAR2(50) | |
| PASACHECK | Optional | PASACHECK | CHAR(1) | |
| DISPLAY ADVISORYCHECK | Optional | DISPLAY_ADVISORYCHECK | CHAR(1) | |
| PBBTCHECK | Optional | PBBTCHECK | CHAR(1) | |
| PBBTAXLES | Optional | PBBTAXLES | Integer | |
| PBBTBRAKEFORCE | Optional | PBBTBRAKEFORCE | Decimal | |
| | Optional | PBBTMINBRAKEFORCE | Decimal | |

| Description | Type | XML Tag | Field Format | Comment |
|-----------------------|-------------|------------------|---------------------|----------------|
| PBBTMINBRAKEFOR CE | | | | |
| STUDY1 | Optional | STUDY1 | VARCHAR2(40) | |
| STUDY2 | Optional | STUDY2 | VARCHAR2(40) | |
| STUDY3 | Optional | STUDY3 | VARCHAR2(40) | |
| STUDY4 | Optional | STUDY4 | VARCHAR2(40) | |
| STUDY5 | Optional | STUDY5 | VARCHAR2(40) | |
| STUDY6 | Optional | STUDY6 | VARCHAR2(40) | |
| STUDY7 | Optional | STUDY7 | VARCHAR2(40) | |
| STUDY8 | Optional | STUDY8 | VARCHAR2(40) | |
| STUDY9 | Optional | STUDY9 | VARCHAR2(40) | |
| STUDY10 | Optional | STUDY10 | VARCHAR2(40) | |
| IEPSPACEPROVIDED | Optional | IEPSPACEPROVIDED | CHAR(1) | |
| IEPINSPCONDUCTED | Optional | IEPINSPCONDUCTED | CHAR(1) | |
| INSPECTION NOTES | Optional | INSPECTION_NOTES | VARCHAR2(32760) | |

The following BRAKE information shall be provided:

Table 2. BRAKE (Output)

| Description | Type | XML Tag | Field Format |
|---------------|----------|---------------|--------------|
| AXLE_NUMBER | Optional | AXLE_NUMBER | Integer |
| BRAKE_CHAMBER | Optional | BRAKE_CHAMBER | VARCHAR2(6) |
| LEFT_BRAKE | Optional | LEFT_BRAKE | VARCHAR2(6) |
| RIGHT_BRAKE | Optional | RIGHT_BRAKE | VARCHAR2(6) |

The following Performance Based Brake Test measurements information shall be provided:

Table 3. PBBTMeasurement (Output)

| Description | Type | XML Tag | Field Format |
|-------------------|----------|-------------------|--------------|
| AXLENUM | Optional | AXLENUM | Integer |
| LEFTBRAKEMEASURE | Optional | LEFTBRAKEMEASURE | Decimal |
| RIGHTBRAKEMEASURE | Optional | RIGHTBRAKEMEASURE | Decimal |

The following HAZMAT information shall be provided:

Table 4. HAZMAT (Output)

| Description | Type | XML Tag | Field Format |
|----------------|----------|----------------|--------------|
| HM_SEQ_NUMBER | Optional | HM_SEQ_NUMBER | CHAR(1) |
| HM_CODE | Optional | HM_CODE | VARCHAR2(3) |
| HM_QUANT | Optional | HM_QUANT | CHAR(1) |
| HM_WASTE | Optional | HM_WASTE | CHAR(1) |
| HM_DESCRIPTION | Optional | HM_DESCRIPTION | VARCHAR2(20) |

The following OOS Text information shall be provided:

Table 5. OOS Text (Output)

| Description | Type | XML Tag | Field Format |
|------------------|----------|------------------|----------------|
| VEHICLE_OOS_TEXT | Optional | VEHICLE_OOS_TEXT | VARCHAR2(2000) |
| DRIVER_OOS_TEXT | Optional | DRIVER_OOS_TEXT | VARCHAR2(2000) |
| CERTIFY_OOS_TEXT | Optional | CERTIFY_OOS_TEXT | VARCHAR2(2000) |
| VERIFY_OOS_TEXT | Optional | VERIFY_OOS_TEXT | VARCHAR2(2000) |

The following RAM DATA information shall be provided:

Table 6. RAM DATA (Output)

| Description | Type | XML Tag | Field Format |
|----------------------|----------|----------------------|--------------|
| POINT_OF_ORIGIN | Optional | POINT_OF_ORIGIN | CHAR(1) |
| ENROUTE | Optional | ENROUTE | CHAR(1) |
| POINT_OF_DESTINATION | Optional | POINT_OF_DESTINATION | CHAR(1) |

| | | | |
|--------------------------|----------|--------------------------|---------------|
| ACCIDENT | Optional | ACCIDENT | CHAR(1) |
| INCIDENT | Optional | INCIDENT | CHAR(1) |
| HRCQ | Optional | HRCQ | CHAR(1) |
| TRU_WASTE | Optional | TRU_WASTE | CHAR(1) |
| PROPER_SHIPPING_NAME | Optional | PROPER_SHIPPING_NAME | VARCHAR2(120) |
| INSTRUMENT_TYPE | Optional | INSTRUMENT_TYPE | VARCHAR2(20) |
| INSTRUMENT_SERIAL_NUMBER | Optional | INSTRUMENT_SERIAL_NUMBER | VARCHAR2(15) |
| PROBE_NUMBER | Optional | PROBE_NUMBER | VARCHAR2(15) |
| PACKAGE_TYPE | Optional | PACKAGE_TYPE | VARCHAR2(10) |
| DOESHIPMENT | Optional | DOESHIPMENT | CHAR(1) |
| COBALT60 | Optional | COBALT60 | CHAR(1) |
| EXCLUSIVEUSE | Optional | EXCLUSIVEUSE | CHAR(1) |
| SHIPID_NUMBER | Optional | SHIPID_NUMBER | VARCHAR2(25) |
| LEVEL6DECAL | Optional | LEVEL6DECAL | VARCHAR2(8) |
| INSTRUMENTMFR | Optional | INSTRUMENTMFR | VARCHAR2(20) |
| PROBEMODEL | Optional | PROBEMODEL | VARCHAR2(15) |

The following RAM PACKAGE information shall be provided:

Table 7. RAM PACKAGE (Output)

| Description | Type | XML Tag | Field Format |
|--------------------|----------|--------------------|--------------|
| PACKAGE_SEQ_NUMBER | Optional | PACKAGE_SEQ_NUMBER | NUMBER(10) |
| SERIAL_NUMBER | Optional | SERIAL_NUMBER | VARCHAR2(15) |
| TRANSPORT_INDEX | Optional | TRANSPORT_INDEX | VARCHAR2(6) |
| CRITICALITYINDEX | Optional | CRITICALITYINDEX | Decimal |

The following RAM READING information shall be provided:

Table 8. RAM READING (Output)

| Description | Type | XML Tag | Field Format |
|---------------|----------|---------------|--------------|
| LOCATION | Optional | LOCATION | VARCHAR2(3) |
| LOCATION_CODE | Optional | LOCATION_CODE | CHAR(1) |
| RAM_READING | Optional | RAM_READING | NUMBER(9,5) |

The following SHIPPER information shall be provided:

Table 9. SHIPPER (Output)

| Description | Type | XML Tag | Field Format |
|--------------------|----------|--------------------|---------------|
| SHIPPER_NUMBER | Optional | SHIPPER_NUMBER | VARCHAR2(3) |
| SHIPPER_DOT_NUMBER | Optional | SHIPPER_DOT_NUMBER | VARCHAR2(8) |
| SHIPPER_NAME | Optional | SHIPPER_NAME | VARCHAR2(120) |
| SHIPPER_ADDRESS | Optional | SHIPPER_ADDRESS | VARCHAR2(50) |
| SHIPPER_CITY | Optional | SHIPPER_CITY | VARCHAR2(25) |

| | | | |
|-----------------|----------|-----------------|--------------|
| SHIPPER_STATE | Optional | SHIPPER_STATE | CHAR(2) |
| SHIPPER_ZIP | Optional | SHIPPER_ZIP | VARCHAR2(10) |
| SHIPPER_COUNTRY | Optional | SHIPPER_COUNTRY | CHAR(2) |

The following vehicle information shall be provided:

Table 10. Vehicle (Output)

| Description | Type | XML Tag | Field Format |
|------------------------|----------|------------------------|---------------|
| VEHICLE_UNIT_NUMBER | Optional | VEHICLE_UNIT_NUMBER | CHAR(1) |
| VEHICLE_TYPE | Optional | VEHICLE_TYPE | CHAR(2) |
| VEHICLE_MAKE | Optional | VEHICLE_MAKE | VARCHAR2(10) |
| VEHICLE_MODEL_YEAR | Optional | VEHICLE_MODEL_YEAR | VARCHAR2(4) |
| VEHICLE_COMPANY_NUMBER | Optional | VEHICLE_COMPANY_NUMBER | VARCHAR2(15) |
| LICENSE_PLATE_NUMBER | Optional | LICENSE_PLATE_NUMBER | VARCHAR2(12) |
| LICENSE_STATE | Optional | LICENSE_STATE | CHAR(2) |
| VIN | Optional | VIN | VARCHAR2(17) |
| UVWR | Optional | UVWR | VARCHAR2(6) |
| CVSA_DECAL | Optional | CVSA_DECAL | CHAR(1) |
| DECAL_NUMBER | Optional | DECAL_NUMBER | VARCHAR2(8) |
| VEHICLE_OOS_NUMBER | Optional | VEHICLE_OOS_NUMBER | VARCHAR2(12) |
| DECAL_STATUS | Optional | DECAL_STATUS | CHAR(1) |
| EXISTING_DECAL_NUMBER | Optional | EXISTING_DECAL_NUMBER | VARCHAR2(8) |
| REMOVED_CARGOSEALID | Optional | REMOVED_CARGOSEALID | VARCHAR2(25) |
| REPLACED_CARGOSEALID | Optional | REPLACED_CARGOSEALID | VARCHAR2(25) |
| IEP_DOT_NUMBER | Optional | IEP_DOT_NUMBER | VARCHAR2(8) |
| IEP_NAME | Optional | IEP_NAME | VARCHAR2(120) |
| IEP_CHASSISPOOL_NAME | Optional | IEP_CHASSISPOOL_NAME | VARCHAR2(25) |
| IEP_SOURCECODE | Optional | IEP_SOURCECODE | VARCHAR2(3) |
| IEP_DATETIMEZ | Optional | IEP_DATETIMEZ | DATE |

The following violation information shall be provided:

Table 11. Violation (Output)

| Description | Type | XML Tag | Field Format |
|---------------------------|----------|---------------------------|---------------|
| VIOLATION_SEQUENCE_NUMBER | Optional | VIOLATION_SEQUENCE_NUMBER | Integer |
| VIOLATION_UNIT | Optional | VIOLATION_UNIT | CHAR(1) |
| FED_VIOLATION_CODE | Optional | FED_VIOLATION_CODE | VARCHAR2(25) |
| FED_VIOLATION_SECTION | Optional | FED_VIOLATION_SECTION | VARCHAR2(30) |
| STATE_VIOLATION_CODE | Optional | STATE_VIOLATION_CODE | VARCHAR2(25) |
| VIOLATION_DESCRIPTION | Optional | VIOLATION_DESCRIPTION | VARCHAR2(162) |
| DESCRIPTION_TYPE | Optional | DESCRIPTION_TYPE | CHAR(1) |
| OOS | Optional | OOS | CHAR(1) |
| DEFECT_ACTION | Optional | DEFECT_ACTION | CHAR(1) |
| CITATION_NUMBER | Optional | CITATION_NUMBER | VARCHAR2(15) |
| SHIPPER_NUMBER | Optional | SHIPPER_NUMBER | VARCHAR2(3) |
| POSTCRASH | Optional | POSTCRASH | CHAR(1) |
| FEDERAL_STATE_FLAG | Optional | FEDERAL_STATE_FLAG | CHAR(1) |
| LEVEL6OOS | Optional | LEVEL6OOS | CHAR(1) |

4.10 DELETE TRANSACTIONS (INPUT AND OUTPUT):

1. Delete transaction input file shall be same as corresponding input transaction input file except OPERATION is DELETE and root tag is delete transaction type.
2. The deletion key shall be as follow for each delete transaction:

T0019D: IFTA_LICENSE_NUMBER, IFTA_BASE_COUNTRY, IFTA_BASE_STATE
 T0022D: VIN, LICENSE_PLATE_NUMBER, IRP_BASE_STATE

3. Sending state is the state which sends transaction files. The sixth to seventh characters in file name is the sending state. For example, transaction file name is CVIEWKSxxxxxxxxx.zip, and the sending state is KS. For all delete transactions, if the IRP base state is the sending state, the record can be deleted. If the IRP base state is not the sending state, and the IRP base state is one of the eligible sending states, SAFER shall not delete the record, and return error message Only IRP base state can delete records in the log file. If the IRP base state is not one of the eligible sending states, the record can be deleted only by those sending states which are eligible to send multiple states records. Currently state WA and KY are the only states can send files for other states.
4. If the delete key is not found on SAFER, SAFER shall return a message in the log file to the CVIEW states indicating the key does not exist

T0019D: Referenced IFTA Account does not exist
 T0022D: Vehicle registration does not exist

5. In T0022D processing, if a vehicles is associated with an OOS carrier, SAFER shall not delete the record and shall return error message Carrier is currently out of service in the log file to the CVIEW states indicating the carrier is currently out of service.
6. In T0019D processing, if an IFTA is referenced in T0022, SAFER shall delete the record and shall return warning message IFTA Account is Referenced By Vehicle Registration in the log file to the CVIEW states (Not PRISM-ONLY states) indicating the IFTA is referenced by T0022. This business role shall not apply to PRISM-ONLY states.
7. Each delete transaction shall have corresponding output transaction:
 T0019D → T0025D
 T0022D → T0028D
8. Delete transaction output file shall be same as corresponding input transaction output file except OPERATION is DELETE and root tag is delete transaction type.
9. The output transaction shall be for daily deletion only, no baseline.
10. Version number shall be same as input transaction. For example,

| Input Transaction, | Input Delete Transaction, | Output Transaction, | Deletion Output Transaction |
|--------------------|---------------------------|---------------------|-----------------------------|
| T0019V1 | T0019DV1 | T0025V1 | T0025DV1 |
| T0022V3 | T0022DV3 | T0028V3 | T0028DV3. |

11. All input delete transactions shall be audited. SAFER shall be able to tell a specific record is deleted by which delete transaction file name.

5. APPENDIX A.: DATA DICTIONARY

6. APPENDIX B.: JURISDICTION CODES

The following Jurisdiction Codes are used in transactions T0022V3, T0024V2, T0028V3 and T0029V2.

| JURISDICTION CODE | DESCRIPTION |
|-------------------|-----------------------|
| CAAB | Alberta |
| CABC | British Columbia |
| CAMB | Manitoba |
| CANB | New Brunswick |
| CANF | Newfoundland |
| CANS | Nova Scotia |
| CANT | Northwest Territories |
| CAON | Ontario |
| CAPE | Prince Edward Island |
| CAQC | Quebec |
| CAPQ | Quebec |
| CASN | Saskatchewan |
| CASK | Saskatchewan |
| CAYT | Yukon Territory |
| MXAG | Aguascalientes |
| MXBN | Baja California Norte |
| MXBS | Baja California Sur |
| MXCH | Coahuila |
| MXCI | Chihuahua |
| MXCL | Colima |
| MXCP | Campeche |
| MXCS | Chiapas |
| MXDF | Distrito Federal |
| MXDG | Durango |
| MXGE | Guerrero |
| MXGJ | Guanajuato |
| MXHD | Hidalgo |
| MXJA | Jalisco |
| MXMC | Michoacan |
| MXMR | Morelos |
| MXMX | Mexico |
| MXNA | Nayarit |
| MXNL | Nuevo Leon |
| MXOA | Oaxaca |
| MXPU | Puebla |
| MXQE | Queretaro |
| MXQI | Quintana Roo |
| MXSI | Sinaloa |
| MXSL | San Luis Potosi |
| MXSO | Sonora |

| JURISDICTION CODE | DESCRIPTION |
|-------------------|--------------------------------|
| MXTA | Tamaulipas |
| MXTB | Tabasco |
| MXTL | Tlaxcala |
| MXVC | Veracruz |
| MXYU | Yucatan |
| MXZA | Zacatecas |
| USAK | Alaska |
| USAL | Alabama |
| USAR | Arkansas |
| USAS | American Samoa |
| USAZ | Arizona |
| USCA | California |
| USCO | Colorado |
| USCT | Connecticut |
| USDC | District of Columbia |
| USDE | Delaware |
| USFL | Florida |
| USFM | Federated States of Micronesia |
| USGA | Georgia |
| USGU | Guam |
| USHI | Hawaii |
| USIA | Iowa |
| USID | Idaho |
| USIL | Illinois |
| USIN | Indiana |
| USKS | Kansas |
| USKY | Kentucky |
| USLA | Louisiana |
| USMA | Massachusetts |
| USMD | Maryland |
| USME | Maine |
| USMH | Marshall Islands |
| USMI | Michigan |
| USMN | Minnesota |
| USMO | Missouri |
| USMP | Northern Mariana Islands |
| USMS | Mississippi |
| USMT | Montana |
| USNC | North Carolina |
| USND | North Dakota |
| USNE | Nebraska |
| USNH | New Hampshire |
| USNJ | New Jersey |
| USNM | New Mexico |

| JURISDICTION CODE | DESCRIPTION |
|-------------------|--------------------------------------|
| USNV | Nevada |
| USNY | New York |
| USOH | Ohio |
| USOK | Oklahoma |
| USOR | Oregon |
| USPA | Pennsylvania |
| USPR | Puerto Rico |
| USPW | Palau |
| USRI | Rhode Island |
| USSC | South Carolina |
| USSD | South Dakota |
| USTN | Tennessee |
| USTX | Texas |
| USUM | United States Minor Outlying Islands |
| USUT | Utah |
| USVA | Virginia |
| USVI | Virgin Islands |
| USVT | Vermont |
| USWA | Washington |
| USWI | Wisconsin |
| USWV | West Virginia |
| USWY | Wyoming |

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7. APPENDIX C.: IFTA STATUS CODES

IFTA STATUS CODES From Reference [10]

| IFTA STATUS CODE | IFTA STATUS DESC | IFTA Check Flag |
|------------------|---------------------|------------------------------|
| 0 | Not Available | “Y” – Check is Required |
| 1 | Active | “N” – OK, Check not Required |
| 2 | Active Pending | |
| 3 | Active Delinquent | |
| 4 | Closed | |
| 5 | Closed Pending | |
| 6 | Suspended | |
| 7 | Canceled | |
| 8 | Canceled Pending | |
| 9 | Inactive | |
| A | Inactive Delinquent | |
| B | Released | |
| C | Revoked | |
| D | Revoke Pending | |

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8. APPENDIX D.: IRP VEHICLE STATUS CODE

OLD IRP VEHICLE STATUS CODES From Reference [10]

| Code | Description |
|------|--------------------------------------------------------------------------|
| 0 | Not Available (Assumed Current) |
| 100 | Original Carrier Fleet (Generic Active Vehicle Status) |
| 101 | All Credentials Issued |
| 111 | Partial Payment Not Yet Due |
| 121 | Vehicle Added On A Fleet To Fleet Transaction |
| 131 | Outstanding Temporary Authority |
| 140 | Vehicle Conversion Record |
| 161 | Activate Suspended Vehicle |
| 201 | Renewed Active Vehicle |
| 501 | Active Vehicle (Converted) |
| 511 | Inactive (Converted) |
| 900 | Not Current (Generic Inactive Vehicle Status) |
| 901 | Suspended Non Payment |
| 911 | Suspended (Weight Violation) |
| 940 | Vehicle Status Code Not Yet Assigned |
| 941 | Sleeping Vehicle |
| 943 | Prevents Credential Issuance |
| 951 | Vehicle Withdrawn From Operation For No Reported Reason |
| 952 | Vehicle Withdrawn From Operations Due To The Vehicle Needing Maintenance |
| 953 | Vehicle Withdrawn From Operations Due To The Vehicle Being Sold |
| 954 | Vehicle Withdrawn From Operations Due To The Vehicle Being Stolen |
| 955 | Vehicle Withdrawn From Operations Due To The Vehicle Being Wrecked |
| 956 | Vehicle Withdrawn From Operations Due To The Vehicle Being Salvaged |
| 959 | Vehicle Deleted On A Fleet To Fleet Transaction |
| 961 | Vehicle Suspension Code. |
| 998 | Vehicle Soft Deleted But Treated As Hard |
| 999 | Physically Deleted Vehicle |
| | |

NEW IRP VEHICLE STATUS CODES

| Code | Description |
|-------------|--------------------------------------------------------|
| 100 | Original Carrier Fleet (Generic Active Vehicle Status) |
| 900 | Not Current (Generic Inactive Vehicle Status) |
| 950 | Federal out of service |
| 961 | Vehicle Suspension Code. |

OLD code mapping to New code:

Any code <900, convert to 100.

950 and 961 keep same.

Any code >= 900 except 950 and 961, convert to 900.

9. APPENDIX E.: VEHICLE USE CLASS CODE

OLD Vehicle Use Class Code From Reference [10]

| Use Class Code | Definition | Explanation |
|----------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2B | Double Bottom Trailer | |
| 2F | Full Double Bottom Trailer | |
| 3B | Triple Bottom Trailer | |
| 3F | Full Triple Bottom Trailer | |
| AA | Auxiliary Axle | An auxiliary undercarriage assembly with a fifth wheel and tow bar used to convert a semi-trailer to a full trailer. (MD IRP) |
| AC | Auto Carrier | |
| AG | Agricultural/Farm | |
| AM | Ambulance | |
| AU | Automobile | An automobile is a motor vehicle other than a motorcycle or utility vehicle consisting of a transport device designed for carrying ten or fewer persons. (Reference [6], 2.2.12) |
| BS | Bus | A motor vehicle with motive power, except a trailer, designed for carrying more than 10 persons. (Reference [4], § 571.3) |
| BT | Boat Trailer | |
| BX | Box Trailer | |
| CB | Cab and Chassis | |
| CD | Converter Dolly/Converter Gear | A motor vehicle consisting of a chassis equipped with one or more axles, a fifth wheel and/or equivalent mechanism, and drawbar, the attachment of which converts a semi trailer to a full trailer. (Reference [4], § 393.5) |
| CK | Cargo Tank Truck | |
| CM | Concrete or Transit Mixer | |
| CO | Convertible | |
| CP | Coupe | |
| CR | Crane | |
| CS | Construction | |
| CT | Cargo Tank Trailer | |
| CV | Combination Vehicle | Any combination of vehicles with a gross combination weight rating of 26,001 or more pounds provided the GVWR of the vehicle being towed is in excess of 10,000 pounds (Reference [4]) |
| DB | Double Bottom | A combination of a power unit pulling two (2) semi trailers or semi trailer and a full trailer. |
| DL | Dolly Trailer | |
| DP | Dump Trailer | |
| DT | Dump Truck | A motor vehicle designed to haul cargo, and to self-unload by gravity or mechanical means and to be used to haul feed or other loose materials in bulk. |
| ES | Executive Sedan | Privately owned, not for hire (corporation limousine, hotel van) |
| FB | Flatbed/Platform | |
| FI | Fire Truck | |
| FL | Flatbed Trailer | |

**OLD Vehicle Use Class Code From Reference
[10]**

| Use Class Code | Definition | Explanation |
|----------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FT | Full Trailer | A full trailer is a trailer, other than a pole trailer, designed for carrying property and so constructed that no part of its weight rests upon or is carried by the towing road vehicle. An auxiliary undercarriage assembly, commonly known as a converted dolly and consisting of a chassis, fifth wheel and one or more tow bars, is sometimes used to convert a semi trailer to a full trailer. (Reference [6], 2.2.18) |
| GG | Garbage or Refuse Truck | |
| HB | Hatchback | |
| HC | HazMat Cargo Tank | |
| HD | Hardtop | |
| HK | HazMat Truck | |
| HM | Household Mover | |
| HT | HazMat Trailer | |
| HU | HazMat Tank Trailer | |
| HV | HazMat Tank Truck | |
| IF | Interstate Farm Vehicle | |
| JE | Jeep | |
| LB | Lowbed/Boy Trailer | |
| LG | Log Truck | |
| LI | Limousine | Vehicle for hire per hour or flat fee |
| LL | Carryall | |
| LS | Livestock Trailer | |
| M2 | Motorized Home B | |
| M3 | Motorized Home C | |
| MA | Motorized Home | |
| MB | Modular Building | |
| MC | Motorcycle | A motorcycle is any motor vehicle having a seat or saddle for the use of its operator and designed to travel on not more than three wheels in contact with the ground. (Reference [6], 2.2.9) |
| MH | Mobile Home | |
| MK | Motor Truck | Every motor vehicle designed primarily for carrying livestock, merchandise, freight of any kind, or more than nine persons as passengers. * |
| MT | Mobile Home Trailer | |
| P1 | Pickup Truck: 1 Ton | |
| P2 | Pickup Truck: 1/2 Ton | |
| P3 | Pickup Truck: 3/4 Ton | |
| PK | Pickup Truck | |
| PN | Panel | |
| PS | Pusher | |
| PU | Pickup | |
| PW | Power Unit | |
| RC | Rental Car | |
| RD | Roadster | |
| RE | Refrigerated Van Trailer | |
| RF | Refrigerated Van | |
| RH | Retractable Hardtop | |

OLD Vehicle Use Class Code From Reference
[10]

| Use Class Code | Definition | Explanation |
|----------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RN | Recreational Van | |
| RT | Road Tractor | |
| RV | Recreational Vehicle | |
| SB | School Bus | |
| SK | Service Body Truck | |
| SL | Stake or Rack | |
| SP | Special Truck | A motor truck or truck tractor not used for hire with a gross weight registration of 6 through 32 tons, used by a person engaged in farming to transport commodities produced only by the owner, or to transport commodities purchased by the owner for use in the owner's own farming operation, or occasional use for charitable purpose. A "special truck" does not include a truck tractor operated more the 7,500 miles annually. ¹ |
| SR | Semi-Trailer | A trailer, except a pole trailer, so constructed That a substantial part of its weight rests upon or is carried by another motor vehicle. (Reference [4], § 571.3) |
| ST | Straight Truck | Truck means a motor vehicle with motive power, except a trailer, designed primarily for the transportation of property or special purpose equipment. (Reference [4], § 571.3) A vehicle with its cargo body and tractor mounted on the same chassis. |
| SW | Station Wagon | |
| TB | Twin Beam | |
| TC | Truck | A truck is a motor vehicle designed primarily for carrying property. Includes single-unit truck and truck combination, and excludes truck tractor. (Reference [6], 2.2.13) |
| TD | Tow Dolly | A tow dolly is an axle-like device used to support the front or rear wheels of a passenger vehicle, pick-up or panel truck for towing purposes. |
| TE | Tow Truck | |
| TK | Truck (Single) | A truck consisting primarily of a single motorized transport device. When connected to a trailer, such device may be part of a truck combination (Reference [6], 2.2.19) |
| TL | Travel Trailer | |
| TN | Tank Trailer | |
| TP | Triple | |
| TR | Trailer | A vehicle without motive power designed for carrying persons or property and for being drawn by a motor vehicle (Reference [4], § 571.3) |
| TT | Truck Tractor | A motor vehicle designed and used primarily for drawing other vehicles and not so constructed to carry a load other than a part of the weight of the vehicle and load being drawn. (Reference [4], § 571.3) |
| TU | Truck Trailer | |
| TV | Tank Vehicle | Any commercial motor vehicle that is designed to |

**OLD Vehicle Use Class Code From Reference
[10]**

| Use Class Code | Definition | Explanation |
|----------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | transport liquid or gaseous materials within a tank that is either permanently or temporarily attached to the vehicle or the chassis (Reference [4]) |
| TX | Taxi | |
| UT | Utility Trailer | A full trailer or semi trailer constructed solely for the purpose of carrying property and not to exceed 6,000 pounds gross vehicle weight. |
| V1 | Van: 1 Ton | |
| V2 | Van: 1/2 Ton | |
| V3 | Van: 3/4 Ton | |
| VL | Van Trailer | |
| VN | Van | |
| VT | Vanette | |
| WK | Tow/Recovery | |
| WR | Tow Truck Wrecker | |
| WW | Water Well | |
| ZZ | Other Unlisted Type | |

New Vehicle Use Class Code

| Use Class Code | Definition | Explanation |
|----------------|----------------|-------------|
| BU | Bus | |
| ST | Semi-Trailer | |
| TR | Straight truck | |
| TT | Truck Tractor | |
| FT | Full Trailer | |
| OT | Other | |

Old code mapping to New code:

- BS → BU
- TR → FT
- ST → TR
- SR → ST
- FT → FT
- TT → TT
- All others (2B, 2F....) → OT

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10. APPENDIX F.: IRP FLEET CODE

IRP Fleet Codes From Reference [10]

| REF_ID | REF_DESC | REF_BGN_RANGE | REF_END_RANGE | REF_LONG_DESC |
|--------|-----------------|---------------|---------------|-----------------------------------------------------------|
| 1 | January Fleet | 101 | 109 | Prorated Registration Period: January 1 - December 31 |
| 2 | February Fleet | 201 | 209 | Prorated Registration Period: February 1 - January 31 |
| 3 | March Fleet | 301 | 309 | Prorated Registration Period: March 1 - February 28/29 |
| 4 | April Fleet | 401 | 409 | Prorated Registration Period: April 1 - March 31 |
| 5 | May Fleet | 501 | 509 | Prorated Registration Period: May 1 - April 30 |
| 6 | June Fleet | 601 | 609 | Prorated Registration Period: June 1 - May 31 |
| 7 | July Fleet | 701 | 709 | Prorated Registration Period: July 1 - June 30 |
| 8 | August Fleet | 801 | 809 | Prorated Registration Period: August 1 - July 31 |
| 9 | September Fleet | 901 | 909 | Prorated Registration Period: September 1 - August 31 |
| A | October Fleet | A01 | A09 | Prorated Registration Period: October 1 - September 30 |
| B | November Fleet | B01 | B09 | Prorated Registration Period: November 1 - October 31 |
| C | December Fleet | C01 | C09 | Prorated Registration Period: December 1 - November 30 |

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11. APPENDIX G.: CARRIER CLASSIFICATION CODE

CARRIER CLASSIFICATION CODES

Code Table 1, Carrier Classifications

Describes carrier’s operations. Used with Record Type 2, Carrier Classification, corresponding to SafetyNet 2000 CENS_CARRIER_CLASS.

| Code | Definition | Explanation |
|------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Operation/Work Code Series |
| 01 | Authorized For Hire | Transportation for compensation as a common or contract carrier of property, owned by others, or passengers under the provisions of the Federal Highway Administration. |
| 05 | Exempt For Hire | Transportation for compensation of property or passengers exempt from the economic regulation by the Federal Highway Administration. [Exempt carrier is any individual partnership, or corporation engaged in the business of transporting exempt goods or persons for compensation.] |
| 07 | Federal Government | Transportation of property or passengers by a U.S. Federal Government agency. |
| 08 | Indian Tribe | Transportation of property or passengers by an Indian tribal government. |
| 19 | Local Government | Transportation of property or passengers by a local municipality. |
| 20 | Migrant | Interstate transportation, including a contract carrier, but not a common carrier of 3 or more migrant workers to or from their employment by any motor vehicle other than a passenger automobile or station wagon. |
| 21 | Other | Transportation of property or passengers by some other operation classification. |
| 24 | Private Passenger (Business) | A private motor carrier engaged in the interstate transportation of passengers which is provided in the furtherance of a commercial enterprise and is not available to the public at large (e.g., bands). [Private carrier is a person, firm or corporation which utilizes its own trucks to transport its own freight.] |
| 25 | Private (Property) | A person who provides transportation of property by commercial motor vehicle and is not a for-hire motor carrier. |
| 26 | Private Passenger (Non-Business) | A private motor carrier involved in the interstate transportation of passengers that does not otherwise meet the definition of a private motor carrier of passengers (business) (e.g., church buses). |
| 28 | State Government | Transportation of property or passengers by a U.S. State Government agency. |
| 29 | US Mail | Transportation of U.S. Mail under contract with the U.S. Postal Service. |

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12. APPENDIX H.: CARGO CLASSIFICATION CODES

CARGO CLASSIFICATION CODES

Code Table 2, Cargo Codes

Describes cargo transported by carrier. Used with Record Type 3, Carrier Cargo, corresponding to SafetyNet 2000 CENS_CARGO table.

| Code | Definition | Explanation |
|-----------------------|----------------------------|----------------------|
| Commodity Code Series | | |
| UT | Utilities | |
| CS | Construction | |
| WW | Water Well | |
| AG | Agricultural/Farm | Farm Supplies |
| BM | Building Materials | |
| BV | Beverages | |
| CC | Coal, Coke | |
| CH | Chemicals | |
| DB | Commodities Dry Bulk | |
| DT | Drive-Away, Tow-Away | |
| GB | Garbage, Refuse, Trash | |
| GF | General Freight | |
| GH | Grain, Feed, Hay | |
| HG | Household Goods | |
| IM | Intermodal Cont. | |
| LG | Liquids/Gases | |
| LM | Logs, Poles, Beams, Lumber | |
| LS | Livestock | |
| MC | Machinery Large Objects | |
| MH | Mobile Homes | |
| ML | Metal | Sheets, coils, rolls |
| MT | Meat | |
| MV | Motor Vehicles | |
| OE | Oilfield Equipment | |

CARGO CLASSIFICATION CODES

Code Table 2, Cargo Codes

Describes cargo transported by carrier. Used with Record Type 3, Carrier Cargo, corresponding to SafetyNet 2000 CENS_CARGO table.

| Code | Definition | Explanation |
|------|-------------------|------------------------------|
| | | Commodity Code Series |
| PD | Fresh Produce | |
| PP | Paper Products | |
| PS | Passengers | |
| RF | Refrigerated Food | |
| UM | US Mail | |
| ZZ | Other | |

13. APPENDIX I.: HAZMAT CODES

HAZMAT CODES TABLE

Code Table 3 - HazMat Codes

Describes hazardous materials transported. Used with record type 4, HazMat Carried / Shipped, corresponding to SafetyNet 2000 CENS_HAZMAT table.

| Code | Definition | Explanation |
|------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HazMat Commodity Code Series | | |
| 1 | Division 1.1 Explosives | Division 1.1 consists of explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously. Load instantaneously. (Reference, § 173.50) |
| 2 | Division 1.2 Explosives | Division 1.2 consists of explosives that have a projection hazard but not a mass explosion hazard. |
| 3 | Division 1.3 Explosives | Division 1.3 consists of explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. |
| 4 | Division 1.4 Explosives | Division 1.4 consists of explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually i |
| 5 | Division 1.5 Explosives | Division 1.5{1} consists of very insensitive explosives. This division is comprised of substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport. |
| 6 | Division 1.6 Explosives | Division 1.6 {2} consists of extremely insensitive articles which do not have a mass explosive hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of |
| 7 | Division 2.1 Flammable Gas | Flammable gas (Division 2.1) means any material which is a gas at 20°C (68°F) or less and 101.3 kPa (14.7 psi) of pressure (a material which has a boiling point of 20°C (68°F) +or less at 101.3 kPa (14.7 psi)) which- (1) Is ignitable at 101.3 kPa (14.7 psi) when in a mixture of 13 percent or less by volume with air; or (2) Has a flammable range at 101.3 kPa (14.7 psi) with air of at least 12 percent regardless of the lower limit. |
| 8 | Division 2.2 Nonflammable Gas | Division 2.2 (non-flammable, non-poisonous compressed gas-including compressed gas, liquefied gas, pressurized cryogenic gas and compressed gas in solution). For the purpose of this subchapter, a non-flammable, non-poisonous compressed gas. |
| 9 | Division 2.3 Poisonous Gas | Division 2.3 (Gas poisonous by inhalation). For the purpose of this subchapter, a gas poisonous by inhalation (Division 2.3) means a material which is a gas at 20°C (68°F) or less and a pressure of 101.3 |

HAZMAT CODES TABLE

Code Table 3 - HazMat Codes

Describes hazardous materials transported. Used with record type 4, HazMat Carried / Shipped, corresponding to SafetyNet 2000 CENS_HAZMAT table.

| Code | Definition | Explanation |
|------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | HazMat Commodity Code Series |
| | | kPa (14.7 psi) (a material which has a boiling point |
| 10 | Class 3 Flammable Liquid | Flammable liquid (Class 3) means a liquid having a flash point +of not more than 60.5°C (141°F), or any material in a liquid +phase with a flash point at or above 37.8°C (100°F) that is +intentionally heated and offered for transportation or transported +at or above its flash point in a bulk packaging, with some exceptions. |
| 11 | Division 4.1 Flammable Solid | flammable solid (Division 4.1) means any of the following three types of materials: (1) Wetted explosives (2)(i) Self-reactive materials are materials that are thermally +unstable and that can undergo a strongly exothermic decomposition +even without participation of oxygen (air). (3) Readily combustible solids. |
| 12 | Division 4.2 Spontaneous Combustible | Division 4.2 (Spontaneously Combustible Material) means- (1) A pyrophoric material. (2) A self-heating material. |
| 13 | Division 4.3 Dangerous When Wet | Division 4.3 means a material that, by contact with water, is liable to become spontaneously flammable or to give off flammable or toxic gas at a rate greater than 1 liter per kilogram of the material per hour. |
| 14 | Division 5.1 Oxidizer | Division 5.1 means a material that may, generally by yielding oxygen, cause or enhance the combustion of other materials. |
| 15 | Division 5.2 Organic Peroxide | Division 5.2 means any organic compound containing oxygen (O) in the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide, where one or more of the hydrogen atoms have been replaced by organic radicals. |
| 16 | Division 6.1 Poison Liquid | Division 6.1 means a material, other than a gas, which is known to be as toxic to humans as to afford a hazard to health during transportation. Poison liquid with no inhalation hazard |
| 17 | Division 6.1 Solids | Poison solids |
| 18 | Division 6.2 Infectious Substance | Division 6.2 are defined as follows: (1) An infectious substance (2) A diagnostic specimen |

HAZMAT CODES TABLE

Code Table 3 - HazMat Codes

Describes hazardous materials transported. Used with record type 4, HazMat Carried / Shipped, corresponding to SafetyNet 2000 CENS_HAZMAT table.

| Code | Definition | Explanation |
|------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | HazMat Commodity Code Series |
| | | (3) A biological product (4) A regulated medical waste Etiologic agent |
| 19 | Class 7 Radioactive Material | Radioactive material means any material having a specific +activity greater than 70 Bq per gram (0.002 microcurie per gram). |
| 20 | Class 7 Highway Route Controlled Quantity of Radioactive Material | Radioactive |
| 21 | Class 8 Corrosive Material | Corrosive material (Class 8) means a liquid or solid that causes full thickness destruction of human skin at the site of contact within a specified period of time. A liquid that has a severe corrosion rate on steel or aluminum based on the criteria in § 1 |
| 22 | Class 9 Miscellaneous Hazardous Material | Miscellaneous hazardous material (Class 9) means a material which presents a hazard during transportation but which does not meet the definition of any other hazard class. |
| 23 | Division 6.1 Zone A | Poison liquid which is Poison Inhalation Hazard (PIH) Zone A |
| 24 | Class 3 Combustible Liquid | |
| 25 | Class 9 Hazardous Substance | Reportable quantity (RQ) |
| 26 | Class 9 Hazardous Waste | |
| 27 | Other Regulated Material (ORM-D) | "ORM-D material" means a material such as a consumer commodity, which, although otherwise subject to the regulations of this subchapter, presents a limited hazard during transportation due to its form, quantity and packaging. |
| 28 | Class 9 Elevated Temperature Material | |
| 29 | Class 9 Marine Pollutants | |
| 30 | Division 2.1 Liquefied Petroleum Gas | |
| 31 | Division 2.1 Methane Gas | |
| 32 | Division 2.2 Anhydrous Ammonia | |
| 33 | Division 2.3 Zone A | Poison gas which is Poison Inhalation Hazard (PIH) Zone A |
| 34 | Division 2.3 Zone B | Poison gas which is Poison Inhalation Hazard (PIH) Zone B |

HAZMAT CODES TABLE

Code Table 3 - HazMat Codes

Describes hazardous materials transported. Used with record type 4, HazMat Carried / Shipped, corresponding to SafetyNet 2000 CENS_HAZMAT table.

| Code | Definition | Explanation |
|-------------------------------------|--------------------------|-----------------------------------------------------------------|
| HazMat Commodity Code Series | | |
| 35 | Division 2.3 Zone C | Poison gas which is Poison Inhalation Hazard (PIH) Zone C |
| 36 | Division 2.3 Zone D | Poison gas which is Poison Inhalation Hazard (PIH) Zone D |
| 37 | Class 3 Zone A | Flammable liquid which is Poison Inhalation Hazard (PIH) Zone A |
| 38 | Class 3 Zone B | Flammable liquid which is Poison Inhalation Hazard (PIH) Zone B |
| 39 | Division 6.1 Zone B | Poison liquid which is Poison Inhalation Hazard (PIH) Zone B |
| 40 | Class 8 Zone A | Corrosive liquid which is Poison Inhalation Hazard (PIH) Zone A |
| 41 | Class 8 Zone B | Corrosive liquid which is Poison Inhalation Hazard (PIH) Zone B |
| 42 | Class 9 Infectious Waste | |
| Format Code Series | | |
| A | All | Format is both Bulk and Non-Bulk |
| B | Bulk | |
| N | Non-Bulk | |
| Type Code Series | | |
| C | Carrier | |
| S | Shipper | |
| B | Both | Both Carrier and Shipper |

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14. APPENDIX J.: TIME ZONE CODE

The following codes will be used to represent time zones where required.

| Time Zone Codes | |
|-----------------|------------------------------------------------------------------------------------------------------|
| Value | Definition |
| AD | Alaska Daylight Time |
| AS | Alaska Standard Time |
| AT | Alaska Time |
| CD | Central Daylight Time |
| CS | Central Standard Time |
| CT | Central Time |
| ED | Eastern Daylight Time |
| ES | Eastern Standard Time Navassa (Uninhabited) |
| ET | Eastern Time |
| HD | Hawaii-Aleutian Daylight Time |
| HS | Hawaii-Aleutian Standard Time |
| HT | Hawaii-Aleutian Time |
| MD | Mountain Daylight Time |
| MS | Mountain Standard Time |
| MT | Mountain Time |
| ND | Newfoundland Daylight Time |
| NS | Newfoundland Standard Time |
| NT | Newfoundland Time |
| PD | Pacific Daylight Time |
| PS | Pacific Standard Time |
| PT | Pacific Time |
| TD | Atlantic Daylight Time |
| TS | Atlantic Standard Time Puerto Rico (GMT – 0400) Virgin Islands (GMT – 0400) |
| TT | Atlantic Time |
| 10 | Guam (Mariana Islands) (GMT + 1000) Northern Mariana Islands (GMT + 1000) |
| 12 | Wake Islands (GMT + 1200) |
| 14 | American Samoa (GMT – 1100) Midway Islands (Leeward Islands, Part of Hawaiian Chain) (GMT – 1100) |

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15. APPENDIX K.: COMPRESSION FORMAT

The file compression used to exchange data is the equivalent of that provided by PK ZIP Version 2.04G, a program created by PKWARE, Incorporated. The SAFER system uses the DynaZIP 3.0 Data Compression Toolkit for Microsoft Windows to compress and decompress the message text. This toolkit is a product of Inner Media, 60 Pain Road, Hollis, and NY 03049.

The compression utility takes one or more files and produces one compressed file from them, known as an archive file. The archive file not only contains the compressed information from the files, it also contains information about the files, such as their names, full file paths including the file's directory, file size, and any included comments. However, most of these features are not used by SAFER. In addition, SAFER only includes one file, the message text being compressed, in the archive. In compressing the message text the following settings, formats and conventions must be used:

- The name of the zip file must conform to the file name specified in the ICD for the specific transaction. DOS file names, of eight characters or less, are not used.
- The name of the compressed XML transaction file, as stored in the zip file, must conform to the file name specified in the ICD for the specific transaction it contains. DOS file names, of eight characters or less, are not used.
- Although a zip file may contain many files, one and only one file, which contains the XML transaction(s), is utilized in this compression scheme.
- Although a zip file may contain directories as well as files, no directories should be added as items to the archive file. Only the XML file itself should be included.
- The archive must be constructed as a single, integrated file, i.e. "disk spanning" formats that break the archive into several smaller files should not be used.
- A compression factor of 5 must be used. This compression factor represents a balance between speed and compression, 0 being the fastest with no compression and 9 being the slowest with best compression.
- No volume label should be used.
- The path portion of the message text file name should not be stored in the archive.
- No comments should be stored in the archive.
- No encryption should be applied to the message text file during the compression process.

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16. APPENDIX L.: TRANSACTION SAMPLES AND SCHEMAS

16.1 VEHICLE COUNTRY CODES

Used in Transactions T0022, T0028, and T0030

| Code | Country |
|------|--------------------------|
| CA | Canada |
| MX | Mexico |
| US | United States of America |
| BZ | Belize |
| CR | Costa Rica |
| ES | El Salvador |
| GT | Guatemala |
| HO | Honduras |
| NI | Nicaragua |
| OT | Other |
| PN | Panama |
| UK | Unknown |
| M | Mexican State |
| P | American Territory |

16.2 VEHICLE LICENSE PLATE STATE CODES

Used in Transactions T0022, T0028, and T0030

| Code | State |
|------|-----------------------|
| AB | Alberta |
| BC | British Columbia |
| MB | Manitoba |
| NB | New Brunswick |
| NF | Newfoundland |
| NS | Nova Scotia |
| NT | Northwest Territories |
| ON | Ontario |
| PE | Prince Edward Island |
| SK | Saskatchewan |
| PQ | Quebec |
| YT | Yukon Territory |
| AG | Aguascalientes |
| BN | Baja California Norte |
| BS | Baja California Sur |
| CH | Coahuila |
| CI | Chihuahua |
| CL | Colima |
| CP | Campeche |
| CS | Chiapas |
| CZ | Canal Zone |
| DF | Districto Federal |

| Code | State |
|-------------|--------------------------------|
| DG | Durango |
| GE | Guerrero |
| GJ | Guanajuato |
| HD | Hidalgo |
| JA | Jalisco |
| MC | Michoacan |
| MR | Morelos |
| MX | Mexico |
| NA | Nayarit |
| NL | Nuevo Leon |
| OA | Oaxaca |
| PU | Puebla |
| QE | Queretaro |
| QI | Quintana Roo |
| SI | Sinaloa |
| SL | San Luis Potosi |
| SO | Sonora |
| TA | Tamaulipas |
| TB | Tabasco |
| TL | Tlaxcala |
| VC | Veracruz |
| YU | Yucatan |
| ZA | Zacatecas |
| AK | Alaska |
| AL | Alabama |
| AR | Arkansas |
| AS | American Samoa |
| AZ | Arizona |
| CA | California |
| CO | Colorado |
| CT | Connecticut |
| DC | District of Columbia |
| DE | Delaware |
| FL | Florida |
| FM | Federated States Of Micronesia |
| GA | Georgia |
| GU | Guam |
| HI | Hawaii |
| IA | Iowa |
| ID | Idaho |
| IL | Illinois |
| IN | Indiana |
| KS | Kansas |
| KY | Kentucky |
| LA | Louisiana |
| MA | Massachusetts |
| MD | Maryland |
| ME | Maine |
| MH | Marshall Islands |
| MI | Michigan |
| MN | Minnesota |
| MO | Missouri |

| Code | State |
|------|--------------------------------------|
| MP | Northern Mariana Islands |
| MS | Mississippi |
| MT | Montana |
| MX | Mexico |
| NC | North Carolina |
| ND | North Dakota |
| NE | Nebraska |
| NH | New Hampshire |
| NJ | New Jersey |
| NM | New Mexico |
| NV | Nevada |
| NY | New York |
| OH | Ohio |
| OK | Oklahoma |
| OR | Oregon |
| PA | Pennsylvania |
| PR | Puerto Rico |
| PW | Palau |
| RI | Rhode Island |
| SC | South Carolina |
| SD | South Dakota |
| TN | Tennessee |
| TX | Texas |
| UM | United States Minor Outlying Islands |
| UT | Utah |
| VA | Virginia |
| VI | Virgin Islands |
| VT | Vermont |
| WA | Washington |
| WI | Wisconsin |
| WV | West Virginia |
| WY | Wyoming |
| BZ | Belize |
| CR | Costa Rica |
| ES | El Salvador |
| GT | Guatemala |
| HO | Honduras |
| NI | Nicaragua |
| OT | Other |
| PN | Panama |
| UK | Unknown |

16.3 SCHEMAS:



T0019V1.xsd

T0019:



T0019DV1.xsd

T0019D:



T0020V1.xsd

T0020:



T0021V1.xsd

T0021:



T0022V3.xsd

T0022V3:



T0022DV3.xsd

T0022DV3:



T0024V2.xsd

T0024v2:



T0025V1.xsd

T0025:



T0025DV1.xsd

T0025D:



T0026V1.xsd

T0026:



T0027V1.xsd

T0027:



T0028V3.xsd

T0028V3:



T0028DV3.xsd

T0028DV3:



T0029V2.xsd

T0029V2:



T0030V1.xsd

T0030:



T0031V3.xsd

T0031V3:



T0032V1.xsd

T0032:



T0033V1.xsd

T0033:

17. APPENDIX M.: STATE CVISN PROGRAMS:



State_CVISN_Program.xls