



# SAFER Web Services

## SAFERv4.4 System Enhancement Requirement Specification

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# SAFER Web Services Requirements Specification

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## ii ACRONYMS

CVIEW	Commercial Vehicle Information Exchange Window
CVISN	Commercial Vehicle Information Systems and Networks
FTP	File Transfer Protocol
ICD	Interface Control Document
ITS	Intelligent Transportation Systems
SAFER	Safety And Fitness Electronic Records
SOAP	Simple Object Access Protocol
WSDL	Web Services Definition Language
XML	eXtensible Markup Language

## iii References

In addition to the references listed in the SAFER 4.2 Interface Control Document and earlier ICDs, the following references are applicable to the SAFER Web Services Interface.

[1] XML. The eXtensible Markup Language (XML) Version 1.0 (Second Edition) W3C Recommendation is published by the World Wide Web Consortium at <http://www.w3.org/TR/2000/REC-xml-20001006>.

[2] SOAP. The Simple Object Access Protocol (SOAP) 1.2 W3C Recommendation is published by the World Wide Web Consortium at <http://www.w3.org/TR/2003/REC-soap12-part1-20030624/>.

[3] WSDL. The Web Services Definition Language (WSDL) 1.1 W3C Recommendation is published by the World Wide Web Consortium at <http://www.w3.org/TR/2001/NOTE-wsdl-20010315>.

[4] Web Services. The Web Services Architecture is published by the World Wide Web Consortium at <http://www.w3.org/TR/2004/NOTE-ws-arch-20040211/>.

# SAFER Web Services Requirements Specification

This document specifies the interface and requirements for SAFER Web Services. The SAFER Web Services interface is intended to provide real-time query capability to the XML processing of SAFER, and may eventually supersede the FTP interface specified in the SAFER Version 4.2 Interface Control Document (ICD) at the discretion of FMCSA.

It is a preliminary version and has not been approved by the CVISN and SAFER program Sponsors. It is for purposes of review by CVISN stakeholders and FMCSA personnel.

This document has been prepared as a response to a System Change Request that was approved by FMCSA.

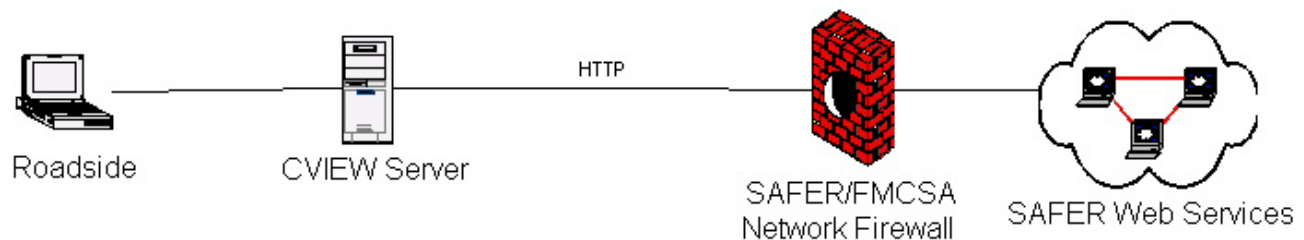
## 1.0 Overview

This section presents general architectural information for the SAFER Web Services Interface.

## 1.2 Purpose of the SAFER Web Services Interface

SAFER Web Services is intended to support a real time query capability for state systems. 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.

**Figure 1.0. SAFER Web Services Systems Interaction**



## 1.3 Interface Summary

A CVIEW or equivalent system, hereafter referred to as a “state system”, will utilize this interface to perform two basic operations: real-time query operations obtaining XML output files and real-time upload operations. The XML input or output files will conform to the specifications of the SAFER XML output transactions. To accomplish this interaction, the state system shall interact with the SAFER system in the manner described below.

**Real-Time Queries:** A state system connects to the SAFER Web Services Interface using the standard SOAP and WSDL protocols. Password authentication will not be required for systems with a persistent connection to the FMCSA/SAFER network. Other users will need to authenticate with the UAS system before being allowed to connect to the SAFER Web Services Interface.

An example SAFER Web Service Client will be provided for states to assist in their integration efforts.

**Real-Time 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. Password authentication will not be required for systems with a persistent connection to the FMCSA/SAFER network. Other users will need to authenticate themselves with the FMCSA/SAFER network. Instructions on how to apply for accounts can be obtained from the FMCSA Technical Support web site at <http://fmcsa-ts.dot.gov>. Real-time uploads will not be supported in SAFER 4.4 Beta 1.

**Real-Time Response:** Query operations will return a result conforming 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.

**Batch Response:** Interface support for loading large files through the SAFER Web Services interface will not be supported in SAFER Version 4.4 Beta 1.

## 1.4 Standards

The SAFER Web Services interface shall conform to the following industry standards.

### 1.4.1 XML

The SAFER Web Services interface shall conform to the eXtensible Markup Language (XML) standard. This is an FMCSA standard.

### 1.4.2 SOAP

The SAFER Web Services interface shall conform to the Simple Object Access Protocol (SOAP) standard. This is an FMCSA standard.

### 1.4.3 WSDL

The SAFER Web Services interface shall conform to the Web Services Definition Language (WSDL) standard which is based upon the XML standard. It is used to specify metadata about Web Services. This is an FMCSA standard.

## 1.5 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 toolkit-generated code on the client 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 internet 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 instantiate an XML transaction class and uses attributes of the class to perform the transaction, producing an XML output file. If the transaction is a SAFER output transaction, the output file 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 file 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.

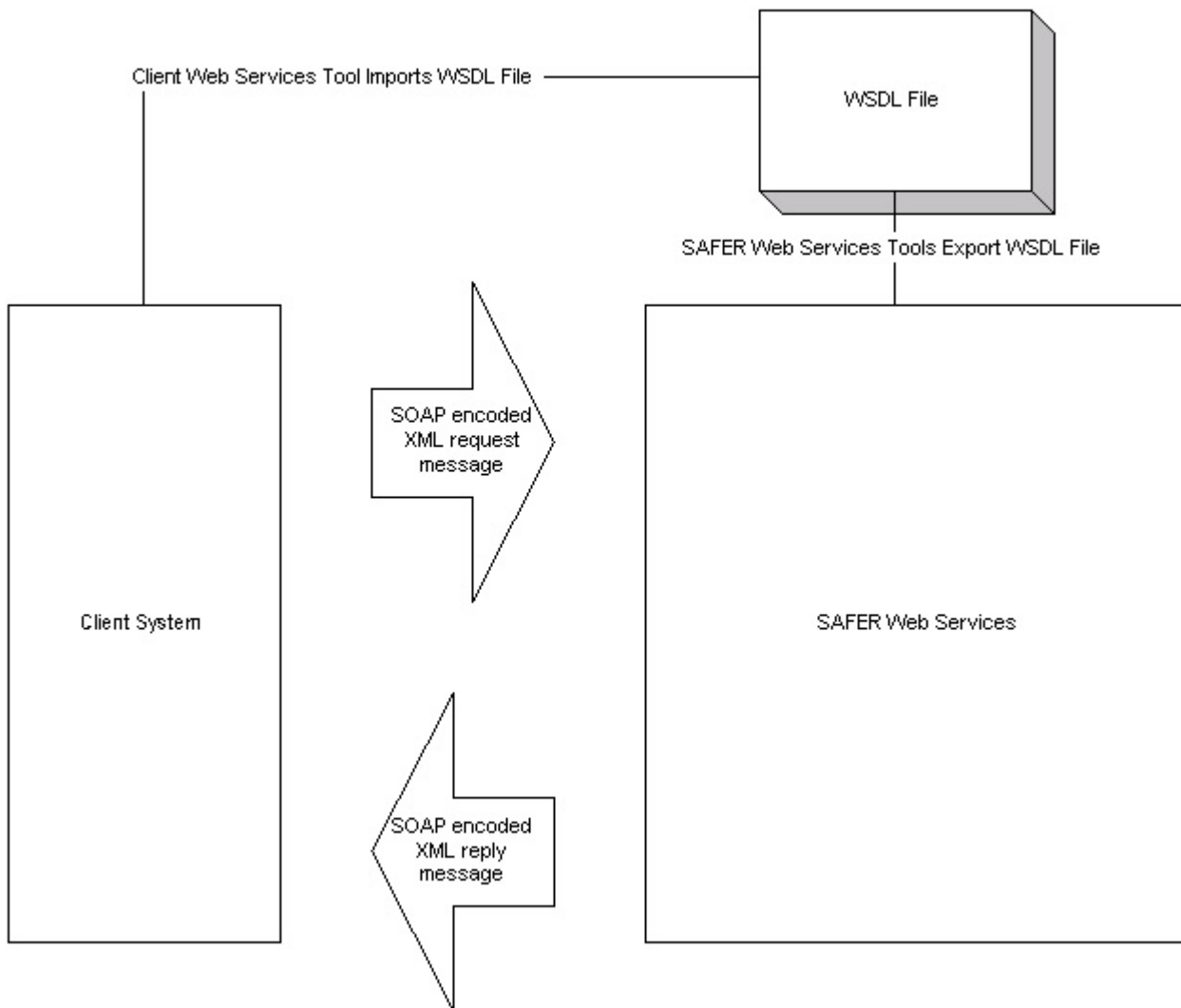
## 1.6 Client System Development

The specific steps necessary to build a Web Service client to interface with SAFER Web Services depends on the tools that are used to develop the client system. Web Services toolkits are available from a number of vendors, which will support various programming languages including Java, C++, Visual Basic, Delphi and C#.

In general, the developer will import the WSDL file which defines the SAFER Web Services interface and use their vendor's tools to generate the low-level code that will perform the SOAP encoding and decoding and XML generation and parsing.

The client system developer will then be able to integrate the SAFER Web Services methods into their system by making standard method or function calls.

**Figure 2.0. SAFER Web Services Architectural Overview**



## 1.7 Response Time

The SAFER Web Services Interface is intended to support a real time query capability. The response time must be sufficient to support roadside operation.

## 1.8 Usage Level Requirements

Expected usage level information will be gathered from the state users and prospective state users. This information will be used in planning for resource needs in order to support the growing usage level over time as more states start using the system and existing user states increase their usage levels.



## 2.0 General Interface and Transaction Specifications

The following transactions are supported by SAFER Version 4.4 Beta 1 through the XML/Web Services Interface. Collectively, these transactions constitute the SAFER 4.4 XML/Web Services transaction set. Each transaction in the transaction set has an identifier (e.g. "T0018" for the Inspection Report input transaction) that is unique within the SAFER system. This identifier is used throughout the interface to identify a specific transaction from among those in the transaction set. Only one transaction per input or output file is allowed. Each transaction will have one or more sets or parameters.

Each output transaction will return a SOAP message that will contain either a string conforming to the corresponding SAFER 4.2 XML/FTP output transaction specification, or an XML error message, the format of which will be specified.

Each input transaction will return a SOAP message containing either an XML acknowledgement message, the format of which will be specified, or an XML error message, the format of which will be specified.

### 2.1 General Input Specification

Input to the SAFER Web Services Interface is in the form of standard SOAP message format. Each message contains the name of the method to be invoked and the arguments with which the method is to be called.

For example, for a T0031 MCMIS Safety and Census Data output transaction, the method to be called would be SaferWebQueryByDOT and the arguments would be T0031 for the transactionID argument and a string containing a DOT number for the motor carrier for whom the data is requested.

#### 2.1.1 Example SOAP Request

Here is an example of a SOAP Request to the SAFER Web Services interface. It is an invocation of the SaferQueryByDOT method for transaction T0031, using the DOT number 555555. It is a query for MCMIS Safety and Census data for the motor carrier with DOT number 555555.

```
<?xml version="1.0"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/">
<SOAP-ENV:Body SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
  <NS1:SaferQueryByDOT xmlns:NS1="saferXML.SaferQueryService">
    <transactionID xsi:type="xsd:string">
      T0031
    </transactionID>
    <dotNumber xsi:type="xsd:string">
      555555
    </dotNumber>
    <lastUpdateDate xsi:type="xsd:string"></lastUpdateDate>
  </NS1:SaferQueryByDOT>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

## 2.1.2 Web Service Methods

Two things are required to specify a SAFER Web Services transaction: the method name and the transaction name. The method names are specified in the tables below. The transaction identifiers are the same as those for the existing SAFER XML/FTP interface.

For example, one may wish to query MCMIS Census and Safety information for a motor carrier using the DOT number as the key. In addition to the DOT number, users may wish to use the ICC number, DUNS number, MC number or MX number. The DOT number is the supported method for obtaining Carrier information in the SAFER 4.4 Beta 1 version of the system.

SAFER output transactions have two modes, update and baseline. If the lastUpdateDate parameter of a query method is specified, then only records updated in the SAFER data store since the specified date are returned. If the lastUpdateDate parameter is null, then all records returned satisfying any conditional processing constraints of the particular transaction will be returned. In other words, a baseline mode is indicated by leaving the lastUpdateDate field blank. SAFER 4.4 Beta 1 will only support baseline queries; the lastUpdateDate parameter will be ignored.

For vehicle information, one may wish to query using the VIN, or using the combination of State and License Plate Number. Both of these options are supported in the SAFER 4.4. Beta 1 version of the system.

The SAFER 4.4 Beta 1 Web Services Interface supports the following methods. All arguments are of the type string. During the Beta test period, additional methods can be added if requested by the users and approved by the Sponsor.

**Table 1. SAFER Version 4.4 Beta 1 XML/Web Services Interface Methods**

Method Name	Arguments	Entity
SaferQueryByDOT	transactionID dotNumber lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByVIN	transactionID VIN lastUpdateDate stylesheetURL username password	Vehicle
SaferQueryByStatePlate	transactionID state plate lastUpdateDate stylesheetURL	Vehicle

	username password	
SaferXMLUpload	transactionID xmlData destination username password	All

Additional arguments may be supported to specify the Transaction Version and whether or not to compress the result. Future versions of SAFER Web Services may support the following methods.

Comments and change requests can be submitted to the Volpe Center during the review period.

Subsequently, change requests can be submitted to the CVISN Architecture Configuration Control Board.

**Table 1A. Possible Future SAFER XML/Web Services Interface Methods**

<b>Method Name</b>	<b>Arguments</b>	<b>Entity</b>
SaferQueryByICC	transactionID iccNumber lastUpdateDate stylesheetURL username password	Vehicle
SaferQueryByMCMX	transactionID mcOrMxNumber lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByCarrierName	transactionID carrierName lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByIFTA	transactionID iftaAccountNumber lastUpdateDate stylesheetURL username password	Carrier

<b>Method Name</b>	<b>Arguments</b>	<b>Entity</b>
SaferQueryByIRP	transactionID irpAccountNumber state lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByFleet	transactionID fleetNumber state lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByTransponderID	transacationID transponderID jurisdiction lastUpdateDate stylesheetURL username password	Vehicle
SaferQueryByCDL	transactionID CDL lastUpdateDate stylesheetURL username password	Driver
SaferQueryByDUNS	transactionID DUNS lastUpdateDate stylesheetURL username password	Carrier
SaferQueryByReportNumber	transactionID reportNumber lastUpdateDate stylesheetURL username password	Inspection
SaferXMLUpload	transactionID xmlData destination username password	All

Method Name	Arguments	Entity
SaferXMLUploadMultiple	transactionID recordCount xmlDataZipFile destination username password	All
SaferGetXMLUpdate	transactionID version startDate username password	All
SaferGetXMLBaseline	transactionID version username password	All
SaferGetActivityLog	state startDate endDate username password	All

Additional methods may be created to support new SAFER services, including subscription services.

### 2.1.3 General Output Specification

Output from the SAFER Web Services Interface will conform to the standard SOAP message.

The contents of the message will contain either:

- 1) The XML data resulting from a successful query operation. This data may or may not be in compressed form.
- 2) A status or error message in XML format indicating success for an input transaction, or failure for an input or output transaction, including information about why the failure occurred.

### 2.1.4 Example SOAP Response

Here is an example of a SOAP Response to a SOAP Request to the SAFER Web Services interface. It is the response to the example request for MCMIS Safety and Census data for the motor carrier with DOT number 555555.

The content of the return value string has been reformatted for easier reading. The actual string is XML encoded in XML, which is difficult to read.

```
<?xml.version='1.0'.encoding='UTF-8'?>
```

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <SOAP-ENV:Body> <ns1:SaferQueryByDOTResponse xmlns:ns1="saferXML.SaferQueryService".SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
    <return xsi:type="xsd:string"><T0031 xmlns:abc="http://www.safersys.org/namespaces/T0031V1">
      <INTERFACE>
        <NAME>SAFER</NAME>
        <VERSION>04.02</VERSION>
      </INTERFACE>
      <TRANSACTION>
        <VERSION>01.00</VERSION>
        <OPERATION>REPLACE</OPERATION>
        <DATE_TIME>0</DATE_TIME>
        <TZ>ED</TZ> </TRANSACTION>
        <MCMIS_CENSUS_AND_SAFETY>
          <BUS>0</BUS>
          <CARRIER_HAZMAT_PLACARDED>0</CARRIER_HAZMAT_PLACARDED>
          <CARRIER_ID_NUMBER>555555</CARRIER_ID_NUMBER>
          <CARRIER_INTERSTATE>1</CARRIER_INTERSTATE>
          <CARRIER_INTRASTATE_HM>0</CARRIER_INTRASTATE_HM>
          <CARRIER_INTRASTATE_NHM>0</CARRIER_INTRASTATE_NHM>
          <CARRIER_NAME>ALMACEN E IMPORTACION DE REFACCIONES S A DE C V</CARRIER_NAME>
          <CITY>MEXICALI</CITY>
          <COLONIA>PUEBLO NUEVO</COLONIA>
          <COUNTRY>M</COUNTRY>
          <DATE_ADDED>1994-03-31</DATE_ADDED>
          <DBA_NAME>AIRSA</DBA_NAME>
          <DRIVER_INSPECTIONS_LAST15>9</DRIVER_INSPECTIONS_LAST15>
          <DRIVER_INSPECTIONS_LAST24>17</DRIVER_INSPECTIONS_LAST24>
          <DRIVER_INSPECTIONS_LAST30>20</DRIVER_INSPECTIONS_LAST30>
          <EMAIL_ADDRESS>bordermotorparts@adelphia.net</EMAIL_ADDRESS>
          <ENTITY_TYPE>C</ENTITY_TYPE>
          <FAX_NUMBER>7603570289</FAX_NUMBER>
          <FILE_CREATE_DATE>2004-02-28</FILE_CREATE_DATE>
          <ICC_NUMBER_1>232042</ICC_NUMBER_1>
          <ISS_INDICATOR>S</ISS_INDICATOR>
          <ISS_SCORE>25</ISS_SCORE>
          <ISS_SCORE_DATE>2004-01-23</ISS_SCORE_DATE>
          <LAST_UPDATE_DATE>2003-06-12</LAST_UPDATE_DATE>
          <LAST_UPDATE_USERID>GHERRERA</LAST_UPDATE_USERID>
          <MAIL_CITY>CALEXICO</MAIL_CITY>
          <MAIL_COUNTY_CODE>25</MAIL_COUNTY_CODE>
          <MAIL_STATE>CA</MAIL_STATE>
          <MAIL_STREET>P.O BOX K</MAIL_STREET>
          <MAIL_ZIP_CODE>92231 </MAIL_ZIP_CODE>
          <MCMIS_STATUS>A</MCMIS_STATUS>
          <MCMIS_STATUS_DATE>1994-03-31</MCMIS_STATUS_DATE>
          <MCS150_MILEAGE>3360</MCS150_MILEAGE>
          <MCS150_MILEAGE_YEAR>2000</MCS150_MILEAGE_YEAR>
          <MCS150_UPDATE_DATE>2003-05-30</MCS150_UPDATE_DATE>
          <OIC_NUMBER>06</OIC_NUMBER>
          <OOS_ALL_TYPES_LAST15>2</OOS_ALL_TYPES_LAST15>
          <OOS_ALL_TYPES_LAST24>2</OOS_ALL_TYPES_LAST24>
          <OOS_ALL_TYPES_LAST30>2</OOS_ALL_TYPES_LAST30>
          <OOS_VEHICLE_INSPECTIONS_LAST15>1</OOS_VEHICLE_INSPECTIONS_LAST15>
          <OOS_VEHICLE_INSPECTIONS_LAST24>1</OOS_VEHICLE_INSPECTIONS_LAST24>
        </MCMIS_CENSUS_AND_SAFETY>
      </TRANSACTION>
    </return>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```
<OOS_VEHICLE_INSPECTIONS_LAST30>1</OOS_VEHICLE_INSPECTIONS_LAST30>
<QUANTITY_DRIVERS>3</QUANTITY_DRIVERS>
<QUANTITY_DRIVERS_INTERSTATE>3</QUANTITY_DRIVERS_INTERSTATE>
<QUANTITY_INSPECTIONS_LAST15>9</QUANTITY_INSPECTIONS_LAST15>
<QUANTITY_INSPECTIONS_LAST24>17</QUANTITY_INSPECTIONS_LAST24>
<QUANTITY_INSPECTIONS_LAST30>20</QUANTITY_INSPECTIONS_LAST30>
<QUANTITY_POWER_UNITS>3</QUANTITY_POWER_UNITS>
<QUANTITY_TRUCKS>3</QUANTITY_TRUCKS>
<REGION_CODE>09</REGION_CODE>
<REVIEW_CARGO_TANK>0</REVIEW_CARGO_TANK>
<REVIEW_DRUG_ALCOHOL>0</REVIEW_DRUG_ALCOHOL>
<REVIEW_HOURS>0</REVIEW_HOURS>
<REVIEW_LICENSE>0</REVIEW_LICENSE>
<REVIEW_LOGS>0</REVIEW_LOGS>
<REVIEW_MEDICAL_CERTIFICATE>0</REVIEW_MEDICAL_CERTIFICATE>
<REVIEW_OTHER>0</REVIEW_OTHER>
<REVIEW_PAPERS>0</REVIEW_PAPERS>
<REVIEW_PLACARDS>0</REVIEW_PLACARDS>
<REVIEW_TRAFFIC>0</REVIEW_TRAFFIC>
<SAFESTAT_CATEGORY>H</SAFESTAT_CATEGORY>
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<SAFESTAT_RUN_INDICATOR>M</SAFESTAT_RUN_INDICATOR>
<SAFESTAT_VEHICLE_SEA>32 79</SAFESTAT_VEHICLE_SEA>
<SHIPPER_INTERSTATE>0</SHIPPER_INTERSTATE>
<SHIPPER_INTRASTATE_HM>0</SHIPPER_INTRASTATE_HM>
<STATE>BN</STATE>
<STREET>AVE. JALISCO. #. 946</STREET>
<TELEPHONE_NUMBER>7603574430</TELEPHONE_NUMBER>
<VEHICLE_INSPECTIONS_LAST15>5</VEHICLE_INSPECTIONS_LAST15>
<VEHICLE_INSPECTIONS_LAST24>9</VEHICLE_INSPECTIONS_LAST24>
<VEHICLE_INSPECTIONS_LAST30>12</VEHICLE_INSPECTIONS_LAST30>
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<VIOLATION_STEERING>2</VIOLATION_STEERING>
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<CARRIER_CLASS>
  <CLASS_CODE>01</CLASS_CODE>
</CARRIER_CLASS>
<CARRIER_CLASS>
  <CLASS_CODE>25</CLASS_CODE>
</CARRIER_CLASS>
<CARRIER_CARGO>
  <CARGO_CODE>GF</CARGO_CODE>
</CARRIER_CARGO>
<CARRIER_CARGO>
  <CARGO_CODE>ZZ</CARGO_CODE>
  <CARGO_OTHER_DESC>AUTO PARTS </CARGO_OTHER_DESC>
</CARRIER_CARGO>
</MCMIS_CENSUS_AND_SAFETY>
</T0031>
</return>
</ns1:SaferQueryByDOTResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

## 2.2 Transaction Set Overview

The following table summarizes the transaction set supported by the SAFER 4.4 Beta 1 Web Services Interface. Each transaction is supported by one or more methods depending on the keys that are desired for the query. During the Beta test period, additional transactions from the SAFER 4.2 ICD can be added if requested by the users and approved by the Sponsor.

The transaction IDs are shared with the SAFER XML/FTP Interface in order to facilitate the re-use of existing state system functionality when implementing SAFER Web Service Client components, where possible. They are also shared in order to leverage FMCSA's previous investments in the SAFER XML/FTP Interface, and to allow enhancements to either interface to be shared by the other interface.



**Table 2. SAFER Version 4.4 Beta 1 XML/Web Services Transaction Set**

<b>ID</b>	<b>Type</b>	<b>Transaction</b>	<b>Transaction Data Tag</b>	<b>Method</b>
T0018	Input	Inspection Report	INSPECTION	SaferXMLUpload
T0028	Output	IRP Registration (Cab Card)	IRP_REGISTRATION	SaferQueryByStatePlate
T0028	Output	IRP Registration (Cab Card)	IRP_REGISTRATION	SaferQueryByVIN
T0031	Output	MCMIS Safety and Census	MCMIS_SAFETY_CENSUS	SaferQueryByDOT

Future versions of the SAFER Web Services interface may contain the following transactions, or other requested transactions.

Comments and change requests can be submitted to the Volpe Center during the review period.

Subsequently, change requests can be submitted to the CVISN Architecture Configuration Control Board.

**Table 2A. Possible Future SAFER Web Services Transaction Set**

<b>ID</b>	<b>Type</b>	<b>Transaction</b>	<b>Transaction Data Tag</b>	<b>Method</b>
T0018	Input	Inspection Report	VEHICLE_INSPECTION	SaferXMLUpload
T0019	Input	IFTA Account	IFTA_ACCOUNT	SaferXMLUpload
T0020	Input	IRP Account	IRP_ACCOUNT	SaferXMLUpload
T0021	Input	IRP Fleet	IRP_FLEET	SaferXMLUpload
T0022	Input	IRP Registration (Cab Card)	IRP_REGISTRATION	SaferXMLUpload
T0023	Input	Carrier E-Screening Authorization	CARRIER_ESCREEN	SaferXMLUpload
T0024	Input	Vehicle Transponder ID	VEHICLE_TRANSPONDER_ID	SaferQueryByVIN
T0025	Output	IFTA Account	IFTA_ACCOUNT	SaferQueryByDOT
T0025	Output	IFTA Account	IFTA_ACCOUNT	SaferQueryByIFTA
T0026	Output	IRP Account	IRP_ACCOUNT	SaferQueryByDOT
T0027	Output	IRP Fleet	IRP_FLEET	SaferQueryByDOT
T0027	Output	IRP Fleet	IRP_FLEET	SaferQueryByIRP
T0027	Output	IRP Fleet	IRP_FLEET	SaferQueryByFleet

ID	Type	Transaction	Transaction Data Tag	Method
T0028	Output	IRP Registration (Cab Card)	IRP_REGISTRATION	SaferQueryByStatePlate
T0028	Output	IRP Registration (Cab Card)	IRP_REGISTRATION	SaferQueryByVIN
T0029	Output	Carrier E- Screening Authorization	CARRIER_ESCREEN	SaferQueryByVIN
T0029	Output	Carrier E- Screening Authorization	CARRIER_ESCREEN	SaferQueryByTransponderID
T0030	Output	Vehicle Inspection Summary	VEHICLE_INSPECTION_SUMMARY	SaferQueryByStatePlate
T0030	Output	Vehicle Inspection Summary	VEHICLE_INSPECTION_SUMMARY	SaferQueryByVIN
T0031	Output	MCMIS Safety and Census	MCMIS_SAFETY_CENSUS	SaferQueryByDOT

### 2.3 SAFER XML/Web Services Output Specification

The SAFER Web Services transaction output shall contain output conforming to the corresponding SAFER 4.2 XML/FTP output transaction XML schema definition.

### 2.4 SAFER XML/Web Services Response Specification

Unsuccessful Output transactions and all Input transactions will return a SAFER Web Services XML Response Message. The SAFER Web Services XML Response Message will conform to the following format. An XML Schema for this format will be provided.

```
<?xml version = "1.0"?>
<T0001 xmlns="http://www.safersys.org/namespaces/T0001V1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.safersys.org/namespaces/T0001V1 T0001V1.xsd">
<INTERFACE>
  <NAME>SAFER</NAME>
  <VERSION>4.2</VERSION>
</INTERFACE>
<TRANSACTION>
```

```

<VERSION>01.00</VERSION>
<OPERATION>RESPONSE</OPERATION>
<DATE_TIME>0</DATE_TIME>
<TZ>ED</TZ>
</TRANSACTION>
<SAFER_RESPONSE>
  <messageID>n</messageID>
  <error>Here is an example message</error>
  <messageID>n</messageID>
  <error>Here is another example message.</error>
</T0001>

```

The following message codes will be supported:

Response Code	Meaning
-1	Input was successfully processed
1	Unknown transaction ID
2	Unsupported transaction ID
3	DOT number is not present
4	STATE is not present
5	LICENSE is not present
6	VIN is not present
7	ICC number is not present
8	DOT number is invalid
9	STATE is invalid
10	LICENSE is invalid
11	VIN is invalid
12	XML_DATA is not present
13	XML_DATA is not well formed XML
14	XML_DATA failed schema validation
15	No data found matching query criteria
16	Database connection failed
17	Processing error
18	Input failed business rule validation
19	ICC number is invalid
20	Transaction ID is not present
21	MC or MX number is not present
22	MC or MX number is invalid
23	IFTA account number is not present
24	IFTA account number is invalid
25	IRP account number is not present
26	IRP account number is invalid
27	Fleet number is not present
28	Fleet number is invalid
29	Carrier Name is not present
30	Carrier Name is invalid

Response Code	Meaning
31	CDL number is not present
32	CDL number is invalid
33	DUNS number is not present
34	DUNS number is invalid
35	Invalid username or password
36	User not authorized to perform transaction
37	Invalid stylesheet URL

## 2.5 Transaction Examples

Examples of transactions will be included here in the future.

## 2.6 SAFER Web Service Test Client

A test client will be provided to the SAFER 4.4 Beta 1 Web Services Interface. It will be provided to support troubleshooting and as a reference for implementers of CVIEW web service client programs.

## 2.7 SAFER Web Services WSDL File

The current WSDL file for the Beta test version is included for reference. The WSDL file for the Production version will be forthcoming.

```
<?xml version = '1.0' encoding = 'windows-1252'?>
<!--Generated by the Oracle9i JDeveloper Web Services WSDL Generator-->
<!--Date Created: Thu Apr 29 17:23:40 EDT 2004-->
<definitions
  name="SaferQueryService"
  targetNamespace="http://safersys.org/jdeveloper/generated/saferXML/SaferQueryService"
  xmlns="http://schemas.xmlsoap.org/wsdl/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:tns="http://safersys.org/jdeveloper/generated/saferXML/SaferQueryService"
  xmlns:ns1="http://safersys.org/jdeveloper/generated/saferXML/SaferQueryService/schema">
  <types>
    <schema
      targetNamespace="http://safersys.org/jdeveloper/generated/saferXML/SaferQueryService/schema"
      xmlns="http://www.w3.org/2001/XMLSchema"
      xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding"/>
    </types>
    <message name="SaferQueryByDOT0Request">
      <part name="transactionID" type="xsd:string"/>
      <part name="dotNumber" type="xsd:string"/>
      <part name="lastUpdateDate" type="xsd:string"/>
      <part name="stylesheetURL" type="xsd:string"/>

```

```
<part name="username" type="xsd:string"/>
<part name="password" type="xsd:string"/>
</message>
<message name="SaferQueryByDOT0Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferQueryByICC1Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="iccNumber" type="xsd:string"/>
  <part name="lastUpdateDate" type="xsd:string"/>
  <part name="stylesheetURL" type="xsd:string"/>
  <part name="username" type="xsd:string"/>
  <part name="password" type="xsd:string"/>
</message>
<message name="SaferQueryByICC1Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferQueryByMCMX2Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="mcOrMxNumber" type="xsd:string"/>
  <part name="lastUpdateDate" type="xsd:string"/>
  <part name="stylesheetURL" type="xsd:string"/>
  <part name="username" type="xsd:string"/>
  <part name="password" type="xsd:string"/>
</message>
<message name="SaferQueryByMCMX2Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferQueryByStatePlate3Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="state" type="xsd:string"/>
  <part name="plate" type="xsd:string"/>
  <part name="lastUpdateDate" type="xsd:string"/>
  <part name="stylesheetURL" type="xsd:string"/>
  <part name="username" type="xsd:string"/>
  <part name="password" type="xsd:string"/>
</message>
<message name="SaferQueryByStatePlate3Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferQueryByVIN4Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="VIN" type="xsd:string"/>
  <part name="lastUpdateDate" type="xsd:string"/>
  <part name="stylesheetURL" type="xsd:string"/>
  <part name="username" type="xsd:string"/>
  <part name="password" type="xsd:string"/>
```

```
</message>
<message name="SaferQueryByVIN4Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferXMLUpload5Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="xmlData" type="xsd:string"/>
  <part name="destination" type="xsd:string"/>
  <part name="username" type="xsd:string"/>
  <part name="password" type="xsd:string"/>
</message>
<message name="SaferXMLUpload5Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="SaferWebQuery6Request">
  <part name="transactionID" type="xsd:string"/>
  <part name="p1" type="xsd:string"/>
  <part name="p2" type="xsd:string"/>
</message>
<message name="SaferWebQuery6Response">
  <part name="return" type="xsd:string"/>
</message>
<message name="returnOne7Request"/>
<message name="returnOne7Response">
  <part name="return" type="xsd:int"/>
</message>
<message name="returnEmptyString8Request"/>
<message name="returnEmptyString8Response">
  <part name="return" type="xsd:string"/>
</message>
<portType name="SaferQueryServicePortType">
  <operation name="SaferQueryByDOT">
    <input name="SaferQueryByDOT0Request" message="tns:SaferQueryByDOT0Request"/>
    <output name="SaferQueryByDOT0Response" message="tns:SaferQueryByDOT0Response"/>
  </operation>
  <operation name="SaferQueryByICC">
    <input name="SaferQueryByICC1Request" message="tns:SaferQueryByICC1Request"/>
    <output name="SaferQueryByICC1Response" message="tns:SaferQueryByICC1Response"/>
  </operation>
  <operation name="SaferQueryByMCMX">
    <input name="SaferQueryByMCMX2Request" message="tns:SaferQueryByMCMX2Request"/>
    <output name="SaferQueryByMCMX2Response" message="tns:SaferQueryByMCMX2Response"/>
  </operation>
  <operation name="SaferQueryByStatePlate">
    <input name="SaferQueryByStatePlate3Request" message="tns:SaferQueryByStatePlate3Request"/>
    <output name="SaferQueryByStatePlate3Response"
message="tns:SaferQueryByStatePlate3Response"/>
  </operation>
</portType>
```

```
</operation>
<operation name="SaferQueryByVIN">
  <input name="SaferQueryByVIN4Request" message="tns:SaferQueryByVIN4Request"/>
  <output name="SaferQueryByVIN4Response" message="tns:SaferQueryByVIN4Response"/>
</operation>
<operation name="SaferXMLUpload">
  <input name="SaferXMLUpload5Request" message="tns:SaferXMLUpload5Request"/>
  <output name="SaferXMLUpload5Response" message="tns:SaferXMLUpload5Response"/>
</operation>
<operation name="SaferWebQuery">
  <input name="SaferWebQuery6Request" message="tns:SaferWebQuery6Request"/>
  <output name="SaferWebQuery6Response" message="tns:SaferWebQuery6Response"/>
</operation>
<operation name="returnOne">
  <input name="returnOne7Request" message="tns:returnOne7Request"/>
  <output name="returnOne7Response" message="tns:returnOne7Response"/>
</operation>
<operation name="returnEmptyString">
  <input name="returnEmptyString8Request" message="tns:returnEmptyString8Request"/>
  <output name="returnEmptyString8Response" message="tns:returnEmptyString8Response"/>
</operation>
</portType>
<binding name="SaferQueryServiceBinding" type="tns:SaferQueryServicePortType">
  <soap:binding style="rpc" transport="http://schemas.xmlsoap.org/soap/http"/>
  <operation name="SaferQueryByDOT">
    <soap:operation soapAction="" style="rpc"/>
    <input name="SaferQueryByDOT0Request">
      <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
    </input>
    <output name="SaferQueryByDOT0Response">
      <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
    </output>
  </operation>
  <operation name="SaferQueryByICC">
    <soap:operation soapAction="" style="rpc"/>
    <input name="SaferQueryByICC1Request">
      <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
    </input>
    <output name="SaferQueryByICC1Response">
      <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
    </output>
  </operation>
  <operation name="SaferQueryByMCMX">
```

```
<soap:operation soapAction="" style="rpc"/>
<input name="SaferQueryByMCMX2Request">
  <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
</input>
<output name="SaferQueryByMCMX2Response">
  <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
</output>
</operation>
<operation name="SaferQueryByStatePlate">
  <soap:operation soapAction="" style="rpc"/>
  <input name="SaferQueryByStatePlate3Request">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </input>
  <output name="SaferQueryByStatePlate3Response">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </output>
</operation>
<operation name="SaferQueryByVIN">
  <soap:operation soapAction="" style="rpc"/>
  <input name="SaferQueryByVIN4Request">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </input>
  <output name="SaferQueryByVIN4Response">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </output>
</operation>
<operation name="SaferXMLUpload">
  <soap:operation soapAction="" style="rpc"/>
  <input name="SaferXMLUpload5Request">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </input>
  <output name="SaferXMLUpload5Response">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </output>
</operation>
<operation name="SaferWebQuery">
  <soap:operation soapAction="" style="rpc"/>
  <input name="SaferWebQuery6Request">
```



```
<soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
  </input>
  <output name="SaferWebQuery6Response">
    <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
      </output>
    </operation>
  <operation name="returnOne">
    <soap:operation soapAction="" style="rpc"/>
    <input name="returnOne7Request">
      <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
        </input>
      <output name="returnOne7Response">
        <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
          </output>
        </operation>
      <operation name="returnEmptyString">
        <soap:operation soapAction="" style="rpc"/>
        <input name="returnEmptyString8Request">
          <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
            </input>
          <output name="returnEmptyString8Response">
            <soap:body use="encoded" namespace="saferXML.SaferQueryService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
              </output>
            </operation>
          </binding>
        <service name="SaferQueryService">
          <port name="SaferQueryServicePort" binding="tns:SaferQueryServiceBinding">
            <soap:address location=""/>
          </port>
        </service>
      </definitions>
```

## 3.1 Transaction T0018, Inspection Report Input Transaction

### 3.1.1 Identification

This interface is SAFER 04.02, T0018 01.00

Root Transaction Tag: T0018

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: INSPECTION\_REPORT

### 3.1.2 Information Transmitted

#### 3.1.2.1 Input

The SAFER Web Services Transaction T0018 transaction input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

Argument	Contents
transactionID	T0018
xmlData	XML input conforming to T0018 schema
destination	Additional destination (besides SAFER) for data that is sent to other systems; for the IR Upload it is the SAFETYNET destination, the same as the SAFETYNET office mailbox name in Aspen 2.4.x
username	User name for authentication
password	Password for authentication

#### 3.1.2.2 Output

The T0018 schema will be specified in another document since it is not present in the SAFER 4.2 ICD.

### 3.1.3 Interface Terminals

#### 3.1.3.1 Input Source

A state system, such as CVIEW or its equivalent

#### 3.1.3.2 Input Destination

SAFER Version 4.4

### **3.1.3.3 Output Source**

SAFER Version 4.4

### **3.1.3.4 Output Destination**

A state system, such as CVIEW or its equivalent

## **3.1.4 Communication/Transmission Process**

### **3.1.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

### **3.1.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### **3.1.4.2 Conditional Processing**

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

### **3.1.4.3 Data Validation**

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### **3.1.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### **3.1.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### **3.1.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

#### **3.1.4.7 Priority**

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

#### **3.1.4.8 Maximum Transaction Size**

There will be a limit to the number of inspections that can be loaded in a single Web Service upload transaction. Bulk loads of Inspection Reports can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD using the T0018 transaction specified in another addendum to the SAFER 4.2 ICD.

## 3.2 Transaction T0019, IFTA Input Transaction

### 3.2.1 Identification

This interface is SAFER 04.02, T0019 01.00

Root Transaction Tag: T0019

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IFTA\_LICENSE

### 3.2.2 Information Transmitted

#### 3.2.2.1 Input

The SAFER Web Services Transaction T0019 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
username	Username for authentication
password	Password for authentication

#### 3.2.2.2 Output

The T0019 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.2.3 Interface Terminals

#### 3.2.3.2 Input Destination

SAFER Version 4.4

#### 3.2.3.3 Output Source

SAFER Version 4.4

#### 3.2.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### 3.2.4 Communication/Transmission Process

#### 3.2.4.1 Format/Record Layout

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

### 3.2.4.2 Standards and Conventions

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### 3.2.4.2 Conditional Processing

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a batch 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 by-transaction descriptions of conditional processing that follow. Marking the data with status codes only applies 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 type of status code determines the type of processing the record will undergo. For these the domain of values is Update, Delete, and Insert. Note that the conditional processing occurs in the order shown below for this transaction.

<b>Condition</b>	Incoming data is older than what’s in the database
<b>Check</b>	If there's a match on ifta_license_number, ifta_base_country, and ifta_base_state and ifta_update_date is older than that of existing record
<b>Result</b>	Sets incoming record's status to OLDER DATA

<b>Condition</b>	Incoming data contains duplicate key data
<b>Check</b>	If there's a match on ifta_license_number, ifta_base_country, and ifta_base_state, effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUP_KEY

<b>Condition</b>	Name Type must be unique
<b>Check</b>	If there's a match on ifta_license_number, ifta_base_country, ifta_base_state, and name_type within the incoming data feed; effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets the record's status to DUPLICATE NAME TYPE

<b>Condition</b>	Address Type must be unique
<b>Check</b>	If there's a match on ifta_license_number, ifta_base_country, ifta_base_state, and address_type within the incoming data feed; effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets the record's status to DUPLICATE ADDRESS TYPE

### 3.2.4.3 Data Validation

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### 3.2.4.4 Error Processing and Recovery

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### 3.2.4.5 Schedule/Frequency

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### 3.2.4.6 Initiation Method

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

### 3.2.4.7 Priority

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

### 3.2.4.8 Maximum Transaction Size

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

### 3.3 Transaction T0020, IRP Account Input Transaction

#### 3.3.1 Identification

This interface is SAFER 04.02, T0020 01.00

Root Transaction Tag: T0020

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_ACCOUNT

#### 3.3.2 Information Transmitted

##### 3.3.2.1 Input

The SAFER Web Services Transaction T0020 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
username	Username for authentication
password	Password for authentication

##### 3.3.2.2 Output

The T0020 schema is specified in Appendix L of the SAFER 4.2 ICD.

#### 3.3.3 Interface Terminals

##### 3.3.3.2 Input Destination

SAFER Version 4.4

##### 3.3.3.3 Output Source

SAFER Version 4.4

##### 3.3.3.4 Output Destination

A state system, such as CVIEW or its equivalent

#### 3.3.4 Communication/Transmission Process

##### 3.3.4.1 Format/Record Layout



Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

### 3.3.4.2 Standards and Conventions

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### 3.3.4.2 Conditional Processing

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a batch 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 by-transaction descriptions of conditional processing that follow. Marking the data with status codes only applies 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 type of status code determines the type of processing the record will undergo. For these the domain of values is Update, Delete, and Insert. Note that the conditional processing occurs in the order shown below for this transaction.

<b>Condition</b>	Incoming data is older than what’s in the database
<b>Check</b>	If there's a match on irp_account_number, irp_base_country, and irp_base_state and irp_update_date is older than that of existing record
<b>Result</b>	Sets incoming record's status to OLDER DATA

<b>Condition</b>	Incoming data contains duplicate key data
<b>Check</b>	If there's a match on irp_account_number, irp_base_country, and irp_base_state, effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUP_KEY

<b>Condition</b>	Name Type must be unique
<b>Check</b>	If there's a match on irp_account_number, irp_base_country, irp_base_state, and name_type within the incoming data feed; effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets the record's status to DUPLICATE NAME TYPE

<b>Condition</b>	Address Type must be unique
<b>Check</b>	If there's a match on irp_account_number, irp_base_country, irp_base_state, and address_type within the incoming data feed; effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets the record's status to DUPLICATE ADDRESS TYPE

<b>Condition</b>	Address data must be populated
<b>Check</b>	If all attributes from PO Box, Street_1, or Street_2 are null or missing, the record's status will be marked as below
<b>Result</b>	Sets the record's status to NO STREET

### 3.3.4.3 Data Validation

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### 3.3.4.4 Error Processing and Recovery

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### 3.3.4.5 Schedule/Frequency

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### 3.3.4.6 Initiation Method

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

### 3.3.4.7 Priority

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

### 3.3.4.8 Maximum Transaction Size

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

## 3.4 Transaction T0021, IRP Fleet Input Transaction

### 3.4.1 Identification

This interface is SAFER 04.02, T0021 01.00

Root Transaction Tag: T0021

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_FLEET

### 3.4.2 Information Transmitted

#### 3.4.2.1 Input

The SAFER Web Services Transaction T0021 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
username	Username for authentication
password	Password for authentication

#### 3.4.2.2 Output

The T0021 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.4.3 Interface Terminals

#### 3.4.3.2 Input Destination

SAFER Version 4.4

#### 3.4.3.3 Output Source

SAFER Version 4.4

#### 3.4.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### 3.4.4 Communication/Transmission Process

#### 3.4.4.1 Format/Record Layout

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.4.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.4.4.2 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 has the same update date, the database will be updated.

#### **3.4.4.3 Data Validation**

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

#### **3.4.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

#### **3.4.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.4.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the `SaferXMLUpload` using its own SAFER Web Services Client interface.

#### **3.4.4.7 Priority**

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

#### **3.4.4.8 Maximum Transaction Size**

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

## 3.5 Transaction T0022, IRP Registration (Cab Card) Input Transaction

### 3.5.1 Identification

This interface is SAFER 04.02, T0022 01.00

Root Transaction Tag: T0022

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_REGISTRATION

### 3.5.2 Information Transmitted

#### 3.5.2.1 Input

The SAFER Web Services Transaction T0022 transaction input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

Argument	Contents
transactionID	T0022
xmlData	XML input conforming to T0022 schema
username	Username for authentication
password	Password for authentication

#### 3.5.2.2 Output

The T0022 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.5.3 Interface Terminals

#### 3.5.3.2 Input Destination

SAFER Version 4.4

#### 3.5.3.3 Output Source

SAFER Version 4.4

#### 3.5.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### 3.5.4 Communication/Transmission Process

#### 3.5.4.1 Format/Record Layout

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

### 3.5.4.2 Standards and Conventions

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### 3.5.4.2 Conditional Processing

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a batch 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 by-transaction descriptions of conditional processing that follow. Marking the data with status codes only applies 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 type of status code determines the type of processing the record will undergo. For these the domain of values is Update, Delete, and Insert. Note that the conditional processing occurs in the order shown below for this transaction.

<b>Condition</b>	Incoming data contains duplicate VIN key data
<b>Check</b>	If there's a match on prism_state and VIN, effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUPLICATE VIN

<b>Condition</b>	Incoming data contains duplicate State Plate key data
<b>Check</b>	If there's a match on prism_state and license_plate_number, effect is that all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUPLICATE STATE PLATE

<b>Condition</b>	Incoming data VIN matches existing VIN key, needs to have its foreign key set
<b>Check</b>	If there's a match on VIN, need to assign incoming data the matching record’s foreign key (vehicle_seq_number) to preserve referential integrity
<b>Result</b>	Sets the record's vehicle_seq_number to that of existing VIN record

<b>Condition</b>	Incoming data VIN does not match existing VIN key, needs to have its foreign key set
<b>Check</b>	If there's no match on VIN, need to assign incoming data the next value available from the database's sequence (vehicle_seq_number) to preserve referential integrity
<b>Result</b>	Sets the record's vehicle_seq_number to the next value available from the database's (vehicleseq) sequence

<b>Condition</b>	Incoming license plate number + license plate state combination matches existing key, needs to have its foreign key set to the existing record's ID
<b>Check</b>	If there's a match on license_plate_number + license_plate_state, need to assign incoming data the matching record's foreign key (license_seq_number) to preserve referential integrity
<b>Result</b>	Sets the record's vehicle_seq_number to that of existing record's license_plate_number + license_plate_state value

<b>Condition</b>	Incoming data does not match existing license_plate_number + license_plate_state key, needs to have its foreign key set
<b>Check</b>	If there's no match on the license_plate_number + license_plate_state key, need to assign incoming data the next value available from the database's sequence (license_seq_number) to preserve referential integrity
<b>Result</b>	Sets the record's license_seq_number to the next value available from the database's (licenseseq) sequence

<b>Condition</b>	Incoming data VIN and state values match an existing record's – this record is an Update
<b>Check</b>	If there's a match on VIN, state, and authoritative_source = 'IRP', and it has not been flagged in any way by preceding conditional processing logic, the record's status will be marked as below
<b>Result</b>	Sets the record's status to UPDATE

<b>Condition</b>	Incoming data plate number and state values match an existing record's – this record is an Update
<b>Check</b>	If there's a match on license_plate_number, state, and authoritative_source = 'IRP', and it has not been flagged in any way by preceding conditional processing logic, the record's status will be marked as below
<b>Result</b>	Sets the record's status to UPDATE

<b>Condition</b>	Incoming data references a PRISM record, need to flag it as such
<b>Check</b>	If there's a match with existing db data on VIN, license_plate_number, state, prism_state, cvis_default_carrier, and authoritative_source is PRISM the record's status will be marked as below
<b>Result</b>	Sets the record's status to PRISM DATA



<b>Condition</b>	Incoming data missing some PRISM criteria, but matches on others, need to flag it as bad.
<b>Check</b>	If there's a match with existing db data on VIN, prism_state, and license_plate_number, but not on state and/or authoritative_source is not PRISM, record's status will be marked as below
<b>Result</b>	Sets the record's status to BAD

<b>Condition</b>	Records whose status codes have not yet been marked in any way are simply to be inserted.
<b>Check</b>	If the status code for the record is null at this point, mark the status code as INSERT.
<b>Result</b>	Record will be inserted into the database.

<b>Condition</b>	Incoming data contains data that is newer than what's in the database
<b>Check</b>	If there's a match on vehicle_seq_number, license_seq_number and last_update_date is newer than that of the existing record, mark the status code as below.
<b>Result</b>	Sets the record's status to UPDATE

<b>Condition</b>	Check that at least one of the proration records is for the base state.
<b>Check</b>	If there's not a 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.
<b>Result</b>	Sets the record's status to IRP_JURIS

<b>Condition</b>	Check that intrastate registrations can have one and only one proration
<b>Check</b>	If there's a match on vehicle_seq_number, license_seq_number, prism_state and interstate_flag = '0', mark all but one of these records as below.
<b>Result</b>	Sets all but one record's status to INTRA_MULT

<b>Condition</b>	Check incoming records for valid IRP data.
<b>Check</b>	If the incoming record has an irp_account_number, but there's no match on irp_base_state and irp_account_number, mark the record as below.
<b>Result</b>	Sets the record's status to NO_IRP

<b>Condition</b>	Check incoming records for valid Fleet data
<b>Check</b>	If the incoming record has an irp_fleet_number, but there's no match on irp_base_state, irp_account_number, and irp_fleet_number, mark the record as below
<b>Result</b>	Sets the record's status to NO_FLEET

### **3.5.4.3 Data Validation**

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### **3.5.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### **3.5.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### **3.5.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

### **3.5.4.7 Priority**

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

### **3.5.4.8 Maximum Transaction Size**

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

## 3.6 Transaction T0023, Carrier E-Screening Authorization Input Transaction

### 3.6.1 Identification

This interface is SAFER 04.02, T0023 01.00

Root Transaction Tag: T0023

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: CARRIER\_ESCREEN\_AUTHORIZATION

### 3.6.2 Information Transmitted

#### 3.6.2.1 Input

The SAFER Web Services Transaction T0023 transaction input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

Argument	Contents
transactionID	T0023
xmlData	XML input conforming to T0023 schema
username	Username for authentication
password	Password for authentication

#### 3.6.2.2 Output

The T0023 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.6.3 Interface Terminals

#### 3.6.3.2 Input Destination

SAFER Version 4.4

#### 3.6.3.3 Output Source

SAFER Version 4.4

#### 3.6.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### 3.6.4 Communication/Transmission Process

#### 3.6.4.1 Format/Record Layout

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### 3.6.4.2 Standards and Conventions

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### 3.6.4.2 Conditional Processing

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a batch 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 by-transaction descriptions of conditional processing that follow. Marking the data with status codes only applies 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 type of status code determines the type of processing the record will undergo. For these the domain of values is Update, Delete, and Insert. Note that the conditional processing occurs in the order shown below for this transaction.

<b>Condition</b>	Assign carrier sequence number to incoming record
<b>Check</b>	If match on carrier_id_number assign associated sequence number value to the record, if no match found, assign an error code to the data record
<b>Result</b>	Incoming data record has valid carrier_id value or set the record's status to NO_CARRIER

<b>Condition</b>	Incoming data contains duplicate key data
<b>Check</b>	If there are matches in the input data on carrier_id_number,jurisdiction_code,activity_code, all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUP_KEY

<b>Condition</b>	Enforce foreign key constraints on carrier_action
<b>Check</b>	If no match is found between incoming record's carrier_escreen carrier_action and the database's car_veh_action_lookup code value, the record is flagged
<b>Result</b>	Sets incoming record's status to NO_CARRIER_ACTION

<b>Condition</b>	Enforce foreign key constraints on jurisdiction_action
<b>Check</b>	If no match is found between incoming record's carrier_escreen jurisdiction_action and the database's jurisdiction_action_lookup code value, the record is flagged
<b>Result</b>	Sets incoming record's status to NO_JURIS_ACTION

<b>Condition</b>	Enforce foreign key constraints on jurisdiction_code + activity_code
<b>Check</b>	If no match is found between incoming record's carrier_escreen jurisdiction_code + activity_code and the database jurisdiction_participation table's corresponding jurisdiction_code + activity_code, the record is flagged
<b>Result</b>	Sets incoming record's status to NO_JURIS_PARTICIPATION

<b>Condition</b>	Incoming data is older than what's in the database
<b>Check</b>	If there's a match on carrier_seq_number, jurisdiction_code, and activity_code and the incoming record's carrier_action_date is older than the database's, the record is flagged
<b>Result</b>	Sets incoming record's status to OLDER_DATA

### 3.6.4.3 Data Validation

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### 3.6.4.4 Error Processing and Recovery

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### 3.6.4.5 Schedule/Frequency

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### 3.6.4.6 Initiation Method

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

### **3.6.4.7 Priority**

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

### **3.6.4.8 Maximum Transaction Size**

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

## 3.7 Transaction T0024, Vehicle Transponder ID Input Transaction

### 3.7.1 Identification

This interface is SAFER 04.02, T0024 01.00

Root Transaction Tag: T0024

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: VEHICLE\_TRANSPONDER\_ID

### 3.7.2 Information Transmitted

#### 3.7.2.1 Input

The SAFER Web Services Transaction T0024 transaction input shall consist of an invocation of the SaferXMLUpload method with the following arguments:

Argument	Contents
transactionID	T0024
xmlData	XML input conforming to T0024 schema
username	Username for authentication
password	Password for authentication

#### 3.7.2.2 Output

The T0024 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.7.3 Interface Terminals

#### 3.7.3.2 Input Destination

SAFER Version 4.4

#### 3.7.3.3 Output Source

SAFER Version 4.4

#### 3.7.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### 3.7.4 Communication/Transmission Process

#### 3.7.4.1 Format/Record Layout

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

### 3.7.4.2 Standards and Conventions

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### 3.7.4.2 Conditional Processing

SAFER transactions undergo conditional processing before they are loaded into the database. Each record in a batch 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 by-transaction descriptions of conditional processing that follow. Marking the data with status codes only applies 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 type of status code determines the type of processing the record will undergo. For these the domain of values is Update, Delete, and Insert. Note that the conditional processing occurs in the order shown below for this transaction.

<b>Condition</b>	Incoming data contains duplicate key data
<b>Check</b>	If there are matches on vin within the input file, all but one such record will be marked as a duplicate
<b>Result</b>	Sets incoming record's status to DUP_KEY

<b>Condition</b>	The input record’s VIN must be in the vehicle_vin table and it must have at least one registration.
<b>Check</b>	If there are matches between the input record’s vin and the database’s vin and between that matching database record’s vehicle_seq_number and its vehicle_registration table’s vehicle_seq_number, mark the record as an update.
<b>Result</b>	Sets incoming record's status to UPDATE

<b>Condition</b>	Reject input records without vehicle sequence numbers
<b>Check</b>	If the vehicle_seq_number value is null or missing, set the record to be rejected.
<b>Result</b>	Sets incoming record's status to BAD



<b>Condition</b>	Incoming data is older than what's in the database
<b>Check</b>	If there's a match with the database on vehicle_seq_number, and the incoming record's transponder_update_date is older than the database's, the record is flagged
<b>Result</b>	Sets incoming record's status to OLDER_DATA

<b>Condition</b>	Incoming transponder_number does not match the vehicle
<b>Check</b>	If there's a match with the database on transponder_number but not a match on vin, the record is flagged
<b>Result</b>	Sets incoming record's status to TRANSPONDER_ID_EXISTS

### **3.7.4.3 Data Validation**

Data validation shall be done automatically in accordance with the schema defined for this transaction. Refer to the schema in the addendum to Appendix L of the SAFER 4.2 ICD.

### **3.7.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction shall not be processed, and a response message about the error will be returned to the client system.

### **3.7.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### **3.7.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferXMLUpload using its own SAFER Web Services Client interface.

### **3.7.4.7 Priority**

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

### **3.7.4.8 Maximum Transaction Size**

There will be a limit to the number of records that can be loaded in a single Web Service upload transaction. Bulk loads can be made using the SAFER XML/FTP Interface specified in the SAFER 4.2 ICD.

## 3.8 Transaction T0025, IFTA Output Transaction

### 3.8.1 Identification

This interface is SAFER 04.02, T0019 01.00

Root Transaction Tag: T0025

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IFTA\_LICENSE

### 3.8.2 Information Transmitted

#### 3.8.2.1 Input

The SAFER Web Services Transaction T0025 transaction input shall consist of an invocation of the 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 stylesheet
username	Username for authentication
password	Password for authentication

#### 3.8.2.2 Output

The T0025 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.8.3 Interface Terminals

#### 3.8.3.1 Input Source

A state system, such as CVIEW or its equivalent

#### 3.8.3.2 Input Destination

SAFER Version 4.4

#### 3.8.3.3 Output Source

SAFER Version 4.4

#### 3.8.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### **3.8.4 Communication/Transmission Process**

#### **3.8.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.8.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.8.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

##### **3.8.4.2.1 Server Side Conditional Processing**

There is no server side conditional processing for this transaction.

##### **3.8.4.2.2 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.

#### **3.8.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.8.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.8.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.8.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByDOT method using its own SAFER Web Services Client interface.

#### **3.8.4.7 Priority**

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

#### **3.8.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.

## 3.9 Transaction T0026, IRP Account Output Transaction

### 3.9.1 Identification

This interface is SAFER 04.02, T0026 01.00

Root Transaction Tag: T0026

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_ACCOUNT

### 3.9.2 Information Transmitted

#### 3.9.2.1 Input

The SAFER Web Services Transaction T0026 transaction input shall consist of an invocation of the SaferQueryByDOT method with the following arguments:

Argument	Contents
transactionID	T0026
dotNumber	USDOT Number of motor carrier
lastUpdateDate	Date of last update received by the client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

#### 3.9.2.2 Output

The T0026 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.9.3 Interface Terminals

#### 3.9.3.1 Input Source

A state system, such as CVIEW or its equivalent

#### 3.9.3.2 Input Destination

SAFER Version 4.4

#### 3.9.3.3 Output Source

SAFER Version 4.4

#### 3.9.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### **3.9.4 Communication/Transmission Process**

#### **3.9.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.9.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.9.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

##### **3.9.4.2.1 Server Side Conditional Processing**

There is no server side conditional processing for this transaction.

##### **3.9.4.2.2 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.

#### **3.9.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.9.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.9.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.9.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByDOT method using its own SAFER Web Services Client interface.

#### **3.9.4.7 Priority**

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

#### **3.9.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.

## 3.10 Transaction T0027, IRP Fleet Output Transaction

### 3.10.1 Identification

This interface is SAFER 04.02, T0027 01.00

Root Transaction Tag: T0027

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_FLEET

### 3.10.2 Information Transmitted

#### 3.10.2.1 Input

The SAFER Web Services Transaction T0027 transaction input shall consist of an invocation of the SaferQueryByDOT method with the following arguments:

Argument	Contents
transactionID	T0027
dotNumber	USDOT Number of motor carrier
lastUpdateDate	Date of last update received by client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

#### 3.10.2.2 Output

The T0027 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.10.3 Interface Terminals

#### 3.10.3.1 Input Source

A state system, such as CVIEW or its equivalent

#### 3.10.3.2 Input Destination

SAFER Version 4.4

#### 3.10.3.3 Output Source

SAFER Version 4.4

#### 3.10.3.4 Output Destination



A state system, such as CVIEW or its equivalent

### **3.10.4 Communication/Transmission Process**

#### **3.10.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.10.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.10.4.2 Conditional Processing**

##### **3.10.4.2.1 Server Side Conditional Processing**

There is no server side conditional processing for this transaction.

##### **3.10.4.2.2 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.

#### **3.10.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.10.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.10.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.10.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByDOT method using its own SAFER Web Services Client interface.

#### **3.10.4.7 Priority**

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

#### **3.10.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.

## 3.11 Transaction T0028, IRP Registration (Cab Card) Output Transaction

### 3.11.1 Identification

This interface is SAFER 04.02, T0028 01.00

Root Transaction Tag: T0028

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: IRP\_REGISTRATION

### 3.11.2 Information Transmitted

#### 3.11.2.1 Input

##### 3.11.2.1.1 Query By State and License Plate Number

The SAFER Web Services Transaction T0028 transaction input method call shall contain the following arguments to the SaferWebQueryByStatePlate method:

Argument	Contents
transactionID	T0028
state	State code for the vehicle
plate	License plate number for the vehicle
lastUpdateDate	Date of last update received by client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

##### 3.11.2.1.2 Query By VIN

The SAFER Web Services Transaction T0028 transaction input method call shall contain the following arguments to the SaferWebQueryByVIN method:

Argument	Contents
transactionID	T0028
VIN	VIN for the vehicle
lastUpdateDate	Date of last update received by client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

#### 3.11.2.2 Output

The T0028 schema is specified in Appendix L of the SAFER 4.2 ICD.

### **3.11.3 Interface Terminals**

#### **3.11.3.1 Input Source**

A state system, such as CVIEW or its equivalent

#### **3.11.3.2 Input Destination**

SAFER Version 4.4

#### **3.11.3.3 Output Source**

SAFER Version 4.4

#### **3.11.3.4 Output Destination**

A state system, such as CVIEW or its equivalent

### **3.11.4 Communication/Transmission Process**

#### **3.11.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.11.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.11.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

##### **3.11.4.2.1 Server Side Conditional Processing**

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

#### **3.11.4.2 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.

#### **3.11.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.11.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.11.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.11.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByStatePlate method or the SaferQueryByVIN method using its own SAFER Web Services Client interface.

#### **3.11.4.7 Priority**

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

#### **3.11.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.

## 3.12 Transaction T0029, Vehicle Transponder ID Output Transaction

### 3.12.1 Identification

This interface is SAFER 04.02, T0029 01.00

Root Transaction Tag: T0029

Interface Name: SAFER

Interface Version: 04.02

Transaction Version: 01.00

Transaction Data Tags: VEHICLE\_TRANSPONDER\_ID

### 3.12.2 Information Transmitted

#### 3.12.2.1 Input

The SAFER Web Services Transaction T0029 transaction input shall consist of an invocation of the SaferXMLQueryByVIN method with the following arguments:

Argument	Contents
transactionID	T0029
VIN	VIN of Vehicle
lastUpdateDate	Date of last update received by the client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

#### 3.12.2.2 Output

The T0029 schema is specified in Appendix L of the SAFER 4.2 ICD.

### 3.12.3 Interface Terminals

#### 3.12.3.1 Input Source

A state system, such as CVIEW or its equivalent

#### 3.12.3.2 Input Destination

SAFER Version 4.4

#### 3.12.3.3 Output Source

SAFER Version 4.4

#### 3.12.3.4 Output Destination

A state system, such as CVIEW or its equivalent

### **3.12.4 Communication/Transmission Process**

#### **3.12.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.12.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.12.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

##### **3.1.4.2.1 Server Side Conditional Processing**

The query runs for specific values of JURISDICTION\_CODE that have been authorized for some carrier. Output includes only records with matching CVIS\_DEFAULT\_CARRIER and IRP\_CARRIER\_ID\_NUMBER from the VEHICLE\_REGISTRATION and CARRIER tables.

##### **3.1.4.2.2 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.

#### **3.12.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.12.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.12.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.12.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByVIN method using its own SAFER Web Services Client interface.

#### **3.12.4.7 Priority**

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

#### **3.12.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.



## 3.13 Transaction T0030, Vehicle Inspection Summary Output Transaction

### 3.13.1 Identification

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

### 3.13.2 Information Transmitted

#### 3.13.2.1 Input

##### 3.13.2.1.1 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 stylesheet
username	Username for authentication
password	Password for authentication

##### 3.13.2.1.2 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 stylesheet
username	Username for authentication
password	Password for authentication

#### 3.13.2.2 Output

The T0030 schema is specified in Appendix L of the SAFER 4.2 ICD.

### **3.13.3 Interface Terminals**

#### **3.13.3.1 Input Source**

A state system, such as CVIEW or its equivalent

#### **3.13.3.2 Input Destination**

SAFER Version 4.4

#### **3.13.3.3 Output Source**

SAFER Version 4.4

#### **3.13.3.4 Output Destination**

A state system, such as CVIEW or its equivalent

### **3.13.4 Communication/Transmission Process**

#### **3.13.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.13.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

#### **3.13.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

##### **3.13.4.2.1 Server Side Conditional Processing**

On the SAFER side, the query results only include jurisdictions that match the data and which exist in the PRISM\_JURISDICTION\_LOOKUP table.

#### **3.13.4.2.2 Client Side Conditional Processing**

Regarding conditional processing on the receiving side: the SAFER database is the sole source of this information. Therefore, the use of an update date to prevent old data from updating newer data is not necessary. The most recently processed information will be provided to the state system and should be used to update the local data store.

#### **3.13.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.13.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.13.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.13.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByStatePlate method or the SaferQueryByVIN method using its own SAFER Web Services Client interface.

#### **3.13.4.7 Priority**

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

#### **3.13.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.

## 3.14 Transaction T0031, MCMIS Safety and Census Output Transaction

### 3.14.1 Identification

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: MCMIS\_SAFETY\_CENSUS

### 3.14.2 Information Transmitted

#### 3.14.2.1 Input

##### 3.14.2.1.1 Query By DOT Number

The SAFER Web Services Transaction T0031 transaction input method call shall issue the following arguments to the SaferQueryByDOT method:

Argument	Contents
transactionID	T0031
dotNumber	DOT number for the motor carrier
lastUpdateDate	Date of last update received by the client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

##### 3.14.2.1.2 Query By ICC Number

The SAFER Web Services Transaction T0031 transaction input method call shall issue the following arguments to the SaferQueryByICC method:

Argument	Contents
transactionID	T0031
iccNumber	ICC number for the motor carrier
lastUpdateDate	Date of last update received by the client

##### 3.14.2.1.3 Query By MC/MX Number

The SAFER Web Services Transaction T0031 transaction input method call shall issue the following arguments to the SaferQueryByMCMX method:

<b>Argument</b>	<b>Contents</b>
transactionID	T0031
mcOrMxNumber	MC or MX number for the motor carrier
lastUpdateDate	Date of last update received by the client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

### **3.14.2.2 Output**

The T0025 schema is specified in Appendix L of the SAFER 4.2 ICD.

### **3.14.3 Interface Terminals**

#### **3.14.3.1 Input Source**

A state system, such as CVIEW or its equivalent

#### **3.14.3.2 Input Destination**

SAFER Version 4.4

#### **3.14.3.3 Output Source**

SAFER Version 4.4

#### **3.14.3.4 Output Destination**

A state system, such as CVIEW or its equivalent

### **3.14.4 Communication/Transmission Process**

#### **3.14.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.14.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### **3.14.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

#### **3.14.4.2.1 Server Side Conditional Processing**

On the SAFER side, the query includes only records with REVIEW\_TYPE in the CARRIER\_REVIEW table that are equal to 'F'.

#### **3.14.4.2.2 Client Side Conditional Processing**

Conditional processing on the receiving side 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.

#### **3.14.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

#### **3.14.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

#### **3.14.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

#### **3.14.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByDOT method using its own SAFER Web Services Client interface.

#### **3.14.4.7 Priority**

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

#### **3.14.4.8 Maximum Transaction Size**

There will only be one record returned by this transaction.

## 3.15 Transaction T0032, Licensing and Insurance Output Transaction

### 3.15.1 Identification

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

### 3.15.2 Information Transmitted

#### 3.15.2.1 Input

##### 3.15.2.1.1 Query By 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 stylesheet
username	Username for authentication
password	Password for authentication

##### 3.15.2.1.2 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 stylesheet
username	Username for authentication
password	Password for authentication

##### 3.15.2.1.3 Query By MC/MX Number

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

<b>Argument</b>	<b>Contents</b>
transactionID	T0032
mcOrMxNumber	MC or MX number for the motor carrier
lastUpdateDate	Date of last update received by the client
stylesheetURL	URL for user defined stylesheet
username	Username for authentication
password	Password for authentication

### **3.15.2.2 Output**

The T0032 schema is specified in Appendix L of the SAFER 4.2 ICD.

### **3.15.3 Interface Terminals**

#### **3.15.3.1 Input Source**

A state system, such as CVIEW or its equivalent

#### **3.15.3.2 Input Destination**

SAFER Version 4.4

#### **3.15.3.3 Output Source**

SAFER Version 4.4

#### **3.15.3.4 Output Destination**

A state system, such as CVIEW or its equivalent

### **3.15.4 Communication/Transmission Process**

#### **3.15.4.1 Format/Record Layout**

Refer to the schema for this transaction in the addendum to Appendix L of the SAFER 4.2 ICD for the complete XML specification.

#### **3.15.4.2 Standards and Conventions**

XML parsers expect Unicode by default, either UTF-8 or UTF-16. Any other character set besides 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.

The SOAP Protocol, as described in Reference 2, shall be used.

### **3.15.4.2 Conditional Processing**

In all output transactions, there are two modes of operation, baseline and update. 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.

#### **3.15.4.2.1 Server Side Conditional Processing**

There is no conditional processing in SAFER for this transaction. The output is derived from the carrier\_li\_detail and carrier\_li\_detail.

#### **3.15.4.2.2 Client Side Conditional Processing**

Conditional processing on the receiving side is at the discretion of the state system. The IFTA\_LAST\_UPDATE\_DATE may be used to ensure that the local data store is not updated with old information.

### **3.15.4.3 Data Validation**

Data validation is at the discretion of the state system. It may be done automatically in accordance with the schema defined for this transaction. Refer to the schema in Appendix L of the SAFER 4.2 ICD.

### **3.15.4.4 Error Processing and Recovery**

Records that do not conform to the schema for this transaction should not be processed.

### **3.15.4.5 Schedule/Frequency**

The SAFER system is generally on-line and processing transactions between the hours of 8AM and 8PM Eastern Standard Time or daylight savings time, seven days a week, 52 weeks a year. Outside of these hours the system is subject to discontinuities in service, due to maintenance activities.

### **3.15.4.6 Initiation Method**

To initiate this transaction, the state system will issue an invocation of the SaferQueryByDOT method using its own SAFER Web Services Client interface.

### **3.15.4.7 Priority**

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

### **3.15.4.8 Maximum Transaction Size**

The maximum number of records returned by this transaction will be limited by the number of records matching the key in the SAFER database.