



SAFER Transaction T0022D Specification

Vehicle IRP (Cab Card) Delete Transaction

DRAFT Version 0.1

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SAFER T0022D Vehicle IRP (Cab Card) Delete Transaction

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i POINTS OF CONTACT

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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

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 T0022D Vehicle IRP Registration (Cab Card) Delete Transaction.

[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>.

1 SAFER Vehicle Registration (Cab Card) Delete Transaction Specification

This document specifies a new transaction for the SAFER XML Interface specified in the SAFER 4.2 Interface Control Document and the SAFER 4.4 Alpha 1 Web Services Interface Control Document. This transaction effectively reverses Transaction 22 (T0022) with the proviso that the filing entity is validated using the Authoritative Source database element – the transaction only occurs if the Authoritative Source matches the state of the Registration to be deleted.

1.1 SAFER Delete Transactions

A SAFER Delete Transaction is distinguished from a SAFER Input Transaction by the following characteristics.

1.1.1 Transaction ID

A SAFER Delete Transaction corresponding to a SAFER Input Transaction shall have a Transaction ID of TXXXXD, where TXXXX is the Transaction ID of the Input Transaction.

1.1.2 Transaction Operation Tag

The value of the Transaction Operation Tag in the Transaction header must be the string “DELETE”.

1.1.3 Mandatory and Optional Elements

The only mandatory elements are the key values necessary to identify the data which is to be deleted. All other elements are optional for the convenience of CVIEW or equivalent systems whose owners may find it expedient to develop their delete transactions out of their existing implementations of SAFER Input Transactions.

2 T0022D, Vehicle Registration Delete Transaction

- Root Transaction Tag: T0022D
- Interface Name: SAFER
- Interface Version: 4.02
- Transaction Version: 01.00
- Transaction Data Tag: VEHICLE_REGISTRATION

2.1 Information Transmitted

The Inspection Report Input Transaction shall consist of information defining the registration to be deleted structured within a file as follows:

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

The only required elements are the keys necessary to identify the data to be deleted: The VIN, IRP_BASE_STATE and LICENSE_PLATE_NUMBER elements.

The following information shall be provided:

The following **IRP VIN** information shall be provided:

Table 2–1. IRP VIN (Input)

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

The following **IRP Registration** information shall be provided:

Table 2–2. IRP Registration (Input)

Description		XML Tag
License Plate Number (M)	Mandatory	LICENSE_PLATE_NUMBER
License Plate Base Jurisdiction (State/Province) (M)	Mandatory	IRP_BASE_STATE
Carrier Vehicle Unit Number (O)	Optional	UNIT_NUMBER
Vehicle Last Update Date	Optional	LAST_UPDATE_DATE
Interstate / Intrastate Flag	Optional	INTERSTATE_FLAG
Vehicle Status Code	Optional	IRP_STATUS_CODE
Vehicle Status Update Date	Optional	IRP_STATUS_DATE
IRP Account Number	Optional	IRP_ACCOUNT_NUMBER
IRP Fleet Number	Optional	IRP_FLEET_NUMBER
Vehicle Registration Start Date	Optional	REGISTRATION_START_DATE
Base Vehicle Registration Expiration Date	Optional	REGISTRATION_EXPIRE_DATE
Operator's Name	Optional	OPERATOR_NAME
Safety USDOT Number	Optional	SAFETY_CARRIER
Account Owner USDOT Number	Optional	IRP_CARRIER_ID_NUMBER
IFTA Account Number (O)	Optional	IFTA_LICENSE_NUMBER
Base Jurisdiction Licensed Gross Vehicle Weight	Optional	GVW
Base Jurisdiction Licensed GVW Expiration Date	Optional	GVW_EXPIRE_DATE

The following **IRP Proration** information shall be provided:

Table 2-3. IRP Proration (Input)

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

It is not required that any IRP Proration records exist in the transaction.

2.2 Interface Terminals

2.2.1 Source

SAFER Version 4.6

2.2.2 Destination

A state system, such as CVIEW or its equivalent.

2.3 Communication/Transmission Process

2.3.1 Format/Record Layout

Refer to the schema for this transaction in Appendix A of this document for the complete XML specification.

2.3.2 Standards and Conventions

- XML Parsers expect Unicode by default – either UTF-8 or UTF-16. Any character set other than UTF-8 or UTF-16 must be specified with the “encoding” attribute in the XML header. For example:

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

- The File Transfer Protocol, as described in Reference 4 of the SAFER 4.2 ICD, shall be used.

2.3.3 Conditional Processing

The following conditional processing shall apply:

The uploaded filename must contain the state code abbreviation of the authoritative source for the operation. The filename format is as specified in the SAFER 4.2 Interface Control Document.

If the uploaded vehicle identification number (VIN element) is not found in SAFER, the transaction reports an error and no deletion occurs. If the `IRP_BASE_STATE` in the `SAFER VEHICLE_REGISTRATION` record associated with the uploaded Vin does not match the transaction’s authoritative source state code, the transaction reports an error and no deletion occurs.

2.3.4 Data Validation

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

2.3.5 Error Processing/Recovery

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

2.3.6 Schedule/Frequency

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

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

2.3.7 Initiation Method

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

2.3.8 Synchronization/Dependencies

Deletion proceeds with all database integrity constraints enabled. This means that dependent database relationships persist throughout the operation. As a result, even though a Transaction T0022 submission may have created a specific set of database records, it is possible that some of these records will not be deleted by initiating a Transaction T0022D. In the processing of a Transaction T0022D, SAFER will check before performing deletes so as not to violate integrity constraints. These checks will affect database tables that are ancillary to the VEHICLE_REGISTRATION table.

2.3.9 Priority

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

2.3.10 Maximum Transaction Size

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

APPENDIX A: SAFER Transaction T0022D XML Schema

The XML schema for this transaction is as follows:

```
<?xml version="1.0"?>
<schema
  xmlns="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://www.safer.org/namespaces/T0022DV1"
  xmlns:ts="http://www.safer.org/namespaces/T0022DV1"
  elementFormDefault="qualified">

  <!-- IRP Registration (Cab Card) Delete Transaction, T0022D, version 1 -->

  <include schemaLocation="globalTypes.xsd"/>

  <!-- Root element -->

  <element name="T0022D" type="ts:T0022DV1Type"/>

  <!-- Root element type -->

  <complexType name="T0022DV1Type">
    <sequence>
      <element name="INTERFACE" type="ts:interfaceHeaderType"/>
      <element name="TRANSACTION" type="ts:transHeaderType"/>
      <element name="IRP_REGISTRATION" type="ts:IRPRegType"
        minOccurs="1" maxOccurs="5000"/>
    </sequence>
  </complexType>

  <!-- Interface Header type -->

  <complexType name="interfaceHeaderType">
    <sequence>
      <element name="NAME" type="string" fixed="SAFER"/>
      <element name="VERSION" type="string" fixed="04.02"/>
    </sequence>
  </complexType>

  <!-- Transaction Header type -->

  <complexType name="transHeaderType">
    <sequence>
      <element name="VERSION" type="string" fixed="01.00"/>
      <element name="OPERATION" type="string" fixed="DELETE"/>
      <element name="DATE_TIME" type="dateTime"/>
      <element name="TZ" type="ts:globalTimeZoneType"/>
    </sequence>
  </complexType>

  <!-- IRP Registration type -->

  <complexType name="IRPRegType">
    <sequence>
      <element name="VIN">
        <simpleType>
          <restriction base="string">
```

```
        <minLength value="1"/>
        <maxLength value="30"/>
    </restriction>
</simpleType>
</element>
<element name="TITLE_NUMBER" minOccurs="0">
    <simpleType>
        <restriction base="string">
            <maxLength value="17"/>
        </restriction>
    </simpleType>
</element>
<element name="TITLE_JURISDICTION" type="ts:globalFullJurisdictionType"
    minOccurs="0"/>
<element name="OWNER_NAME" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="55"/></restriction>
    </simpleType>
</element>
<element name="MODEL_YEAR" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="4"/></restriction>
    </simpleType>
</element>
<element name="MAKE" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="10"/></restriction>
    </simpleType>
</element>
<element name="TYPE" type="ts:globalVehicleUseType" minOccurs="0"/>
<element name="MODEL" minOccurs="0">
    <simpleType>
        <restriction base="string"><maxLength value="3"/></restriction>
    </simpleType>
</element>
<element name="FUEL" type="ts:globalPowerCodeType" minOccurs="0"/>
<element name="UNLADEN_WEIGHT" minOccurs="0">
    <simpleType>
        <restriction base="integer"><totalDigits value="8"/></restriction>
    </simpleType>
</element>
<element name="NUMBER_OF_AXLES" minOccurs="0">
    <simpleType>
        <restriction base="integer"><totalDigits value="2"/></restriction>
    </simpleType>
</element>
<element name="LICENSE_PLATE_NUMBER">
    <simpleType>
        <restriction base="string">
            <minLength value="1"/>
            <maxLength value="12"/>
        </restriction>
    </simpleType>
</element>
<element name="IRP_BASE_COUNTRY" minOccurs="0" type="ts:globalVEHCountryType"/>
<element name="IRP_BASE_STATE" type="ts:globalJurisdictionType"/>
<element name="UNIT_NUMBER" minOccurs="0">
    <simpleType>
```

```
<restriction base="string"><maxLength value="20"/></restriction>
</simpleType>
</element>
<element name="LAST_UPDATE_DATE" minOccurs="0" type="date"/>
<element name="INTERSTATE_FLAG" minOccurs="0">
<simpleType>
<restriction base="string">
<enumeration value="0"/> <!-- Intrastate -->
<enumeration value="1"/> <!-- Interstate -->
</restriction>
</simpleType>
</element>
<element name="IRP_STATUS_CODE" minOccurs="0" type="ts:globalIRPStatusCodeType"/>
<element name="IRP_STATUS_DATE" minOccurs="0" type="date"/>
<element name="IRP_ACCOUNT_NUMBER" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="32"/></restriction>
</simpleType>
</element>
<element name="IRP_FLEET_NUMBER" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="15"/></restriction>
</simpleType>
</element>
<element name="REGISTRATION_START_DATE" minOccurs="0"
type="ts:globalOptionalDateType"/>
<element name="REGISTRATION_EXPIRE_DATE" minOccurs="0"
type="ts:globalOptionalDateType"/>
<element name="OPERATOR_NAME" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="55"/></restriction>
</simpleType>
</element>
<!-- CVIS_DEFAULT_CARRIER has tag SAFETY_CARRIER -->
<element name="SAFETY_CARRIER" minOccurs="0"
type="ts:globalCarrierIdNumberType"/>
<element name="IRP_CARRIER_ID_NUMBER"
type="ts:globalOptCarrierIdNumberType" minOccurs="0"/>
<element name="IFTA_LICENSE_NUMBER" minOccurs="0">
<simpleType>
<restriction base="string"><maxLength value="18"/></restriction>
</simpleType>
</element>
<element name="GVW" minOccurs="0">
<simpleType>
<restriction base="integer"><totalDigits value="8"/></restriction>
</simpleType>
</element>
<element name="GVW_EXPIRE_DATE" type="ts:globalOptionalDateType"
minOccurs="0"/>
<element name="IRP_PRORATION" type="ts:IRPProrationType"
minOccurs="0"
maxOccurs="unbounded"/>
</sequence>
</complexType>

<!-- IRP Proration type -->
```

```
<complexType name="IRPProrationType">
  <sequence>
    <element name="IRP_JURISDICTION" type="ts:globalFullJurisdictionType"/>
    <element name="IRP_WEIGHT_CARRIED">
      <simpleType>
        <restriction base="string">
          <minLength value="1"/>
          <maxLength value="8"/>
        </restriction>
      </simpleType>
    </element>
    <element name="IRP_WEIGHT_EXPIRE_DATE" type="date"/>
  </sequence>
</complexType>

</schema>
```

APPENDIX B: Example T0022D Transaction

Please Note: The only mandatory elements in the VEHICLE_REGISTRATION element are the VIN, IRP_BASE_STATE and LICENSE_PLATE_NUMBER.

```
<?xml version="1.0"?>
<T0022D xmlns="http://www.safersys.org/namespaces/T0022DV1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.safersys.org/namespaces/T0022DV1 T0022DV1.xsd">
  <INTERFACE>
    <NAME>SAFER</NAME>
    <VERSION>04.02</VERSION>
  </INTERFACE>
  <TRANSACTION>
    <VERSION>01.00</VERSION>
    <OPERATION>DELETE</OPERATION>
    <DATE_TIME>2002-12-10T14:05:00</DATE_TIME>
    <TZ>ED</TZ>
  </TRANSACTION>
  <IRP_REGISTRATION>
    <VIN>1FV6HLBA4YHF33774</VIN>
    <TITLE_NUMBER>ZJ1996</TITLE_NUMBER>
    <TITLE_JURISDICTION>USCT</TITLE_JURISDICTION>
    <OWNER_NAME>JOHN SMITH</OWNER_NAME>
    <MODEL_YEAR>2001</MODEL_YEAR>
    <MAKE>FORD</MAKE>
    <TYPE>TR</TYPE>
    <MODEL>001</MODEL>
    <FUEL>A</FUEL>
    <UNLADEN_WEIGHT>30000</UNLADEN_WEIGHT>
    <NUMBER_OF_AXLES>4</NUMBER_OF_AXLES>
    <LICENSE_PLATE_NUMBER>30616A</LICENSE_PLATE_NUMBER>
    <IRP_BASE_COUNTRY>US</IRP_BASE_COUNTRY>
    <IRP_BASE_STATE>WA</IRP_BASE_STATE>
    <UNIT_NUMBER>1</UNIT_NUMBER>
    <LAST_UPDATE_DATE>2002-08-15</LAST_UPDATE_DATE>
    <INTERSTATE_FLAG>1</INTERSTATE_FLAG>
    <IRP_STATUS_CODE>100</IRP_STATUS_CODE>
    <IRP_STATUS_DATE>2002-08-01</IRP_STATUS_DATE>
    <IRP_ACCOUNT_NUMBER>333333</IRP_ACCOUNT_NUMBER>
    <IRP_FLEET_NUMBER>333330</IRP_FLEET_NUMBER>
    <REGISTRATION_START_DATE>2001-08-20</REGISTRATION_START_DATE>
    <REGISTRATION_EXPIRE_DATE>2005-08-20</REGISTRATION_EXPIRE_DATE>
    <OPERATOR_NAME>TOM JAMISON</OPERATOR_NAME>
    <IRP_CARRIER_ID_NUMBER>8</IRP_CARRIER_ID_NUMBER>
    <IFTA_LICENSE_NUMBER>87598</IFTA_LICENSE_NUMBER>
    <GVW>50000</GVW>
    <GVW_EXPIRE_DATE>2005-09-16</GVW_EXPIRE_DATE>
    <IRP_PRORATION>
      <IRP_JURISDICTION>USCT</IRP_JURISDICTION>
      <IRP_WEIGHT_CARRIED>50000</IRP_WEIGHT_CARRIED>
      <IRP_WEIGHT_EXPIRE_DATE>2003-09-15</IRP_WEIGHT_EXPIRE_DATE>
    </IRP_PRORATION>
  </IRP_REGISTRATION>
  <IRP_REGISTRATION>
    <VIN>321A654B987CCT</VIN>
    <TITLE_NUMBER>ZJ1998</TITLE_NUMBER>
```

SAFER T0022D Vehicle Registration (Cab Card) Delete Transaction Specification

```
<TITLE_JURISDICTION>USCT</TITLE_JURISDICTION>
<OWNER_NAME>JOHN SMITH</OWNER_NAME>
<MODEL_YEAR>2002</MODEL_YEAR>
<MAKE>FORD</MAKE>
<TYPE>TR</TYPE>
<MODEL>001</MODEL>
<FUEL>A</FUEL>
<UNLADEN_WEIGHT>30000</UNLADEN_WEIGHT>
<NUMBER_OF_AXLES>4</NUMBER_OF_AXLES>
<LICENSE_PLATE_NUMBER>TF3003</LICENSE_PLATE_NUMBER>
<IRP_BASE_COUNTRY>US</IRP_BASE_COUNTRY>
<IRP_BASE_STATE>CT</IRP_BASE_STATE>
<UNIT_NUMBER>1</UNIT_NUMBER>
<LAST_UPDATE_DATE>2002-08-15</LAST_UPDATE_DATE>
<INTERSTATE_FLAG>1</INTERSTATE_FLAG>
<IRP_STATUS_CODE>100</IRP_STATUS_CODE>
<IRP_STATUS_DATE>2002-08-01</IRP_STATUS_DATE>
<IRP_ACCOUNT_NUMBER>333333</IRP_ACCOUNT_NUMBER>
<IRP_FLEET_NUMBER>333330</IRP_FLEET_NUMBER>
<REGISTRATION_START_DATE>2001-08-20</REGISTRATION_START_DATE>
<REGISTRATION_EXPIRE_DATE>2005-08-20</REGISTRATION_EXPIRE_DATE>
<OPERATOR_NAME>TOM JAMISON</OPERATOR_NAME>
<IRP_CARRIER_ID_NUMBER>8</IRP_CARRIER_ID_NUMBER>
<IFTA_LICENSE_NUMBER>87598</IFTA_LICENSE_NUMBER>
<GVW>50000</GVW>
<GVW_EXPIRE_DATE>2005-09-16</GVW_EXPIRE_DATE>
<IRP_PRORATION>
  <IRP_JURISDICTION>USCT</IRP_JURISDICTION>
  <IRP_WEIGHT_CARRIED>50000</IRP_WEIGHT_CARRIED>
  <IRP_WEIGHT_EXPIRE_DATE>2003-09-15</IRP_WEIGHT_EXPIRE_DATE>
</IRP_PRORATION>
</IRP_REGISTRATION>
</T0022D>
```