Federation of Tax Administrators
444 N. Capitol Street, NW, Suite 348, Washington, DC • (202) 624-5890

Motor Fuel Electronic Filing Guide

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Section 1 – General Information

Chapter 1 – Introduction

Electronic Commerce Subcommittee

The Federation of Tax Administrators (FTA) has adopted an "11 Point Plan" to curb tax evasion. Point 6 is, "Allow for uniform electronic reporting systems by adopting the FTA Motor Fuel Uniformity Electronic Commerce Committee standards for all electronic data exchange."

The Electronic Commerce Subcommittee facilitates and encourages all tax authorities: federal, state/provincial and local, and taxpayers alike, to comply with this point.

Electronic data interchange (EDI) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention.

EDI is made up of many different methods of sharing data electronically between parties. The FTA has developed standards for the tax authority to follow when implementing electronic data interchange (EDI).

Over the past few years the subcommittee has adopted the 813 transaction set of ANSI X12 as the standard for such reporting as well as the XML schema standard included in this guide. It has also incorporated into such standards the various codes adopted by the Uniformity Committee for reporting product type, entity identification, mode of transport and locations of points of origin and destination of fuel movements, as well as specific motor fuels tax information and amount. The mapping allows for a single data file transmission for Supplier or Distributor, Carrier, and Terminal Operator returns and detailed schedules.

The Electronic Commerce Subcommittee is the custodian of the TIA and summary codes and the State co-chair is the contact person for anyone wishing to add to the list of approved codes.

Currently, a number of states have plans for mandatory or voluntary electronic reporting programs for motor fuels taxes. Obviously, the more uniform the methods employed in such reporting, the better it is for all taxpayers and tax authorities involved. Besides making tax reporting more efficient, uniformity in methods and standards also facilitates the sharing of the detailed information contained in the tax reports among tax authorities, and it enables taxpayers to better respond to tax authority requirements for information.

The Electronic Commerce Subcommittee is also developing or has adopted the following uniform mapping for:

- Payment Order/Remittance Advice - 820
- Tax Information Exchange (exchange of information between tax authorities) – 826
- Functional Acknowledgement of Filing – 997
- XML Schemas

The Motor Fuel Tax Electronic Commerce Subcommittee recommends that state tax administrators adopt a standard internet interface for motor fuel taxpayers. The standard interface is included in this guide.

A listing of active work groups and the leadership of this subcommittee can be found on the next few pages.

Committee Co-chairs

State	Industry
Mike Hanson Senior Tax Auditor California Department of Tax and Fee Administration 450 N St. MIC: 48 Sacramento, CA 95814 Phone: (916) 322-6382 E-mail: michael.hanson@cdtfa.ca.gov	Gene Holland Director – Indirect Tax Phillips 66 560-02 Adams Building Bartlesville, OK 74005 Phone: (918) 977-5118 Fax: (918) 977-9320 Cell: (918) 815-0242 E-mail: Gene.P.Holland@P66.com

Work Groups

The work group's responsibilities are planning, implementation, and evaluation.

XML Schema for Fuels Tax Team	
Team Leader	**Team Members**
Mike Hanson, California Department of Tax and Fee Administration Phone: 916-322-6382 Email: michael.hanson@cdtfa.ca.gov	Terry Garber, FTA Technical Consultant Phone 202-624-5889 Email: Terry.Garber@taxadmin.org
	Cheryl Gilson, Avalara Phone: 206-826-4900 x3415 Email: Cheryl.gilson@avalara.com
	Ray Mattson-Grimm, SICPA Phone: 571-275-0242 Email: ray.mattson-grimm@sicpa.com
	Gene Holland, Phillips 66 Company Phone: 918-977-5118 Email: Gene.P.Holland@P66.com
	Jonathan Lyon, FTA – Advisor Email: jonathan.lyon@taxadmin.org

Team Focus:

- Preliminary review of State XML schemas and XML implementation guides
- Maintain XML schema for supplier, distributor, carrier, terminal operator, and retailer
- XML for state-to-state data exchanges
- Future XML discussion topics: migration strategies; common implementation strategies; and translation software

Electronic Commerce Survey Team	
Team Leader	**Team Members**
Doug Arndt, North Dakota Tax Commissioner's Office Phone: 701-328-2050 Email: darndt@nd.gov	Hal Lovell, California Department of Tax and Fee Administration Phone: 916-324-2301 Email: hal.lovell@cdtfa.ca.gov
	Mike Hanson, California Department of Tax and Fee Administration Phone: 916-322-6382 Email: michael.hanson@cdtfa.ca.gov

Team Focus:

- Evaluation and development of action items from Electronic Commerce Survey Results
- Revisions to Electronic Commerce Survey
- Publish Results of Electronic Commerce Survey

X12 Electronic Commerce Implementation Review Team	
Team Leader	**Team Members**
Mike Hanson, California Department of Tax and Fee Administration Phone: 916-322-6382 Email: michael.hanson@cdtfa.ca.gov	Cheryl Gilson, Avalara Phone: 206-826-4900 x3415 Email: Cheryl.gilson@avalara.com
	Gene Holland, Phillips 66 Phone: 918-977-5118 Email: Gene.P.Holland@P66.com
	Ray Mattson-Grimm, SICPA Phone: 571-275-0242 Email: ray.mattson-grimm@sicpa.com

Team Focus:

- Responsible for Annual Update of Motor Fuel Electronic Filing Guide
- Annual Updates of Summary, TIA and Schedule Codes in Guide
- Preliminary review of X12 implementation guides
- Responsible for Additions/Deletions/Modifications of Summary Codes, TIA Codes, Report Codes, and Schedule Codes

Implementation Guide Approval Procedures

Procedure for having an eFile Software Guide (X12 and/or XML Guide) approved by the FTA Motor Fuel Uniformity Electronic Commerce Sub-committee

- Submit tax forms and schedules to the Motor Fuel Uniformity Forms Sub-committee for review. You may want to make changes to your forms and/or schedules to make them more uniform; this will make it easier to implement electronic filing.
- Contact the Electronic Commerce Implementation Review Team of the Motor Fuel Uniformity Electronic Commerce Sub-committee early with any preliminary questions or discussion; this will aid in resolving many issues before the first complete draft is submitted.
- Submit an electronic copy of proposed Guide to Electronic Commerce Implementation Review Team
    - Tax forms and schedules used by the State are helpful in determining proper mapping and should be submitted along with Guide.
- The Guide is distributed to review team for review
- The Team members submit comments on the Guide to the Team Leader
    - The Team will be given approximately 3 weeks for review of the Guide.
- The Team will have a conference call with Guide submitters
    - Questions or Changes will be addressed during the conference call. If mapping changes are required, the process restarts at submission of the Guide.
- The Guide is either preliminarily accepted or rejected
- The Guide is submitted for approval by the Electronic Commerce Sub-committee at the next quarterly meeting
- The Guide is approved.

Note: these procedures should be followed for new guide approvals and also for significant changes to existing guides.

X12 – State Implementation Guides

The following implementation guides were reviewed by the FTA Uniformity Committee and identified as following the standards defined by the committee for electronic file formats.

	State	Guide Date	Guide Version	X12 Standards Version	FTA Approved Date
1.	Arkansas	January 2000	06202000	3050	June 2000
2.	California*	May 2003 July 2011	1 3	4030 4030	June 2004 July 2011
3.	Colorado	October 2004	1.1	4030	July 2005
4.	Florida	January 2003 September 2008	1 1.0	3070 4030	September 2004 January 2009
5.	Iowa	September 2005	1.00	4030	March 2006
6.	Kentucky	July 2007 Jan 2009	1.0	4030	September 2007 Jan 2016
7.	Michigan	March 2003	1.0	4030	May 2003
8.	Minnesota	October 2004	1.08	4030	April 2005
9.	Mississippi	September 2005	1.0	4030	December 2005
10.	Missouri	September 2002	1	4030	May 2003
11.	Montana - 813	April 2004	1	4030	June 2004
12.	Montana - 826	March 2004	1	4030	June 2004
13.	Nebraska	July 2004	1	4030	October 2004
14.	New Hampshire	March 2009	1	4030	May 2009
15.	North Carolina	June 2005 Sept 2013 April 2019	1.0 2.0 3.0	4030	June 2005 Sept 2013 April 2019
16.	North Dakota*	June 2004	1	4030	June 2004
17.	South Carolina	September, 2003, Updates Feb 2006	1 2	4030 4030	September 2003 September 2006
18.	South Dakota	November 2002	1	4030	May 2003
19.	Wyoming	September 2003	1	4030	September 2003

Footnotes:

* The California and North Dakota X12 guides were approved with minor differences from the FTA uniform guide. See state's guide for details on the minor differences.

XML – State Implementation Guides

The following implementation guides were reviewed by the FTA Uniformity Committee and identified as following the standards defined by the committee for electronic file formats.

	State	Guide Date	Guide Version	XML Version	FTA Approved Date
1.	Georgia	January 2014	1		Jan 2014
2.	Florida	May 2014 April 2019	1 1	 1	May 2014 April 2019
3.	Oregon	June 2015	1		June 2015
4.	Mississippi	June 2015	1		June 2015
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					

Footnotes:

2015 – 2 guides (Oregon, Mississippi) were submitted for review and approved by the FTA for their XML guides.

2014 – 2 guides (Georgia, and Florida) were submitted for review and approved by the FTA for their XML guides.

Chapter 2 - Migration Strategies

Strategic Migration Document Overview

Description

As mature Electronic Commerce implementation becomes part of day-to-day business activities for state agencies involved with the collection of filing information, there may be a point in time where a tax authority evaluates migrating to a new X12 map or an XML schema. It is important to have plans and strategies in place that will allow implementing a new map version or XML schema with minimal disruption to government agencies and industry partners.

Mature Installments

Once a tax authority has created an environment where they are actively collecting tax filing data from motor fuel tax filers or information providers (filers), the environment begins to mature over time. Duties in a mature environment move away from the initial set up of the program and instead focus on the issues of moving a new filer quickly and efficiently from setup, to testing, to full production. Once a filer has been certified by the tax authority and is established in the production environment, monthly processing is routine.

Point of Taxation

The number of filers in an electronic filing program at the state level will directly correlate with the point of taxation and the geographic region where the tax entity resides. The largest number of filers will predominantly be in states where tax is reported at the distributor level. The states in which taxes are reported at the terminal level will tend to have fewer filers.

Reasons to Change X12 Map Versions or Migrate to an XML Schema

Tax authorities may consider changing versions of the X12 Map or XML schema. Tax authorities using X12 may consider migrating to an XML schema. Reasons include:

- Taxation Level changes due to legislative initiatives, providing an opportunity to migrate to a newer filing method designed for uniform reporting.
- New reporting requirements are not supported by the currently used X12 map, but are supported by a newer map or an XML schema
- Agency mandates to have all X12 mapping at a more current version or to use XML for all filings.
- Moving an organization away from several versions of maps being used to a single new map version that would also align with federal reporting requirements and X12 map sets or XML schemas.

Strategies for Distribution of Software or Requirements

The strategies for how the actual distribution of software for the sending entities may differ depending on the type of software distribution model used. There are currently at least three models in place from tax authorities which practice Motor Fuel Electronic Commerce based Tax Reporting. These three models include:

- The tax authority supplies all software to filers and updates the software when there are changes and/or enhancements.
- The tax authority out-sources with third party software vendors who work closely with the tax authority to manage any enhancements or tax authority back-office changes.
- The tax authority supplies filing specifications (X12 or XML) to filers, and it is the responsibility of industry to update software to match the state's specifications.

Minimizing Risk

It is important to understand that managing a tax authority's assets are of strategic importance to the tax authority in both business and technical management. It is also crucial for industry to manage business and technical resources. For both the tax authority and industry, the risk of making changes which are not warranted, justified, essential, and strategically planned is significant. The following guidelines have proven valuable:

- Make sure there is a strong business case for moving to a new version of an X12 map / XML schema and starting a new certification process.
- Changes to the X12 map set, movement to a new X12 map version, migration from X12 to an XML schema, or implementing a new XML version should be well thought out, planned, coordinated, and managed.
- Allow trade associations representing the motor fuel industry to participate in the planning, implementation, and communication process. [*Industry is generally represented by trade associations that are the business customer focus group at the state level for motor fuel tax reporting*.]
- The tax authority should ensure requirements are reasonable, easily understood, and simple to comply with.
    - Provide a well-defined electronic implementation guide
    - Provide adequate notification of implementation
    - Provide adequate testing opportunities
    - Provide a quick path to certification
        - Provide feedback quickly after a test is submitted, whether the filing is acceptable or changes are requested
        - Filers should need to test and file dual tax information in more than one map set / XML schema for only a short period of time
        - For both industry and the tax authority, the goal is to use the minimum number of resources to quickly certify the filer in the new map version / XML schema format

Implementation Guide Review:

Any new implementation guide should be submitted to the Federation of Tax Administration Motor Fuel Uniformity Electronic Commerce Subcommittee for review before implementation. Please see Section 1, Chapter 1 for the Implementation Guide Approval Procedures.

Chapter 3 - Motor Fuel Tax Web Pages

Introduction

The Motor Fuel Tax Electronic Commerce Subcommittee recommends that state tax administrators adopt a standard internet interface for motor fuel taxpayers. A standard interface will help taxpayers to access the forms and information they need, regardless of the number of states in which they do business. Such access will also be helpful to other states as they look for comparable information. Each state motor fuel tax Web site will include a predictable number of links and a standard set of informational categories, although the precise look and feel of each site will remain specific to the state. This will also help states build Web sites that include all the information a taxpayer will need, by providing a map to Web developers.

Guidelines

The standard interface will consist of a recommended set of links to pertinent motor fuel tax information, forms, and frequently asked questions. This set of links, or standard categories, with suggested subcategories, is:

- Frequently Asked Questions (FAQs)
- Forms and Publications
- Fuel Tax Rates
- Laws, Regulations and Notices
  - Current Laws
  - Legislation
  - Current Regulations
  - Proposed Regulations
  - Departmental Notices or Newsletters
- Licenses
  - Distributors (or suppliers)
  - Carriers
  - Retailers
  - How to obtain a license
- Electronic Filing & Payment
  - Motor Fuel Electronic Filing Guide
  - XML Schema and reporting requirements
  - Electronic filing testing requirements
  - EFT
  - FAQs
- Contact Us
  - Email us
  - Write us
  - Call us

Under each of the category headings, states may place links to whatever types of information they require. For example, under FAQs, a state may wish to link to FAQ pages for IFTA, for motor fuel tax, or for registration. The links will vary by state, but the category headings should remain standard. Taxpayers would then have the benefit of always knowing where to find certain types of information, no matter what state page they are using.

Taxpayers and administrators may have different needs; therefore, the Electronic Commerce Subcommittee also includes this list of suggested categories, which will contain additional links. States may adopt and include whatever optional categories they wish, but the Electronic Commerce Subcommittee recommends that the optional categories be placed after the set of standard categories.

The Optional Categories are:

- IFTA
- Fuel Tax Statistics
- Other Links
  - Marketers' Associations
  - IRS - Forms and Publications
  - IRS - Excise

When each state develops its Motor Fuel Tax Web Interface, it should forward the URL of the interface page to Jonathan Lyon of the FTA at jonathan.lyon@taxadmin.org so that the link may be included on the FTA's motor fuel tax links to the states. If you already have such a web page, please forward the URL to FTA even though you may be changing the content.

Chapter 4 - Web Services

The term *Web services* describes a standardized way of integrating Web-based applications using the XML, SOAP, WSDL and UDDI open standards over an Internet protocol backbone. XML is used to tag the data, SOAP is used to transfer the data, WSDL is used for describing the services available and UDDI is used for listing what services are available. Used primarily as a means for businesses to communicate with each other and with clients, Web services allow organizations to communicate data without intimate knowledge of each other's IT systems behind the firewall

Unlike traditional client/server models, such as a Web server/Web page system, Web services do not provide the user with a GUI. Web services instead share business logic, data and processes through a programmatic interface across a network. The applications interface, not the users. Developers can then add the Web service to a GUI (such as a Web page or an executable program) to offer specific functionality to users.

Web services allow different applications from different sources to communicate with each other without time-consuming custom coding, and because all communication is in XML, Web services are not tied to any one operating system or programming language. For example, Java can talk with Perl, Windows applications can talk with UNIX applications.

Web services do not require the use of browsers or HTML.

Web services are sometimes called *application services*.

Chapter 5 - Implementing Uniform Electronic Filing

The goal of uniform reporting is to provide tax authorities with a model to follow so that they do not have to reinvent the electronic filing process, also to provide industry a standard by which they can more easily report information that tax authorities need. The easier it is for industry to comply, the more likely the tax authority will get the information timely and error free.

When implementing FTA maps (X12) or schemas (XML), the tax authority should publish the entire uniform map or the sections of the uniform schema utilized by the tax authority. The tax authority should extract from the data the information they require. Once the uniform file is received, the tax authority can choose to ignore certain data fields. If tax authorities follow this recommendation, we can achieve uniform electronic filing and it will be easier for the filer to provide accurate and complete information. When publishing your implementation guide, gray out or strike out the portions of the X12 map you do not require; do not delete these sections.

Quick Overview of Motor Fuel Tax

Supplier

They are the largest petroleum companies.

Distributor

They are typically the companies between the Supplier and Retail station.

Terminal Operator

They manage the terminal. They don't necessarily own the product. They must be registered with and licensed by the IRS.

Retailer

They are typically the companies responsible for selling the fuel to the consumer.

Carrier

They are the companies that physically transport the fuel.

Choose the best EDI process for your needs: X12 vs. XML

Introduction to X12 EDI

What is ASC X12? In 1979, the American National Standards Institute (ANSI) chartered the Accredited Standards Committee (ASC) X12 to build and support electronic exchange standards, related documents, and products intended for worldwide use. Today, ASC X12 brings together business and technical professionals in a cross-industry forum to enhance business processes, reduce costs and expand organizational reach for both vertical and horizontal markets. Representing multiple business domains including finance, government, health care, insurance, supply chain, and transportation, just to name a few, ASC X12 members have created numerous XML schema and more than 315 X12 EDI standards that are widely adopted by most Fortune 1000 companies and around the world.

For more information see The Accredited Standards Committee Web site at www.X12.org

For more information on using X12 to support the Motor Fuel reporting requirements, see Section 2 - X12 EDI.

By using the Motor Fuel Uniformity Committee approved X12 EDI map, tax authority and taxpayers can leverage existing work instead of creating custom files to transmit tax data. Standard maps pre-define fields and data elements so they are well understood. Additionally, tax authority and companies can utilize vendor software to produce standard X12 EDI files.

The Motor Fuel Uniformity committee has provided standards-based EDI filing specifications since 1995.

This includes:

X12 EDI transactions for return and information sharing

Forms and definitions

Sample Implementation Guide

Approval process for tax authority specific EDI implementation guide

Control and maintenance of code lists (Product Code, Schedule Code, etc.).

Introduction to XML EDI

What is EXtensible Markup Language (XML)? It is a markup language much like HTML that is designed to describe data by using "tags." XML is a platform, software, and hardware independent tool for storing, carrying, and exchanging information.

Tags are not predefined in XML, but the Motor Fuel Uniformity Sub-committee through the assistance of Tax Information Group for EC Requirements Standardization (TIGERS) has designed a standard schema set to be used for reporting, supported by the Uniformity effort. The tags are considered self-describing, which makes reading the data stream more intuitive than the standard X12 data stream.

An XML schema provides a way to define and constrain the data contained in an XML document. XML schema is the XML-based alternative to data tag definition (DTD).

For more information regarding XML, visit www.w3.org/standards/xml/

For additional XML resources visit:

- www.StateMeF.com
- TIGERS Best Practices: http://www.statemef.com/projects/mef/Best_Practices_2008.pdf
- TIGERS Standards for FedState MeF: http://www.statemef.com/projects/mef/TIGERS_MeF_STANDARDS.pdf

For a software company that provides the most commonly used XML toolset, visit http://www.altova.com/

For more information on using XML to support the Motor Fuel reporting requirements, see Section 3 - XML EDI.

Why XML? -

- In 2006, as states gained XML experience through the fed/state Modernized e-Filing (MeF) effort, states expressed an interest in moving to XML for Motor Fuel reporting. Because of Industry's request for XML standards, the Motor Fuel Uniformity Committee and TIGERS joined efforts to develop an XML schema equivalent to the X12 standards based program.
- Key Design Parameters
    - Development was a joint Motor Fuel Uniformity and TIGERS initiative.
    - Data structures are based on the Motor Fuel Uniformity approved forms and business model.
    - Use existing Uniformity codes list such as Schedule, Product and Mode.
    - Convert 5000 series TIA summary codes to XML elements.
    - Concentrate on the five major return types (Supplier, Distributor, Terminal Operator, Retailer and Carrier).

  FTA Recommendation: Based on the return, require all data fields. Once the uniform file is received, the tax authority can choose to ignore unwanted data.

Testing Timeline:

- From notifying the taxpayer to go-live, allow at least 6 months to test and convert the current process to EDI. This gives appropriate lead time to align resources, budgets, preparation and testing.
- Sample Data Test: Require 1 or 2 months of testing sample data. Be flexible as to what month and year the companies provide for testing. Due to development system limitations, only a limited amount of data may be available at any given time and it is very cumbersome to load data from prior month's actual transactions. The point of this portion of the test is to test the system's ability to process the file.
- Production Data Test: To ensure that EDI is accurate, the tax authority could require both paper and EDI for 2 to 3 months in production.
- After Go Live the paper and/or separate electronic submission via fax, email or web site of summary reports contained in the EDI submission should no longer be required. If paying by check, a one-page paper remittance advice is appropriate.

Forms and Schedules:

It is best not to change forms or schedule codes at the same time you are moving to EDI. Moving from paper to EDI is more straight-forward when the forms/schedules remain the same. We recommend changing forms/codes in advance of EDI by at least 6 months, if possible. This will make the transition into the new "EDI" method easier to understand and implement. Before and after full electronic filing implementation, forms and schedules should be made available by the tax authority on their web site. This makes it clearer what information is required and how the data is used to compute tax due and/or inventories.

Tax Authority Web Site:

If possible, the tax authority's web site could provide the following:

- Allow companies to upload and process test and production files using a secure or encrypted method.
- Provide clear error messages and confirmation that a return was filed. Error messages should allow the filer to identify which records resulted in the error. Include the name of the file and the date submitted.
- Validation/Pre-Check process: validate a file before submission to catch any data issues (i.e. invalid FEIN).
- Allow for multiple user logins by filer.
- Whether through FTP or web site login, EDI filing methods should attempt to use standard technology. The recommended method for providing the file to the tax authority is a secure web upload.
- Contain contact information (e-mail and phone number) for problems encountered when using the web site or filing a return. Also, provide the office hours that support is available. Be sure to keep contact information up to date.
- Do not stop processing on the first error encountered. Process the complete EDI file and identify and return all the errors to the filer so the filer can correct them all at once. Example: Colorado has a good X12 EDI pre-validation process. See "EDI check" at: https://www.cofts.com/goGuest.cfm

Retroactive Filing:

Requiring companies to re-file already filed paper returns electronically is not a best or preferred practice. Once a return is filed with the tax authority (paper or EDI), that return should serve as the source. A filer cannot always modify historical data used for paper filing for use in back-filing; this applies for conversions from paper to either form of electronic filing or conversion from one method of electronic filing to the other. Different or additional data is often required that cannot necessarily be provided after the fact.

If a tax authority expects they will be requiring the taxpayer to back-file they need to disclose that fact up front, so that the taxpayer can prepare for it while testing. It shouldn't come as a surprise at the end of the certifications process.

Tax authority could also be asked to suspend the paper schedules in exchange for a company's agreement to back-file the returns due during the test period.

X12 EDI Implementation guides:

It is recommended that tax authority begin with the FTA Electronic Commerce Guide in designing the tax authority's guide; then submit that guide to the committee for review and approval. Once approved the tax authority publishes their guide and advises industry allowing 6 months for testing and implementation.

Include comprehensive instructions that address both technical specifications and plain text descriptions. Include testing procedures/requirements; tax authority contacts and any specific file naming conventions. Also include schedule description details for determining appropriate schedule assignments as many times the taxpayer and tax authority testers involved in implementing X12 EDI are not experts with the particular tax returns.

Recommendation before Starting EDI (XML or X12)

Implement Uniformity Standards prior to the conversion to EDI. Check the following to ensure compliance:

- Tax Returns
- Product Codes
- Schedule Types

The Motor Fuel Uniformity Forms Sub-Committee may be contacted for further assistance.

Motor Fuel Uniformity Forms State Co-Chair: Lee Gonzalez,
email: Gonzalee@dor.state.fl.us,
Telephone: 850-488-7268

Chapter 6 – Security

File Transfer Protocol (FTP)

File Transfer Protocol (FTP) has been a staple of data file transmission since the inception of the Internet. Today FTP plays an important role in government electronic filing applications. FTP remains a popular choice for electronic filing due to its operating system independence, low cost, and ease of implementation. The startup costs for implementing FTP data exchange between government entities and trading partners are relatively low and the process is well documented.

Most computer operating systems contain built-in FTP functionality that programmers can utilize to develop scripted data file transfers. Additionally, the availability of free and commercial software to support managed FTP sessions simplifies data transfer allowing it to become a common clerical task. Once the trading partner relationship is established and account and directory configuration is completed most data file exchange transactions can be completed using drag-and-drop functionality at the user desktop.

FTP is network independent. This flexibility allows government and business trading partners to leverage the same tools and techniques they use for internal platform data exchange with external customers.

FTP is a common method of moving data internally between corporate and government computing platforms. The ability to use FTP to seamlessly transfer data between operating systems has made it the preferred choice of Information Technology shops. Using batch files, IT organizations have used FTP to create multi-platform job-sets for unattended program execution. The ability to create these programs using the operating systems built-in FTP capabilities generates significant cost-savings for organizations versus having to use commercial data migration programs.

The most common medium for trading partner FTP exchange is via the Internet. This cost-effective connectivity only requires that government entities configure an Internet FTP server and that the trading partner have a connection to the Internet. Trading partner Internet access can be dedicated service or dial-up access through an Internet Service Provider. The bandwidth required for the electronic filing process is largely dictated by the size of the data files sent during the filing process.

Extranet networks also provide an ideal environment for utilizing FTP for the exchange of data. A significant drawback to FTP is that it provides no security during the electronic filing process. Many organizations have implemented encrypted extranet networks to provide increased security for data exchange using FTP.

The adoption of FTP as a common mechanism for electronic filing has been greatly facilitated by security programs developed to protect data during the transmission process.

FTP transmission over the Internet creates two distinct security concerns for electronic filing applications. The first concern is protecting the data file transmitted during the electronic filing process. The second concern is securing the trading partner login and directory mapping process that occurs prior to transmitting the data file. The common method for protecting data during the transmission process is encrypting the file prior to using FTP to send. Strategies for securing the login process vary from basic password management to establishing secure communications using Secure Socket Layer (SSL) encryption.

Encryption

Encrypting the data prior to transmission has been the established standard for protecting data during electronic filing. When combined with an aggressive strategy of capturing and moving data after transmission, this security has proved effective in protecting trading partner data. The basic strategy is for government organizations and trading partners to exchange encryption keys allowing for the encrypting and decrypting of the data. Once the data is transmitted, the government entity rapidly collects the data and moves it to a secure location. Since the log-in and directory mapping process is performed in clear text over the Internet, quickly moving the data files to a secure location reduces the likelihood that the data file may be retrieved by unauthorized entities. Since the data file is encrypted the value of the compromised data is questionable, but trading partner confidence in the process is improved. In addition, FTP servers should allow the trading partners to frequently change their passwords to reduce the likelihood that data may be compromised.

To address the concern of account and directory mapping security, the use of SSL and Virtual Private Network (VPN) is gaining in popularity. Products offering SSL FTP are generally available. While providing an additional layer of security, SSL FTP products are more proprietary in nature. Most implementations require the trading partners to use the same product on the server and client platforms. Requiring trading partners to adopt a proprietary software product may represent a significant barrier to electronic filing. Over time, market forces may drive default standards for proprietary security architectures increasing the flexibility offered to government organizations and trading partners for securing FTP transactions.

The security of FTP for electronic filing is benefiting from the investment government organizations and their trading partners are making in Public Key Infrastructure (PKI). As government organizations establish PKI capabilities, trading partners will have a standard set of tools at their disposal to authenticate themselves and protect their data.

Secured Transmission (SSL, HTTPS)

SSL is perhaps the most common way of providing encrypted transmission of data between web browsers and web servers. Built upon private key encryption technology, SSL provides data encryption, server authentication, message integrity, and client authentication for any TCP/IP connection.

Web server certificates have become the de facto standard for organizations to deliver online trust. Web server certificates are used to authenticate the identity of a website to visiting browsers. When a user wants to send confidential information to a web server, the browser will access the server's digital certificate. The certificate containing the web server's public key will be used by the browser to authenticate the identity of the web server (the website) and encrypt information for the server using SSL technology. Since the web server is the only entity with access to its private key, only the server can decrypt the information. This is how the information remains confidential and tamper-proof while in transit across the Internet.

Some organizations use 40-bit encryption but many banks require 128-bit encryption for online banking because 40-bit encryption is considered to be relatively weak. 128-bit encryption is about 309 septillion times (309,485,000,000,000,000,000,000,000) stronger than 40-bit.

Other Benefits:

For the most part, as a developer, implementing SSL is easy. The code remains the same.

All that changes is the web server that you serve your application from. When served from an SSL enabled server and directory, the browser and server will do all the work of encryption, no additional software is required.

The browser will even let the client know that they have moved into a secure transmission mode for you.

Possible Issues:

Users need to be aware that sending secure information (e.g., your credit card information) over an SSL connection does not ensure the integrity of the receiving organization. SSL/HTTPS only guarantees the data is secure while it is being transmitted from the Browser to the Web server or the Web server to the Browser. As an example, if you send credit card information across the internet via HTTPS it will be encrypted. Once it arrives on the server, it is decrypted. If the organization that receives the information saves it in its unencrypted form or makes it available to all their employees, obviously the risks increase.

Because all information going back and forth between the client and server is being put through an encryption process instead of being sent plain, the server and browser take longer to process this data. For this reason, many organizations will use SSL/HTTPS for only the pages that may contain sensitive data, while the other pages use HTTP without encryption for efficiency.

Web Security and Security Issues

Security is an important consideration when using Web services. Because it is based on program-to-program interactions as opposed to human-to-program interaction, it is important for Web service security to address topics such as access control, authentication, data integrity and privacy. Today the most common security scheme is SSL (Secure Sockets Layer), but when it comes to Web services there are limitations with SSL. The Web service technology has been moving towards different XML-based security schemes for Web services.

For additional information on XML security see Section 3 Chapter 9.

WS-Security (Web Services Security)

Security Assertion Markup Language (SAML) from OASIS provides a means for partner applications to share user authentication and authorization information. This is essentially the single sign-on (SSO) feature being offered by all major vendors in their e-commerce products. In the absence of any standard protocol on sharing authentication information, vendors normally use cookies in HTTP communication to implement SSO. With the advent of SAML, this same data can be wrapped inside XML in a standard way, so that cookies are not needed and interoperable SSO can be achieved.

For additional information on Web Services, see Section 1 Chapter 4.

Chapter 7 – Sample Trading Partner Agreement

Trading Partner Agreement

For Electronic Data Exchange (XML & X12)

This Agreement is entered into on _____ (date), by and between the ***(State Agency)*** ("Department") and _____ ("Licensee").

The Department and the Licensee wish to provide a means by which the Licensee will file its ***(State Name)*** Motor Fuel terminal operator, supplier/distributor and/or carrier report(s) by electronically transmitting data in substitution for conventional, paper-based documents and to assure that such report is legally valid and enforceable. In order to achieve this goal, the parties agree as follows:

1. **Terms and Amendments:** This agreement shall be effective on the date shown above and shall continue until terminated by either party. A party may terminate this agreement by giving thirty (30) days written notice to the other party or by the cancellation of their Motor Fuels License. This agreement may be amended at any time by executing a written addendum signed by both the Licensee and the Department.
2. **Standards:** The Licensee will electronically transmit report(s) to the Department according to the Department's standards and instructions that may be revised / updated by the Department from time to time. The Department will provide these standards and instructions to the Licensee in a reasonable time frame in advance of due dates to allow compliance with filing requirements.
3. **Transmission:** *(This is the definition of individual state's requirements for transmission, i.e. VAN, Direct Dial, Internet, etc.)*
4. **System Operations and Security Procedures:** The Licensee, at its own expense, shall provide and maintain the equipment, software, services and testing necessary for the Licensee to transmit the electronic report(s). The Department, at its own expense, shall provide and maintain the equipment, software, services and testing necessary for the Department to receive the electronic report(s). Each party shall use security procedures which are reasonably sufficient to ensure that all transmissions of the report(s) are authorized and to protect its business records and data from improper access.

   (Additional procedures defined by each state)
5. **Signatures:** The name of the Licensee's authorized agent, or the Licensee's identification number, when included as part of the report filed pursuant to this agreement, shall constitute the signature of the Licensee on the report as if such report were actually signed by the Licensee.
6. **Receipt of Transmission:** A report shall be deemed to have been filed with the department when the report, in the stipulated format, is accessible to the Department or the Department's third party service provider and meets the requirements of the taxing authority. If the Licensee attempts to file and is unable to do so because the Receipt Computer is not available to receive a filing, the department will not impose late filing penalties or interest provided the Licensee contacts the Department immediately when an access problem is identified.

7. **Acknowledgement of Transmission:** Upon receiving a successfully transmitted report from the Licensee, the Department or the Department's third party service provider will transmit an acknowledgement in return within three (3) business day from receipt of the Licensee's report. The acknowledgement will communicate only that Department has received the Licensee's transmission. An acknowledgement does not imply any findings by the Department about the correctness of the report. A transmission that is received by the Department but is not in the stipulated format will not constitute a valid report.
8. **Garbled Transmissions:** If any transmission is received in an unintelligible or garbled form and the Department cannot identify the Licensee, no acknowledgement will be transmitted. The absence of an acknowledgement shall be treated as notice to the Licensee that the report was not received by the Department in the required format.
9. **Record Retention:** *(Define individual states record retention requirements)*
10. **Admissibility of Returns/Reports as Evidence:** A certified copy of any report may be introduced in paper form as evidence in any judicial or administrative proceeding by either party to the same extent and under the same conditions as any other business record. Neither party shall contest the admissibility of any report on the basis that it was not originated or maintained in paper form.
11. **Payments:** *(Define individual state's method of payment to accompany electronic report)*
12. **Governing Law:** This Agreement shall be governed by, and interpreted in accordance with the laws of the state of *(State Name)*.
13. **Identifying Codes & Numbers:** To ensure proper identification of electronically transmitted reports, the parties will exchange the identifying qualifiers listed below. Any changes in these qualifiers will be communicated to the other party before any transmission using the new qualifiers is sent.

(Define states requirements for Identifying codes, numbers and Electronic Signature)

Licensee:

Print Name of Licensee or Authorized Agent

Signature of Licensee or Authorized Agent Date

Email Address Phone Number

Department:

Print Name of Authorized Agent

Signature of Authorized Agent Date

Chapter 8 – FTA Schedules and Sub-Schedules, Summary, and TIA Codes

See the FTA Motor Fuels Uniformity Manual for additional details on schedules.

Schedules of Receipts

Schedule 1 - Gallons received tax paid

Sub-Schedules

1A	Gallons received, originating state tax paid
1B	Gallons for export, destination state tax paid
1C	Gallons received tax-paid with a payment voucher
1D	Gallons received, transfer fee paid
1E	Gallons imported from another state into taxed storage from a licensed distributor, tax-paid
1F	Gallons received tax-paid and shipped directly to the customer
1G	Gallons fully taxed but at a reduced rate

Schedule 2 - Gallons received from motor fuel licensee tax unpaid

Sub-Schedule

2A	Gallons received from terminals, refineries or distributors, origin tax-unpaid
2B	Gallons received tax-unpaid, blendable stock
2C	Gallons received imported, tax-unpaid
2D	Gallons received using a tax-exempt card/code
2E	Gallons received for export
2F	Gallons received tax free (resaler's) and direct shipped to customers
2G	Gallons received tax-exempt for sale through barricade pumps
2K	Gallons of nontaxable fuel received and sold or used for a taxable purpose
2X	Gallons received from suppliers on exchange agreement tax-unpaid

Schedule 3 - Gallons imported from another state direct to customer

Sub-Schedules

3A	Gallons imported from terminals/refineries
3B	Gallons imported from bulk storage in another state
3X	Imports below the terminal rack subject to tax
3Y	Imports below the terminal rack not subject to tax

Schedule 4 - Gallons imported from another state into tax free storage

Sub-Schedules

4A	Gallons imported from another state into taxed storage
4B	Gallons imported or transferred from in-state storage tax-free into in-state refinery storage

Schedules of Disbursements

Schedule 5 - Gallons delivered tax collected

Sub-Schedule

5A	Gallons sold to non-licensed distributors, retailers or bulk-end users from in-state terminals
5B	Gallons sold to non-licensed distributors, retailers or bulk-end users for imports from ___
5C	Gallons sold to motor fuel licensee from in-state terminals
5D	Gallons sold to motor fuel licensee for imports from ____
5E	Gallons sold to bonded importers, occasional importers or tank wagon importers from___
5F	Dyed diesel gallons sold for taxable purposes from in-state terminals
5G	Dyed diesel gallons sold for taxable purposes for imports from _____
5H	Gallons sold as export from in-state terminals, originating tax collected
5I	Border Zone 1 (Missouri)
5J	Border Zone 2 (Oklahoma)
5K	Border Zone 3 (Texas)
5L	Border Zone 4 (Louisiana)
5M	Border Zone 5 (Mississippi)
5N	Border Zone 6 (Tennessee)
5O	Border Zone 7 (Extra)
5P	Border Zone 8 (Extra)
5Q	Gallons used on which tax is remitted
5R	Gallons delivered to Native American Reservation, tax collected
5S	Gallons sold as export from refinery, tax collected
5T	Gallons reported for pool bond amounts
5U	Gallons sold into bulk storage of licensed motor carrier, tax collected
5V	Gallons disbursed tax collected and subject to oil inspection fees
5W	Gallons of untaxed products blended with or added to fuel resulting in a product which is used as or is usable as a taxable fuel
5X	Gallons delivered and partially taxed
5Y	Tax-paid sales to railroads
5Z	Gallons sold for Racing Use-tax collected
5AA	Gallons received tax-paid and sold to an unlicensed distributors, retailers, bulk users and users
5AB	Gallons received tax-paid and sold to a licensed distributor or importer
5AC	Gallons received tax-paid and sold to a licensed supplier
5HW	Aviation fuel converted to highway use
5LO	Fuel distributor subject to local option taxes
5XA	Gallons delivered to an airport and partially taxed

Schedule 6 - Gallons delivered to motor fuel licensee tax not collected

Sub-Schedule

6A	Gallons sold tax-exempt, customer is a licensed exporter
6B	Gallons sold tax-exempt, customer is a licensed blender
6C	Gallons sold tax-exempt, customer is a licensed importer
6D	Gallons sold tax-exempt to other licensed distributors/suppliers
6E	Gallons sold tax-exempt, customer is a licensed LPG vendor
6F	Gallons sold tax-exempt purposes from in-state terminals
6H	Gallons sold or exchanged tax-free with a qualified refiner
6I	Gallons of undyed fuel sold to licensed importer/tank wagon operator-importer, tax not collected
6J	Gallons delivered tax-free into refinery storage
6P	Gallons sold to suppliers or permissive suppliers, tax not collected
6R	Gallons from refinery sold or exchanged with qualified refiners
6V	Gallons disbursed tax not collected and subject to oil inspection fees
6X	Gallons delivered to suppliers or permissive suppliers on exchange agreements
6Z	Gallons sold for Racing Use-tax not collected

Schedule 7 - Gallons exported to state of XXXXXXXXXXX

Sub-Schedule

7A	Gallons exported, destination state tax-paid
7B	Gallons sold for export, originating state tax-paid
7C	Gallons for free trade zones
7D	Gallons exported in bulk
7F	Exports of reportable products below the terminal rack
7R	Gallons exported from refinery storage

Schedule 8 - Gallons delivered to US Government tax exempt

Sub-Schedule

8A	Gallons sold to U.S. Government tax-exempt from in-state
8K	Kerosene sales (information only)
8R	Gallons sold to U.S. Government tax-exempt from refinery

Schedule 9 - Gallons delivered to state and local government tax exempt

Sub-Schedule

9A	Gallons sold directly to the state from in-state terminals
9C	Gallons sold directly to local public schools from in-state terminals
9E	Gallons sold for county, city or town use
9F	Gallons sold to licensed charter schools
9G	Gallons sold to community colleges
9R	Gallons sold to state and local government from refinery

Schedule 10 - Gallons delivered to other tax exempt entities

Sub-Schedule

10A	Gallons delivered to other tax-exempt entities (farmers and fishermen) or non-highway
10B	Gallons delivered to tax-exempt licensed general aviation fuel dealers
10C	Gallons delivered to tax-exempt common carriers for urban mass transportation
10D	Credit card sales to tax-exempt diplomats and missions by dealers
10E	Gallons delivered to customers representing uncollectable motor fuel vehicle fuel taxes
10F	Gallons delivered to tax-free storage
10G	Gallons of other authorized tax-exempt sales
10H	Sales to tax-exempt hospitals
10I	Gallons delivered tax-exempt for farming
10J	Gallons delivered to consumers or filling stations tax-free
10K	Gallons delivered to airlines and self use in own aircraft
10M	Gallons of unenhanced diesel product delivered for manufacturing processing or assembly
10R	Gallons delivered for use as bunker fuel in vessels
10T	Gallons delivered to Native American Tribes
10U	Gallons delivered fees-exempt
10Y	Gallons delivered tax-exempt to railroad
10Z	Blendstocks removed tax-exempt not in connection with a sale, which will not be used to produce a finished fuel
10AB	Blendstocks removed tax-exempt in connection with a sale when the buyer has issued a properly executed exemption certificate stating the blendstocks will not be used to produce a finished fuel

Schedule 11 - Schedule of state diversions

Sub-Schedule

11A	Diversion to state of _____
11B	Diversion from state of _____

Schedule 12 - Vendor Schedule

Sub-Schedule

12A	Gallons of tax-paid product sold or used below the terminal rack
12B	Gallons of ex-tax paid product sold or used below the terminal rack
12C	Gallons of ending physical inventory of product below the rack

Schedule 13 - Schedule of Credits and Refunds

Sub-Schedule

13A	Tax-paid fuel exported - **Note: This schedule is an exception for the state of California. All other states should use schedule 7.**
13B	Tax-paid fuel sold to a consulate officer or employee by credit card
13C	Tax-paid fuel sold to the United States Government
13D	Tax-paid fuel sold for use on farms
13E	Tax-paid fuel sold to exempt bus operators
13F	Schedule of bad debts
13G	Tax-paid fuel sold to train operators
13H	Tax-paid fuel sold to state or local government
13J	Tax-paid fuel sold tax-free for temperature control units (reefer) and PTO or with exemption certificate or used in an exempt manner
13K	Credit or Deduction for Reduced Tax Rate
13L	Credit for gallons sold for Racing Use –tax collected
13M	Refund or credit for the second tax-paid when tax-paid fuel is removed from a terminal as a second taxable event
13N	Refund or credit when tax-paid fuel is used to produce a non-taxable product such as a fuel additive

Schedule 14 - Common and Contract Petroleum Product Carrier Report

Sub-Schedule

14A	Total of all deliveries of fuels from in-state locations to outside the state (exports)
14B	Total of all deliveries of fuels from out-of-state locations to inside the states (imports)
14C	Total of all deliveries of fuel between points in the state (intrastate)
14D	Carrier Receipt
14E	Carrier Deliveries

Schedule 15 - Terminal Operator Report

Sub-Schedule

15A	Terminal Operator Schedule of Receipts
15B	Terminal Operator Schedule of Disbursements
15C	Terminal Operator Schedule of Inventories

Summary Schedule Codes

S01 Inventory

- S01A Net Gains / Losses
- S01B Casualty Loss
- S01C Product Transfer – Disbursement
- S01D Product Transfer – Receipt
- S01E Meter Test – Disbursement
- S01F Meter Test - Receipt

S02 Taxes / Fees

- S02A Tax
- S02B Transfer / Lust Fee
- S02C Inspection Fee
- S02D Other Environmental Fee
- S02E Gaseous Permit Fee

S03 Credit

- S03A Tax Credit
  - S03A01 Collection Allowance *(IN – February 2002)*
- S03B Fee Credit
  - S03B01 Transfer Fee Credit *(MO – September 2001)*
  - S03B02 Inspection Fee Credit *(MO – September 2001)*
- S03C Allowance

S04 Bad Debt Write-off

- S04A Tax Bad Debt Write-off
- S04B Fee Bad Debt Write-off

S05 General Return

- S05A Gallons/Liters Refined, Distilled or produced
- S05B Petroleum product repackaged into containers of 55 gallons or less
- S05C Ethanol Blended with Gasoline
  (S05C is being phased out as of September 2005, see S05M01)
- S05D Product Delivered
- S05E Other petroleum products first sold, offered for sale, or used in state *(NB)*
- S05F Total gallons of Motor Vehicle fuel first sold, offered for sale or used in state *(NB)*
- S05G Untaxed diesel used in a licensed vehicle
- S05H Kerosene blended with diesel and used in a licensed vehicle
  (S05H is being phased out as of September 2005, see S05M02)
- S05I Other exempt removals *(CA – May 2001)*
- S05J Approved for deduction *(MS – January 2004)*
- S05K Taxable sales total dollar amount *(ND – January 2004)*
- S05L Taxable sales gallons multiplied by the average sales price for a defined period *(ND – January 2004)*
- S05M Product Blended
  - S05M01 Product Blended with Gasoline
  - S05M02 Product Blended with Undyed Diesel
  - S05M03 Product Blended with Dyed Diesel

X12 TIA Codes

The data represented by these TIA codes is not derivable from schedules or it represents a check value.		
5000	**Not used**	
5001	Total Net Reported	Header
5002	Net Physical Inventory	DIS, DLR, RET, SDR, SUR, TOR
5003	Total Due	DIS, DLR, RET, SDR, SUR
5004	Total Net Transported	CCR
5005	Net	SCH, SUM
5006	Gross	SCH, SUM
5007	Billed	SCH, SUM
5008	Interest	SUM
5009	Penalty	SUM
5010	Confidential Information	Header, 826
5011-5199	**Not used**	

Chapter 9 - FTA Product Codes

FTA Motor Fuel Tax Section Uniformity Committee and the Canadian Fuel Tax Council have adopted the following codes for the product codes to be used on the Uniform Forms.

Product	Sub-product Codes	Product Codes
Alcohol		123
Ethanol (100%)	E00	
Methanol (100%)	M00	
Asphalt		188
Aviation Gasoline		125
Blending Components		122
Additive Miscellaneous	090	
Benzene	248	
Butane, including butane-propane mix	055	
Butylene	198	
CBOB	301	
ETBE	249	
Ethane	052	
Ethylene	196	
Isobutane	058	
MTBE	093	
Methane	265	
Napthas	126	
Pentanes, including isopentanes	059	
Propylene	075	
Raffinates	223	
RBOB	302	
TAME	121	
Toluene	199	
Waste Oil	091	
Xylene	076	
Compressed Natural Gas (CNG)		224
Crude Oil		001
Diesel Fuel Group – Dyed		
Biodiesel – Dyed		171
Biodiesel - Dyed (100%)	D00	
(Percentage of biodiesel-dyed)	D01-D99	
Diesel Fuel – Dyed		228
High Sulfur Diesel – Dyed	226	
Low Sulfur Diesel – Dyed	227	
Ultra Low Sulfur Diesel – Dyed	314	
No 1 Diesel – Dyed	231	
Diesel Fuel #4 – Dyed	153	
Kerosene – Dyed		072
Low Sulfur Kerosene – Dyed	073	

Product	Sub-product Codes	Product Codes
High Sulfur Kerosene – Dyed	074	
Diesel Fuel Group – Undyed		
Biodiesel – Undyed		170
Biodiesel - Undyed (100%)	B00	
(Percentage of biodiesel-undyed)	B01-B99	
Diesel Fuel – Undyed		160
Low Sulfur diesel #1 – Undyed	161	
Low Sulfur Diesel #2 – Undyed	167	
Ultra Low Sulfur Diesel – Undyed	313	
No. 1 Fuel Oil – Undyed	150	
Diesel Fuel #4 – Undyed	154	
#1 High Sulfur Diesel – Undyed	282	
#2 High Sulfur Diesel – Undyed	283	
Kerosene – Undyed		142
Low Sulfur Kerosene – Undyed	145	
High Sulfur Kerosene – Undyed	147	
Excluded Liquid (Mineral Oil)		077
Gasoline Fuel Group		
Gasohol Blend (Rollup Code)		124
Percentage of Ethanol	E01-E99	
Percentage of Methanol	M01-M99	
Gasoline		065
Gasoline MTBE		071
Heating Oil		152
Hydrogen		259
Jet Fuel		130
Liquid Natural Gas (LNG)		225
Marine Gas Oil		280
Marine Diesel Oil		279
Mineral Oils		281
Natural Gasoline		061
Organic Oils		960
Propane		054
Residual Fuel Oil		175
Soy Oil		285
Transmix		100
Undefined Products		092

Chapter 10 - Procedures for Requesting Schedule, TIA, and Summary Codes

In order to promote consistency and uniformity in the implementation of Motor Fuel Tax Reporting, the Uniformity Committee has developed listings of data elements and associated Schedule codes, Tax Information and Amount (TIA) codes, and Summary Schedule codes. Any state implementing a new Electronic Commerce or FTA Uniformity sponsored program is asked to utilize codes from the appropriate list when mapping or developing motor fuel returns/reports. See Section 1, Chapter 8: FTA Schedules and Sub-Schedules, Summary, and TIA Codes for a complete list. Anyone needing a code not on this list should follow the procedure outlined below:

State tax administrators should submit their request using the Schedule, TIA, and Summary Schedule Code Request Form to the current Electronic Commerce Subcommittee and current Forms Subcommittee state co-chairs. See the list of current subcommittee co-chairs in the FTA Motor Fuel Tax Section, Uniformity Book. The request form may be submitted through e-mail or regular mail. The submitted request should detail the following information:

1. Identify which type of code is being requested.
2. The name and description of the Schedule, TIA, and/or Summary Schedule code(s).
3. Provide a description of the need for the addition, deletion, or modification. Include an explanation of the code's use and why the existing codes do not meet your needs. It is recommended a representative of your state, knowledgeable of this topic, attend the FTA Uniformity subcommittee meeting so this can be discussed.
4. Identify the tax or information return in which the code(s) will be used (if applicable).
5. Version of the map or schema to be used (if applicable).
6. Date the requested item is needed.
7. Supply a PDF copy of your return.
8. The line number on the paper return to which the code corresponds (if applicable).
9. Plan to be at the next Uniformity Committee meeting to discuss the adoption of the requested code.

To receive a code before the next Uniformity meeting follow these additional steps:

1. Explain the reason the code(s) needs to be approved prior to the next meeting.
2. The Subcommittee state co-chairs will evaluate the request and respond to the requestor within one week of the receipt of the request. The state co-chairs may convene a special meeting via a phone conference call to discuss this request.

The Subcommittee state co-chairs, upon receipt of the request, shall take the following actions:

1. Distribute copies to Subcommittee members for review and discussion.
2. Review the most current list of Schedule, TIA, Summary Schedule codes to determine if the requested code already exists.
3. Place the proposed change on the agenda of the next Uniformity Committee meeting for formal review.
4. If the proposed change is adopted, revise and distribute the updated FTA Schedule, TIA, and Summary Schedule Code List for the requester to use.
5. If the proposed change is rejected or modified, inform the requesting administrator of the reasons for the rejection and the proper code(s) to be used.
6. Submit the new code/information to the full committee for approval.
7. If the code is required prior to the next meeting, the state co-chairs may convene a special meeting using a phone conference call to discuss this request.
8. If a Schedule, TIA, or Summary Schedule code must be assigned before the above mentioned approval process can be completed, the state co-chairperson may assign a temporary Schedule, TIA, and/or Summary Schedule code(s). This code(s) will be reviewed for adoption at the next FTA Uniformity meeting.

Note: A summary code is a 3 to 6 character string in the format x99x99 where “x” represents a letter and “9” represents a number.

x = S – Summary Code.
99 = Primary category of the summary codes.
x = Sub-category.
99 = Further break down of the sub-category.

Federation of Tax Administrators
444 N. Capitol Street, NW, Suite 348, Washington, DC • (202) 624-5890

FTA Motor Fuels Tax Section Uniformity Committee
Schedule, TIA, and Summary Schedule Codes Request Form

1. Type of Code being requested: ☐ Summary ☐ TIA ☐ Schedule
2. State requesting Code: _____
3. Map for which the code is needed (*if applicable*)
   ☐ 813 ☐ 826 ☐ XML ☐ Other _____ ☐ N/A
4. Version of map being used (*if applicable*)
   ☐ 3050 ☐ 4010 ☐ 4030 ☐ Other _____ ☐ N/A
5. To which line on your paper return will this code correspond? *Attach a copy of your paper return if applicable.* _____ ☐ N/A
6. What category does the requested code fit in?
   - ☐ TIA code
   - ☐ FTA Uniformity information not derivable from the schedules
   - ☐ FTA Uniformity information derivable from the schedules
   - ☐ State specific information not derivable from the schedules
   - ☐ New Schedule
7. Does another code come close to describing the code being requested? _____
8. If yes, why won't the existing code work for your needs? _____
   _____
9. Proposed description of code: _____
   _____
10. How will the code be used? _____
    _____
11. Why is this code needed? _____
    _____
12. Date code needed _____
13. Contact name _____
    A. Telephone number _____
    B. Address _____
    C. E-mail address _____
    D. Fax number _____
    E. Will someone be at the next meeting to discuss this requested code? ☐ Yes ☐ No

NOTE: Submit your FTA Uniformity Summary / TIA / Schedule Code Request Form according to the procedures outlined in Section 1, Chapter 5 of the Motor Fuels Electronic Filing Guide.

Approved By _____ Date Issued _____ Code Issued _____

Summary Code and TIA Code Usage

Summary and TIA codes are used for the following purposes (See complete list of codes below.):

813 Map

1. Header – TIA code 5000 defines the version/publication number of the taxing authority's Electronic Commerce Implementation Guide. TIA code 5001 (Total Net Reported) is a check value for determining if all information is included in the EDI file.
2. TOR – Terminal Operator Report or SDR - Supplier/Distributor Report - TIA code 5002 (Physical Inventory) is used to report Ending and/or Beginning Inventory.
3. SDR – Supplier/Distributor Report – TIA code 5003 (Total Due) is a check value used to acknowledge and validate tax liability or taxable gallons.
4. CCR – Common Carrier Report – TIA code 5004 (Total Net Transported) is a check value used to acknowledge and validate the report.
5. SUM - Summary Code and TIA codes are used for identifying information not found in schedules or able to be derived from the schedules. The SUM loop provides a looping structure allowing multiple TIAs in a uniform format
6. Schedules – TIA 5005 (Net), 5006 (Gross) and 5007 (Billed) are used to report bill of lading volume details or further define summary detail.
7. Summary codes are defined and utilized for both quantity and money. The TIA segment of the summary has elements for both quantity and monetary values.

820 Map

No TIA or summary codes used.

826 Map

1. Header – TIA code 5000 defines the version/publication number of the tax authority's Electronic Commerce Implementation Guide. TIA code 5001 (Total Net Reported) is a check value for determining if all information is included in the EDI file.
2. Schedules – TIA 5005 (Net), 5006 (Gross) and 5007 (Billed) are used to report bill of lading volume details or further define summary detail.

151 Map

No TIA or summary codes used.

Chapter 11 - Transaction Type Mode Codes

The X12 standard requires 2 characters in the field using this code. When a single letter, left justify and pad with a space.

The XML schema allows the user to submit the exact code. There is no need to left justify and pad with a space for the single character codes.

X12 and XML Mode Codes and Description	
B	Barge
BA	Book Adjustment
CE	Summary
GS	Gas Station
J	Truck
PL	Pipeline
R	Rail
RT	Removal from Terminal, other than by truck or Rail, for sale or consumption
S	Ship (Great Lakes or ocean marine vessel)
ST	Stationary Transfer

Chapter 12 - US, Canadian, and Mexican Postal Codes

The following charts list the valid districts, states, territories, and provinces codes for the United States, Canada, and Mexico. The source for these codes is the Federal Child Support Enforcement Network (CSENet V.8). The items in blue have been updated in the 2013 since the list was last published by the FTA Uniformity Committee.

United States Standardized Postal Abbreviations

Code	State	Code	State	Code	State
AL	Alabama	MD	Maryland	SC	South Carolina
AK	Alaska	MA	Massachusetts	SD	South Dakota
AZ	Arizona	MI	Michigan	TN	Tennessee
AR	Arkansas	MN	Minnesota	TX	Texas
CA	California	MS	Mississippi	UT	Utah
CO	Colorado	MO	Missouri	VT	Vermont
CT	Connecticut	MT	Montana	VI	Virgin Islands
DE	Delaware	NE	Nebraska	VA	Virginia
DC	District of Columbia	NV	Nevada	WA	Washington
FL	Florida	NH	New Hampshire	WV	West Virginia
GA	Georgia	NJ	New Jersey	WI	Wisconsin
GU	Guam	NM	New Mexico	WY	Wyoming
HI	Hawaii	NY	New York	Armed Forces	
ID	Idaho	NC	North Carolina	AA	APO/FPO [Americas]
IL	Illinois	ND	North Dakota	AE	APO/FPO [Europe]
IN	Indiana	OH	Ohio	AP	APO/FPO [Pacific]
IA	Iowa	OK	Oklahoma	Territories	
KS	Kansas	OR	Oregon	AS	American Samoa
KY	Kentucky	PA	Pennsylvania	MH	Marshall Islands
LA	Louisiana	PR	Puerto Rico	MP	Northern Mariana Islands
ME	Maine	RI	Rhode Island		

The items in blue have changed since the list was last published by the FTA Uniformity Committee.

Canada Standardized Postal Abbreviations

Code	Province	Code	Province
AB	Alberta	NU	Nunavut
BC	British Columbia	ON	Ontario
MB	Manitoba	PE	Prince Edward Island
NB	New Brunswick	QC	Quebec
NL	Newfoundland and Labrador	SK	Saskatchewan
NT	Northwest Territories	YT	Yukon
NS	Nova Scotia		

The items in blue have changed since the list was last published by the FTA Uniformity Committee.

Mexico Standardized Postal Abbreviations

Code	State	Code	State
AG	Aguascalientes	MO	Morelos
BC	Baja California Norte	NA	Nayarit
BS	Baja California Sur	NL	Nuevo Leon
CM	Campeche	OA	Oaxaca
CS	Chiapas	PU	Puebla
CH	Chihuahua	QT	Queretaro
CO	Coahuila	QR	Quintana Roo
CL	Colima	SL	San Luis Potosi
DF	Distrito Federal	SI	Sinaloa
DG	Durango	SO	Sonora
GT	Guanajuato	TB	Tabasco
GR	Guerrero	TM	Tamaulipas
HG	Hidalgo	TL	Tlaxcala
JA	Jalisco	VE	Veracruz
MX	Mexico	YU	Yucatan
MI	Michoacán	ZA	Zacatecas

Chapter 13 - Tax Payment Code Lists

These codes are used in the TXP02 element of the 820 Payment Order Remittance map. These codes are defined and maintained by the FTA and can be found on their web page under Electronic Tax Administration.

TXP02		Description
Tax Payment Type Code	State Defined Tax Payment Type Sub-code (2-Digits)	
050	00 - 99	Motor Fuels Taxes
051	00 - 99	Gasoline
052	00 - 99	Special/Diesel Fuel
053	00 - 99	Motor Fuel Use Tax
054	00 - 99	Aviation Fuel
055	00 - 99	LP Gas
056	00 - 99	Sales Tax on Fuel
057	00 - 99	Local Option Fuel Tax

These codes are used in the Tax Payment segment, element TXP04, of the 820 Payment Order Remittance map. This code list is information maintained by the FTA after consultation with the states.

Code	Description
T	Tax
P	Penalty
I	Interest
S	State
L	Local
C	City or County
F	Fee

Chapter 14 - 151 Error Response Codes

These codes are used to return a response to a tax authority that has sent a 151 transaction set containing records in error.

Code	Description
00001	Record corrected
00002	Record correct as originally submitted
00003	Remove record, reported in error
00004 - 99999	Available for future use

Chapter 15 - Report Codes

The three digit alpha codes listed below are used to identify the tax data being submitted as belonging to a specific tax return/report or informational report. In the X12 813 map, these codes are entered into the TFS segment in the Report section of the FTA map. In the XML schema, these descriptions are in the Report section of the FTA schema.

X12 Report Codes and Descriptions		XML Report Descriptions
CCR	Carrier Report	Carrier Report
DIS	Distributor Report	Distributor Report
DLR	Dealer Report	Dealer Report
RET	Retailer Report	Retailer Report
SDR	Supplier/Distributor Report	*not used in XML*
SUR	Supplier Report	Supplier Report
TOR	Terminal Operator Report	Terminal Operator Report

Chapter 16 - Book Adjustments for Products Rebranding

Example 1 - Book Adjustments

Supplier/Distributor Return:

Distributor B purchases 1,000 gallons of gasohol from Distributor A. Distributor A received the gasohol components as follows:

100 gallons of alcohol from Distributor Y

900 gallons of gasoline from Distributor X

Distributor A has the above products listed as such in its inventory but needs to record the sale of the Gasohol. To accomplish the reduction of the alcohol and gasoline and to account for the sale of the gasohol, Distributor A will need to record the rebranding of the products from Alcohol/Gasoline to Gasohol using a "BA" mode code.

Below is a mapped X12 EDI example of the rebranding:

Supplier's/Distributor's Receipts

Product: Alcohol

TFS~T3~2~PG~E00~94~J\	Original entry for receipt of prod/code E00
REF~55~325\	
N1~SF~IA\	State where original gallons received
N4~Council Bluff~IA\	City where the original gallons received
N1~SE~Distributor Y~24~848888888\	Receipt of gasoline from Distributor Y
FGS~D~BM~34882\	
REF~55~326\	
DTM~095~20130404\	Date the original receipt of product
TIA~5005~~~100~GA\	Net amount of gallons in receipt
TIA~5006~~~99~GA\	Gross amount of gallons in receipt
TIA~5007~~~100~GA\	Billed amount of gallons in receipt

Supplier's/Distributor's Receipts

Product: Gasoline

TFS~T3~2~PG~065~94~J\	Original entry for receipt of prod/code 065
REF~55~327\	
N1~SF~IA\	State where original gallons received
N4~Council Bluff~IA\	City where the original gallons received
N1~SE~Distributor X~24~849999999\	Receipt of gasoline from Distributor X
FGS~D~BM~34852\	
REF~55~328\	
DTM~095~20130404\	Date the original receipt of product
TIA~5005~~~900~GA\	Net amount of gallons in receipt
TIA~5006~~~895~GA\	Gross amount of gallons in receipt
TIA~5007~~~100~GA\	Billed amount of gallons in receipt

Supplier's/Distributor's Disbursement (rebrand - out)

Product being rebranded: Alcohol

TFS~T3~6~PG~E00~94~BA\	Book Adjustment for product code E00
REF~55~329\	
FGS~D~BM~REBRAND\	States choice of how to identify rebrand
N1~ST~IA\	State where rebrand occurred
N4~Council Bluff~IA\	City where rebrand occurred
REF~55~330\	
DTM~095~20130404\	Date the rebrand took place
TIA~5005~~~100~GA\	Net amount of gallons in rebrand
TIA~5006~~~99~GA\	Gross amount of gallons in rebrand

Supplier's/Distributor's Disbursement (rebrand - out)

Product being rebranded: Gasoline

TFS~T3~6~PG~065~94~BA\	Book Adjustment for product code 065
REF~55~331\	
FGS~D~BM~REBRAND\	States choice of how to identify rebrand
N1~ST~IA\	State where rebrand occurred
N4~Council Bluff~IA\	City where rebrand occurred
REF~55~332\	
DTM~095~20130404\	Date the rebrand took place
TIA~5005~~~900~GA\	Net amount of gallons in rebrand
TIA~5006~~~895~GA\	Gross amount of gallons in rebrand

Supplier's/Distributor's Receipt (rebrand - in)

Rebranded product: Gasohol

TFS~T3~2~PG~E10~94~BA\	Book Adjustment for receipt of rebrand
REF~55~333\	
N1~SF~IA\	State where rebranded gallons received
N4~Council Bluff~IA\	City where the rebranded gallons received
FGS~D~BM~REBRAND\	
REF~55~334\	
DTM~095~20130404\	Date the rebrand took place
TIA~5005~~~1000~GA\	Net amount of gallons in rebrand
TIA~5006~~~994~GA\	Gross amount of gallons in rebrand

Supplier's/Distributor's Disbursement (rebranded product sold)

Rebranded product: Gasohol

TFS~T3~6~PG~E10~94~J\	Sale of rebranded product E10
REF~55~335\	
FGS~D~BM~34582\	Invoice number of product out
N1~BY~Distributor B~24~847777777\	Purchaser of product
N1~ST~IA\	State product is destined
N4~Council Bluff~IA\	City where the gallons destined
REF~55~336\	
DTM~095~20130404\	Date the sale took place
TIA~5005~~~1000~GA\	Net amount of gallons in sold
TIA~5006~~~994~GA\	Gross amount of gallons in sold
TIA~5007~~~1000~GA\	Billed amount of gallons in sold

Example 2 - Rebranding Above the Rack

Terminal Operator Return:

Book adjustments require corresponding entries on the return. Rebranding of products is reported using a book adjustment (BA) mode code. Rebranding, the above the rack transfer of one product into storage of another product, must be reported by a book adjustment reflecting a disbursement terminal (15B) of one product and a corresponding terminal receipt (15A) of the second product. The product codes for the disbursements and receipts should be different, but the total gallons for the receipts and disbursements must be the same.

You have a customer who needs 10,000 gallons of dyed diesel. Your terminal does not blend dyed diesel (228) in the tank, but injects dye into undyed diesel (160) at the rack. A negative dyed diesel (228) inventory is created when your customer pulls 10,000 gallons of dyed diesel (228) at the rack. You need to rebrand 10,000 gallons of undyed diesel (160) into dyed diesel (228) to balance both your undyed and dyed diesel inventories. You need two book adjustment entries, the first being a 10,000 gallon entry to your terminal disbursements (Schedule 15B) for undyed diesel (160) and a second entry to record the receipt (Schedule 15A) of the dyed diesel (228). The mapping would read as follows:

Disbursement

TFS~T3~15B~PG~160~94~BA\	Book Adjustment for product code 160
REF~55~325\	
N1~OT~~TC~T57SC0000\	Terminal where rebrand happened
N1~ON~Terminal A~24~571234567\	Owner of product in terminal
FGS~D~BM~REBRAND\	
REF~55~326\	
DTM~095~20130404\	Date the rebrand took place
TIA~5005~~~10000~GA\	Gross amount of gallons in rebrand
TIA~5006~~~10000~GA\	

Receipt

TFS~T3~15A~PG~228~94~BA\	Book Adjustment for product code 228
REF~55~327\	
N1~DT~~TC~T57SC0000\	Terminal where rebrand happened
N1~ON~Terminal A~24~571234567\	Owner of product in terminal
FGS~D~BM~REBRAND\	
REF~55~328\	
DTM~095~20130404\	Date the rebrand took place
TIA~5005~~~10000~GA\	Gross amount of gallons in rebrand
TIA~5006~~~10000~GA\	

Once the volume of fuel is rebranded the new product is reported when physically dispensed.

Book Adjustments Requiring a One-sided Entry

If there is a transfer that involves a non-reporting product, there would only be an entry showing the disbursement or receipt of the reporting product. There would be no related entry for the non-reporting product.

Section 2 - X12 EDI

Chapter 1 - Introduction to X12 EDI

EDI is made up of many different methods of sharing data electronically between parties. The FTA has developed standards for the tax authority to follow when implementing electronic data interchange (EDI).

Electronic data interchange (**EDI**) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention.

The X12 EDI Process - Basic Components

The 813 Transaction Set contains the return information elements that include:

Header Information

TFS - Tax Form Segment (start of the tax form). The TFS loop for a Motor Fuel 813 can contain one of the following tax form types:

Report Codes:
- Terminal Operator Report - TOR
- Supplier/Distributor Report - SDR
- Supplier - SUR
- Distributor - DIS
- Common Carrier Report - CCR
- Retailer Report - RET
- Dealer Report - DLR

FGS - Forms Group Segment (report detail)

The FGS loop, which always begins with the FGS segment, begins the individual shipments within the TFS loop.

Chapter 2 - X12 Attribute and Separator Conventions

Attributes

Attribute	Definition	
Data Element Type	Nn – Numeric	Numeric type data element is symbolized by the two-position representation (Nn). N indicates a numeric, and n indicates the decimal places to the right of a fixed, implied decimal point. N0 (N Zero) is a numeric with no decimal places.
	R – Decimal (Real)	The decimal point is optional for integer values, but is required for fractional values. For negative values, the leading minus (-) sign is used. Absence of this sign indicates a positive value. The plus (+) sign should not be transmitted.
	ID – Identifier	An identifier data element must always contain a value from a predefined list of values that is maintained by ASC X12 or by other bodies that are recognized by ASC X12.
	AN – String	A string (Alphanumeric) is a sequence of any characters from the basic or extended character sets. It must contain at least one non-space character. The significant characters must be left justified. Leading spaces, if any, are assumed to be significant. Trailing spaces should be suppressed.
	DT – Date	Format for the date type is CCYYMMDD. CC is the century digits of the year (ex. 19, 20). YY is the last two digits of the year (00-99), MM is the numeric value of the month (01-12), and DD for the day (01-31).
	TM – Time	Format for the time type is HHMMSS, expressed in 24-hour clock format. HH is the numeric value for hour (00-23), MM for minute (00-59), and SS for second (00-59).
Requirement Designator	Defines how the data element is used in a segment. M Mandatory data element - This element is required to appear in the segment. O Optional data element - The appearance of this data element is at the option of the sending party or is based on a mutual agreement of the interchange parties. X Relational data element - Relational conditions may exist between two or more data elements. If one is present the other/s is required. The relational condition is displayed under the Syntax Noted of the X12 Standards.	
Data Element Length	The number of character positions assigned to a data element. Example: Data element length of 2/10. You must have at least 2 characters but no more than 10 characters for this element (minimum of 2/ maximum of 10).	
Semantic Note Designator	Z – Designator	A data element within a segment may have a designator (Z) that indicates the existence of a semantic note. Semantic notes are considered part of the standard. If a condition designator and a semantic note both affect a single data element, the condition will appear first, separated from the semantic note designator by a vertical bar (|). The number 00 to the left of the comment identifies semantic notes that are general in nature.

Separator Requirements

Type	ASCII Value	EBCDIC Value	Character	Character Name
Repetition Separator	7C	4F	|	Pipe
Segment Terminator	5C	E0	\	Back Slash
Element Separator	7E	A1	~	Tilde
Sub-element Separator	5E	5F	^	Caret
Padding Character	20	40	Space	Space

Chapter 3 – X12 Question and Answers

Question: Taxing authorities require diversions to be reported on my tax returns. Where in the EDI map can I pass the diversion number?

Answer: Diversion numbers are not passed in the FTA Uniform Motor Fuels EDI map. These numbers are generated by taxing authorities and are associated with a bill of lading at the time the diversion number is assigned. The diverted bill of lading number and related fuel information is reported in the EDI file on the diversion schedule 11. The bill of lading number on schedule 11 gives the tax authority a link back to the diversion number they already have stored in their system.

Question: Do I need to pass tax rates and fees in my EDI file?

Answer: No, Tax Rates and Fees are not passed in the FTA Uniform Motor Fuels EDI map. This information is set and published by the taxing authority. The monetary values associated with the tax and fees due are derivable from the information reported in the EDI file.

Question: Does inventory gains/losses information have to be reported electronically with each filing?

Answer: This depends on the requirements of the taxing authorities. Some authorities do not require regular gains/losses information reporting and compute the gain or loss from the other information in the FTA Uniform Motor Fuels EDI map. Other authorities require positive reporting of the gains/losses and compare their calculated amounts to the amounts reported. If an inventory gain or loss is questionable, the tax authority should contact the taxpayer for an explanation. The gain or loss is the difference between book inventory and physical ending inventory. If the book inventory is greater than physical ending inventory there is a loss of inventory. Likewise, if book inventory is less than physical ending inventory there is a gain of inventory. The following example details the calculation of an inventory gain or loss.

January 2001		February 2001	
Beginning Inventory		Beginning Inventory	100,000
+ Receipts		+ Receipts	500,000
= Total Available		= Total Available	600,000
- Disbursements		- Disbursements	450,000
= Book Inventory		= Book Inventory	150,000
Gain/(Loss)		Gain/(Loss)	(500)
Ending Inventory	100,000	Ending Inventory	149,500

Question: Does beginning inventory information have to be reported electronically with each filing?

Answer: No, even though the FTA Uniform Motor Fuels EDI map allows for beginning inventory to be reported, this information can be derived from the previous months ending inventory. However, some taxing authorities are asking taxpayers to report this information each month if there have been changes made to the reported inventory quantities. It is the position of the EC Subcommittee that if inventory quantities change from what was reported as ending inventory in the previous month to what is reported as beginning for the current month; that the taxpayer should be required to correct the previous months ending inventory by filing amended information. By filing amended inventory information the taxpayer will have eliminated inventory discrepancies.

Question: Does each element within a segment have to be represented when data does not exist?

Answer: Certain elements within a segment are required by the X12 standards. Element Separators (Placeholders) are required for each element that falls between utilized elements.

Example: TIA~5005~~~8000~GA\

However, Placeholders are not required when unused elements are at the end of the segment following the last utilized element.

Example: TFS~T2~TOR\

This TFS segment only uses 2 of the 8 elements available. We do not have to add Placeholder for the remaining 6 elements.

Question: What is meant by combined reporting?

Answer: Combined reporting means the electronic file contains one schedule that can be applied to multiple reports. The data in the schedule needs to be analyzed electronically and associated with the appropriate return in internal tax authority systems. The file will contain information in the following order:

1. Report Cover sheets (TOR, SDR, CCR, etc.). All report types that apply to the data.
2. Summary information. All summary information applying to any of the included reports.
3. Schedule date. This is the detail that can be broken out by the tax authority and applied to the appropriate report type.

Question: What naming convention do we use when sending export information to neighboring states?

Answer: To ensure files are not accidentally overwritten, use the following naming convention when sending electronic export information to neighboring states.

SSXXXRSYYYYMM.txt

SS = Sending state abbreviation

XXX = file type ‘826’ = EDI file, ‘XML’ = XML Schema, or ‘FFF’ = flat file format

RS = Receiving state abbreviation

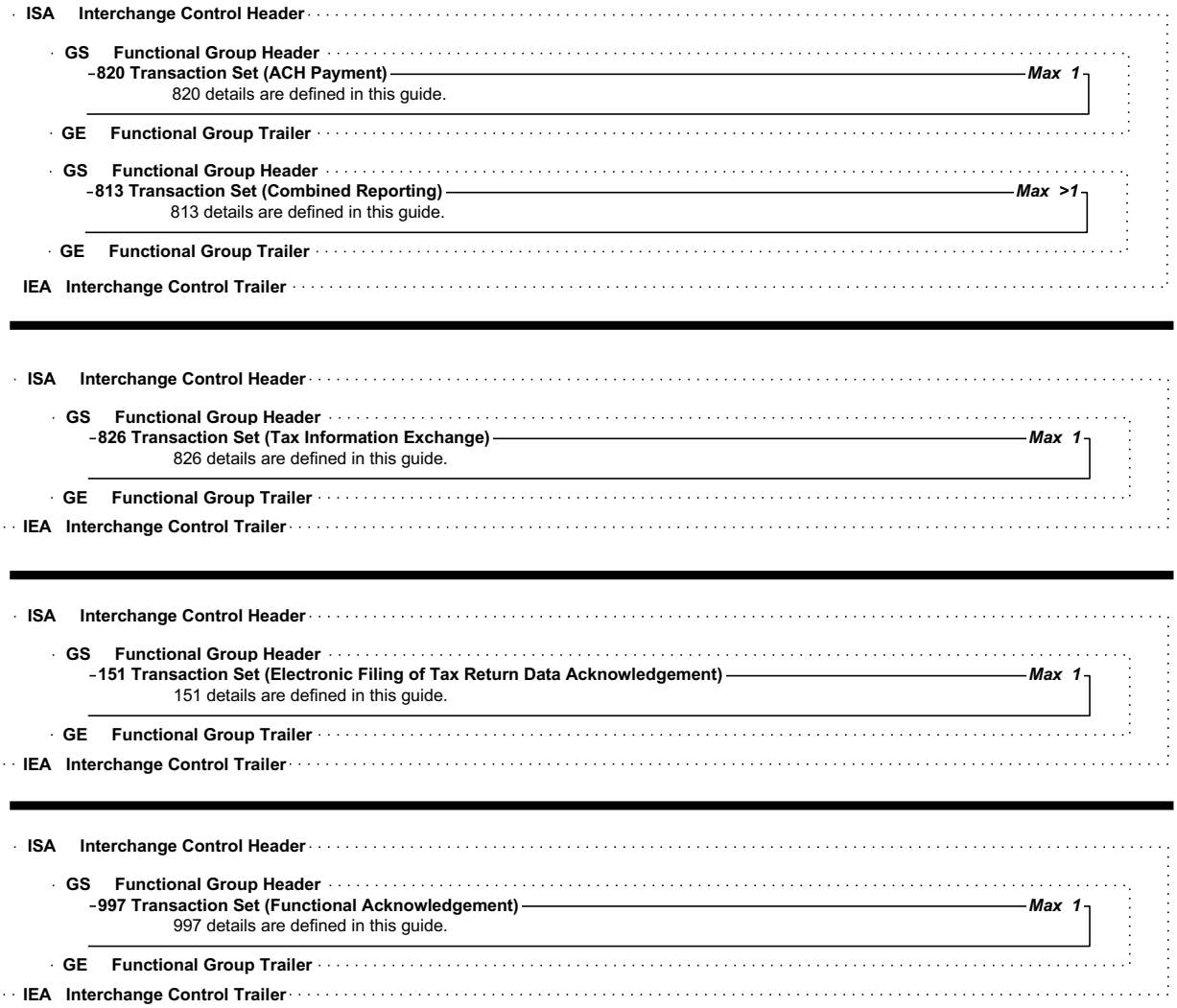
YYYY = 4-digit year of the transmission date

MM = 2-digit month of the transmission date

Chapter 4 - X12 Envelope

X12 Envelope Examples

Each envelope example depicts a specific type of data exchange between the sender and the receiver. The first is an example of a payment (820) and tax return (813) submission. The next example is the exchange of tax data (826) between taxing authorities. The next example is the acknowledgement of data error (151), and the last example is the receipt acknowledgement of the data (997).



Key:

Not Used	Not used: No data to transmit
Syntax Notes	Note: Notes defined by X12 Standards
FTA Notes	Note: Notes defined by FTA Uniformity

Interchange Control Header Description

Interchange Segment								**(Required)**
Element ID	Elem Ref #	Sub-Ele Ref#	Field Status	Field Name	Field Type	Length Min.	Length Max.	Field Description
ISA01	I01		M	Authorization Information Qualifier	ID	2	2	"00" = No Authorization Information Present (No Meaningful Information In Isa02) "03" = Additional Data Identification
ISA02	I02		M	Authorization Information	AN	10	10	Information used for additional identification or authorization of the interchange sender or the data in the interchange.
ISA03	I03		M	Security Information Qualifier	ID	2	2	"00" = No Security Information Present (No Meaningful Information In ISA 04) "01" = Password
ISA04	I04		M	Security Information	AN	10	10	This is used for identifying the security information about the interchange sender or the data in the interchange.
ISA05	I05		M	Interchange ID Qualifier	ID	2	2	"01" = DUNS Number "32" = Employer's Identification Number "ZZ" = ID qualifier published by the sender used to designate the sender ID element being qualified.
ISA06	I06		M	Interchange Sender ID	AN	15	15	ID code published by the sender for other parties to use as the receiver ID to route data to them.
ISA07	I05		M	Interchange ID Qualifier	ID	2	2	"01" = DUNS Number "32" = Employer's Identification Number "ZZ" = ID qualifier published by the receiver used to designate the receiver ID element being qualified.
ISA08	I07		M	Interchange Receiver ID	AN	15	15	ID code published by the receiver for other parties to use as the sender ID to route data to them.
ISA09	I08		M	Interchange Date	DT	6	6	"YYMMDD" = Date Of The Interchange
ISA10	I09		M	Interchange Time	TM	4	4	"HHMM" = Time Of The Interchange
ISA11	I65		M	Repetition Separator		1	1	"|" = EBCDIC - 4F HEX ASCII - 7C HEX
ISA12	I11		M	Interchange Control Version Number	ID	5	5	"00403"
ISA13	I12		M	Interchange Control Number	N0	9	9	The interchange control number uniquely identifies the interchange data to the sender. The sender assigns this number.
ISA14	I13		M	Acknowledgment Requested	ID	1	1	"0" = No Acknowledgment Required "1" = Acknowledgment Required
ISA15	I14		M	Usage Indicator	ID	1	1	"P" = Production Data "T" = Test Data
ISA16	I15		M	Component Sub-Element Separator		1	1	"^" = EBCDIC – 5F HEX ASCII – 5E HEX
ISA~03~T5ZXF54W21~01~TORCCRFILE~ZZ~757654321 ~ZZ~040539587 ~010523~0931~|~00403~000000001~0~T~^\								
Syntax Notes: None								
FTA Note: ISA09 does not include the century based on the ANSI ASC X12 Standard.								

Electronic Signature Method:

The following example illustrates how the ISA01-ISA04 can serve as an electronic signature.

- ISA01 is 03 (zero three). ISA01 qualifies ISA02 as an authorization code.
- ISA02 is the ten-digit authorization code provided by the taxing authority. This code, in conjunction with the ten-digit password in ISA04, will represent your signature that is affixed to a trading partner agreement
- ISA03 is 01 (zero one). ISA03 qualifies ISA04 as a security password
- ISA04 is the ten-digit password that is created by the trading partner and entered on the trading partner agreement. This password, in conjunction with the ISA02 authorization code, will represent your signature that is established on the trading partner agreement

Functional Group Header Description

Functional Group Segment								**(Required)**
Element ID	Elem. Ref #	Sub-Ele Ref#	Field Status	Field Name	Field Type	Length Min.	Length Max.	Field Description
GS01	479		M	Functional Identifier Code	ID	2	2	"TF" for 813 Transaction Set "RA" for 820 Transaction Set "TI" for 826 Transaction Set "FA" for 997 Transaction Set
GS02	142		M	Application Sender's Code	AN	2	15	Code identifying party sending transmission. Code assigned by sender and agreed to by trading partner.
GS03	124		M	Application Receiver's Code	AN	2	15	Code identifying party receiving transmission. Code assigned by receiving and agreed to by trading partner.
GS04	373		M/Z	Date	DT	8	8	"CCYYMMDD" = Date
GS05	337		M/Z	Time	TM	4	8	"HHMMSSDD" = Time
GS06	28		M/Z	Group Control Number	N0	1	9	Assigned number originated and maintained by the sender.
GS07	455		M	Responsible Agency Code	ID	1	2	"X" = ASC X12
GS08	480		M	Version/ Release / Industry Identifier Code	AN	1	12	"004030"
GS~TF~Sender ID~Receiver ID~20010523~0931~1101~X~004030\								
Syntax Notes:	None							
FTA Note:	None							

The following transaction sets depending on what is being conveyed would be between the GS and GE segments.

1. 813 Electronic Filing of Tax Return Data
2. 820 Payment – ACH Debit
3. 826 Tax Information Exchange
4. 997 Functional Acknowledgement

Functional Group Trailer Description

Functional Group Segment								**(Required)**
Element ID	Elem Ref #	Sub-Ele Ref#	Field Status	Field Name	Field Type	Length Min.	Length Max.	Field Description
GE01	97		M	Number Of Transaction Sets Included	N0	1	6	Count of transaction sets within this GS/GE.
GE02	28		M/Z	Group Control Number	N0	1	9	The data interchange control number in the trailer must be identical to the same data element in the associated functional header (GS06).
GE~1~1101\								
Syntax Notes:	None							
FTA Note:	None							

Interchange Control Trailer Description

Interchange Segment								**(Required)**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min.	Length Max.	Field Description
IEA01	I16		M	Number Of Included Functional Groups	N0	1	5	Count of Function Groups Within This ISA/IEA.
IEA02	I12		M	Interchange Control Number	N0	9	9	The interchange number in the trailer must be identical to the same data element in the associated interchange header (ISA13).
IEA~10~000000001\								
Syntax Notes:	None							
FTA Note:	None							

Chapter 5 - X12 813 Combined Reporting Overview

ANSI ASC X12 813 EDI Standard

RELEASE • 004030 TRANSACTION SET TABLES • 813

813 Electronic Filing of Tax Return Data

FUNCTIONAL GROUP=TF

This Draft Standard for Trial Use contains the format and establishes the data contents of the Electronic Filing of Tax Return Data Transaction Set (813) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set can be used by tax filers to electronically file tax returns with a federal, state, or local taxing authority and which may initiate payments related to the tax return.

Table 1

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
	0100	ST	Transaction Set Header	M	1	
	0200	BTI	Beginning Tax Information	M	1	
	0300	DTM	Date/Time Reference	M	10	
N	0400	TIA	Tax Information and Amount	O	1000	
	0430	REF	Reference Identification	O	10	
	0450	TRN	Trace	O	1000	
	0470	BPR	Beginning Segment for Payment Order/Remittance Advice	O	1000	
			LOOP ID - N1			>1
N	0500	N1	Name	O	1	
	0600	N2	Additional Name Information	O	2	
	0700	IN2	Individual Name Structure Components	O	10	
	0800	N3	Address Information	O	2	
	0900	N4	Geographic Location	O	1	
	1000	PER	Administrative Communications Contact	O	2	

Table 2

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
			LOOP ID - TFS			100000
	0100	TFS	Tax Form	O	1	
	0200	REF	Reference Identification	O	10	
	0300	DTM	Date/Time Reference	O	10	
	0400	MSG	Message Text	O	1000	
			LOOP ID - N1			>1
N	0500	N1	Name	O	1	
	0600	N2	Additional Name Information	O	2	
	0700	IN2	Individual Name Structure Components	O	10	
	0800	N3	Address Information	O	2	
	0900	N4	Geographic Location	O	1	
			LOOP ID - TIA			10000
N	0920	TIA	Tax Information and Amount	O	1	
	0940	DTM	Date/Time Reference	O	10	
	0960	MSG	Message Text	O	1000	
			LOOP ID - FGS			100000
	1000	FGS	Form Group	O	1	
	1100	REF	Reference Identification	O	10	
	1200	DTM	Date/Time Reference	O	10	
			LOOP ID - N1			>1
N	1300	N1	Name	O	1	

DECEMBER 1999 1

[1]

[1] Data Interchange Standards Association, Inc. (DISA)

	1400	N2	Additional Name Information	O	2		
	1500	IN2	Individual Name Structure Components	O	10		
	1600	N3	Address Information	O	2		
	1700	N4	Geographic Location	O	1		
			LOOP ID - TIA			10000	
N	1800	TIA	Tax Information and Amount	O	1		
	1900	DTM	Date/Time Reference	O	10		
	2000	MSG	Message Text	O	1000		

Table 3

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
	0100	SE	Transaction Set Trailer	M	1	
			Changes loop repeat value in table/positions 1/0500, 2/0500 and 2/1300.			6 205299

NOTES

1/0400 The TIA segment allows for tax information and amounts associated with the entire filing. At least one occurrence of the TIA segment must be present in the transaction set, either in Table 1 or Table 2.
1/0500 This N1 loop reflects names and addresses associated with the entire filing.
2/0500 This N1 loop reflects names and addresses associated with a particular tax form (TFS).
2/0920 At least one occurrence of the TIA segment must be present in the transaction set, either in Table 1 or Table 2.
2/1300 This N1 loop reflects names and addresses associated with a particular subset of a tax form.
2/1800 At least one occurrence of the TIA segment must be present in the transaction set, either in Table 1 or Table 2.

[2]

[2] Data Interchange Standards Association, Inc. (DISA)

Motor Fuel Uniformity X12 813 Structure

Table 1

Pos No	Uniform 813 Map	Header
0100	ST	Transaction Set Header
0200	BTI	Identify Tax Agency Information
0300	DTM	Tax Filing Period
0400	TIA	Confidential Information
0400	TIA	Total Net Reported
0430	REF	Line Item Control Number
0470	BPR	Payment Information
0500	N1	Taxpayer Name Detail
0600	N2	Additional Taxpayer Name Detail
0800	N3	Address Detail
0900	N4	City, State, Zip Code Detail
1000	PER	General Contact Person
1000	PER	EDI Contact Person
0500	N1	Mailing Name Detail
0600	N2	Additional Mailing Name Detail
0800	N3	Mailing Address Detail
0900	N4	Mailing City State Zip Code Detail

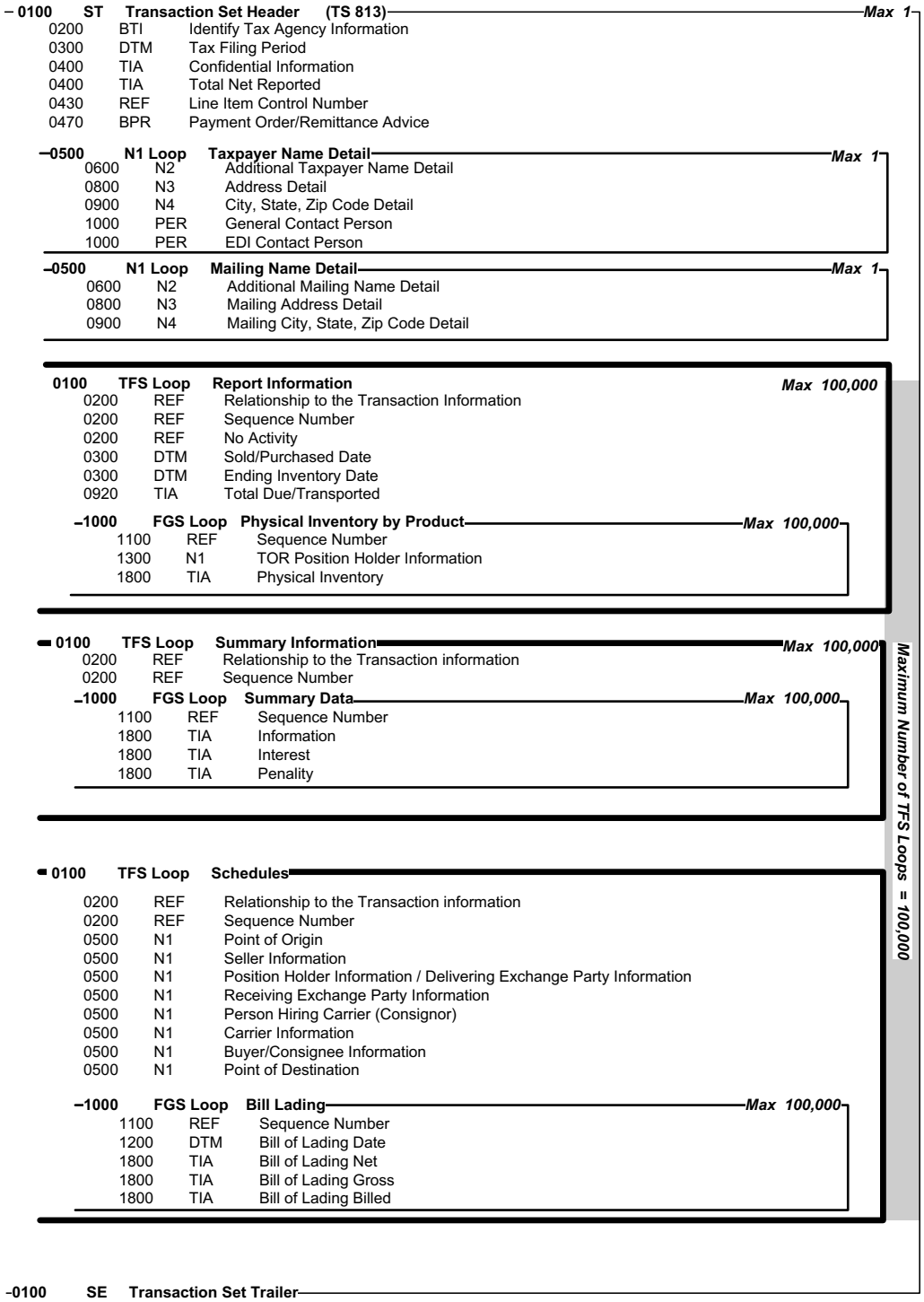
Table 2

Pos No	Uniform 813 Map	TOR/SDR/etc. (Tax Report)	SUM (Summary Information)	SCH (Schedule Detail)
0100	TFS	Report	Summary Information	Schedules
0200	REF	Relationship to the Transaction	Relationship to the Transaction	Relationship to the Transaction
0200	REF	Sequence Number	Sequence Number	Sequence Number
0200	REF	No Activity		
0300	DTM	Sold/Purchase Date		
0300	DTM	Ending Inventory Date		
0500	N1			Point of Origin
0500	N1			Seller Information
0500	N1			Position Holder Information / Delivering Exchange Party
0500	N1			Receiving Exchange Party Information (only used when an exchange occurs)
0500	N1			Person Hiring Carrier (Consignor)
0500	N1			Carrier Information
0500	N1			Buyer / Consignee Information
0500	N1			Point of Destination
0920	TIA	Total Due / Transported		
1000	FGS	Physical Inventory by Product	Summary Data	Bill of Lading
1100	REF	Sequence Number	Sequence Number	Sequence Number
1200	DTM			Bill of Lading Date
1300	N1	TOR Position Holder Information		
1800	TIA	Physical Inventory	Information	Bill of Lading Net
1800	TIA		Interest	Bill of Lading Gross
1800	TIA		Penalty	Bill of Lading Billed

Table 3

Pos No	Uniform 813 Map	Trailer
0100	SE	Transaction Set Trailer

X12 813 Map Flow



FTA Motor Fuel Tax Section Uniformity Committee 813 Map

The Combined Reporting map is based on uniform forms adopted by the Uniformity Committee of the Motor Fuel Tax Section of the Federation of Tax Administrators. This map is consistent with ANSI ASC X12 version 4030 standards. Any tax authority implementing EC programs is asked to utilize this document when mapping their motor fuel tax returns/reports.

Taxing authorities implementing EC are requested to bring their implementation guide to the Electronic Commerce Sub-committee to ensure compliance to the Uniformity standards. Please submit an advance copy to the Electronic Commerce Review Team leader by e-mail.

Historical Summary of Map Changes

The following is intended as a high level historical summary of map changes from V.3040 to V.4030.

- Version 3040
  - Release Date: October, 1993
  - First motor fuel EDI map released
- Version 3050
  - Release date: October, 1994
  - Moved away from form-faithful mapping to logic-driven mapping of motor fuel reports
  - Information should be carried on detail schedules if possible
  - Provided longer field lengths (i.e. name field)
  - Provided a century code for all date fields to handle Y2K
- Version 3060
- Version 3070
  - Added composite elements to mapping
  - Made improvements by adding a sub element century code for Y2K
- Version 3072
  - Initial release of eight digit date field
- Version 4010
  - Release Date: October 1997
  - Released the first Combined Motor Fuel map to carry the Terminal Operator, Supplier, Distributor and Carrier reports in one EDI file
  - Eight digit date field
  - Added Sequence Error ID Number
- Version 4020
  - Repetition Separator in the ISA11
  - Began to see the beginning of repeating elements which occur in V.4030

- Version 4030
  - 813 was released as draft: December 1999
  - 813 and 151 final release date: September 2000
  - 103 differences mainly changes from semantic note to comment
  - N1 loop changed from a maximum of 5 to a maximum of greater than 1
  - Increased size of field lengths
  - TFS loop for Summary Information added
  - TIA segments modified to include both gallons and dollars on same segment
  - Summary schedule added
  - TIA codes reduced and summary codes created
  - 826 and 997 added September 2002
  - 820 Released as draft: September 2002
  - 820 Transaction set adopted September 2003
  - BPR Segment in the 813 transaction set adopted September 2003
  - Update Sequence Error ID Number segment to allow for responses and better definition of error.
  - Add segment to address 2 party exchanges.
  - A segment was added to the Terminal Operator report to show date of sale and purchase of a terminal.
  - Add ability for report codes and state license number.
  - Add the ability to report county codes for point of origin and destination.
  - 813 updated to include position holder inventory on Terminal Operator report: September 2013.

Chapter 6 - X12 813 X12 Map

Key:

Not Used	Not used: No data to transmit
Syntax Notes	Note: Notes defined by X12 Standards
FTA Notes	Note: Notes defined by FTA Uniformity

Transaction Set Tax Report Header Information

Beginning of Transaction Set Header Segment								**(Required) Pos. No. 0100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
ST01	143		M	Transaction Set Code	ID	3	3	Transaction Set Type "813"
ST02	329		M	Transaction Set Control Number	AN	4	9	Filer defined unique control number (same value as SE02)
ST03	1705		O/Z	Implementation Convention Reference	AN	1	5	Version of taxing authority's implementation guide.
ST~813~10001~1\								
Syntax Notes: None								
FTA Note: It is recommended that ST03 be used to help identify which implementation guide the trading partner is using. This element will help the receiver of the data determine if the sender is using an old guide or the most current guide for the data transmission.								

Identify Tax Agency Information Begin Tax Information Segment								**(Required) Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
BTI01	128		M	Reference Number Qualifier	ID	2	2	"T6" = Defines as Tax Filing
BTI02	127		M	Reference Number	AN	3	3	Defined by FTA "050" = All Fuels Tax Filings
BTI03	66		M	ID Code Qualifier	ID	2	2	"47" = Tax Authority
BTI04	67		M	ID Code	AN	2	20	Determined by Tax Authority Example: Tax Agency Abbreviation; Tax Authority's DUNS number
BTI05	373		O	Transaction Create Date	DT	8	8	"CCYYMMDD" = Transmission Date
BTI06	818		O	Name Control ID	AN	4	4	First 4 positions of Taxpayer's Legal Business Name. If business name is less than 4 characters, left justify name control and pad with "*".
BTI07	66		X	ID Code Qualifier	ID	2	2	"24" = FEIN Federal Employer Identification Number "34" = Social Security Number "50" = BN – Canadian Business Number
BTI08	67		X	ID Code	AN	9	18	Taxpayer's FEIN or SSN or BN
BTI09	66		X	ID Code Qualifier	ID	2	2	"49" = State (assigned) Identification Number
BTI10	67		X	ID Code	AN	2	20	License or Permit Number
BTI11	66		X	ID Code Qualifier	ID	2	2	"48" = IRS Electronic Filer ID Number "SV" = Software Provider Number
BTI12	67		X	ID Code	AN	9	18	637 Permit Number or State Assigned Software Provider Number
BTI13	353		O	Transaction Set Purpose Code	ID	2	2	Original Filing Options: "00" = Original "05" = Replace "15" = Resubmission

BTI14	640		O	Transaction Type Code	ID	2	2	Amended Filing Options: “6R” = Resubmission “6S” = Supplemental “CO” = Corrected
BTI~T6~050~47~Tax Authority Code~20010523~ABCD~24~516999988~49~123456~~~00\								
Syntax Notes: If either BTI07 or BTI08 is present, then the other is required. If either BTI09 or BTI10 is present, then the other is required. If either BTI11 or BTI12 is present, then the other is required.								
FTA Notes: BTI07 must be the FEIN if the taxpayer has one. Submit a SSN only for sole proprietorships that have not been issued a FEIN. In Canada, companies us a BN – Canadian Business Number. The application of BTI13 and BTI14 are as follows: BTI13 should be used when the taxpayer transmits their initial return (BTI13 should be used without BTI14); BTI14 should be used when the taxpayer transmits modifications (BTI14 should be used without BTI13). This is a recommendation of the Motor Fuel Uniformity Committee, not a requirement of X12. Further clarification of these elements is located below.								

Element	Application
BTI13 [Initial Return]	
“00” = Original	Use “Original” when first attempt to transmit your return to the department, no matter if the Department receives your return.
“05” = Replace	Use “Replace” when first attempt of transmitted return had corrupted data.
“15” = Resubmission	Use “Resubmission” when the Department did not receive first attempt of your transmitted return.
BTI14 [Amended Return]	
“CO” = Corrected	Use “Corrected” when adjusting or correcting original or amended return.
“6R” = Resubmission	Use “Resubmission” when first attempt to transmit amended return was not received by the Department.
“6S” = Supplemental	Use “Supplemental” when transmitting new or additional data not included in original or amended return.

Tax Filing Period **(Required)**
Date/Time Reference Segment **Pos. No. 0300**

Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	“194” = Tax Period End Date “683” = Filing Period
DTM02	373		X	Date	DT	8	8	”CCYYMMDD” = Tax Filing Period End
DTM03 and DTM04 are not used.								
DTM05	1250		X	Date Time Period Format Qualifier	ID	3	3	“RD8” = Range of Dates
DTM06	1251		X	Date Time Period	AN	17	17	“CCYYMMDD-CCYYMMDD” = Tax Filing Period Beginning and Ending Dates.
DTM~194~20010525\ or DTM~683~~~~RD8~20010426-20010525\								
Syntax Notes: At least one of DTM02 or DTM05 is required. If either DTM05 or DTM06 is present, then the other is required.								
FTA Notes: If qualifier “194” is used in DTM01, then DTM05 and DTM06 are not used. If qualifier “683” is used in DTM01, then DTM02 is not used.								

Confidential Data **Tax Information and Amount Segment**								**(Optional)** **Pos. No. 0400**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information Code	AN	4	4	"5010" = Confidential Information
TIA02 is not used.								
TIA03	449		X	Fixed Format Information	AN	1	5	User defined: Example: "6103" = IRS 6103C Tax data.
TIA~5010~~6103\								
Syntax Notes: TIA03 is required.								
FTA Notes: This segment is used only between the states and the IRS								

Total Net Reported **Tax Information and Amount Segment**								**(Optional)** **Pos. No. 0400**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information Code	AN	4	4	"5001" = Total Net Reported
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Total Number of Net Gallons/Liters in Tax Filing
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5001~~~1000000~GA\								
Syntax Notes: TIA04 is required. If TIA05 is present, then TIA04 is required.								
FTA Notes: Even though this value can be calculated, it is included, as a control figure to verify that the amount calculated by the Tax Authority is the same as expected by the taxpayer.								

Line Item Control Number **Reference Number Segment**								**(Optional)** **Pos. No. 0430**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"FJ" = Line Item Control Number
REF02	127		X	Reference Identification	AN	4	9	Control Number
REF~FJ~0001234\								
Syntax Notes: REF02 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required.								

The payment order remittance advice is included as a convenience for industry if a tax authority accepts a BPR segment. The recommendation is **not** to mandate this as the only method of payment a tax authority accepts.

Payment Order Remittance Advice Beginning Segment								**(Optional) Pos. No. 0470**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
BPR01	305		M	Transaction Handling Code	ID	1	2	"S" = Single Debit Authorization "P" = Pre-notification
BPR02	782		M	Monetary Amount	R	1	18	Amount of tax payment
BPR03	478		M	Credit/Debit Flag Code	ID	1	1	"D" = Debit
BPR04	591		M	Payment Method Code	ID	3	3	'ACH" = Automated Clearing House
BPR05	812		M	Payment Format Code	ID	3	3	"CCD" = Cash Concentration/Disbursement "CCP" = Cash Concentration/Disbursement plus Addenda (CCD+)
BPR06 through BPR11 are not inserted by the taxpayer. They are on file with the party that creates the ACH Debit transaction. The taxpayer transmits empty fields for these elements.								
BPR06	506		X/Z	(ODFI) ID Number Qualifier	ID	2	2	"01" = ABA Transit Routing Number and Check Digits.
BPR07	507		X	(ODFI) Identification Number	AN	3	12	State's Bank Routing and Transit Number
BPR08	569		O/Z	(ODFI) Account Number Qualifier	ID	1	3	"DA" = Demand Deposit "SG" = Savings
BPR09	508		X/Z	(ODFI) Account Number	AN	1	35	State's Bank Account Number to be Credited
BPR10	509		O	Originating Company Identifier	AN	10	10	State ID Example: Taxing Authority's DUNS Number
BPR11	510		O	Originating Company Supplemental Code	O	9	9	Code Identifying Fiscal Agent
BPR12	506		X/Z	(RDFI) ID Number Qualifier	ID	2	2	"01" = ABA Transit Routing Number and Check Digits
BPR13	507		X	(RDFI) Identification Number	AN	3	12	Taxpayer's Bank Routing and Transit Number
BPR14	569		O/Z	(RDFI) Account Number Qualifier	ID	1	3	"DA" = Demand Deposit "SG" = Savings
BPR15	508		X/Z	(RDFI) Account Number	AN	1	35	Taxpayer's Bank Accounted to be Debited
BPR16	373		O/Z	Date	DT	8	8	The intended payment effective date (CCYYMMDD)
BPR17	1048		O/Z	Business Function Code	ID	1	3	"TAX" = Tax Payment
BPR~S~500~D~ACH~CCD~~~~~~~01~123456789~DA~987654321~20010325~TAX\								
Syntax Notes: If either BPR06 or BPR07 is present, then the other is required. If BPR08 is present, then BPR09 is required. If either BPR12 or BPR13 is present, then the other is required. If BPR14 is present, then BPR15 is required.								
FTA Notes: This segment should not be mandated by a Taxing Authority. ODFI (Originating Depository Financial Institution) is the bank that creates the ACH transaction. For debit transactions, this is the state's Bank. RDFI (Receiving Depository Financial Institution) is the bank that accepts the ACH transaction. For debit transactions, this is the Taxpayer's Bank.								

Name Detail **Name Segment**								**(Optional)** **Pos. No. 0500**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"TP" = Primary Taxpayer "L9" = Information Provider
N102	93		X	Name	AN	1	35	Taxpayer Name
N1~TP~ABC Distributing\								
Syntax Notes: N102 is required.								
FTA Note: N101: Use "TP" for tax reporting or "L9" for information reporting.								

Additional Taxpayer Name Detail **Additional Name Segment**								**(Optional)** **Pos. No. 0600**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N201	93		M	Name	AN	1	35	Taxpayer Name
N202	93		O	Name	AN	1	35	Taxpayer Name
N2~ABC Trucking~ABC Station\								
Syntax Notes: None								
FTA Note: None								

Address Detail **Address Information Segment**								**(Optional)** **Pos. No. 0800**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N301	166		M	Address Information	AN	1	35	First Line Street Address
N302	166		O	Address Information	AN	1	35	Second Line Street Address
N3~123 C Street~PO Box 222\								
Syntax Notes: None								
FTA Note: None								

City, State, Zip Code Detail **Location Geographic Segment**								**(Optional)** **Pos. No. 0900**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State code or Province	ID	2	2	State or Province Abbreviation (see Section 1, Chapter 9)
N403	116		O	Postal (Zip) Code	ID	3	11	ZIP Code, ZIP Plus 4 Code or Foreign Postal code
N404	26		O	Country	ID	2	3	Country Abbreviation (United States = USA)
N4~Billings~MT~59401-2222~USA\								
Syntax Notes: None								
FTA Note: None								

General Contact Person Administrative Communications Contact Segment								(Optional) Pos. No. 1000
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
PER01	366		M	Contact Function Code	ID	2	2	Contact Type Code: "CN" = General Contact
PER02	93		O	Name	AN	1	35	Contact Name
PER03	365		X	Communications Number Qualifier	ID	2	2	"TE" = Telephone Number
PER04	364		X	Communications Number	AN	10	14	Voice Telephone Number
PER05	365		X	Communications Number Qualifier	ID	2	2	"FX" = FAX Number
PER06	364		X	Communications Number	AN	10	10	FAX Telephone Number
PER07	365		X	Communications Number Qualifier	ID	2	2	"EM" = Electronic Mail
PER08	364		X	Communications Number	AN	1	80	E-mail Address
PER~CN~Allen Smith~TE~4069959988~FX~4069950329~EM~asmith@abc.com\								
Syntax Notes: If either PER03 or PER04 is present, then the other is required. If either PER05 or PER06 is present, then the other is required. If either PER07 or PER08 is present, then the other is required.								
FTA Note: None								

EDI Contact Person Administrative Communications Contact Segment								(Optional) Pos. No. 1000
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
PER01	366		M	Contact Function Code	ID	2	2	Contact Type Code: "EA" = EDI Coordinator
PER02	93		O	Name	AN	1	35	Contact Name
PER03	365		X	Communications Number Qualifier	ID	2	2	"TE" = Telephone Number
PER04	364		X	Communications Number	AN	10	14	Voice Telephone Number
PER05	365		X	Communications Number Qualifier	ID	2	2	"FX" = FAX Number
PER06	364		X	Communications Number	AN	10	10	FAX Telephone Number
PER07	365		X	Communications Number Qualifier	ID	2	2	"EM" = Electronic Mail
PER08	364		X	Communications Number	AN	1	80	E-mail Address
PER~EA~Bob Smith~TE~4069958877~FX4069950329~EM~bsmith@abc.com\								
Syntax Notes: If either PER03 or PER04 is present, then the other is required. If either PER05 or PER06 is present, then the other is required. If either PER07 or PER08 is present, then the other is required.								
FTA Note: None								

The following segments are required if the mailing address is different than the physical address.

Mailing Name Detail **Name Segment**								**(Optional)** **Pos. No. 0500**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"31" = Postal Mailing
N102	93		X	Name	AN	1	35	Mailing Name
N1~31~ABC Company\								
Syntax Notes: N102 is required.								
FTA Note: None								

Mailing Additional Name Detail **Additional Name Segment**								**(Optional)** **Pos. No. 0600**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N201	93		M	Name	AN	1	35	Mailing Name
N202	93		O	Name	AN	1	35	Mailing Name
N2~ABC Distributing~ABC Trucking\								
Syntax Notes: None								
FTA Note: None								

Mailing Address Detail **Address Information Segment**								**(Optional)** **Pos. No. 0800**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N301	166		M	Address Information	AN	1	35	First Line Street Address
N302	166		O	Address Information	AN	1	35	Second Line Street Address
N3~123 C Street~PO Box 222\								
Syntax Notes: None								
FTA Note: None								

Mailing City, State, Zip Code Detail **Location Geographic Segment**								**(Optional)** **Pos. No. 0900**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State code or Province	ID	2	2	State or Province Abbreviation (see Section 1, Chapter 9)
N403	116		O	Postal (Zip) Code	ID	3	11	ZIP Code, ZIP Plus 4 Code or Foreign Postal code
N404	26		O	Country	ID	2	3	Country Abbreviation (United States = USA)
N4~Billings~MT~59401-2222~US\								
Syntax Notes: None								
FTA Note: None								

End of Transaction Set Tax Report Header Information

Transaction Set Tax Report Detail Information

This TFS loop reports information on the type of report. Transaction detail is reported using the Summary and Schedule section of this map.

The TFS loop is repeated when reporting information for each report. Repeat the FGS loop within the TFS loop for each product reported.

Beginning of Report Tax Form Segment								**(Required) Pos. No. 0100**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TFS01	128		M	Reference Identification Qualifier	ID	2	2	"T2" = Tax Form Code
TFS02	127		M	Reference Identification	AN	1	6	Report Code (See Section 1, Chapter 12)
TFS03 and TFS04 Are not used								
TFS05	66		X	ID Code Qualifier	ID	2	2	"TC" = IRS Terminal Code
TFS06	67		X	ID Code	AN	9	9	IRS Terminal Control Number (TCN)
TFS~T2~TOR~~~TC~T81MT4007\								
Syntax Notes: If either TFS05 or TFS06 is present, then the other is required.								
FTA Note: TFS05 and TFS06 are only used on a terminal report.								

Relationship to the Transaction Information Reference Segment								**(No Longer in Use by the IRS) Pos. No. 0200**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"SU" = Special Processing
REF02	127		X	Reference Identification	AN	3	3	IRS = IRS Data N/A = If not applicable to the IRS
REF03 Not used								
REF04-01	C040	128	M	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-02	C040	127	M	Reference Identification	AN	2	2	State Abbreviation for state which data belongs to.
REF04-03	C040	128	X	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-04	C040	127	X	Reference Identification	AN	2	2	State abbreviation for state which data belongs to.
REF~SU~IRS~~S0^MT\								
Syntax Notes: REF02 is required.								
FTA Note: REF02, REF04-02 and REF04-04 represent the taxing authorities and their relationship to the information in this TFS loop. REF05 – REF07 use the sub-element separator.								

Sequence Number **Reference Number Segment**								**(Optional)** **Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1, Chapter 11)
REF~55~0001234\								
Syntax Notes: At least one of REF02 or REF03 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required. REF03 is used for responding to an error.								

Condition 1 – If an account has no activity, this segment is required. The Condition 2 DTM and FGS are not used.

No Activity **Reference Number Segment**								**(Conditional)** **Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Entity Identification Code	ID	2	2	"BE" = Business Activity
REF02	127		X	Name	AN	1	1	"1" = No Activity
REF~BE~1\								
Syntax Notes: REF02 is required.								
FTA Note: If an account has no activity, this segment is required.								

Sold/Acquired Date **Date/Time Reference Segment**								**(Conditional)** **Pos. No. 0300**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	"572" = Date Property Sold "631" = Date Property Acquired
DTM02	373		X	Date	DT	8	8	"CCYYMMDD"
DTM~572~20010520\								
Syntax Notes: DTM02 is required.								
FTA Note: This segment is used once when you purchase or sell a terminal.								

Condition 2 – If an account has activity, at least the TIA (Total Due/Delivered) is required. The Condition 1 REF is not used. The FGS loop contains inventory information. The FGS loop is repeated when the product code value changes.

Ending Inventory Date **Date/Time Reference Segment**								**(Conditional)** **Pos. No. 0300**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	"184" = Inventory Date
DTM02	373		X	Date	DT	8	8	"CCYYMMDD"
DTM~184~20010520\								
Syntax Notes: DTM02 is required.								
FTA Note: None								

Total Due/Transported **Tax Information and amount Segment**								**(Conditional)** **Pos. No. 0920**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5003" = Total Due "5004" = Total Net Transported
TIA02	782		X	Monetary Amount	R	1	15	Dollar Amount
TIA03 is not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5003~25000\ or TIA~5003~25000~~100000~GA\								
Syntax Notes: At least one of TIA02 or TIA04 is required. If TIA05 is present, then TIA04 is required.								
FTA Notes: Total Due/Transported is passed as a check value and represents dollars and/or quantity.								

Physical Inventory by Product **Form Group Segment**								**(Conditional)** **Pos. No. 1000**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
FGS01	350		M	Assigned Identification	AN	2	2	"BI" = Beginning Inventory (First Filing) "EI" = Ending Inventory "GL"= Gains and Losses
FGS02	128		X	Reference Identification Qualifier	ID	2	2	"PG" = Product Group
FGS03	127		X	Reference Identification	AN	3	3	Product Code (See Section 1, Chapter 6)
FGS~EI~PG~065\								
Syntax Notes: If either FGS02 or FGS03 is present, then the other is required.								
FTA Note: FGS01 – Recommend BI only be used for first filing. Beginning inventory is the previous period's ending inventory. FGS01 – GL - TIA04 is Positive for a gain and negative for a loss.								

Sequence Number **Reference Number Segment**								**(Optional)** **Pos. No. 1100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1. Chapter 11)
REF~55~0001234\								
Syntax Notes: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. At least one of REF02 or REF03 is required.								
FTA Note: REF02 is always required. REF03 is used for responding to an error.								

This segment is used by States that require position holder inventory to be reported on a TOR.

Position Holder Information **Name Segment 3**								**(Optional)** **Pos. No. 1300**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"ON" = Position Holder
N102	93		X	Name	AN	1	35	Position Holder's Name
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number "FI" = Federal Taxpayer 637 ID Number
N104	67		X	Identification Code	AN	9	18	Position Holder's FEIN or SSN
N1~ON~ABC Fuel~24~516888888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								

Inventory **Tax Information and Amount Segment**								**(Required if FGS is Used)** **Pos. No. 1800**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5002" = Net Physical Inventory
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5002~~~10000~GA\								
Syntax Notes: TIA04 is required. If TIA05 is present, then TIA04 is required.								
FTA Note: Physical Inventory is the only value passed. All other information is derivable from schedules.								

End of FGS loop (Line item detail)
End of TFS loop (detail)

End of Transaction Set Tax Report Detail Information

Transaction Set Tax Report Summary Schedule Information

This TFS loop reports summary information. This TFS loop is used in combination with the SDR tax report or any other tax report that requires summary information on the face of the return.

Summary information is used when the information cannot be derived from the schedule details. This TFS loop repeats when one of the following values change: TFS02 Summary Code, and/or TFS04 Product Code.

If there is no information to report for this filing, it is not necessary to transmit a Summary Information TFS loop.

Beginning of Summary Information **Tax Form Segment**								**(Optional)** **Pos. No. 0100**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TFS01	128		M	Reference Identification Qualifier	ID	2	2	"T3" = Tax Schedule Code
TFS02	127		M	Reference Identification	AN	1	6	TFS02 Summary Code (See Section 1, Chapter 5)
TFS03	128		X	Reference Identification Qualifier	ID	2	2	"PG" = Product Group
TFS04	127		X	Reference Identification	AN	3	3	Product Code (See Section 1, Chapter 6)
TFS05	128		M	Reference Identification Qualifier	ID	2	2	"T2" = Tax Form Code "94" = Mode
TFS06	127		M	Reference Identification	AN	1	6	Report Code (See Section 1, Chapter 12) or "CE" = Mode
TFS~T3~S02C~PG~228~T2~SDR\								
Syntax Notes: If either TFS03 or TFS04 is present, then the other is required. If either TFS05 or TFS06 is present, then the other is required.								
FTA Notes: TFS02 references the report the summary is associated with. If TFS05 = "94" then TFS06 = "CE". IF TFS05 = "T2" then TFS06 = Report Code (See Section 1, Chapter 12)								

Relationship to the Transaction Information Reference Segment								**(No Longer in Use by the IRS) Pos. No. 0200**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"SU" = Special Processing
REF02	127		X	Reference Identification	AN	3	3	IRS = IRS Data N/A = If not applicable to the IRS
REF03 Not used								
REF04-01	C040	128	M	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-02	C040	127	M	Reference Identification	AN	2	2	State Abbreviation for state which data belongs to.
REF04-03	C040	128	X	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-04	C040	127	X	Reference Identification	AN	2	2	State abbreviation for state which data belongs to.
REF~SU~IRS~~S0^MT\								
Syntax Notes: REF02 is required.								
FTA Note: REF02, REF04-02 and REF04-04 represent the taxing authorities and their relationship to the information in this TFS loop. REF05 – REF07 use the sub-element separator.								

Sequence Number Reference Number Segment								**(Optional) Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1, Chapter 11)
REF~55~0001234\								
Syntax Notes: At least one of REF02 or REF03 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required. REF03 is used for responding to an error.								

Summary Data Forms Group Segment								**(Conditional) Pos. No. 1000**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
FGS01	350		M	Assigned Identification	AN	1	1	"S" = Schedule Summary
FGS~S\								
Syntax Notes: None								
FTA Notes: If you report the TFS segment this FGS is required.								

Sequence Number **Reference Number Segment**								**(Optional)** **Pos. No. 1100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1, Chapter 11)
REF~55~0001234\								
Syntax Notes: At least one of REF02 or REF03 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required. REF03 is used for responding to an error.								

If Reporting Summary Information, at least one of the following TIA segments is required.

Information **Tax Information and Amount Segment**								**(Optional)** **Pos. No. 1800**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	TIA Code (See Section 1, Chapter 5)
TIA02	782		X	Monetary Amount	R	1	15	Dollar Amount
TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5006~~~25000~GA\								
Syntax Notes: At least one of TIA02 or TIA04 is required. If TIA05 is present, then TIA04 is required.								
FTA Notes: None								

Interest **Tax Information and Amount Segment**								**(Optional)** **Pos. No. 1800**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5008" = Interest
TIA02	782		X	Monetary Amount	R	1	15	Dollar Amount
TIA~5008~500\								
Syntax Notes: TIA02 is required.								
FTA Notes: None								

Penalty **Tax Information and Amount Segment**								**(Optional)** **Pos. No. 1800**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5009" = Penalty
TIA02	782		X	Monetary Amount	R	1	15	Dollar Amount
TIA~5009~200\								
Syntax Notes: TIA02 is required.								
FTA Notes: None								

End of FGS loop (Summary Data)
End of TFS loop (Summary Information)
End of Transaction Set Tax Report Summary Schedule Information

Transaction Set Tax Report Schedule Detail Information

This TFS loop begins the schedule detail. It repeats when one of the following values change: Tax Form Code, Schedule Code, Mode Code Product Code, Origin, Position Holder, Seller, Consignor, Carrier, Buyer, Consignee or Destination.

If there are no transactions to report in this filing, it is not necessary to transmit a Schedules TFS loop. You must indicate no activity in the Transaction Set Tax Report Detail sections of this map for the TOR, SDR, CCR, DIS, SUR, RET, & DLR in order to complete the filing.

Beginning of Schedules Tax Form Segment								**(Required if Reporting Schedule Detail) Pos. No. 0100**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TFS01	128		M	Reference Identification Qualifier	ID	2	2	"T3" = Tax Schedule Code
TFS02	127		M	Reference Identification	AN	1	6	Schedule Type Code (See Section 1, Chapter 5)
TFS03	128		X	Reference Identification Qualifier	ID	2	2	"PG" = Product Group
TFS04	127		X	Reference Identification	AN	3	3	Product Code (See Section 1, Chapter 6)
TFS05	66		X	Identification Code Qualifier	ID	2	2	"94" = Mode
TFS06	67		X	Identification Code	AN	2	2	Transaction Type Mode Code (See Section 1, Chapter 8)
TFS~T3~2~PG~065~94~J \								
Syntax Notes: If either TFS03 or TFS04 is present, then the other is required. If either TFS05 or TFS06 is present, then the other is required.								
FTA Notes: None.								

Relationship to the Transaction Information Reference Segment								**(No Longer in Use by the IRS) Pos. No. 0200**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"SU" = Special Processing
REF02	127		X	Reference Identification	AN	3	3	IRS = IRS Data N/A = If not applicable to the IRS
REF03 Not used								
REF04-01	C040	128	M	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-02	C040	127	M	Reference Identification	AN	2	2	State Abbreviation for state which data belongs to.
REF04-03	C040	128	X	Reference Identification Qualifier	ID	2	2	"S0" = Special Approval (S Zero)
REF04-04	C040	127	X	Reference Identification	AN	2	2	State abbreviation for state which data belongs to.
REF~SU~IRS~~S0^MT\								
Syntax Notes: REF02 is required.								
FTA Note: REF02, REF04-02 and REF04-04 represent the taxing authorities and their relationship to the information in this TFS loop. REF05 – REF07 use the sub-element separator.								

Sequence Number Reference Number Segment								**(Optional) Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1, Chapter 11)
REF~55~0001234\								
Syntax Notes: At least one of REF02 or REF03 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required. REF03 is used for responding to an error.								

For Point of Origin/Terminal: (One of the following three options is required)

- Use Option 1 when the origin has an IRS TCN.
- Use Option 2 when the origin does not have an IRS TCN.
- Use Option 3 when the state requires an origin facility ID (currently used by the state of Florida).

Option 1

Point of Origin Name Segment 1								**(One of the three options is used) Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"OT" = Origin Terminal
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"TC" = IRS Terminal Code
N104	67		X	Identification Code	AN	9	9	IRS Terminal Code (Code list is located at https://www.irs.gov/businesses)
N1~OT~~TC~T81MT4007\								
Syntax Notes: N103 and N104 are required.								
FTA Notes: None								

Option 2

Point of Origin Name Segment 1								**(One of the three options is used) Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"SF" = Ship From
N102	93		X	Name	AN	2	2	Origin State Abbreviation
N1~SF~MT\								
Syntax Notes: N102 is required.								
FTA Notes: None								

Point of Origin Name Segment 1								(Optional) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State or Province Code	ID	2	2	State or Province Abbreviation (see Section 1, Chapter 9)
N403	116		O	Postal Code	ID	3	11	ZIP or ZIP plus 4 Code
N404	26		X	Country Code	ID	2	3	Country (USA, CAN, MEX)
N405	309		X	Location Qualifier	ID	1	2	"CY" = County
N406	310		O	Location Identifer	AN	1	5	County
N4~Billings~MT~59401\								
Syntax Notes: None								
FTA Notes: N404 through N406 are optional. N406 is based on the federal county codes (see: http://www.itl.nist.gov/fipspubs/co-codes/states.htm) N405 and N406 are not in the IRS 4030 map.								

Option 3

Point of Origin Name Segment 1								(One of the three options is used) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"WO" = Storage Facility at Origin
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"FA" = Facility Identification
N104	67		X	Identification Code	AN	2	20	Facility/License Number
N1~WO~~FA~123456\								
Syntax Notes: N103 and N104 are required.								
FTA Notes: None								

Seller Information Name Segment 2								(Optional) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"SE" = Selling Party
N102	93		X	Name	AN	1	35	Seller's Name or Name Control (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Seller's FEIN or SSN or BN
N1~SE~Fuel Inc~24~516669999\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Notes: N102, N103 and N104 are required.								

Position Holder Information or Delivering Exchange Party Information **Name Segment 3**								**(Required for TOR)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"ON" = Position Holder
N102	93		X	Name	AN	1	35	Position Holder's Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number "FI" = Federal Taxpayer 637 ID Number
N104	67		X	Identification Code	AN	9	18	Position Holder's FEIN or SSN or BN or IRS 637 Number
N1~ON~ABC Fuel~24~516888888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Notes: If reporting position holder or exchange information this segment is required. For 2-party exchanges this segment defines the party of origin. N102, N103 and N104 are required.								

Receiving Exchange Party Information **Name Segment 4**								**(Required for TOR on exchanges)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"EC" = Exchanger
N102	93		X	Name	AN	1	35	Exchange Party Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number "FI" = Federal Taxpayer 637 ID Number
N104	67		X	Identification Code	AN	9	18	Exchange Party FEIN or SSN or BN or IRS 637 Number
N1~ON~ABC Fuel~24~516888888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Notes: If reporting exchange information this segment is required otherwise do not use this segment. N102, N103 and N104 are required.								

Person Hiring Carrier (Consignor) **Name Segment 5**								**(Optional for CCR)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"CI" = Consignor (Person Hiring the Carrier)
N102	93		X	Name	AN	1	35	Consignor Name or Name Control (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Consignor's (Person Hiring the Carrier) FEIN or SSN or BN
N1~CI~ABC Distributing~24~516777777\								
Syntax Notes:			At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.					
FTA Notes:			N102, N103 and N104 are required.					

Carrier Information **Name Segment 6**								**(Optional)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"CA" = Carrier Name
N102	93		X	Name	AN	1	35	Carrier Name or Name Control (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Carrier's FEIN or SSN or BN
N1~CA~ABC Trucking~24~516666666\								
Syntax Notes:			At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.					
FTA Notes:			N102, N103 and N104 are required.					

Buyer/Consignee Information **Name Segment 7**								**(Optional)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"BY" = Buying Party (Purchaser/Consignee)
N102	93		X	Name	AN	1	35	Buyer Name or Name Control (First 4 positions of buyer's business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Purchaser's FEIN or SSN or BN
N1~Joe Gas Station~24~517222222\								
Syntax Notes:			At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.					
FTA Notes:			N102, N103 and N104 are required.					

For Point (Address) of Delivery/Destination: (One of the following three options is required)

- Use Option 1 when the destination has an IRS TCN.
- Use Option 2 when the destination does not have an IRS TCN.
- Use Option 3 when the state requires a destination facility ID (currently used by the state of Florida).

Option 1

Point of Destination Name Segment 8								**(One of the three options is used) Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"DT" = Destination Terminal
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"TC" = IRS Terminal Code
N104	67		X	Identification Code	AN	9	9	IRS Terminal Code (Code list is located at https://www.irs.gov/businesses)
N1~DT~~TC~T81MT4007\								
Syntax Notes: N103 and N104 are required.								
FTA Notes: None								

Option 2

Point of Destination Name Segment 8								**(One of the three options is Requiredused) Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"ST" = Ship To
N102	93		X	Name	AN	2	2	Destination State Abbreviation
N1~ST~ID\								
Syntax Notes: N102 is required.								
FTA Notes: None								

Point of Destination Name Segment 8								(Optional) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19	19	O	City Name	AN	2	30	Name of City
N402	156	156	O	State or Province Code	ID	2	2	State or Province Abbreviation (see Section 1, Chapter 9)
N403	116	116	O	Postal Code	ID	3	11	ZIP or ZIP plus 4 Code
N404	26		X	Country Code	ID	2	3	Country (USA, CAN, MEX)
N405	309		X	Location Qualifier	ID	1	2	"CY" = County
N406	310		O	Location Identifer	AN	1	5	County
N4~Boise~ID~65079\								
Syntax Notes: None								
FTA Notes: N404 through N406 are optional. N406 is based on the federal county codes (see: http://www.itl.nist.gov/fipspubs/co-codes/states.htm) N405 and N406 are not in the IRS 4030 map.								

Option 3

Point of Destination Name Segment 8								(One of the three options is used) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"WD" = Destination Facility
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"FA" = Facility Identification
N104	67		X	Identification Code	AN	2	20	Facility/License Number
N1~WD~~FA~123456\								
Syntax Notes: N103 and N104 are required.								
FTA Notes: None								

This FGS loop begins the individual shipments within the TFS loop.

Bill of Lading Forms Group Segment								(Required) Pos. No. 1000
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
FGS01	350		M	Assigned Identification	AN	1	1	"D" = Schedule Detail
FGS02	128		X	Reference Identification Qualifier	ID	2	2	"BM" = Bill of Lading Number
FGS03	127		X	Reference Identification	AN	1	15	Bill of Lading Number
FGS~D~BM~00123456\								
Syntax Notes: If either FGS02 or FGS03 is present, then the other is required.								
FTA Notes: None								

Sequence Number **Reference Number Segment**								**(Optional)** **Pos. No. 1100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
REF01	128		M	Reference Identification Qualifier	ID	2	2	"55" = Sequence Number
REF02	127		X	Reference Identification	AN	1	20	Sequence Number
REF03	352		X	Description	AN	1	5	Error Response Code (See Section 1, Chapter 11)
REF~55~0004567\								
Syntax Notes: At least one of REF02 or REF03 is required.								
FTA Note: This segment is used to identify information for error processing. This segment can be generated by the filer when first filling to assist in identifying information or when responding to an error reported. REF02 is always required. REF03 is used for responding to an error.								

Bill of Lading Date **Date/Time Reference Segment**								**(Required)** **Pos. No. 1200**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	"095" = Bill of Lading Date
DTM02	373		X	Date	DT	8	8	Bill of Lading Date (CCYYMMDD)
DTM~095~20010505\								
Syntax Notes: DTM02 is required.								
FTA Notes: None								

Bill of Lading Net **Tax Information and Amount Segment**								**(Required)** **Pos. No. 1800**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5005" = Net
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT"=Liters
TIA~5005~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Notes: Numbers should be reported in whole gallons for both disbursements and receipts.								

Bill of Lading Gross Tax Information and Amount Segment								(Required) Pos. No. 1800
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5006" = Gross
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5006~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Notes: Numbers should be reported in whole gallons for both disbursements and receipts.								

Bill of Lading Billed Tax Information and Amount Segment								(Required for all tax types except for TOR and CCR) Pos. No. 1800
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"5007" = Billed
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5007~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Notes: Numbers should be reported in whole gallons for both disbursements and receipts.								

End of FGS loop for Individual shipments.
End of TFS loop for Schedule.

End of Transaction Set Tax Report Schedule Detail Information

Transaction Set Trailer Description

End of Transaction Set Trailer Segment								(Required) Pos. No. 0100
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
SE01	96		M	Number of Included Segments	N0	1	10	Number of segments (inserted by translator)
SE02	329		M	Transaction Set Control Number	AN	4	9	Determined by Filer (same value in ST02, unique control number)
SE~156~10001\								
Syntax Notes: None								
FTA Notes: None								

End of 813 EDI Map

Chapter 7 - X12 813 to Paper Comparison

Information maintained in or calculated by State system

Header Information section of FTA EDI X.12 Map

Report Information section of FTA EDI X.12 Map

Summary Information section of FTA EDI X.12 Map

Schedules section of FTA EDI X.12 Map

Trading Partner Agreement

Common and Contract Petroleum Products Carrier Report

<table>
<tr><td colspan="3">Common and Contract Petroleum Products Carrier Report</td><td>State of XXXXXXXXXXXXXXX</td></tr>
<tr><td colspan="3" rowspan="3"></td><td>Month of: (CCYYMMDD)
20050131</td></tr>
<tr><td>This information is mapped to the Tax Filing Period Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the detail records below:</td></tr>
<tr><td>DTM~194~20050131\</td></tr>
<tr><td colspan="4">Name:
XYZ Carrier Company</td></tr>
<tr><td colspan="4">See Name Detail Name Segment. Specifically the N102 element. See item bolded in the detail records below:</td></tr>
<tr><td colspan="4">N1~TP~XYZ Carrier Company\</td></tr>
<tr><td colspan="3" rowspan="3">Address 1:
123 Oil Drive</td><td>FEIN:
987654321</td></tr>
<tr><td>This information is mapped to the Identify Tax Agency Information Begin Tax Information Segment. Specifically to the BTI08 element. See item bolded in the detail records below:</td></tr>
<tr><td>BTI~T6~050~47~129999999~20010523~ABC*~24~987654321~49~D123456~~~00\</td></tr>
<tr><td colspan="3">Address 2:</td><td rowspan="2">License Number:
D123456</td></tr>
<tr><td>City:
Anytown USA</td><td>State:
XX</td><td>Zip Code:
55555-5555</td></tr>
<tr><td colspan="3" rowspan="2"></td><td>This information is mapped to the Identify Tax Agency Information Begin Tax Information Segment. Specifically to the BTI10 element. See item bolded in the detail records below:</td></tr>
<tr><td>BTI~T6~050~47~129999999~20010523~ABC*~24~987654321~49~D123456~~~00\</td></tr>
</table>

	Schedule	Net Gallons
1. Total of all deliveries of fuels from in-state locations outside the state (exports)	14A	
2. Total of all deliveries of fuel from out-of-state locations to inside the state (imports)	14B	16,204
3. Total of all deliveries of fuel between points in the state (intrastate)	14C	
4. Total gallons of petroleum product transported (total of lines 1 through 3)		16,204

CERTIFICATION

I certify that I have read this report and all supporting documents; and know and understand their contents and that all information on both the report and supporting documents is true and accurate, and complete.

Authorized Representative's Name *(please print)* **John J Doe**	**Title** **Owner**
Authorized Representative's Signature **John J Doe**	**Date** **4/15/2005**

Telephone Number **(101) 999-2222**	**Fax Number** **(101) 999-2223**	**e-mail Address** **jjdoe@abcoil.com**

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Report Information section of FTA EDI X.12 Map

Schedules section of FTA EDI X.12 813 Map

Common and Contract Petroleum Products Carrier Schedules

Schedule 14A, 14B, or 14C

Company Name:	License Number:	FEIN:	Schedule Type:	Tax Period CCYYMMDD:
ABC Oil Carrier Company	D123456	987654321	14B	20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS02 element. See item bolded in the detail records below: TFS~T3~**14B**~PG~167~94~J \	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Product Type (Circle One)					
This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below: TFS~T3~14B~PG~**167**~94~J \					
065	Gasoline	130	Jet Fuel	226	High Sulfur Diesel Fuel-Dyed
124	Gasohol	161	Low Sulfur Diesel #1	227	Low Sulfur Diesel Fuel-Dyed
125	Aviation Gasoline	167	Low Sulfur Diesel #2	___	Other (See Product Code List)

(1) Consignor Name	(2) Consignor FEIN	(3) Seller Name	(4) Seller FEIN	(5) Mode	(6) Destination State or TCN	(7) Delivered to Consignee Name	(8) Delivered to Consignee FEIN	(9) Date Received or Delivered	(10) Document Number	(11) Net Gallons	(12) Gross Gallons
XYZ Oil Co	234567890	XYZ Oil Co	234567890	J	XX	J Doe Oil	456789012	01/5/05	999991	8,105	8,100
ABC Oil Inc	345678901	XYZ Oil Co	234567890	B	T99XX9991	J Doe Oil	456789012	01/15/05	999992	8,099	8,050
Total:										16,204	16,150

See the following pages for details on mapping between paper and EDI.

(1) Consignor Name	(2) Consignor FEIN	(3) Seller Name	(4) Seller FEIN	(5) Mode	(6) Destination State or TCN	(7) Delivered to Consignee Name	(8) Delivered to Consignee FEIN	(9) Date Delivered	(10) Document Number	(11) Net Gallons	(12) Gross Gallons

(1) Consignor Name: This information is mapped to the ***Consignor Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~CI~**XYZ Oil Co**~24~234567890\

(2) Consignor FEIN: This information is mapped to the ***Consignor Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~CI~XYZ Oil Co~24~**234567890**\

(3) Acquired From (Seller Name): This information is mapped to the ***Seller Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SE~**XYZ Oil Co**~24~234567890\

(4) Seller's FEIN: This information is mapped to the ***Seller Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~SE~XYZ Oil Co~24~**234567890**\

(5) Mode: This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the following detail record: TFS~T3~2~PG~167~94~**J** \

(6) Destination State or TCN: If the information reported was from a Destination State, the information is mapped to the ***Option 2 Point of Destination*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~ST~**XX**\

or

If the information reported was from a Destination TCN, the information is mapped to the ***Option 1 Point of Destination*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~DT~~TC~**T99XX9991**\

(7) Consignee Name: This information is mapped to the Consignee Information Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~BY~**J Doe Oil**~24~456789012\

(8) Consignee FEIN: This information is mapped to the Consignee Information Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~BY~J Doe Oil~24~**456789012**\

(9) Date Received: This information is mapped to the ***Bill of Lading Date*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the following detail record: DTM~095~**20050105**\

(10) Document Number: This information is mapped to the ***Bill of Lading*** Forms Group Segment. Specifically to the FGS03 element. See item bolded in the following detail record: FGS~D~BM~**999991**\

(11) Net Gallons: This information is mapped to the ***Bill of Lading Net*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5005~~~**8105**~GA\

(12) Gross Gallons: This information is mapped to the ***Bill of Lading Gross*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5006~~~**8100**~GA\

Information maintained in or calculated by State system
Header Information section of FTA EDI X.12 Map
Report Information section of FTA EDI X.12 Map
Summary Information section of FTA EDI X.12 Map
Schedules section of FTA EDI X.12 Map
Trading Partner Agreement

Distributor's Fuel Tax Report

Distributor's Fuel Tax Report			State of XXXXXXXXXXXXXXX Month of: (CCYYMMDD) 20050131 This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the detail records below: DTM~194~**20050131**\
Name: ABC Oil Company			License Number: D123456
See ***Name Detail*** Name Segment. Specifically the N102 element. See item bolded in the detail records below:			This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element. See item bolded in the detail records below:
N1~TP~ABC Oil Company\			BTI~T6~050~47~129999999~20010523~ABC*~24~987654321~49~**D123456**~~~00\
Address 1: 123 Oil Drive			FEIN: 987654321 This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element. See item bolded in the detail records below: BTI~T6~050~47~129999999~20010523~ABC*~24~**987654321**~49~D123456~~~00\
Address 2:			
City: Anytown USA	State: XX	Zip Code: 55555-5555	

	Gasoline	Gasohol	Diesel (167)
			This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS03 element. See item bolded in the detail records below:
			FGS~EI~PG~**167**\
1. **Beginning Physical Inventory:** (Is last month's ending inventory.)			25,200
2. **Receipts:** (From line 6, Section I on back of return)			16,204
3. Product Available: (Line 1 plus Line 2)			41,404
4. **Disbursements:** (From line 7, Section II on back of return)	( )	( )	(16,204)
5. Transfers Plus or (Minus): (From one product to another)			25
6. **Book Inventory:** (Lines 3 minus the Sum of Lines 3 and Line 4)			25,225
7. **Ending Physical Inventory:** (Must agree with actual ending inventory.)			24,950
			This information is mapped to the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the detail records below:
			TIA~5002~~~**24950**~GA\
8. **Gain or (Loss):** (Line 7 minus Line 6 - Attach explanation)			(275)

9. Gross Taxable Gallons:			16,204
10. LESS: Tax-Paid Purchases:			0
11. Net Taxable Gallons:			16,204
12. Less Handling Allowance	( )	( )	(25)
13. Total Tax Due:	$ 1,525.00		
14. ADD: Interest for late payment at _____% per month	15.25		
This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA01 element. See item bolded in the detail records below:	This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA02 element. See item bolded in the detail records below:		
TIA~**5008**~1525\	TIA~5008~**1525**\		

15. ADD: Penalty for late Payment at _____%:	30.50
This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA01 element. See item bolded in the detail records below:	This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA02 element. See item bolded in the detail records below:
TIA~**5009**~3050\	TIA~5009~**3050**\
16. Total Due	$ 1,570.75
	This information is mapped to the ***Total Due*** Tax Information and Amount Segment. Specifically to the TIA02 element. See item bolded in the detail records below:
	TIA~5003~**157075**\

CERTIFICATION

I certify that I have read this report and all supporting documents; and know and understand their contents and that all information on both the report and supporting documents is true and accurate, and complete.

Authorized Representative's Name *(please print)* **John J Doe**		**Title** **Owner**
Authorized Representative's Signature **John J Doe**		**Date** **4/15/2005**
Telephone Number **(101) 999-2222**	**Fax Number** **(101) 999-2223**	**e-mail Address** **jjdoe@abcoil.com**

Section I – Receipts: (See instructions)	From Schedule	Gasoline	Gasohol	Diesel
				This information is mapped to the ***Beginning of Summary Information*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below:
				Not reported in EDI file because zero gallons
1. In-state refinery production:				0
This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the detail records below:				This information is mapped to the ***Information*** Tax Information and Amount Segment. Specifically to the TIA02 element. See item bolded in the detail records below:
Not reported in EDI file because zero gallons				Not reported in EDI file because zero gallons
2. Gallons Received (state) tax-paid:	1			
3. Gallons received from licensed distributors tax-unpaid:	2			16,204
4. Gallons imported direct to customer:	3			
5. Gallons imported into tax-free storage:	4			
6. Total Receipts: (total lines 1 through 5) (Transfer to line 2 on front of return)				16,204

Section II – Disbursements: (See instructions)	From Schedule	Gasoline	Gasohol	Diesel
1. Gallons delivered tax collected:	5			16,204
2. Gallons delivered to licensed distributors tax not collected:	6			
3. Gallons exported:	7			
4. Gallons delivered to U.S. Government tax-exempt:	8			
5. Gallons delivered to state and local government tax-exempt:	9			
6. Gallons delivered to other tax-exempt entities:	10			
7. Total Disbursements: (total lines 1 through 6) (Transfer to line 3 on front of return)				16,204

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Schedules section of FTA EDI X.12 813 Map

Distributor's Fuel Tax Report - Schedule of Receipts

Company Name: ABC Oil Company	License Number: D123456	FEIN: 987654321	Schedule Type: 2	Tax Period CCYYMMDD: 20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS02 element. See item bolded in the detail records below: TFS~T3~**2**~PG~167~94~J \	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Schedule Type		Product Type (Circle One) This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below: TFS~T3~2~PG~**167**~94~J \					
1.	Gallons received tax-paid	065	Gasoline	130	Jet Fuel	226	High Sulfur Diesel Fuel-Dyed
2.	Gallons received from licensed motor fuel distributor tax-unpaid	124	Gasohol	161	Low Sulfur Diesel #1	227	Low Sulfur Diesel Fuel-Dyed
3.	Gallons imported from another state direct to customer	125	Aviation Gasoline	[167]	Low Sulfur Diesel #2	___	Other (See Product Code List)
4.	Gallons imported from another state into tax-free storage						

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Origin TCN or State	(4) Destination State or TCN	(5) Acquired From (Seller's Name)	(6) Seller's FEIN	(7) Date Received	(8) Document Number	(9 Net Gallons	(10) Gross Gallons	(11) Billed Gallons
XYZ Carrier Co	234567890	J	T99XX9991	XX	J Doe Oil	456789012	01/5/05	999991	8,105	8,100	8,100
ABC Carrier Inc	345678901	B	T99XX9992	XX	J Doe Oil	456789012	01/15/05	999992	8,099	8,080	8,080
Total:									16,204	16,180	16,180

See the following pages for details on mapping between paper and EDI.

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Original TCN or State	(4) Destination State or TCN	(5) Acquired From	(6) Seller's FEIN	(7) Date Received	(8) Document Number	(9 Net Gallons	(10) Gross Gallons	(11) Billed Gallons

(1) Carrier Name: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~CA~**XYZ Carrier Co**~24~234567890\

(2) Carrier FEIN: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~CA~XYZ Carrier Co~24~**234567890**\

(3) Mode: This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the following detail record: TFS~T3~2~PG~167~94~**J** \

(4 a) Original TCN or State: If the information reported was from an Origin TCN, the information is mapped to the ***Option 1 Point of Origin*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~OT~~TC~**T99XX9991**\

or

If the information reported was from an Origin State, the information is mapped to the ***Option 2 Point of Origin*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SF~**XX**\

(4 b) Destination State or TCN: If the information reported was from a Destination State, the information is mapped to the ***Option 2 Point of Destination*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~ST~**XX**\

or

If the information reported was from a Destination TCN, the information is mapped to the ***Option 1 Point of Destination*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~DT~~TC~**T99XX9999**\

(5) Acquired From (Seller Name): This information is mapped to the ***Seller Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SE~**J Doe Oil**~24~456789012\

(6) Seller's FEIN: This information is mapped to the ***Seller Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~SE~J Doe Oil~24~**456789012**\

(7) Date Received: This information is mapped to the ***Bill of Lading Date*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the following detail record: DTM~095~**20050105**\

(8) Document Number: This information is mapped to the ***Bill of Lading*** Forms Group Segment. Specifically to the FGS03 element. See item bolded in the following detail record: FGS~D~BM~**999991**\

(9) Net Gallons: This information is mapped to the ***Bill of Lading Net*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5005~~~**8105**~GA\

(10) Gross Gallons: This information is mapped to the ***Bill of Lading Gross*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5006~~~**8100**~GA\

(11) Billed Gallons: This information is mapped to the ***Bill of Lading Billed*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5007~~~**8100**~GA\

Schedule Detail Section Example:

Information **Reported** on Return
Information Not Reported on Return

TFS~T3~**2**~PG~**167**~94~**J** \
REF~SU~IRS~~S0^XX^S0^YY\
REF~55~0001234\
N1~OT~~TC~**T99XX9991**\
N1~SE~J Doe Oil~24~456789012\
N1~CA~XYZ Carrier Co~24~234567890\
N1~ST~**XX**\
FGS~D~BM~**999991**\
REF~55~0004567\
DTM~095~**20050105**\
TIA~5005~~~**8105**~GA\
TIA~5006~~~**8100**~GA\
TIA~5007~~~**8100**~GA\

TFS~T3~**2**~PG~**167**~94~**J** \
REF~SU~IRS~~S0^XX^S0^YY\
REF~55~0001234\
N1~OT~~TC~**T99XX9992**\
N1~SE~J Doe Oil~24~456789012\
N1~CA~ABC Carrier Inc~24~345678901\
N1~ST~**XX**\
FGS~D~BM~**999992**\
REF~55~0004567\
DTM~095~**20050115**\
TIA~5005~~~**8099**~GA\
TIA~5006~~~**8080**~GA\
TIA~5007~~~**8080**~GA\

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Schedules section of FTA EDI X.12 813 Map

Distributor's Fuel Tax Report - Schedule of Disbursements

Company Name: ABC Oil Company	License Number: D123456	FEIN: 987654321	Schedule Type: 5	Tax Period CCYYMMDD: 20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS02 element. See item bolded in the detail records below: TFS~T3~**5**~PG~167~94~J \	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Schedule Type		Product Type (Circle One) This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below: TFS~T3~5~PG~**167**~94~J \			
5.	Gallons delivered tax collected	065	Gasoline	130	Jet Fuel
6.	Gallons delivered to licensed motor fuel distributor tax not collected	124	Gasohol	161	Low Sulfur Diesel #1
7.	Gallons exported to State of _____	125	Aviation Gasoline	167	Low Sulfur Diesel #2
8.	Gallons delivered to U.S. Government tax-exempt			226	High Sulfur Diesel Fuel-Dyed
9.	Gallons delivered to State and local government tax-exempt			227	Low Sulfur Diesel Fuel-Dyed
10.	Gallons delivered to other tax-exempt entities			___	Other (See Product Code List)

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Origin TCN or State	(4) Destination State or TCN	(5) Sold To (Purchaser's Name)	(6) Purchaser's FEIN	(7) Date Received	(8) Document Number	(9 Net Gallons	(10) Gross Gallons	(11) Billed Gallons
XYZ Carrier Co	234567890	J	XX	XX	K Doe Oil	456789014	01/5/05	999991	8,105	8,100	8,100
ABC Carrier Inc	345678901	B	XX	XX	K Doe Oil	456789014	01/15/05	999992	8,099	8,080	8,080
Total:									16,204	16,180	16,180

See the following pages for details on mapping between paper and EDI.

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4)		(5) Sold To (Purchaser's Name)	(6) Purchaser's FEIN	(7) Date Received	(8) Document Number	(9 Net Gallons	(10) Gross Gallons	(11) Billed Gallons
			Origin TCN or State	Destination State or TCN							

(1) Carrier Name: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~CA~**XYZ Carrier Co**~24~234567890\

(2) Carrier FEIN: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~CA~XYZ Carrier Co~24~**234567890**\

(3) Mode: This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the following detail record: TFS~T3~5~PG~167~94~**J** \

(4 a) Original TCN or State: If the information reported was from an Origin State, the information is mapped to the ***Option 2 Point of Origin*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SF~**XX**\

or

If the information reported was from an Origin TCN, the information is mapped to the ***Option 1 Point of Origin*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~OT~~TC~**T99XX9991**\

(4 b) Destination State or TCN: If the information reported was from a Destination State, the information is mapped to the ***Option 2 Point of Destination*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~ST~**XX**\

or

If the information reported was from a Destination TCN, the information is mapped to the ***Option 1 Point of Destination*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~DT~~TC~**T99XX9999**\

(5) Acquired From (Seller Name): This information is mapped to the ***Buyer/Consignee Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~BY~**K Doe Oil**~24~456789014\

(6) Seller's FEIN: This information is mapped to the ***Buyer/Consignee Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~BY~K Doe Oil~24~**456789014**\

(7) Date Received: This information is mapped to the ***Bill of Lading Date*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the following detail record: DTM~095~**20050105**\

(8) Document Number: This information is mapped to the ***Bill of Lading*** Forms Group Segment. Specifically to the FGS03 element. See item bolded in the following detail record: FGS~D~BM~**999991**\

(9) Net Gallons: This information is mapped to the ***Bill of Lading Net*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5005~~~**8105**~GA\

(10) Gross Gallons: This information is mapped to the ***Bill of Lading Gross*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5006~~~**8100**~GA\

(11) Billed Gallons: This information is mapped to the ***Bill of Lading Billed*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5007~~~**8100**~GA\

Schedule Detail Section Example:

Information **Reported** on Return
Information Not Reported on Return

TFS~T3~**5**~PG~**167**~94~**J** \
REF~SU~IRS~~S0^XX^S0^YY\
REF~55~0001234\
N1~SF~**XX**\
N1~CA~XYZ Carrier Co~24~234567890\
N1~BY~K Doe Oil~24~456789014\
N1~ST~**XX**\
FGS~D~BM~**999991**\
REF~55~0004567\
DTM~095~**20050105**\
TIA~5005~~~**8105**~GA\
TIA~5006~~~**8100**~GA\
TIA~5007~~~**8100**~GA\

TFS~T3~**5**~PG~**167**~94~**J** \
REF~SU~IRS~~S0^XX^S0^YY\
REF~55~0001234\
N1~SF~**XX**\
N1~CA~ABC Carrier Inc~24~345678901\
N1~BY~K Doe Oil~24~456789014\
N1~ST~**XX**\
FGS~D~BM~**999992**\
REF~55~0004567\
DTM~095~**20050115**\
TIA~5005~~~**8099**~GA\
TIA~5006~~~**8080**~GA\
TIA~5007~~~**8080**~GA\

Information maintained in or calculated by State system
Header Information section of FTA EDI X.12 Map
Report Information section of FTA EDI X.12 Map
Summary Information section of FTA EDI X.12 Map
Schedules section of FTA EDI X.12 Map
Trading Partner Agreement

Terminal Operators Report

Terminal Operators Report			State of XXXXXXXXXXXXXXX
			Month of: (CCYYMMDD) 20050131
			This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the detail records below:
			DTM~194~**20050131**\
Name of Terminal: ABC Oil Company			Terminal Control Number: T99XX9991 / Terminal Location: XYZ Location
See ***Name Detail*** Name Segment. Specifically the N102 element. See item bolded in the detail records below:			This information is mapped to the ***Report Informationt*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the detail records below:
N1~TP~ABC Oil Company\			TFS~T2~TOR~~~TC~**T99XX9991**\
Address 1: 123 Oil Drive			FEIN: 987654321
			This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element. See item bolded in the detail records below:
			BTI~T6~050~47~129999999~20010523~ABC*~24~**987654321**~49~D123456~~~00\
Address 2:			License Number: D123456
City: Anytown USA	State: XX	Zip Code: 55555-5555	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element. See item bolded in the detail records below:
			BTI~T6~050~47~129999999~20010523~ABC*~24~987654321~49~**D123456**~~~00\

Terminal Reconciliation	Schedule No.	Net Gallons
		065 (Gasoline)
1. Beginning Inventory		100,000
		This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**BI**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record:
		TIA~5002~~~**100000**~GA\
2. Total Receipts	15A	400,000
3. Total Gallons Available		500,000
4. Total Disbursements	15B	340,000
5. Gallons Available (less disbursements)		160,000
6. Stock Gains & Losses		1,895
		This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**GL**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record:
		TIA~5002~~~**1895**~GA\
7. Actual Ending Inventory	15C	158,105
		This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**EI**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record:
		TIA~5002~~~**158105**~GA\

CERTIFICATION

I certify that I have read this report and all supporting documents; and know and understand their contents and that all information on both the report and supporting documents is true and accurate, and complete.

Authorized Representative's Name *(please print)*	**Title**
John J Doe	**Owner**
Authorized Representative's Signature	**Date**
John J Doe	**4/15/2005**

Telephone Number	**Fax Number**	**e-mail Address**
(101) 999-2222	**(101) 999-2223**	**jjdoe@abcoil.com**

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Report Information section of FTA EDI X.12 Map

Schedules section of FTA EDI X.12 813 Map

Terminal Operator Report - Schedule 15A Receipts

Company Name: ABC Oil Company	License Number: D123456	FEIN: 987654321	Schedule Type: 15A	Tax Period CCYYMMDD: 20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS02 element. See item bolded in the detail records below:	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Terminal Code Number: T99XX9991	Product Type (Circle One)		
	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below:		
	TFS~T3~15A~PG~**167**~94~J \		
This information is mapped to the ***Report Information*** Tax Form Segment. Specifically to the TFS06 element.	065 Gasoline	130 Jet Fuel	226 High Sulfur Diesel Fuel-Dyed
	124 Gasohol	161 Low Sulfur Diesel #1	227 Low Sulfur Diesel Fuel-Dyed
	125 Aviation Gasoline	[167] Low Sulfur Diesel #2	___ Other (See Product Code List)

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Position Holder	(5) Position Holder's FEIN	(6) Date Received	(7) Document Number	(8) Net Gallons
XYZ Carrier Co	234567890	J	J Doe Oil	456789012	01/5/05	999991	8,105
ABC Carrier Inc	345678901	B	J Doe Oil	456789012	01/15/05	999992	8,099
Total:							16,204

See the following pages for details on mapping between paper and EDI.

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Position Holder	(5) Position Holder's FEIN	(6) Date Received	(7) Document Number	(8) Net Gallons
(1) Carrier Name: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~CA~**XYZ Carrier Co**~24~234567890\							
(2) Carrier FEIN: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~CA~XYZ Carrier Co~24~**234567890**\							
(3) Mode: This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the following detail record: TFS~T3~15A~PG~167~94~**J** \							
(4) Position Holder: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SE~**J Doe Oil**~24~456789012\							
(5) Position Holder's FEIN: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~SE~J Doe Oil~24~**456789012**\							
(6) Date Received: This information is mapped to the ***Bill of Lading Date*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the following detail record: DTM~095~**20050105**\							
(7) Document Number: This information is mapped to the ***Bill of Lading*** Forms Group Segment. Specifically to the FGS03 element. See item bolded in the following detail record: FGS~D~BM~**999991**\							
(8) Net Gallons: This information is mapped to the ***Bill of Lading Net*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5005~~~**8105**~GA\							

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Report Information section of FTA EDI X.12 Map

Schedules section of FTA EDI X.12 813 Map

Terminal Operators Report - Schedule 15B Disbursement

Company Name: ABC Oil Company	License Number: D123456	FEIN: 987654321	Schedule Type: 15B	Tax Period CCYYMMDD: 20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS02 element. See item bolded in the detail records below: TFS~T3~**15B**~PG~167~94~J \	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Terminal Code Number: T99XX9991	Product Type (Circle One)					
	This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS04 element. See item bolded in the detail records below: TFS~T3~15B~PG~**167**~94~J \					
This information is mapped to the ***Report Information*** Tax Form Segment. Specifically to the TFS06 element.	065	Gasoline	130	Jet Fuel	226	High Sulfur Diesel Fuel-Dyed
	124	Gasohol	161	Low Sulfur Diesel #1	227	Low Sulfur Diesel Fuel-Dyed
	125	Aviation Gasoline	167	Low Sulfur Diesel #2	___	Other (See Product Code List)

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Dest. State or TCN	(5) Position Holder	(6) Position Holder's FEIN	(7) Date Received	(8) Document Number	(9) Net Gallons	(10) Gross Gallons
XYZ Carrier Co	234567890	J	XX	J Doe Oil	456789012	01/5/05	999991	8,105	8,100
ABC Carrier Inc	345678901	B	XX	J Doe Oil	456789012	01/15/05	999992	8,099	8,050
Total:								16,204	16,150

See the following pages for details on mapping between paper and EDI.

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Dest. State or TCN	(5) Position Holder	(6) Position Holder's FEIN	(7) Date Received	(8) Document Number	(9) Net Gallons	(10) Gross Gallons
(1) Carrier Name: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~CA~**XYZ Carrier Co**~24~234567890\									
(2) Carrier FEIN: This information is mapped to the ***Carrier Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~CA~XYZ Carrier Co~24~**234567890**\									
(3) Mode: This information is mapped to the ***Beginning of Schedule*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the following detail record: TFS~T3~15B~PG~167~94~**J** \									
(4) Destination State or TCN: If the information reported was from a Destination State, the information is mapped to the ***Option 2 Point of Destination*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~ST~**XX**\ or If the information reported was from a Destination TCN, the information is mapped to the ***Option 1 Point of Destination*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~DT~~TC~**T99XX9999**\									
(5) Position Holder: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~SE~**J Doe Oil**~24~456789012\									
(6) Position Holder's FEIN: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~SE~J Doe Oil~24~**456789012**\									
(7) Date Received: This information is mapped to the ***Bill of Lading Date*** Date/Time Reference Segment. Specifically to the DTM02 element. See item bolded in the following detail record: DTM~095~**20050105**\									
(8) Document Number: This information is mapped to the ***Bill of Lading*** Forms Group Segment. Specifically to the FGS03 element. See item bolded in the following detail record: FGS~D~BM~**999991**\									
(9) Net Gallons: This information is mapped to the ***Bill of Lading Net*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5005~~~**8105**~GA\									
(10) Gross Gallons: This information is mapped to the ***Bill of Lading Gross*** Tax Information and Amount Segment. Specifically to the TIA04 element. See item bolded in the following detail record: TIA~5006~~~**8100**~GA\									

Information calculated by State system

Header Information section of FTA EDI X.12 813 Map

Report Information section of FTA EDI X.12 Map

Terminal Operators Report - Schedule 15C Inventories

Company Name:	License Number:	FEIN:	Schedule Type:	Tax Period CCYYMMDD:
ABC Oil Company	D123456	987654321	15C	20050131
See ***Name Detail*** Name Segment. Specifically the N102 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI10 element.	This information is mapped to the ***Identify Tax Agency Information*** Begin Tax Information Segment. Specifically to the BTI08 element.	This information is not mapped. The schedule is derived from the TOR return loop. This loop carries inventory information.	This information is mapped to the ***Tax Filing Period*** Date/Time Reference Segment. Specifically to the DTM02 element.

Terminal Code Number: T99XX9991	Product Type (Circle One)		
	This information is mapped to the ***Report Information*** Form Group Segment. Specifically to the FGS03 element. See item bolded in the detail records below:		
	FGS~EI~PG~167\		
This information is mapped to the ***Report Information*** Tax Form Segment. Specifically to the TFS06 element. See item bolded in the detail records below:	065 Gasoline	130 Jet Fuel	226 High Sulfur Diesel Fuel-Dyed
	124 Gasohol	161 Low Sulfur Diesel #1	227 Low Sulfur Diesel Fuel-Dyed
TFS~T2~TOR~~~TC~**T99XX9991**\	125 Aviation Gasoline	[167] Low Sulfur Diesel #2	___ Other (See Product Code List)

(1) Position Holder Name	(2) Position Holder FEIN	(3) Beginning Inventory	(4) Total Receipts	(5) Total Disbursements	(6) Gain (Loss)	(7) Ending Inventory
Jon Doe Oil	**456789012**	100,000	400,000	340,000	1,895	158,105
James Doe Oil	**547689021**	200,000	300,000	225,000	(3,099)	278,099
Total:						436,204

See the following pages for details on mapping between paper and EDI.

(1) Position Holder Name	(2) Position Holder FEIN	(3) Beginning Inventory	(4) Total Receipts	(5) Total Disbursements	(6) Gain (Loss)	(7) Ending Inventory
(1) Position Holder Name: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N102 element. See item bolded in the following detail record: N1~ON~**Jon Doe Oil**~24~456789012\						
(2) Position Holder FEIN: This information is mapped to the ***Position Holder Information*** Name Segment. Specifically to the N104 element. See item bolded in the following detail record: N1~ON~Jon Doe Oil~24~**456789012**\						
(3) Beginning Inventory: This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**BI**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record: TIA~5002~~~100000~GA\						
(6) Gain/(Loss): This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**GL**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record: TIA~5002~~~1895~GA\						
(7)Ending Inventory: This information is mapped to the ***Physical Inventory by Product*** Form Group Segment. Specifically to the FGS01 element. See item bolded in the following detail record: FGS~**EI**~PG~167\ and the ***Inventory*** Tax Information and Amount Segment. Specifically to the TIA05 element. See item bolded in the following detail record: TIA~5002~~~158105~GA\						

Chapter 8 - X12 820 ACH Debit Payment Overview

ANSI ASC X12 820 EDI Standard

820 Payment Order/Remittance Advice

FUNCTIONAL GROUP=**RA**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Payment Order/Remittance Advice Transaction Set (820) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to make a payment, send a remittance advice, or make a payment and send a remittance advice.

This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee, through a financial institution, or through a third party agent.

Table 1

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
	0100	ST	Transaction Set Header	M	1	
	0200	BPR	Beginning Segment for Payment Order/Remittance Advice	M	1	
	0300	NTE	Note/Special Instruction	O	>1	
C	0350	TRN	Trace	O	1	
C	0400	CUR	Currency	O	1	
	0500	REF	Reference Identification	O	>1	
	0600	DTM	Date/Time Reference	O	>1	
			LOOP ID - N1			>1
C	0700	N1	Name	O	1	
	0800	N2	Additional Name Information	O	>1	
	0900	N3	Address Information	O	>1	
	1000	N4	Geographic Location	O	1	
	1100	REF	Reference Identification	O	>1	
	1200	PER	Administrative Communications Contact	O	>1	
	1300	RDM	Remittance Delivery Method	O	1	
	1400	DTM	Date/Time Reference	O	1	

Table 2

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
			LOOP ID - ENT			>1
NC	0100	ENT	Entity	O	1	
			LOOP ID - FA1			>1
	0150	FA1	Type of Financial Accounting Data	O	1	
	0160	FA2	Accounting Data	M	>1	
			LOOP ID - NM1			>1
C	0200	NM1	Individual or Organizational Name	O	1	
	0300	N2	Additional Name Information	O	>1	
	0400	N3	Address Information	O	>1	
	0500	N4	Geographic Location	O	1	
	0600	REF	Reference Identification	O	>1	
	0700	PER	Administrative Communications Contact	O	>1	
			LOOP ID - ADX			>1
C	0800	ADX	Adjustment	O	1	
	0900	NTE	Note/Special Instruction	O	>1	

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	1000	PER	Administrative Communications Contact	O	>1	
	1050	DTM	Date/Time Reference	O	1	
			LOOP ID - REF			>1
	1100	REF	Reference Identification	O	1	
	1200	DTM	Date/Time Reference	O	>1	
			LOOP ID - IT1			>1
C	1300	IT1	Baseline Item Data (Invoice)	O	1	
	1310	RPA	Rate Amounts or Percents	O	1	
	1320	QTY	Quantity	O	1	
			LOOP ID - REF			>1
	1400	REF	Reference Identification	O	1	
	1410	DTM	Date/Time Reference	O	1	
			LOOP ID - SAC			>1
	1420	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	1430	TXI	Tax Information	O	>1	
	1440	DTM	Date/Time Reference	O	10	
			LOOP ID - SLN			>1
	1450	SLN	Subline Item Detail	O	1	
			LOOP ID - REF			>1
	1460	REF	Reference Identification	O	1	
	1470	DTM	Date/Time Reference	O	>1	
			LOOP ID - SAC			>1
	1480	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	1490	TXI	Tax Information	O	>1	
			LOOP ID - FA1			>1
	1495	FA1	Type of Financial Accounting Data	O	1	
	1496	FA2	Accounting Data	M	>1	
			LOOP ID - RMR			>1
C	1500	RMR	Remittance Advice Accounts Receivable Open Item Reference	O	1	
	1600	NTE	Note/Special Instruction	O	>1	
	1700	REF	Reference Identification	O	>1	
	1800	DTM	Date/Time Reference	O	>1	
	1850	VEH	Vehicle Information	O	1	
			LOOP ID - IT1			>1
C	1900	IT1	Baseline Item Data (Invoice)	O	1	
	1920	RPA	Rate Amounts or Percents	O	1	
	1940	QTY	Quantity	O	1	
			LOOP ID - REF			>1
	2000	REF	Reference Identification	O	1	
	2010	DTM	Date/Time Reference	O	1	
			LOOP ID - SAC			>1
	2020	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	2030	TXI	Tax Information	O	>1	
			LOOP ID - SLN			>1
	2040	SLN	Subline Item Detail	O	1	
			LOOP ID - REF			>1
	2050	REF	Reference Identification	O	1	
	2060	DTM	Date/Time Reference	O	>1	
			LOOP ID - SAC			>1
	2070	SAC	Service, Promotion, Allowance, or Charge Information	O	1	

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	2080	TXI	Tax Information	O	>1	
			LOOP ID - ADX			>1
C	2100	ADX	Adjustment	O	1	
	2200	NTE	Note/Special Instruction	O	>1	
	2300	PER	Administrative Communications Contact	O	>1	
			LOOP ID - REF			>1
	2400	REF	Reference Identification	O	1	
	2500	DTM	Date/Time Reference	O	>1	
			LOOP ID - IT1			>1
C	2600	IT1	Baseline Item Data (Invoice)	O	1	
	2610	RPA	Rate Amounts or Percents	O	1	
	2620	QTY	Quantity	O	1	
			LOOP ID - REF			>1
	2700	REF	Reference Identification	O	1	
	2710	DTM	Date/Time Reference	O	1	
			LOOP ID - SAC			>1
	2720	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	2730	TXI	Tax Information	O	>1	
	2740	DTM	Date/Time Reference	O	10	
			LOOP ID - SLN			>1
	2750	SLN	Subline Item Detail	O	1	
			LOOP ID - REF			>1
	2760	REF	Reference Identification	O	1	
	2770	DTM	Date/Time Reference	O	>1	
			LOOP ID - SAC			>1
	2780	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	2790	TXI	Tax Information	O	>1	
			LOOP ID - FA1			>1
	2795	FA1	Type of Financial Accounting Data	O	1	
	2796	FA2	Accounting Data	M	>1	
			LOOP ID - TXP			>1
N	2800	TXP	Tax Payment	O	1	
	2850	TXI	Tax Information	O	>1	
			LOOP ID - DED			>1
N	2870	DED	Deductions	O	1	
			LOOP ID - LX			>1
N	2900	LX	Assigned Number	O	1	
	2950	REF	Reference Identification	O	>1	
	3000	TRN	Trace	O	>1	
			LOOP ID - NM1			>1
	3050	NM1	Individual or Organizational Name	O	1	
	3100	REF	Reference Identification	O	>1	
	3150	G53	Maintenance Type	O	1	
			LOOP ID - AIN			>1
	3200	AIN	Income	O	1	
	3250	QTY	Quantity	O	>1	
	3300	DTP	Date or Time or Period	O	>1	
			LOOP ID - PEN			>1
	3350	PEN	Pension Information	O	1	
	3400	AMT	Monetary Amount	O	>1	

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	3450	DTP	Date or Time or Period	O	>1	
			LOOP ID - INV			>1
	3500	INV	Investment Vehicle Selection	O	1	
	3550	DTP	Date or Time or Period	O	>1	
			LOOP ID - N9			1
N	3600	N9	Reference Identification	O	1	
	3650	REF	Reference Identification	O	>1	
			LOOP ID - AMT			>1
C	3700	AMT	Monetary Amount	O	1	
	3800	REF	Reference Identification	O	>1	
			LOOP ID - N1			>1
	3900	N1	Name	O	1	
	4000	REF	Reference Identification	O	>1	
			LOOP ID - EMS			>1
	4100	EMS	Employment Position	O	1	
	4200	ATN	Attendance	O	>1	
	4300	AIN	Income	O	>1	
	4400	PYD	Payroll Deduction	O	>1	
			LOOP ID - RYL			>1
N	4500	RYL	Royalty Payment	O	1	
			LOOP ID - NM1			>1
	4600	NM1	Individual or Organizational Name	O	1	
			LOOP ID - LOC			>1
	4700	LOC	Location	O	1	
			LOOP ID - PID			>1
	4800	PID	Product/Item Description	O	1	
	4900	DTM	Date/Time Reference	O	1	
			LOOP ID - PCT			>1
	5000	PCT	Percent Amounts	O	1	
	5100	QTY	Quantity	O	1	
			LOOP ID - AMT			>1
	5200	AMT	Monetary Amount	O	1	
	5300	ADX	Adjustment	O	>1	
			LOOP ID - ASM			1
	5400	ASM	Amount and Settlement Method	O	1	
	5500	ADX	Adjustment	O	1	

Table 3

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
	0100	SE	Transaction Set Trailer	M	1	

Adds segment to table/positions 2/0150, 2/0160, 2/1495, 2/1496, 2/2795 and 2/2796.	2	329398
Adds segment to table/position 2/3650.	2	332398
Adds segment to table/position 2/1850.	4	093199

NOTES

2/0100 The ENT loop is for vendor or consumer third party consolidated payments.
2/2800 The TXP loop is for tax payments.
2/2870 The DED loop is for child support payments.
2/2900 The LX loop is for pension payments.
2/3600 The N9 loop is for payroll payments.
2/4500 The RYL loop is for royalty payments.

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COMMENTS

1/0350 The TRN segment is used to uniquely identify a payment order/remittance advice.

1/0400 The CUR segment does not initiate a foreign exchange transaction.

1/0700 The N1 loop allows for name/address information for the payer and payee which would be utilized to address remittance(s) for delivery.

2/0100 ENT09 may contain the payee's accounts receivable customer number.

2/0200 Allowing the NM1 segment to repeat in this area allows the paying entity within a payer and the paid entity within a payee to be identified (not the payer and payee).

2/0800 This ADX loop contains adjustment items which are not netted to an RMR segment in this transaction set.

2/1300 Loop IT1 within the ADX loop is the adjustment line item detail loop.

2/1500 Loop RMR is for open items being referenced or for payment on account.

2/1900 Loop IT1 within the RMR loop is the remittance line item detail loop.

2/2100 This ADX loop can only contain adjustment information for the immediately preceding RMR segment and affects the amount (RMR04) calculation. If this adjustment amount is not netted to the immediately preceding RMR, use the outer ADX loop (position 080).

2/2600 Loop IT1 within the ADX loop is the adjustment line item detail loop.

2/3700 The AMT segment can be used to provide information about allocation or distribution of net pay that is split across multiple payment orders.

Changes comment at table/position 2/3700.	2	331398

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7 Data Interchange Standards Association, Inc. (DISA)

Motor Fuel Uniformity X12 820 Structure

Table 1

Pos No	Uniform 820 Map	Header
0100	**ST**	Transaction Set Header
0200	**BTI**	Identify Tax Agency Information
0200	**BPR**	Payment Order Remittance Advice
0350	**TRN**	Sender Defined Trace Number
0600	**DTM**	Tax Filing Period
0700	**N1**	Taxpayer Name Detail
0900	**N3**	Address Detail
1000	**N4**	City, State, Zip Code Detail
1200	**PER**	General Contact Person

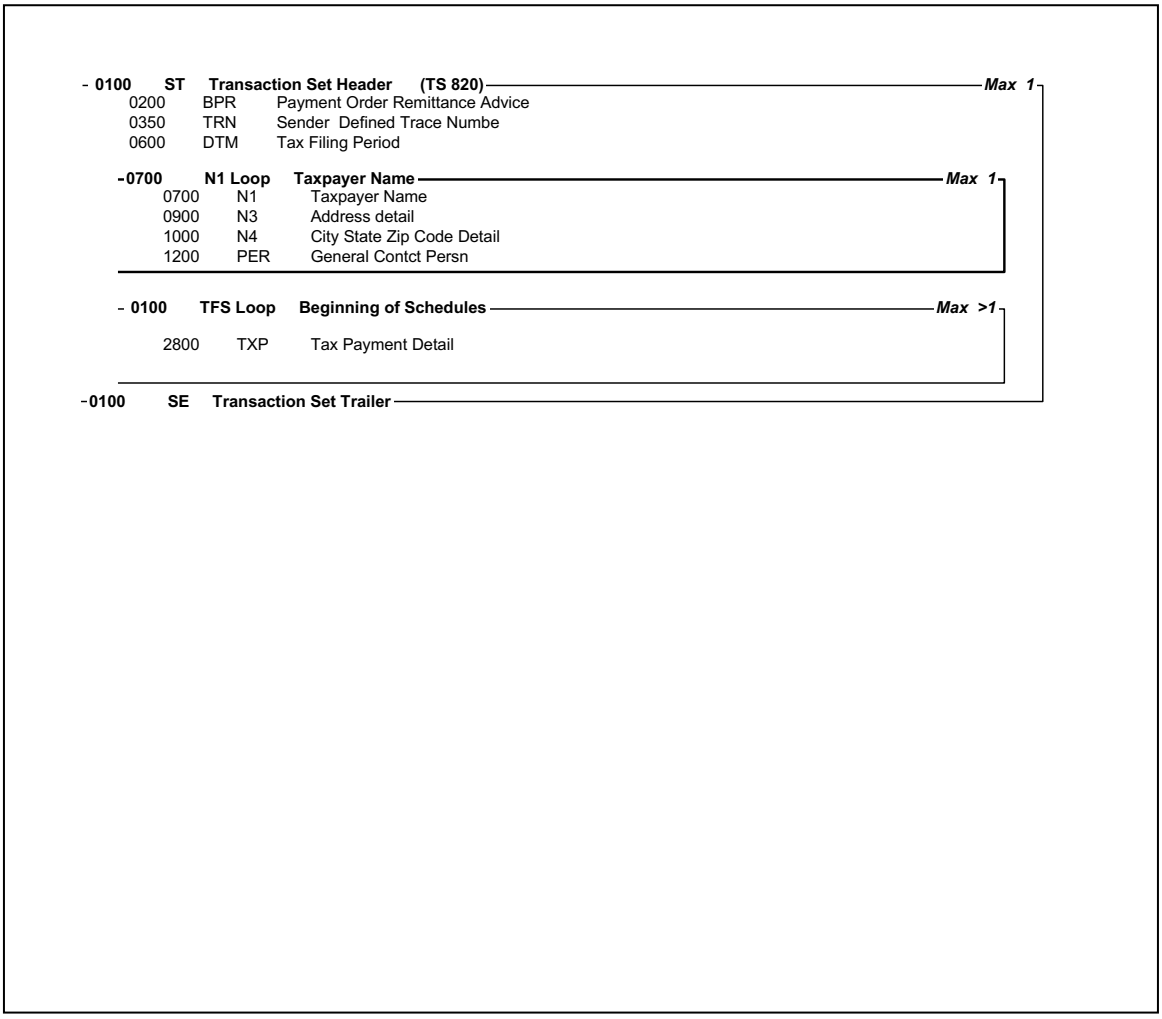
Table 2

Pos No	Uniform 820 Map	Header
2800	**TXP**	Tax Payment Segment

Table 3

Pos No	Uniform 820 Map	Header
0100	**SE**	Transaction Set Trailer

X12 820 Map Flow



Historical Summary of 820 Map Changes

The following is intended as a high level historical summary of map changes.

- First approved September 2002 – no known users.

Chapter 9 - X12 820 Map

This transaction set can be submitted alone within an ISA/GS envelope or can be within an ISA envelope and separate 813 GS and 820 GS envelopes. It is recommended that the 820 be the first transaction set within the ISA.

Key:	
Not Used	Not used: no data to transmit
Syntax Notes	Note: Notes defined by X12 Standards
FTA Notes	Note: Notes defined by FTA Uniformity

Transaction Set Header Description

Beginning of Transaction Set Header Segment								(Required) Pos. No. 0100
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
ST01	143		M	Transaction Set Code	ID	3	3	Transaction Set Type “820”
ST02	329		M	Transaction Set Control Number	AN	4	9	Transmitter defined unique control number (same value as SE02)
ST03	1705		O/Z	Implementation Convention Reference	AN	1	5	Version of taxing authority’s implementation guide.
ST~20~00500~1\								
Syntax Notes: None								
FTA Note: It is recommended that ST03 be used to help identify which implementation guide the trading partner is using. This element will help the receiver of the data determine if the sender is using an old guide or the most current guide for the data transmission.								

Payment Order Remittance Advice **Beginning Segment**								**(Required)** **Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
BPR01	305		M	Transaction Handling Code	ID	1	2	"S" = Single Debit Authorization "P" = Pre-notification
BPR02	782		M	Monetary Amount	R	1	18	Amount of tax payment
BPR03	478		M	Credit/Debit Flag Code	ID	1	1	"D" = Debit
BPR04	591		M	Payment Method Code	ID	3	3	"ACH" = Automated Clearing House
BPR05	812		M	Payment Format Code	ID	3	3	"CCD" = Cash Concentration/Disbursement "CCP" = Cash Concentration/Disbursement plus Addenda (CCD+)
BPR06 through BPR11 are not inserted by the taxpayer. They are on file with the party that creates the ACH Debit transaction. The taxpayer transmits empty fields for these elements.								
BPR06	506		X/Z	(ODFI) ID Number Qualifier	ID	2	2	"01" = ABA Transit Routing Number and Check Digits.
BPR07	507		X	(ODFI) Identification Number	AN	3	12	State's Bank Routing and Transit Number
BPR08	569		O/Z	(ODFI) Account Number Qualifier	ID	1	3	"DA" = Demand Deposit "SG" = Savings
BPR09	508		X/Z	(ODFI) Account Number	AN	1	35	State's Bank Account Number to be Credited
BPR10	509		O	Originating Company Identifier	AN	10	10	State ID Example: Taxing Authority's DUNS Number
BPR11	510		O	Originating Company Supplemental Code	O	9	9	Code Identifing Fiscal Agent
BPR12	506		X/Z	(RDFI) ID Number Qualifier	ID	2	2	"01" = ABA Transit Routing Number and Check Digits
BPR13	507		X	(RDFI) Identification Number	AN	3	12	Taxpayer's Bank Routing and Transit Number
BPR14	569		O/Z	(RDFI) Account Number Qualifier	ID	1	3	"DA" = Demand Deposit "SG" = Savings
BPR15	508		X/Z	(RDFI) Account Number	AN	1	35	Taxpayer's Bank Accounted to be Debited
BPR16	373		O/Z	Date	DT	8	8	The intended payment effective date (CCYYMMDD)
BPR17	1048		O/Z	Business Function Code	ID	1	3	"TAX" = Tax Payment
BPR~S~500~D~ACH~CCD~~~~~~~01~123456789~DA~987654321~20010325~TAX\								
Syntax Notes: If either BPR12 or BPR13 is present, then the other is required. If BPR14 is present, then BPR15 is required.								
FTA Notes: ODFI (Originating Depository Financial Institution) is the bank that creates the ACH transaction. For debit transactions, this is the States' Bank. RDFI (Receiving Depository Financial Institution) is the bank that accepts the ACH transaction. For debit transactions, this is the Taxpayer's Bank.								

Sender defined Trace Number **Trace Segment**								**(Required)** **Pos. No. 0350**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TRN01	481		M	Trace Type Code	ID	1	1	"1" = Current Transaction Trace Number
TRN02	127		M/Z	Reference Identification	AN	1	50	Sender defined Trace Number associated with EFT
TRN~1~abc123\								
Syntax Notes: None								
FTA Notes: None								

Tax Filing Period **Date/Time Reference Segment**								**(Required)** **Pos. No. 0600**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	"194" = Tax Period End Date "683" = Filing Period
DTM02	373		X	Date	DT	8	8	"CCYYMMDD" = Tax Filing Period End
DTM03 and DTM04 are not used.								
DTM05	1250		X	Date Time Period Format Qualifier	ID	3	3	"RD8" = Range of Dates
DTM06	1251		X	Date Time Period	AN	17	17	"CCYYMMDD-CCYYMMDD" = Tax Filing Period Beginning and Ending Dates.
DTM~194~20010525\ or DTM~683~~~~RD8~20010426-20010525\								
Syntax Notes: At least one of DTM02 or DTM05 is required. If either DTM05 or DTM06 is present, then the other is required.								
FTA Notes: If qualifier "194" is used in DTM01, then DTM05 and DTM06 are not used. If qualifier "683" is used in DTM01, then DTM02 is not used.								

Taxpayer Name Detail **Name Segment**								**(Required)** **Pos. No. 0700**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"TP" = Primary Taxpayer
N102	93		X	Name	AN	1	35	Taxpayer Name
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN – Canadian Business Number
N104	67		X	Identification Code	AN	2	18	Taxpayer's FEIN or SSN or BN
N1~TP~ABC Distributing~24~123456789\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Notes: N102, N103 and N104 are required.								

Address Detail **Address Information Segment**								**(Required)** **Pos. No. 0900**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N301	166		M	Address Information	AN	1	35	First Line Street Address
N302	166		O	Address Information	AN	1	35	Second Line Street Address
N3~123 C Street~PO Box 222\								
Syntax Notes: None								
FTA Notes: None								

City, State, Zip Code Detail **Location Geographic Segment**								**(Required)** **Pos. No. 1000**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State code or Province	ID	2	2	State or Province Abbreviation
N403	116		O	Postal (Zip) Code	ID	3	11	ZIP Code, ZIP Plus 4 Code or Foreign Postal code
N404	26		O	Country	ID	2	3	Country Abbreviation (United States = USA)
N4~Billings~MT~59401-2222~US\								
Syntax Notes: None								
FTA Notes: None								

General Contact Person **Administrative Communications Contact Segment**								**(Required)** **Pos. No. 1200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
PER01	366		M	Contact Function Code	ID	2	2	Contact Type Code: “CN” = General Contact
PER02	93		O	Name	AN	1	35	Contact Name
PER03	365		X	Communications Number Qualifier	ID	2	2	“TE” = Telephone Number
PER04	364		X	Communications Number	AN	10	14	Voice Telephone Number
PER05	365		X	Communications Number Qualifier	ID	2	2	“FX” = FAX Number
PER06	364		X	Communications Number	AN	10	10	FAX Telephone Number
PER07	365		X	Communications Number Qualifier	ID	2	2	“EM” = Electronic Mail
PER08	364		X	Communications Number	AN	1	80	E-mail Address
PER~CN~Allen Smith~TE~4069959988~FX~4069950329~EM~asmith@abc.com\								
Syntax Notes: If either PER03 or PER04 is present, then the other is required. If either PER05 or PER06 is present, then the other is required. If either PER07 or PER08 is present, then the other is required.								
FTA Notes: None								

Tax Payment Detail Loop

This segment is used to define the details of the payment. It is repeated each time the tax payment type code (TXP02) changes.

Tax Payment Detail **Tax Payment Segment**								**(Required)** **Pos. No. 2800**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TXP01	325		M	Tax Identification Number	AN	1	20	Taxpayer Identification Number assigned by the taxing authority. Example: License #, Permit #, etc.
TXP02	1049		M	Tax Payment Type Code	ID	1	5	See payment type codes in Appendix for additional codes.
TXP03	373		M	Date	DT	8	8	Payment date (CCYYMMDD)
TXP04	817		M	Tax Information Identification Number	AN	1	30	Identifying tax information may be defined by the taxing authority. See Appendix for existing codes.
TXP05	1051		M	Tax Amount	N2	1	10	Tax Amount
TXP06 through TXP09 are not used								
TXP10	1050		O	Taxpayer Verification	AN	1	6	Code agreed to by both parties to validate the sender.
TXP~12345~05000~20020125~MOTOR FUELS~200000~~~~~ab123\								
Syntax Notes: None								
FTA Notes: None								

Transaction Set Trailer Description

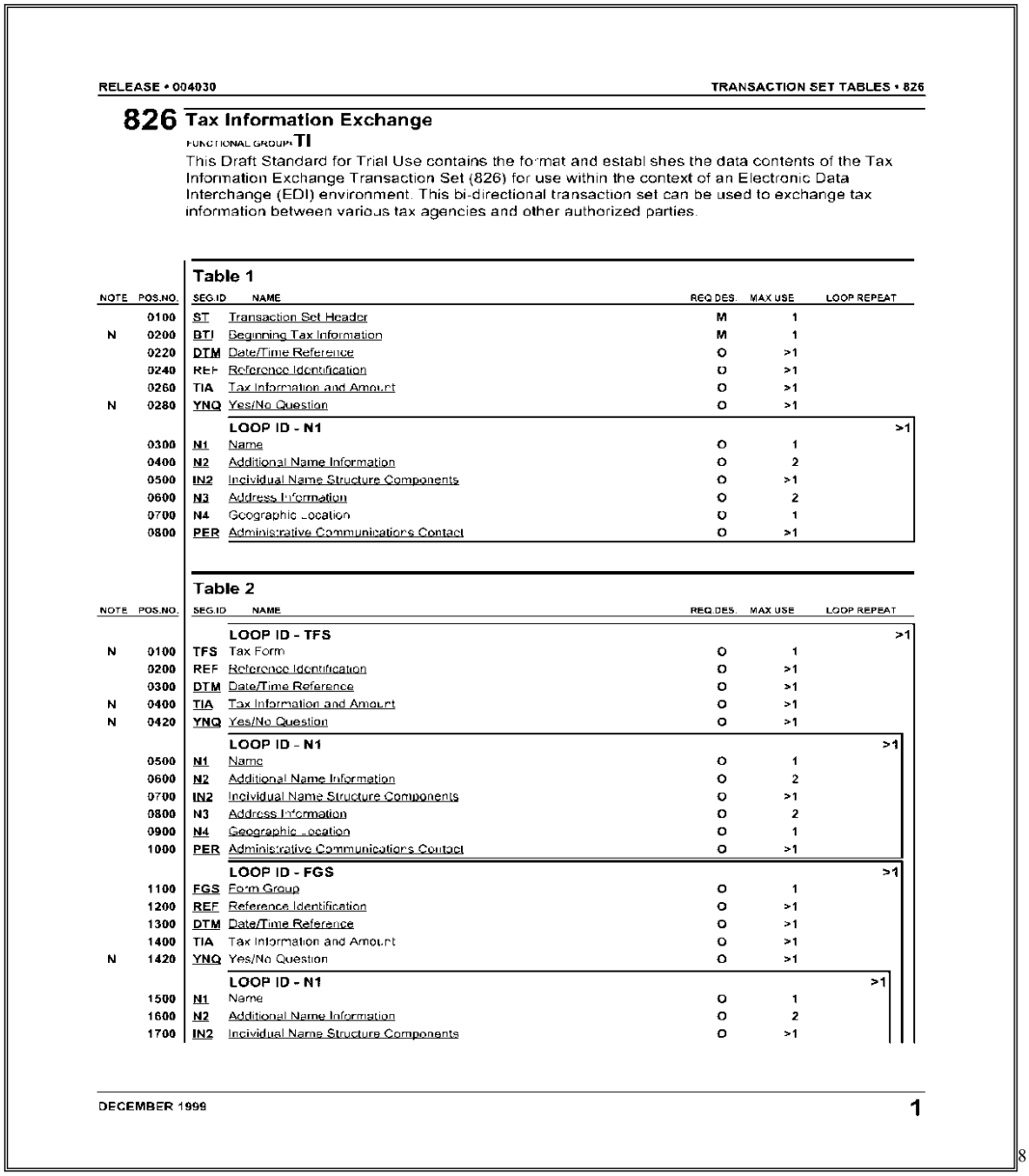
End of Transaction Set **Trailer Segment**								**(Required)** **Pos. No. 2100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
SE01	96	96	M	Number of Included Segments	N0	1	10	Number of segments (inserted by translator)
SE02	329	329	M	Transaction Set Control Number	AN	4	9	Determined by Filer (same value in ST02, unique control number)
SE~9~82000500\								
Syntax Notes: None								
FTA Notes: None								

End of X12 820 Map

Chapter 10 - X12 826 Tax Information Exchange Overview

There are two standards created by the FTA Uniformity Committee to exchange tax information between tax authorities. The first is the use of the X12 826 standard and the second is the use of a flat file standard. This chapter will cover the X12 826 options to exchange tax information.

ANSI ASC X12 826 EDI Standard



RELEASE • 004030 TRANSACTION SET TABLES • 826

826 Tax Information Exchange

FUNCTIONAL GROUP=TI

This Draft Standard for Trial Use contains the format and establishes the data contents of the Tax Information Exchange Transaction Set (826) for use within the context of an Electronic Data Interchange (EDI) environment. This bi-directional transaction set can be used to exchange tax information between various tax agencies and other authorized parties.

Table 1

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
	0100	ST	Transaction Set Header	M	1	
N	0200	BTI	Beginning Tax Information	M	1	
	0220	DTM	Date/Time Reference	O	>1	
	0240	REF	Reference Identification	O	>1	
	0260	TIA	Tax Information and Amount	O	>1	
N	0280	YNQ	Yes/No Question	O	>1	
			LOOP ID - N1			>1
	0300	N1	Name	O	1	
	0400	N2	Additional Name Information	O	2	
	0500	IN2	Individual Name Structure Components	O	>1	
	0600	N3	Address Information	O	2	
	0700	N4	Geographic Location	O	1	
	0800	PER	Administrative Communications Contact	O	>1	

Table 2

NOTE	POS.NO.	SEG.ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
			LOOP ID - TFS			>1
N	0100	TFS	Tax Form	O	1	
	0200	REF	Reference Identification	O	>1	
	0300	DTM	Date/Time Reference	O	>1	
N	0400	TIA	Tax Information and Amount	O	>1	
N	0420	YNQ	Yes/No Question	O	>1	
			LOOP ID - N1			>1
	0500	N1	Name	O	1	
	0600	N2	Additional Name Information	O	2	
	0700	IN2	Individual Name Structure Components	O	>1	
	0800	N3	Address Information	O	2	
	0900	N4	Geographic Location	O	1	
	1000	PER	Administrative Communications Contact	O	>1	
			LOOP ID - FGS			>1
	1100	FGS	Form Group	O	1	
	1200	REF	Reference Identification	O	>1	
	1300	DTM	Date/Time Reference	O	>1	
	1400	TIA	Tax Information and Amount	O	>1	
N	1420	YNQ	Yes/No Question	O	>1	
			LOOP ID - N1			>1
	1500	N1	Name	O	1	
	1600	N2	Additional Name Information	O	2	
	1700	IN2	Individual Name Structure Components	O	>1	

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[8]

[8] *Data Interchange Standards Association, Inc. (DISA)*

1800	N3	Address Information	O	2
1900	N4	Geographic Location	O	1
2000	PER	Administrative Communications Contact	O	>1
2100	SE	Transaction Set Trailer	M	1

NOTES

1/0200 The BTI Segment establishes the Tax Information Exchange Program.
1/0280 This YNQ segment refers to the validity of taxpayer identification in Table 1
2/0100 The TFS segment establishes the tax form, schedule, or type.
2/0400 The TXA segment specifies individual data fields within the tax form, schedule, or type identified in the TFS segment.
2/0420 This YNQ segment refers to the valicity of taxpayer identification in the TFS loop.
2/1420 This YNQ segment refers to the validity of taxpayer identification in the FGS loop.

[9]

[9] *Data Interchange Standards Association, Inc. (DISA)*

Motor Fuel Uniformity X12 826 Structure

Table 1

Pos No	Uniform 826 Map	Header
0100	**ST**	Transaction Set Header
0200	**BTI**	Identify Tax Agency Information
0300	**N1**	Tax Authority
0800	**PER**	Tax Authority EDI Contact

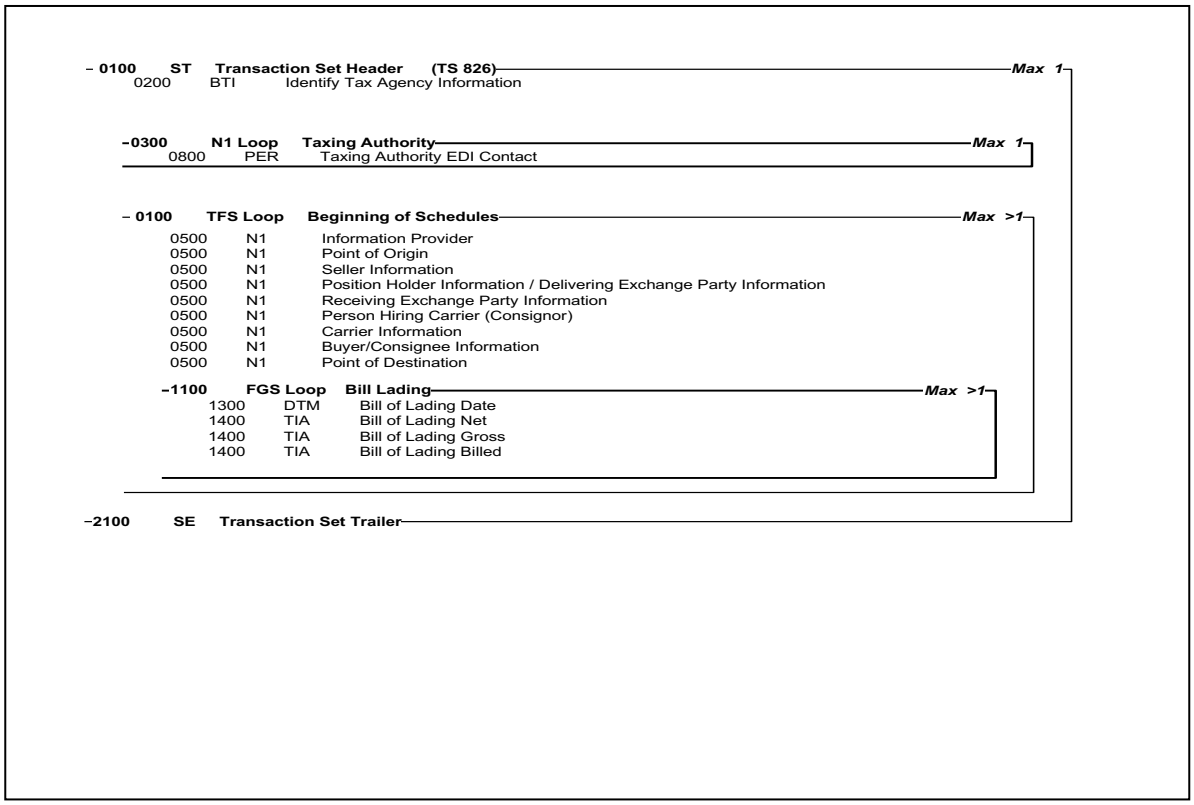
Table 2

Pos No	Uniform 826 Map	Schedule (SCH)
0100	**TFS**	Beginning of Schedules
0500	**N1**	Information Provider
0500	**N1**	Point of Origin
0500	**N1**	Seller Information
0500	**N1**	Position Holder Information / Delivering Exchange Party Information
0500	**N1**	Receiving Exchange Party Information
0500	**N1**	Person Hiring Carrier (Consignor)
0500	**N1**	Carrier Information
0500	**N1**	Buyer/Consignee Information
0500	**N1**	Point of Destination
1100	**FGS**	Bill of Lading
1300	**DTM**	Bill of Lading Date
1400	**TIA**	Bill of Lading Net
1400	**TIA**	Bill of Lading Gross
1400	**TIA**	Bill of Lading Billed

Table 3

Pos No	Uniform 826 Map	Trailer
2100	**SE**	Transaction Set Trailer

X12 826 Map Flow



Historical Summary of 826 Map Changes

The following is intended as a high level historical summary of map changes.

- First approved September 2001

File Naming Convention

When electronically sending the export information to neighboring states, the following naming convention is recommended to ensure other files are not overwritten. The file name should be "SS_Sending_XXX_Receiving_RS_MMDDYYYYHHMM.txt".

- SS = Sending state abbreviation
- XXX = file type '826' = EDI file, 'XML' = XML Schema, or 'FFF' = flat file format
- RS = Receiving state abbreviation
- MM = 2-digit month of the transmission date
- DD = 2-digit day of the transmission date
- YYYY = 4-digit year of the transmission date
- HH = 2-digit hours of the transmission day

MM = 2-digit minutes of the transmission day

Chapter 11 - X12 826 Map

The 826 Tax Information Exchange map is for the purpose of states sharing import and export fuel information.

The EDI separator requirements and the EDI envelope Requirements defined previously are used for the 826 map as well.

Key:

Not Used	**Not used: No data to transmit**
Syntax	**Note: Notes defined by X12 Standards**
FTA Notes	**Note: Notes defined by FTA Uniformity**

Transaction Set Header Description

Beginning of Transaction Set Header Segment								**(Required) Pos. No. 0100**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
ST01	143		M	Transaction Set Code	ID	3	3	Transaction Set Type “826”
ST02	329		M	Transaction Set Control Number	AN	4	9	Transmitter defined unique control number (same value as SE02)
ST03	1705		O/Z	Implementation Convention Reference	AN	1	5	Version of taxing authority’s implementation guide.
ST~826~00500~1\								
Syntax Notes: None								
FTA Note:	It is recommended that ST03 be used to help identify which implementation guide the trading partner is using. This element will help the receiver of the data determine if the sender is using an old guide or the most current guide for the data transmission.							

Identify Tax Agency Information Begin Tax Information Segment								**(Required) Pos. No. 0200**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
BTI01	128		M	Reference Number Qualifier	ID	2	2	"T2" = Tax Form Code
BTI02	127		M	Reference Number	AN	1	30	Name of form used by Tax Authority
BTI03	66		M	ID Code Qualifier	ID	2	2	"57" = Department
BTI04	67		M	ID Code	AN	2	25	Tax Authority name
BTI05	373		O	Transaction Create Date	DT	8	8	“CCYYMMDD” = Transmission Date
BTI~T2~MF-32~57~MT Dept of Transportation~20010525\								
Syntax Notes: None								
FTA Note:	None							

Taxing Authority Name Segment								**(Optional) Pos. No. 0300**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"TX" = Taxing Authority
N102	93		X	Name	AN	1	35	Tax Authority Name
N1~TX~MT Department of Transportation\								
Syntax Notes: N102 is required.								
FTA Note:	None							

Tax Authority EDI Contact Person **Administrative Communications Contact Segment**								**(Optional)** **Pos. No. 0800**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
PER01	366		M	Contact Function Code	ID	2	2	Contact Type Code: “EA” = EDI Coordinator
PER02	93		O	Name	AN	1	35	Contact Name
PER03	365		X	Communications Number Qualifier	ID	2	2	“TE” = Telephone Number
PER04	364		X	Communications Number	AN	10	14	Voice Telephone Number
PER05	365		X	Communications Number Qualifier	ID	2	2	“FX” = FAX Number
PER06	364		X	Communications Number	AN	10	10	FAX Telephone Number
PER07	365		X	Communications Number Qualifier	ID	2	2	“EM” = Electronic Mail
PER08	364		X	Communications Number	AN	1	80	E-mail Address
PER~EA~Joe Smith~TE~4064449999~FX~4064448888~EM~jsmith@state.mt.us\								
Syntax Notes: If either PER03 or PER04 is present, then the other is required. If either PER05 or PER06 is present, then the other is required. If either PER07 or PER08 is present, then the other is required.								
FTA Note: None								

Schedule Detail Information

Repeat the TFS loop for each product type, mode of transport or schedule type.

Beginning of Schedules **Tax Form Segment**								**(Required)** **Pos. No. 0100**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TFS01	128		M	Reference Identification Qualifier	ID	2	2	"T3" = Tax Schedule Code
TFS02	127		M	Reference Identification	AN	1	6	Schedule Type Code (see code list in Appendix on page 23)
TFS03	128		X	Reference Identification Qualifier	ID	2	2	"PG" = Product Group
TFS04	127		X	Reference Identification	AN	3	3	Product Code (see code list in Appendix on page **Error! Bookmark not defined.**)
TFS05	66		X	Identification Code Qualifier	ID	2	2	"94" = Mode of Transportation
TFS06	67		X	Identification Code	AN	2	2	Mode Code (see code list in Appendix on page **Error! Bookmark not defined.**)
TFS~T3~7~PG~065~94~J \								
Syntax Notes: If either TFS03 or TFS04 is present, then the other is required. If either TFS05 or TFS06 is present, then the other is required.								
FTA Note: None								

Information Provider Name Segment								(Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"L9" = Information Provider
N102	93		X	Name	AN	1	35	Information Provider's Name
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN - Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Information Provider's FEIN or SSN or BN
N1~L9~ABC Distributing~24~516999999\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: N102, N103 and N104 are required.								

For Point of Origin/Terminal: (One of the following options is required)

- Use Option 1 when the origin has an IRS TCN.
- Use Option 2 when the origin does not have an IRS TCN.
- Use Option 3 when the state requires an origin facility ID (currently used by the state of Florida).

Option 1

Point of Origin Name Segment 1								(One of the three options is Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"OT" = Origin Terminal
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"TC" = IRS Terminal Code
N104	67		X	Identification Code	AN	9	9	IRS Terminal Code (Code list is located at https://www.irs.gov/businesses)
N1~OT~~TC~T81MT4007\								
Syntax Notes: N103 and N104 are required.								
FTA Note: None								

Option 2

Point of Origin Name Segment 1								(One of the three options is Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"SF" = Ship From
N102	93		X	Name	AN	2	2	Origin State Abbreviation
N1~SF~MT\								
Syntax Notes: N102 is required.								
FTA Note: None								

Point of Origin Name Segment 1								(Optional) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State or Province Code	ID	2	2	State or Province Abbreviation
N403	116		O	Postal Code	ID	3	11	ZIP or ZIP plus 4 Code
N404	26		X	Country Code	ID	2	3	Country (USA, CAN, MEX)
N405	309		X	Location Qualifier	ID	1	2	“CY” = County
N406	310		O	Location Identifer	AN	1	5	County
N4~Billings~MT~59604\								
Syntax Notes: None								
FTA Note: N406 is based on the federal county codes (see: http://www.itl.nist.gov/fipspubs/co-codes/states.htm)								

Option 3

Point of Origin Name Segment 1								(One of the three options is Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	“WO” = Storage Facility at Origin
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"FA" = Facility Identification
N104	67		X	Identification Code	AN	2	20	Facility/License Number
N1~WO~~FA~123456\								
Syntax Notes: N103 and N104 are required.								
FTA Note: None								

Seller Information Name Segment 2								(Required Based on the Tax Type) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"SE" = Selling Party
N102	93		X	Name	AN	1	35	Seller's Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN “50” = BN - Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Seller’s FEIN or SSN or BN
N1~SE~ABC Distributing~24~516998888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: N102, N103 and N104 are required.								

Position Holder Information \ Delivering Exchange Party Information **Name Segment 3**							**(Required for TOR Tax Type)** **Pos. No. 0500**
Element ID	Elem Ref. #	Elem Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"ON" = Position Holder
N102	93		X	Name	AN	1	35	Position Holder's Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN “50” = BN - Canadian Business Number "FI" = Federal Taxpayer 637 ID Number
N104	67		X	Identification Code	AN	9	18	Position Holder's FEIN or SSN or BN or IRS 637 Number
N1~ON~ABC Distributing~24~516998888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: If reporting position holder or 2-party exchange information this segment is required. N102, N103 and N104 are required.								

Receiving Exchange Party Information **Name Segment 4**							**(Optional)** **Pos. No. 0500**
Element ID	Elem Ref. #	Elem Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"EC" = Exchanger
N102	93		X	Name	AN	1	35	Position Holder's Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN “50” = BN - Canadian Business Number "FI" = Federal Taxpayer 637 ID Number
N104	67		X	Identification Code	AN	9	18	Position Holder's FEIN or SSN or BN or IRS 637 Number
N1~ON~DEF Distributing~24~516999999\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: If reporting 2-party exchange information this segment is required. Otherwise do not use. N102, N103 and N104 are required.								

Person Hiring Carrier (Consignor) **Name Segment 5**								**(Required for CCR Tax Type)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"CI" = Consignor (Person Hiring the Carrier)
N102	93		X	Name	AN	1	35	Consignor Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN “50” = BN - Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Consignor's (Person Hiring the Carrier) FEIN or SSN or BN
N1~CI~ABC Distributing~24~516998888\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: N102, N103 and N104 are required.								

Carrier Information **Name Segment 6**								**(Required Based On Tax Type)** **Pos. No. 0500**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"CA" = Carrier Name
N102	93		X	Name	AN	1	35	Carrier Name or Control Name (First 4 position of tax payer business name)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN “50” = BN - Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Carrier’s FEIN or SSN or BN
N1~CA~ABC Trucking~24~516889999\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: N102, N103 and N104 are required.								

Buyer/Consignee Information Name Segment 7								(Required Based On Tax Type) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"BY" = Buying Party (Purchaser/Consignee)
N102	93		X	Name	AN	1	35	Sold to Name (Purchaser./Consignee)
N103	66		X	Identification Code Qualifier	ID	2	2	"24" = FEIN "34" = SSN "50" = BN - Canadian Business Number
N104	67		X	Identification Code	AN	9	18	Purchaser's FEIN or SSN or BN
N1~BY~Joe Gas Station~24~819999999\								
Syntax Notes: At least one of N102 or N103 is required. If either N103 or N104 is present, then the other is required.								
FTA Note: N102, N103 and N104 are required.								

For Point (Address) of Delivery/Destination: (One of the following Options is Required)

- Use Option 1 when the destination has an IRS TCN.
- Use Option 2 when the destination does not have an IRS TCN.
- Use Option 3 when the state requires a destination facility ID (currently used by the state of Florida).

Option 1

Point of Destination Name Segment 8								(One of the three options is Required) Pos. No. 0500
Element 98ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"DT" = Destination Terminal
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"TC" = IRS Terminal Code
N104	67		X	Identification Code	AN	9	9	IRS Terminal Code (Code list is located at https://www.irs.gov/businesses)
N1~DT~~TC~T82ID1001\								
Syntax Notes: N103 and N104 are required.								
FTA Note: None								

Option 2

Point of Destination Name Segment 8								(One of the three options is Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	"ST" = Ship To
N102	93		X	Name	AN	2	2	Destination State Abbreviation
N1~ST~ID\								
Syntax Notes: N102 is required.								
FTA Note: None								

Point of Destination Name Segment 8								(Optional) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N401	19		O	City Name	AN	2	30	Name of City
N402	156		O	State or Province Code	ID	2	2	State or Province Abbreviation
N403	116		O	Postal Code	ID	3	11	ZIP or ZIP plus 4 Code
N404	26		X	Country Code	ID	2	3	Country (USA, CAN, MEX)
N405	309		X	Location Qualifier	ID	1	2	“CY” = County
N406	310		O	Location Identifier	AN	1	5	County
N4~Boise~ID~99817\								
Syntax Notes: None								
FTA Note: N406 is based on the federal county codes (see: http://www.itl.nist.gov/fipspubs/co-codes/states.htm)								

Option 3

Point of Destination Name Segment 8								(One of the three options is Required) Pos. No. 0500
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
N101	98		M	Entity Identification Code	ID	2	2	“WD” = Destination Facility
N102 is not used.								
N103	66		X	Identification Code Qualifier	ID	2	2	"FA" = Facility Identification
N104	67		X	Identification Code	AN	2	20	Facility/License Number
N1~WD~~FA~123456\								
Syntax Notes: N103 and N104 are required.								
FTA Note: None								

This FGS loop begins the individual shipments within the TFS loop. It is repeated when one of the following values changes: Bill of Lading (Document) Number, Bill of Lading Date (Date Shipped), or Gallons/Liters

Bill of Lading Forms Group Segment								(Required) Pos. No. 1100
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
FGS01	350		M	Assigned Identification	AN	1	1	"D" = Schedule Detail
FGS02	128		X	Reference Identification Qualifier	ID	2	2	"BM" = Bill of Lading Number
FGS03	127		X	Reference Identification	AN	1	15	Bill of Lading Number
FGS~D~BM~00123456\								
Syntax Notes: If either FGS02 or FGS03 is present, then the other is required.								
FTA Note: None								

Bill of Lading Date								**(Required)**
Date/Time Reference Segment								**Pos. No. 1300**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
DTM01	374		M	Date/Time Qualifier	ID	3	3	"095" = Bill of Lading Date
DTM02	373		X	Date	DT	8	8	Bill of Lading Date (CCYYMMDD)
DTM~095~20010505\								
Syntax Notes: DTM02 is required.								
FTA Note: None								

Bill of Lading Net								**(Provide if Available)**
Tax Information and Amount Segment								**Pos. No. 1400**
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	“5005” = Net
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT"=Liters
TIA~5005~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Note: None								

Bill of Lading Gross								**(Provide if Available)**
Tax Information and Amount Segment								**Pos. No. 1400**
Element ID	Elem Ref. #	Elem Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	“5006” = Gross
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5006~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Note: None								

Bill of Lading Billed Tax Information and Amount Segment								(Provide if Available) Pos. No. 1400
Element ID	Elem Ref. #	Sub-Ele Ref. #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	“5007” = Billed
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters
TIA~5007~~~8000~GA\								
Syntax Notes: TIA04 and TIA05 are required.								
FTA Note: None								

End of FGS loop for Individual shipments.
End of TFS loop for Schedule.

End of Schedule Detail Information

Transaction Set Trailer Description

End of Transaction Set Trailer Segment								(Required) Pos. No. 2100
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
SE01	96	96	M	Number of Included Segments	N0	1	10	Number of segments (inserted by translator)
SE02	329	329	M	Transaction Set Control Number	AN	4	9	Determined by Filer (same value in ST02, unique control number)
SE~35~00500\								
Syntax Notes: None								
FTA Note: None								

End of Transaction Set

Chapter 12 - ACSII Flat File Tax Information Exchange Overview

There are two standards created by the FTA Uniformity Committee to exchange tax information between tax authorities. The first is the use of the X12 826 standard and the second is the use of a flat file standard. This chapter will cover the ASCII Flat File options to exchange tax information.

File Naming Convention

This is a delimited flat file. Use a ~ 'Tilde' to delimit the file. The file name should contain the state receiving the file and the state sending the file. The file name should also contain the date time stamp. The file name should be "SS_Sending_XXX_Receiving_RS_MMDDYYYYHHMM.txt".

- SS = Sending state abbreviation
- XXX = file type '826' = EDI file or 'FFF' = flat file format
- RS = Receiving state abbreviation
- MM = 2-digit month of the transmission date
- DD = 2-digit day of the transmission date
- YYYY = 4-digit year of the transmission date
- HH = 2-digit hours of the transmission day
- MM = 2-digit minutes of the transmission day

Note: This file can contain both import and export data.

Import Export File Layout

Col No.	Data Element	Data Type	Format	Field Requirement	Description	Explanation or Example
1	Jurisdiction Code	Text	State Abbreviation	Required	The US postal code of the state from which the data is being sent	Sending jurisdiction identifier
2	Period End Date	Text	MMDDYYYY	Required	Reporting Period – Month Day Year	Note: DD – represents the last day of the reporting period, i.e. – 01312008
3	Schedule Code	Text		Required	Schedule Code	The submitting Jurisdiction's Import / Export Schedule Types. i.e.: 3, 3A, 3B, etc.
4	Schedule Code Description	Text		Optional	Schedule Code Description	Sending States schedule description
5	Product Code	Text		Required	Product Code	The FTA product codes are 3 char codes. The Leading 0 is required. Example of product codes are: 065, 160, 228, E85, etc.
6	Product Code Description	Text		Optional	Product Code Description	Gas, Un-dyed Diesel, Dyed Diesel, etc.
7	Filer Name	Text		Required	Filer's Name	Legal name associated to the FEIN or SSN
8	Filer FEIN Identifier	Text		Required	FEIN/SSN	SSN allowed if no FEIN is available.
9	Seller's Name	Text		Required if a Receipt Schedule	Seller's Name	If the record is an Import, report the Seller. SSN allowed if no FEIN is available.
10	Seller's FEIN	Text		Required if a Receipt Schedule	Seller's FEIN	
11	Purchaser Name	Text		Required if a Disbursement Schedule	Purchaser's / Buyers Name	If the record is an Export, report the Buyer. SSN allowed if no FEIN is available.

Col No.	Data Element	Data Type	Format	Field Requirement	Description	Explanation or Example
12	Purchaser FEIN	Text		Required if a Disbursement Schedule	Purchaser's / Buyers Name FEIN	
13	Carrier's Name	Text		Required	Carrier Name	
14	Carrier's FEIN	Text		Required	Carrier FEIN	SSN Allowed if no FEIN is available.
15	Document Number	Text		Required	Document Number	
16	Date Received/Shipped	Text	MMDDYYYY	Required	Date Received/Shipped	i.e. 01222004
17	Transportation Mode	Text		Required	FTA Transportation Code	"R" – Rail "PL" – Pipeline "B" – Barge "J" – Truck "S" – Ship
18	Point of Origin Terminal Code	Text	T##SS####	Provide if City / State is not given	Point of Origin Terminal Code	Terminal or Storage EPA Code. Ex: T93TN1111 (No separators)
19	Point of Origin Address	Text		Optional	Point of Origin	
20	Point of Origin City	Text		Optional	Point of Origin	
21	Point of Origin State	Text		Provide if Origin Terminal Code is not provided	Point of Origin	Mandatory if Point of Origin Terminal Code is not supplied.
22	Origin County	Text		Optional	Point of Origin	
23	Origin Zip Code	Text		Optional	Point of Origin	
24	Origin Country	Text		Optional	Point of Origin	
25	Destination Terminal Code	Text	T##RS####	Provide if City State is not available	Point of Delivery Terminal Code	Terminal or Storage EPA Code.
26	Destination Address	Text		Optional	Point of Delivery	
27	Destination City	Text		Optional	Point of Delivery	
28	Destination State	Text		Provide if Destination Terminal Code is not provided		Mandatory if Point of Destination Terminal Code is not supplied.
29	Destination County	Text		Optional	Point of Delivery	
30	Point of Destination Zip	Text		Optional	Point of Delivery	
31	Destination Country Code	Text		Optional	Point of Delivery	
32	Net Gallons	No.		Provide if Available	Net	Provide if provided by jurisdiction. Enter negative values as "-345"
33	Gross Gallons	No.		Provide if Available	Gross	Provide if provided by jurisdiction. Enter negative values as "-345"
34	Billed Gallons	No.		Provide if Available	Billed	Provide if provided by jurisdiction. Enter negative values as "-345"
35	Export / Import Indicator	Text	E or I	Required	Was this an Export out of the submitting state or an Import into the submitting state?	Indicate if the detail is an Export or Import using a single character: Ex: I – Import or E - Export

ASCII Flat File Examples

Example of Import Record:

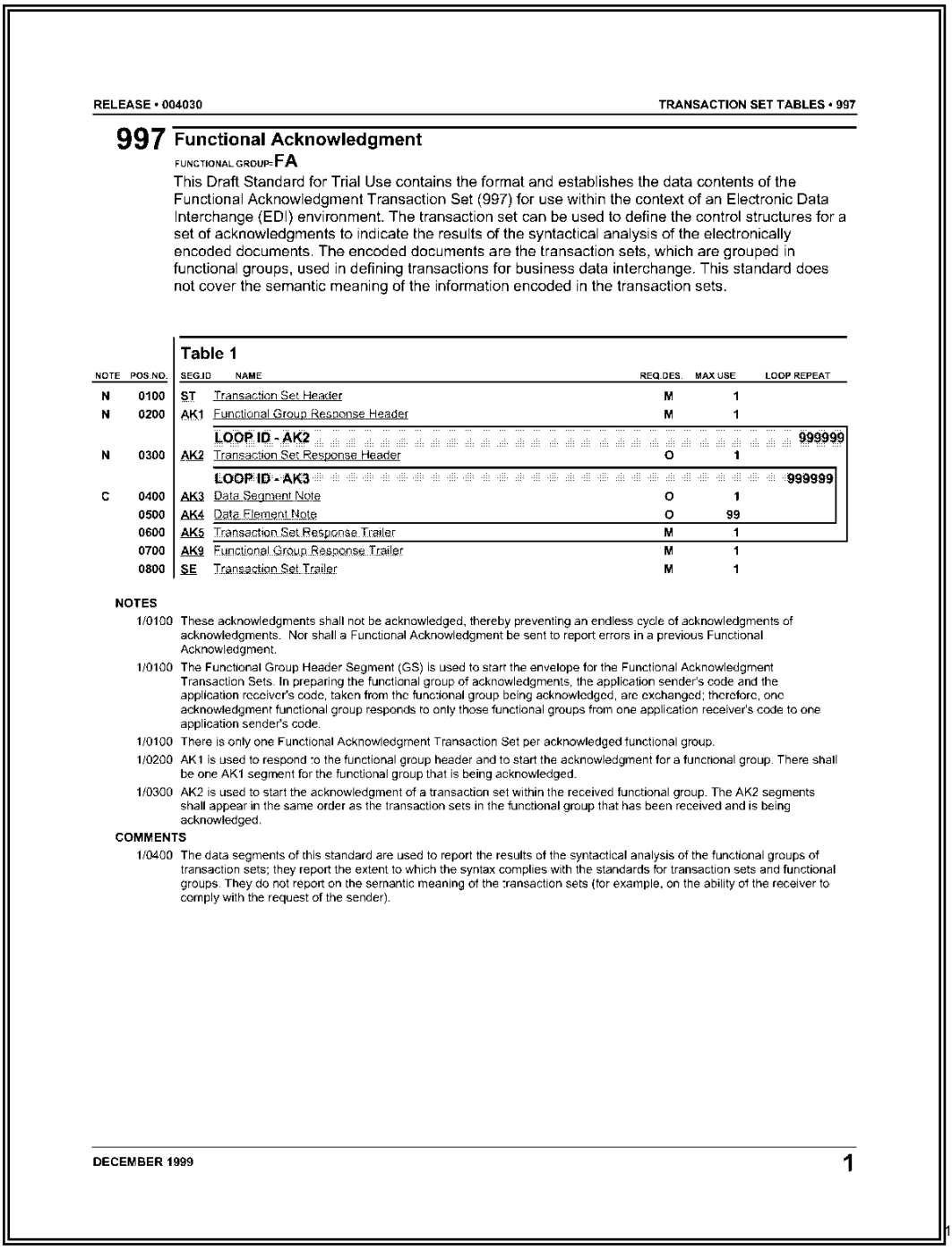
```
SS~01312008~3A~Gallons Imported From
Terminals/Refineries~065~Gasoline~Reporter~123456789~SELLER~234567890~
~~CARRIER~345678901~543210~01152008~J~T99XX9999~~~~~~~~~~SS~~~~8115~~~
I
```

Example of Export Record:

```
SS~12112007~7~Gallons Exported to the State of
RS~123~Alcohol~Reporter~456789012~~~BUYER~567890123~CARRIER~678901234~
908024~12182007~J~~~ORIGIN CITY~SS~~~~~~~~RS~~~~~28500~~E
```

Chapter 13 - X12 997 Functional Acknowledgment Overview

ANSI ASC X12 997 EDI Standard



RELEASE • 004030 TRANSACTION SET TABLES • 997

997 Functional Acknowledgment

FUNCTIONAL GROUP=FA

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Table 1

NOTE	POS NO.	SEG ID	NAME	REQ DES.	MAX USE	LOOP REPEAT
N	0100	ST	Transaction Set Header	M	1	
N	0200	AK1	Functional Group Response Header	M	1	
			LOOP ID - AK2			999999
N	0300	AK2	Transaction Set Response Header	O	1	
			LOOP ID - AK3			999999
C	0400	AK3	Data Segment Note	O	1	
	0500	AK4	Data Element Note	O	99	
	0600	AK5	Transaction Set Response Trailer	M	1	
	0700	AK9	Functional Group Response Trailer	M	1	
	0800	SE	Transaction Set Trailer	M	1	

NOTES

1/0100 These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.

1/0100 The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.

1/0100 There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

1/0200 AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

1/0300 AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

COMMENTS

1/0400 The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

DECEMBER 1999 1

[10]

[10] *Data Interchange Standards Association, Inc. (DISA)*

X12 997 Example File

An example of a 997 ACK can be found below. This 997 contains ACKs for four 813s received in one ISA/GS envelope.

The file you receive will be a continuous stream of data; no carriage returns or line feeds.

```
ISA~00~0000000000~00~0000000000~ZZ~040539587000000~ZZ~123456789000000~990913~1512~|~00403~0000000
01~0~P~^\
GS~FA~040539587050~INTERNALROUTING~19990913~1510~1001~X~004030\
ST~997~0014\
AK1~TF~52001\
AK2~813~000000124\
AK5~A\
AK9~A~1~1~1\
SE~6~0014\
ST~997~0015\
AK1~TF~52001\
AK2~813~000000125\
AK5~A\
AK9~A~1~1~1\
SE~6~0015\
ST~997~0016\
AK1~TF~52001\
AK2~813~000000126\
AK5~A\
AK9~A~1~1~1\
SE~6~0016\
ST~997~0017\
AK1~TF~52001\
AK2~813~000000127\
AK3~N01~124~~1\
AK5~R\
AK9~R~1~1~1\
SE~7~0017\
GE~4~1001\
IEA~1~000000001\
```

Chapter 14 - X12 997 EDI Map

The 997 Functional Acknowledgment notifies the Information Provider that their EDI file was received. Translators create the 997 ACK when the translator processes an EDI file. This ACK is designed to pass back through the Information Provider/Transmitter's translator to notify the Information Provider/Transmitter that the EDI file was accepted, accepted with errors or rejected. If the EDI file is rejected, the Information Provider/Transmitter must fix the file and send a new EDI file.

Transaction Set Header Description

Beginning of Transaction Set								**(Required)** **Pos. No. 0100**
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field
ID	Ref #	Ref #	Status		Type	Min	Max	Description
ST01	143		M	Transaction Set Code	ID	3	3	Transaction Set Type "997"
ST02	329		M	Transaction Set Control Number	AN	4	9	Translator defined (same value in SE02, unique control number)
ST~997~0014\								

Functional Group Response Header								**(Required)** **Pos. No. 0200**
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field
ID	Ref #	Ref #	Status		Type	Min	Max	Description
AK101	479		M/Z	Transaction Set Identifier Code	ID	2	2	Functional ID found in the GS segment (GS01) of the functional group being acknowledged. Equals one of the following: TF = 813 RD = 820 TI = 826 TA = 151
AK102	28		M/Z	Group Control Number	N0	1	9	Functional group control number found in the GS segment (GS02) of the functional group being acknowledged.
AK1~TF~52001\								

Transaction Set Response Header								**(Optional)** **Pos. No. 0300**
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field
ID	Ref #	Ref #	Status		Type	Min	Max	Description
AK201	143		M/Z	Functional Identifier Code	ID	3	3	Transaction set ID found in the ST segment (ST01) of the transaction set being acknowledged. Equals one of the following: 813, 820, 826, 151
AK202	329		M/Z	Transaction Set Control Number	AN	4	9	Transaction set control number found in the ST segment (ST01) of the transaction set being acknowledged.
AK2~813~000000124\								

Data Segment Note							(Optional) Pos. No. 0400
Element	Elem	Sub-Ele	Field	Field Name	Field	Length	Field
ID	Ref #	Ref #	Status		Type	Min / Max	Description
AK301	721		M	Segment ID Code	ID	2 / 3	Code defining the segment ID of the segment in error. See X12 guide for codes.
AK302	719		M	Segment Position in Transaction Set	N0	1 / 6	The position of the segment counted from the transaction set header (ST). The transaction set header is 1.
AK303	447		O	Loop Identifier Code	AN	1 / 6	Loop ID number given on the transaction set diagram.
AK304	720		O	Segment Syntax Error Code	ID	1 / 3	1 = Unrecognized segment ID 2 = Unexpected segment 3 = Mandatory segment missing 4 = Loop occurs over maximum times 5 = Segment exceeds maximum use 6 = Segment not in defined transaction set 7 = Segment not in proper sequence 8 = Segment has data element errors
This segment defines segment syntax errors and the location of the segment. Refer to the X12 standards guide for further definition.							
AK3~N1~0500~6~7\							

Data Element Note							(Optional) Pos. No. 0500
Element	Elem	Sub-Ele	Field	Field Name	Field	Length	Field
ID	Ref #	Ref #	Status		Type	Min / Max	Description
AK401	C030		M	Position in Segment			Code indicating relative position of element in error. See X12 guide for further information.
AK401	C030	722	M	Element Position in Segment	N0	1 / 2	
AK401	C030	1528	O	Component Data Element Position in Composite	N0	1 / 2	
AK401	C030	1686	O	Repeating Data Element Position	N0	1 / 4	
AK402	725		O	Data Element Reference Number	N0	1 / 4	Reference number used to locate the element in the Data Element Dictionary.
AK403	723		M	Data Element Syntax Error Code	ID	1 / 3	1 = Mandatory data element missing. 2 = Conditional required data element missing. 3 = Too many data elements 4 = Data element too short 5 = Data element too long 6 = Invalid character in data element 7 = Invalid code value 8 = Invalid date 9 = Invalid time 10 = Exclusion condition violated 12 = Too many repetitions 13 = Too many components
AK404	724		O/Z	Copy of Bad Data Element	AN	1 / 99	A copy of the bad data element.
This segment defines Element syntax errors and the location of the segment. Refer to the X12 standards guide for further definition.							
AK4~19~3~~~N101~7\							

Transaction Set Response Trailer								(Required) Pos. No. 0600
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field
ID	Ref #	Ref #	Status		Type	Min	Max	Description
AK501	717		M	Transaction Set Acknowledgement Code	ID	1	1	A = Accepted E = Accepted but errors were noted M = Rejected, message authentication code failed R = Rejected W = Rejected, assurance failed validity tests X = Rejected, content after decryption could not be analyzed
AK502	718		O	Transaction Set Syntax Error Code	ID	1	3	1 = Transaction set not supported 2 = Transaction set trailer missing 3 = Transaction set control number in header and trailer do not match. 4 = Number of included segments does not match actual count 5 = One or more segments in error 6 = Missing or invalid transaction set identifier 7 = Missing or invalid transaction set control number 8 = Authentication key name unknown 9 = Encryption key name unknown 10 = Requested service (authentication or encryption) not available. 11 = Unknown security recipient 12 = Incorrect message length (encryption only) 13 = Message authentication code failed 15 = Unknown security originator 16 = Syntax error in decryption text 17 = Security not supported 23 = Transaction set control number not unique within the functional group. 24 = S3E security end segment missing for S3S security. 25 = S3S security start segment missing for S3E security. 26 = S4E security end segment missing for S4S security 27 = S4S security start segment missing for S4E security end segment.
AK503	718		O	Transaction Set Syntax Error Code	ID	1	3	
AK504	718		O	Transaction Set Syntax Error Code	ID	1	3	
AK505	718		O	Transaction Set Syntax Error Code	ID	1	3	
AK506	718		O	Transaction Set Syntax Error Code	ID	1	3	
This segment acknowledges acceptance or rejection and reports errors. Refer to the X12 standards guide for further definition.								
AK5~R\								

Functional Group Response Trailer								(Required) Pos. No. 0700
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field
ID	Ref #	Ref #	Status		Type	Min	Max	Description
AK901	715		M	Functional Group Acknowledgement Code	ID	1	1	A = Accepted E = Accepted but errors were noted M = Rejected, message authentication code failed P = Partially Accepted, at least one transaction set was rejected R = Rejected W = Rejected, assurance failed validity tests X = Rejected, content after decryption could not be analyzed
AK902	97		M	Number of Transaction Sets Included	N0	1	6	Number of Transaction Sets Included
AK903	123		M	Number of Received Transaction Sets	N0	1	6	Number of Received Transaction Sets
AK904	2		M	Number of Accepted Transaction Sets	N0	1	6	Number of Accepted Transaction Sets
AK905	716		O	Functional Group Syntax Error Code	ID	1	3	1 = Functional group not supported 2 = Functional group version not supported 3 = Functional Group Trailer Missing 4 = Group control number in the functional group header and trailer do not agree. 5 = Number of included transaction sets does not match actual count. 6 = Group control number violates syntax 10 = Authentication key name unknown 11 = Encryption key name unknown 12 = Requested service (authentication or encryption) not available. 13 = Unknown security recipient 14 = Unknown security originator. 15 = Syntax error in decrypted text 16 = Security not supported 17 = Incorrect message length (encryption only) 18 = Message authentication code failed 23 = Transaction set control number not unique within the functional group. 24 = S3E security end segment missing for S3S security. 25 = S3S security start segment missing for S3E security. 26 = S4E security end segment missing for S4S security 27 = S4S security start segment missing for S4E security end segment.
AK906	716		O	Functional Group Syntax Error Code	ID	1	3	
AK907	716		O	Functional Group Syntax Error Code	ID	1	3	
AK908	716		O	Functional Group Syntax Error Code	ID	1	3	
AK909	716		O	Functional Group Syntax Error Code	ID	1	3	
This segment acknowledges acceptance or rejection of a functional group. Refer to the X12 standards guide for further definition.								
AK9~R~1~1~1\								

Transaction Set Trailer Description

End of Transaction Set Trailer Segment							**(Required) Pos. No. 0800**
Element ID	Elem Ref #	Sub-Ele Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
SE01	96	96	M	Number of Included Segments	N0	1	10	Number of segments (inserted by translator)
SE02	329	329	M	Transaction Set Control Number	AN	4	9	Determined by Filer (same value in ST02, unique control number)
SE~7~0017\								

End of Transaction Set

Section 3 - XML EDI

Chapter 1 - Introduction to XML EDI

EDI is made up of many different methods of sharing data electronically between parties. The FTA has developed standards for the tax authority to follow when implementing electronic data interchange (EDI).

Electronic data interchange (**EDI**) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention.

The XML EDI Process – Basic Components

- Header

Information about Taxpayer/Company

  - Tax Type and Filing Period
  - Contact Info
  - Address Info
  - Check Values (TotalQuantityTransported, TotalDue)

- Report

Information about the type of report

  - Return/Filer Type (Supplier, Carrier….etc.)
  - Information about the filing (No Business Activity, Sold/Acquired Date, Inventory Date)
  - Check Values (TotalQuantityReported)
  - Inventory information by product (Beginning/Ending, Gains/Losses)

- Summary

Information that can't be derived from Schedule Detail

  - Tax and Fees, Credits, Bad Debt, Penalty and Interest
    - These can be reported by Dollar Amount and/or Quantity

- Schedules

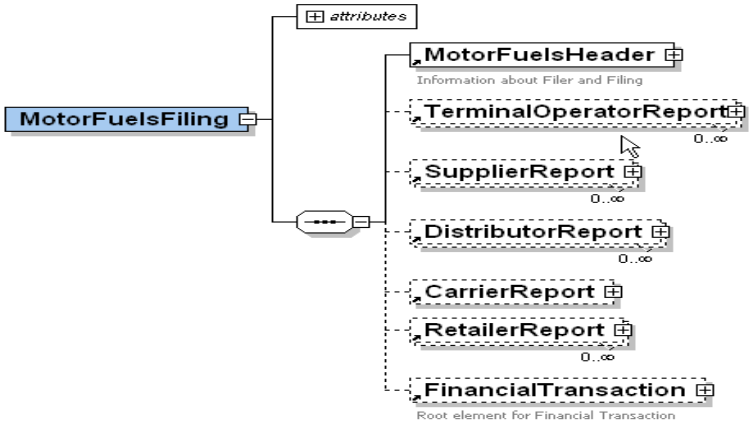
Information about the individual loads of Fuel

  - Schedule Type and Product define a type of transaction (Taxable vs. Non Taxable)
  - Information about Buyer, Seller, Carrier, Mode, Origin, Destination, Receipt Date, Bill of lading and Gallons
    - Gallons are Billed, Net and/or Gross

Key Design Concepts

- Generic data elements shared across returns
- Separate schema per return type
- Very Flexible Schemas based on EDI model
- Shared library of Motor Fuel eFile Types
- Allow tax authority to restrict most enumerated lists
- Created structures to handle the product specific vs. total summary information

High Level diagram of XML Motor Fuel Filing



A simple X12 to XML comparison of the file output for schedule, product and mode data.

EDI segment for Schedule, Product and Mode

```
TFS~T3~3A~PG~065~94~J \
```

XML for Schedule, Product and Mode elements

```
<ScheduleCode>3A</ScheduleCode>
<ProductCode>065</ProductCode>
<Mode>J</Mode>
```

EXtensible Markup Language (XML)

XML is a language much like HTML that is designed to describe data *by using "tags."* XML is a platform, software, and hardware independent tool for storing, carrying, and exchanging information.

Tags are not predefined in XML, but the Motor Fuel Uniformity Sub-committee through the assistance of Tax Information Group for EC Requirements Standardization (TIGERS) has designed a standard schema set to be used for reporting return information supported by the Uniformity effort. The tags are considered self-describing, which makes reading the data somewhat more intuitive than the standard X12 data.

A key XML design concept incorporates the use of "simple" and "complex" element definitions or "eFile types." A simple type, such as amount or quantity, stands alone. The complex type consists of a parent element and child sub-elements, such as a taxpayer address with separate address, city, state, and zip code child elements. Multi-layer complex types are used to represent the various table structures that often appear in tax forms and schedules. We also created generic complex types that provide a defined data structure, but allowed states to use their own field names to describe the data. Credits, bad debt, dollar amount and quantity totals are an example of the information captured by these complex types. Reducing the XML maintenance overhead was an important underlying design principal.

States should use the established eFile Types from the Motor Fuel library whenever possible without restrictions. If restrictions are needed, the tax authority should create a new eFile type specific to their needs.

Motor Fuel XML has 3 major components. The messaging protocol, the XML package and acknowledgement process. The message contains information needed to transmit the XML file from the taxpayer to the tax authority. The technical instructions concerning how this is accomplished are very much up to the individual state. Those states with an active Modernized eFiling (MeF) Web Services program will likely utilize that infrastructure, but others may elect to use their existing X12 file transfer protocol. You can visit the State MeF website at www.statemef.com to get a better understanding of how the MeF process works.

The XML package consists of the header and return data. The header provides high level information about the company and filing. The Motor Fuel header is based on the MeF generic header which is used by Corporate, Personal Income, Payroll and Streamlined Sales Tax. This is part of the FTA vision to provide a standard taxpayer interface/portal that can be shared across the taxes administered by state agencies. This "standardized" look and set of technologies will ultimately reduce implementation cost for both the government and private sectors. The Motor Fuel Header has been revised to include those data elements that are unique to our program. Many of the "shared" header data elements won't be used in the Motor Fuel filing.

The return data has the state-required information to ensure the filing obligation will be satisfied. This includes information about the return, schedule detail, and summary level return data. This set of data constitutes a return for a period of time.

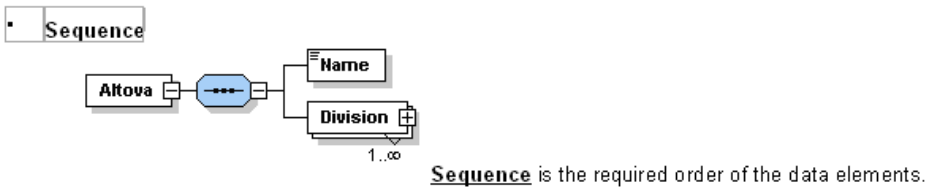
The Acknowledgement process is designed to provide the taxpayer with an electronic notification that their return has been received and processed and also to inform the taxpayer of any errors that would cause their filing to be rejected. States with an active MeF program will likely utilize that Acknowledgement methodology. The details included in the XML errors are determined by the functionality of the individual state's back end application.

The XML schema diagrams used in this guide were generated by Altova XMLSpy 2008 Enterprise Edition.

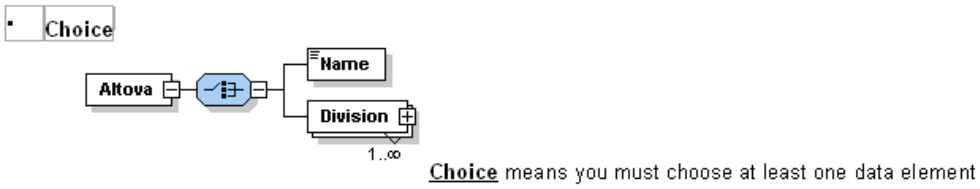
Explanation of XMLSpy Terms and Symbols

We will now present a brief explanation of XMLSpy terms and flow charting symbols needed to understand the graphical output generated by the software. These diagrams provide a "user friendly" view of the basic "building blocks" used to create the Motor Fuel schemas. The graphical representation of the component provides detailed information about the component's type and structural properties.

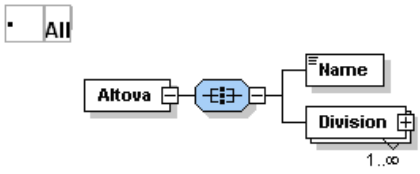
XML Basic Components



Sequence is the required order of the data elements.



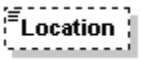
Choice means you must choose at least one data element



All means each data element is required within this structure.

Mandatory single element

The rectangle indicates an element and the **solid border indicates that the element is required**. The absence of a number range indicates a single element (i.e. minOcc=1 and maxOcc=1).

Single optional element 

The rectangle indicates an element and the **dashed border means the element is optional**. The absence of a number range indicates a single element (i.e. minOcc=0 and maxOcc=1).

Mandatory multiple element

The rectangle indicates an element and the solid border indicates that the element is required. The **number range 1..5 means that minOcc=1 and maxOcc=5.**

Mandatory multiple element containing child elements

The rectangle indicates an element and the solid border indicates that the element is required. **The number range 1..infinity means that minOcc=1 and maxOcc=unbounded.** The **plus sign means complex content** (i.e. at least one element or attribute child).

- minOcc = Minimum Occurrence for the specific element.
- maxOcc = Maximum Occurrence for the specific element.

Chapter 2 - XML Lessons Learned

XML Guide

The tax authority should make an XML Guide available to all software providers and filers four to six months before an XML mandate takes effect. The XML guide should provide all expectations and requirements for reporting transactions such as rebranding (product re-grades or book adjustments), and data format requirements such as not accepting any punctuation in names.

The Guide should explain which data elements are required and how to determine what types of transactions belong on each schedule. A schedule name is rarely sufficient to explain what should be placed on a schedule. The more thorough the tax authority is in its Guide the easier it will be for software providers and filers to make it through testing; this will save all parties, including the tax authority, time and money.

Policy changes should not be implemented, without notice to the filer, when moving from paper or EDI/X12 to XML. For example if you're moving from paper to an electronic format the expectation is that the reporting requirements will remain the same. Any new requirements must be clearly documented in the implementation guide. Following are some changes that were made without notifying the filer:

- Not allowing zero gallon transactions,
- Requiring two product codes on a single transaction, or
- Disallowing a book adjustment (rebrand or regrade) from alcohol to gasoline

Work with your filers before starting this effort. Filers may provide valuable information and feedback that the tax authority may have otherwise overlooked if such feedback is solicited before implementing policy changes. This may prevent after-implementation programming changes and workarounds when the tax authority discovers the new information. See "Point 10 – Establishment of a fuel tax advisory group . . ." in the FTA Motor Fuel Uniformity Guide.

Testing Procedures

The tax authority should test both software providers and individual filers. It is important to test both providers and filers. The filer's data may need some perfection to prevent unsuccessful filing even if using an approved software provider. Each filer should submit three month's returns, in test, using both the current method and in the new XML method. Once all three months are accepted, the tax authority may place the filer in XML production and cease requiring the prior filing method. Filers using a software provider should be tested after their software provider is approved and accepted.

Error Reporting

When a tax authority reports errors back to the filer, it should, insofar as is possible, finish analyzing the submitted file and identify all errors and error types. Failure to do so may cause the filer to submit multiple files, fixing each error type as it goes, only to receive another error type in return. This could delay the final accepted return until it's late.

Validation or Confirmation Report

The tax authority should return a confirmation report to the filer as quickly as possible after receiving an acceptable file. The report should contain, at the very least, total taxable gallons and tax due so the filer can double check against its return, thus ensuring the return received by the tax authority is what the filer intended. For information returns such as the terminal operator's report, the calculated gain/loss could be returned.

Chapter 3 - XML Questions & Answers

Question: The FTA XML schema has elements and options that are not required by my state. If the state adopts the FTA schema can it instruct that these elements be left blank?

Answer: The schema is designed to allow the state to adopt what is needed to meet the needs of the state. However, in order to share information with other states, the FTA recommends that you request all the information on a transaction because that information may be provided to another tax authority. Without sufficient information collected, the transaction may become useless to the tax authority the transaction is shared with. It has always been the FTA's position that more is better than less information. If you only collect net gallons for example and that transaction is exported from your state to another that bases its tax on gross gallons, the data you send will not be a valuable if you would have required all gallon types (net, gross, and billed). Another example, if you only require your filers to provide your state license numbers, the other state you share with won't be able to identify the filer because they don't have your license. When designing your eFiling system, please keep this in mind for data sharing purposes.

Question: If a filer's return contains one or more errors, is the return deemed filed when first submitted or after all problems are corrected? Will a substantially complete return be considered timely filed even though a minor correction is still required?

Answer: It is recommended that a return be considered timely filed if it is substantially compliant and late filing penalties not be assessed. Each tax authority must determine its policy regarding timely filing and outline the criterion for making the determination.

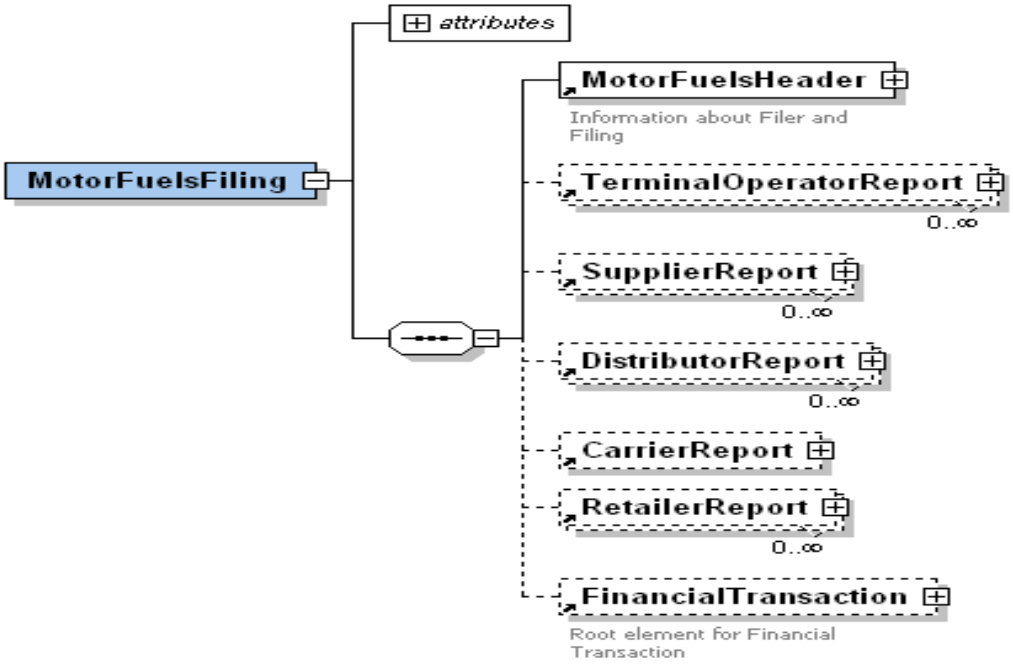
Suppose the return includes one incorrect FEIN or one invalid mode code or product code, and hundreds, or even thousands, of correctly reported transactions. Does the tax authority want to penalize the filer for such a minor error? Statutory or regulatory authority to assess late filing penalties could contain a provision for waiver.

Chapter 4 - Implementing Motor Fuel XML

High Level Filing Overview

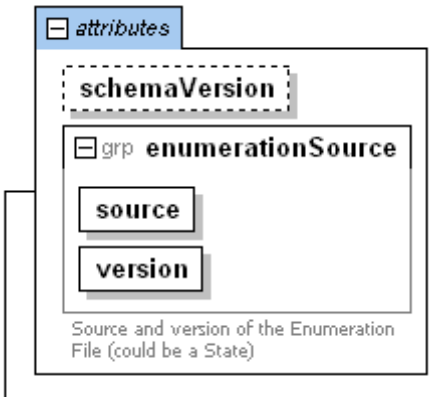
This section will give you a top down view of the flow of information within XML and the basic components used to convey the data. You will be able to see how the filing is organized as well as how the individual pieces of data are defined within the schema structure. Our intent was to present enough detail to help you understand how the XML was designed, but not so technical as to overwhelm the non-IT person.

The first diagram provides the complete Motor Fuel Filing package.

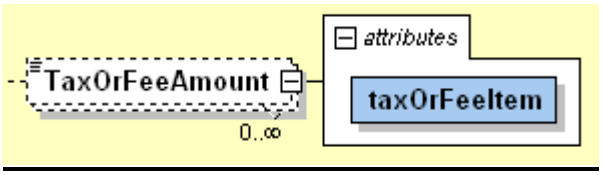


Attributes

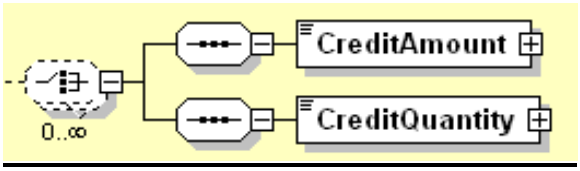
Attributes provide additional information about elements and often provide information that is not part of the data. The attributes at this level declare the version of the schema expected in this filing. Similar to EDI map version.



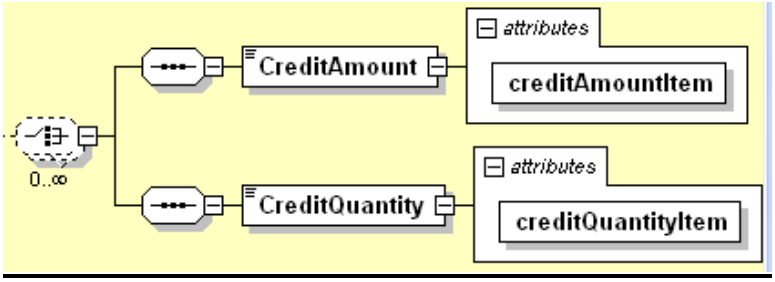
The taxOrFeeItem attribute describes the amount as either a tax or a fee.



The CreditAmount and CreditQuantity elements capture “how much”.

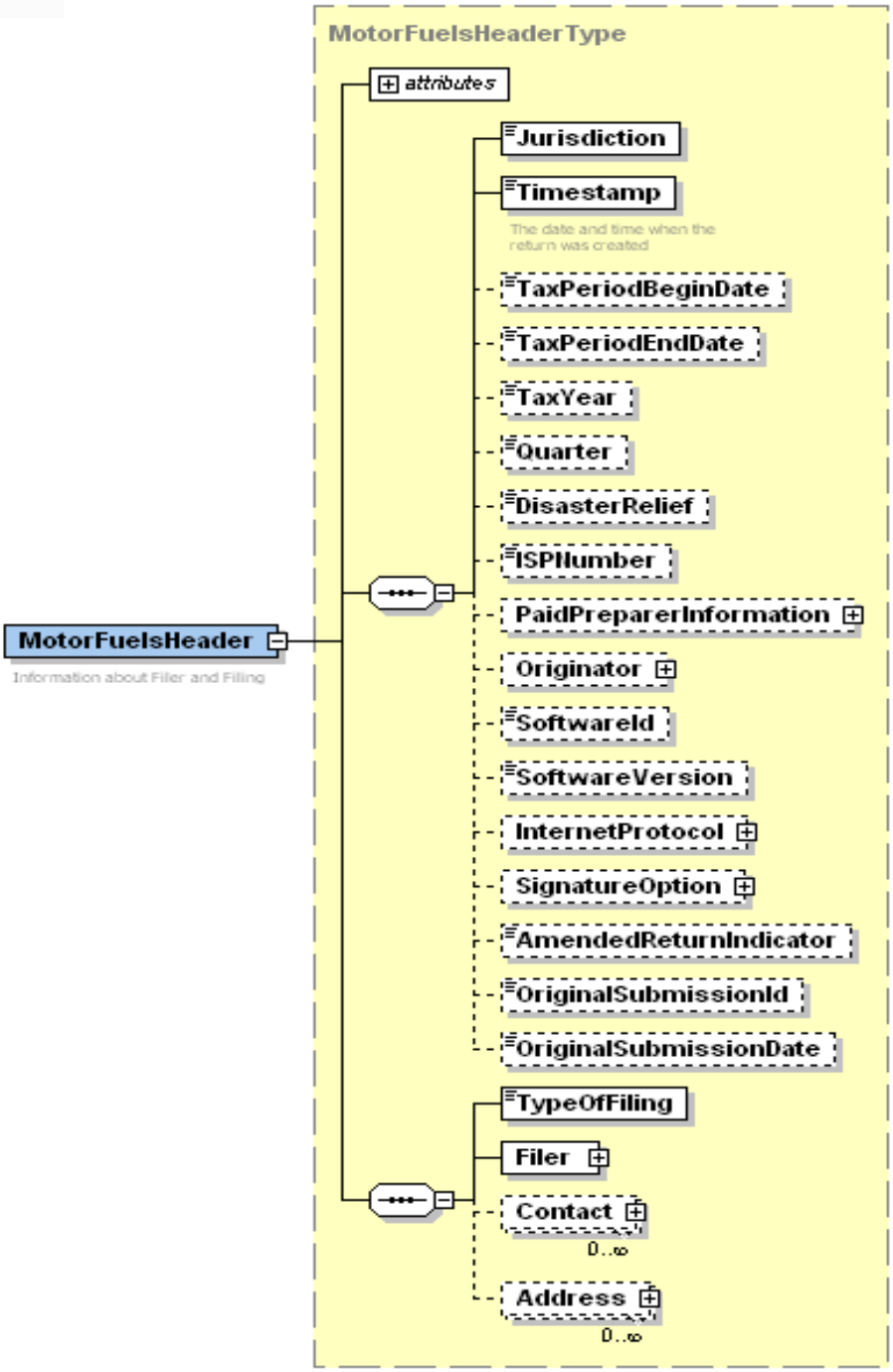


The creditAmountItem and creditQuantityItem attributes defines the “what”.



Header

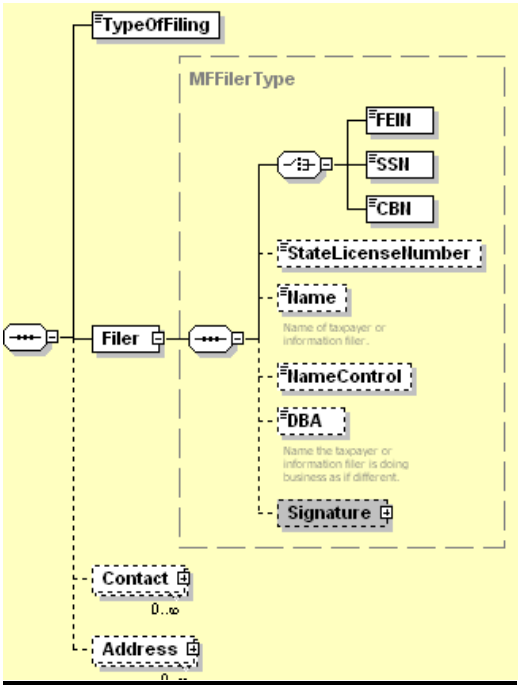
The MotorFuelsHeader define those things about the filer and the filing, very similar to the ISA and GSA in the traditional EDI 813. Except for the "Filer" component, this structure is shared across all taxes using the State MeF program. Most of the data elements are optional and probably won't be used in a Motor Fuel filing.



Filer

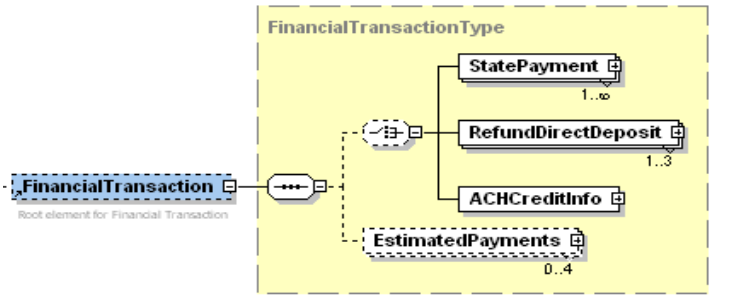
The TypeOfFiling element declares type of filing: Original, Replacement or Resubmit. The enumeration of these values is contained within the XML.

The elements included in the Filer Component (MFFiler Type) were added to the MotorFuelsHeader to handle Motor Fuel specific data requirements.



Financial Transaction / Payment

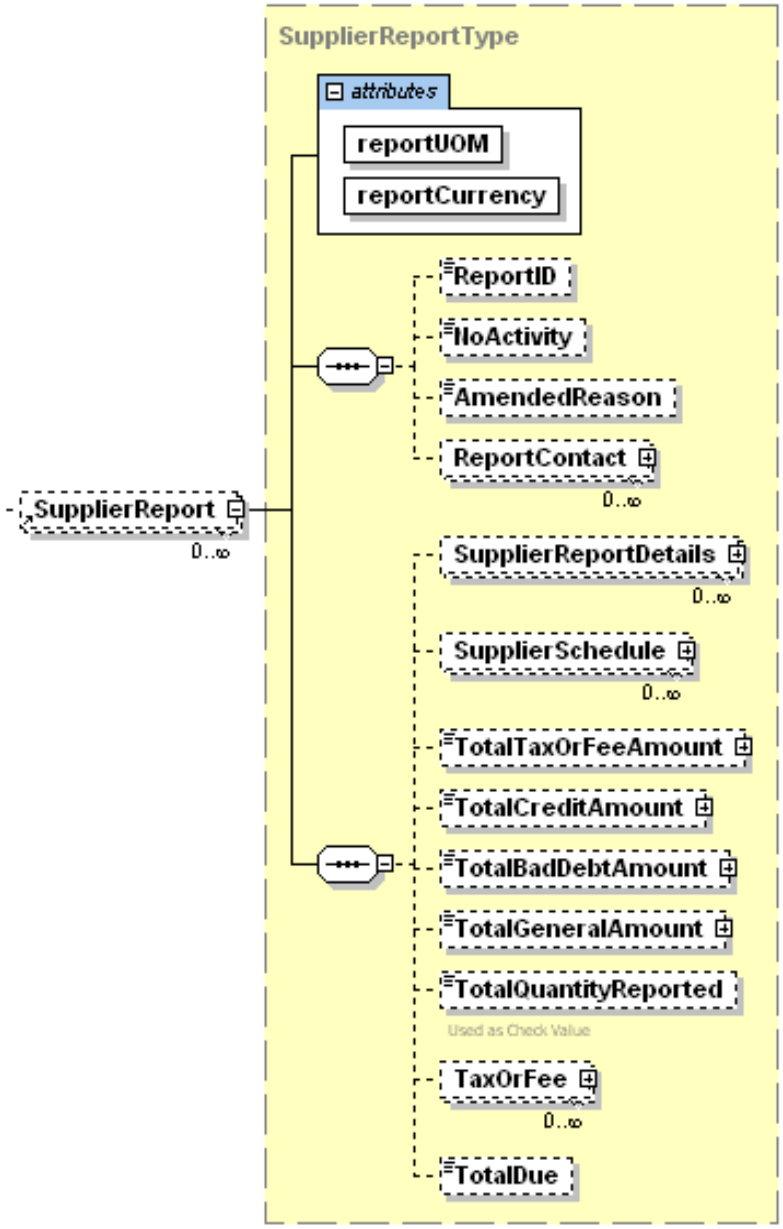
The FinancialTransaction schema is the XML equivalent of the BPR (Payment Order Remittance Advice) in the EDI 813 and allows the transmitter to submit payment with the filing of the report. This structure is also shared across all taxes using the State MeF program. The use of this schema is optional.



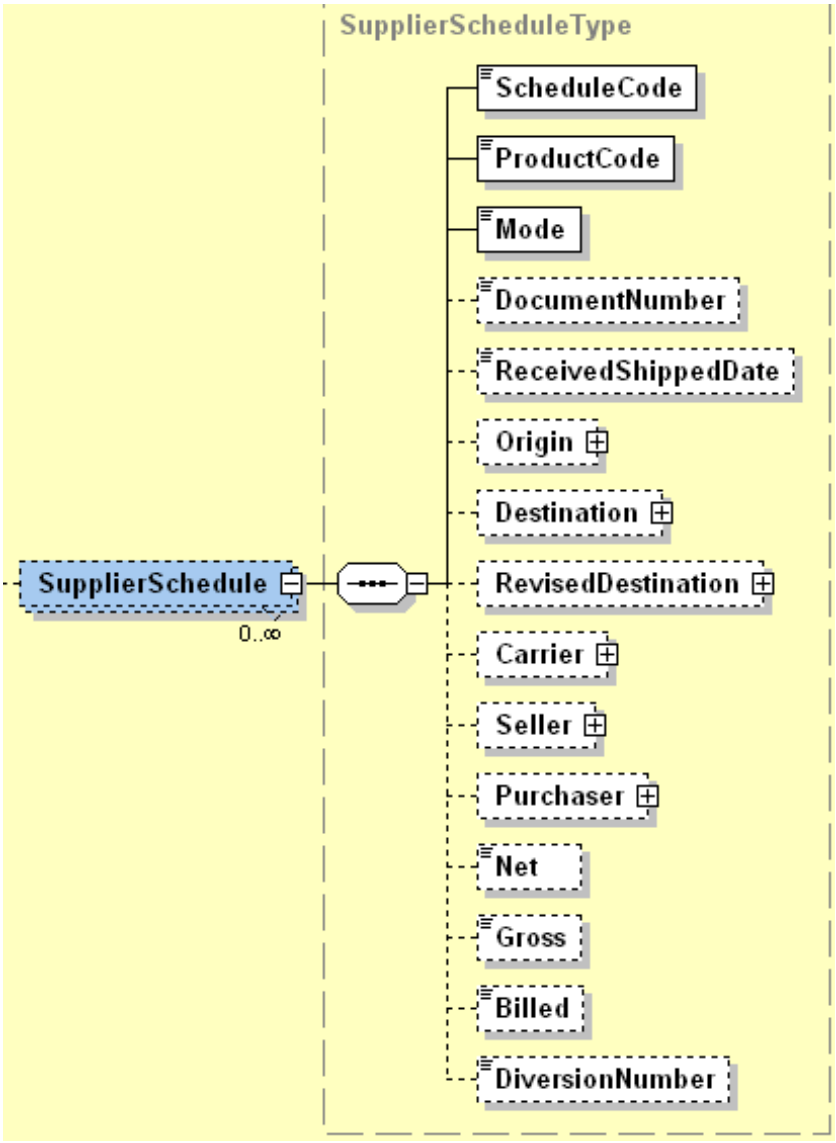
Supplier Schedule Sample

Because each report is built with a similar structure, the Supplier Report will be used as an example of how the schema is built. Structures shared by return types are reused. Contact, Location, Participant, Tax, Fee, Credit and Quantity are common building blocks used to reduce the maintenance. In this example the quantity (reportUOM) and currency (reportCurrency) declares the monetary type of the return. The AmendedReason element declares the reason for filing an amended return. Resubmission, Supplemental or Corrected are the acceptable enumerated values contained within the XML.

* UOM = Unit of Measure



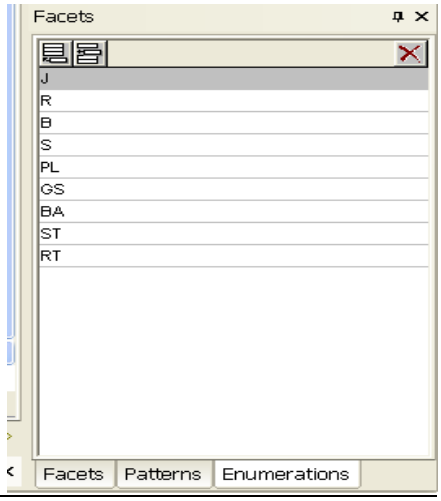
The Schedule (ScheduleCode), Product (ProductCode) and Mode (Mode) Uniformity code list may be included in the actual XML or annotated as residing in the Uniformity Guide addendum.



Chapter 5 - Schema Design Principles

Enumerated Lists

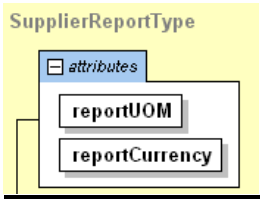
To define a list of acceptable values, enumerated lists are incorporated to ensure the schemas follow uniform reporting requirements. The following enumerated list for **Mode of Transportation** is the only Uniformity list included within the XML. The Schedule and Product lists must utilize the Uniformity-approved lists. The State, Mexican State and Province lists must utilize the Nationally-approved lists provided by Uniformity. Codes can be removed from the approved lists to meet your reporting requirements.



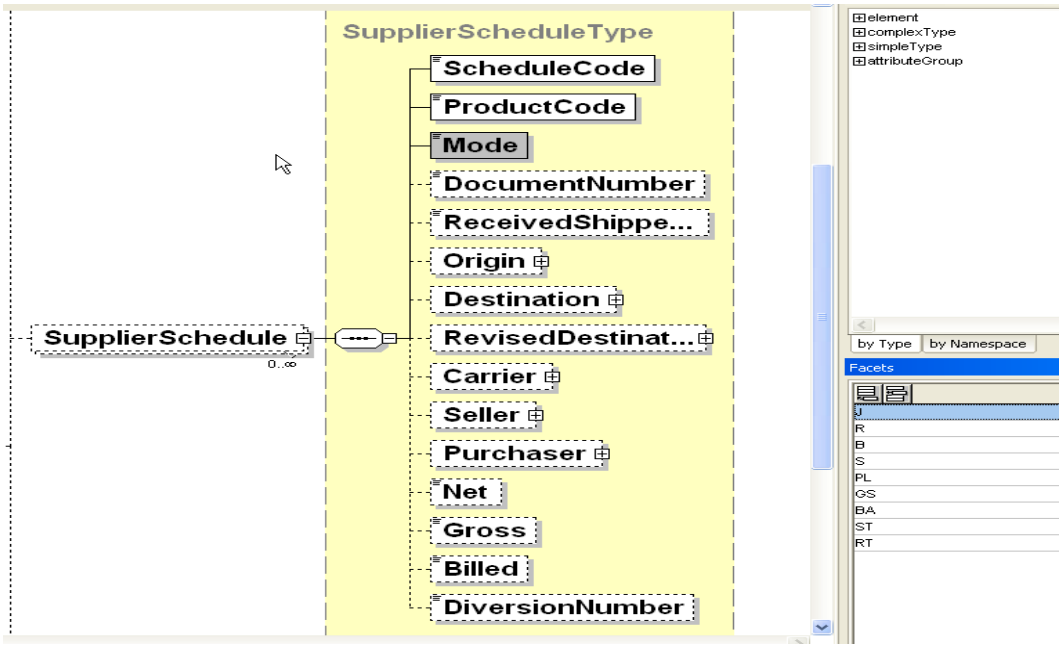
These are the Enumerated types (list) that were provided for Motor Fuel. Some may have as few as 2 values, while others may have many dozen. The schema will use the list to validate if provided.

annotation	This file is a library of the Uniform Codes and approved enumerated values used in FTA Uniform Motor Fuels reporting.	
attributeGroup	**enumerationSource**	ann:Source and version of the Enumeration File (could be a State)
simpleType	**MFCurrencyType**	ann:
simpleType	**MFUnitsOfMeasureType**	ann:
simpleType	**MFProductCode**	ann:FTA Uniform Product code.
simpleType	**MFModeCode**	ann:FTA Uniform Transaction Mode code.
simpleType	**MFCarrierScheduleCode**	ann:FTA Uniform Schedule code.
simpleType	**MFDistributorScheduleCode**	ann:FTA Uniform Schedule code.
simpleType	**MFRetailerScheduleCode**	ann:FTA Uniform Schedule code.
simpleType	**MFSupplierScheduleCode**	ann:FTA Uniform Schedule code.
simpleType	**MFTOScheduleCode**	ann:FTA Uniform Schedule code.
simpleType	**MFTaxOrFeeCategoryType**	ann:
simpleType	**MFTaxOrFeeItemType**	ann:
simpleType	**MFCreditAmountItemType**	ann:
simpleType	**MFCreditQuantityItemType**	ann:
simpleType	**MFBadDebtItemType**	ann:
simpleType	**MFGeneralAmountItemType**	ann:
simpleType	**MFGeneralQuantityItemType**	ann:
simpleType	**ReportIDType**	ann:Each state must add its own report form numbers HERE as enumerations

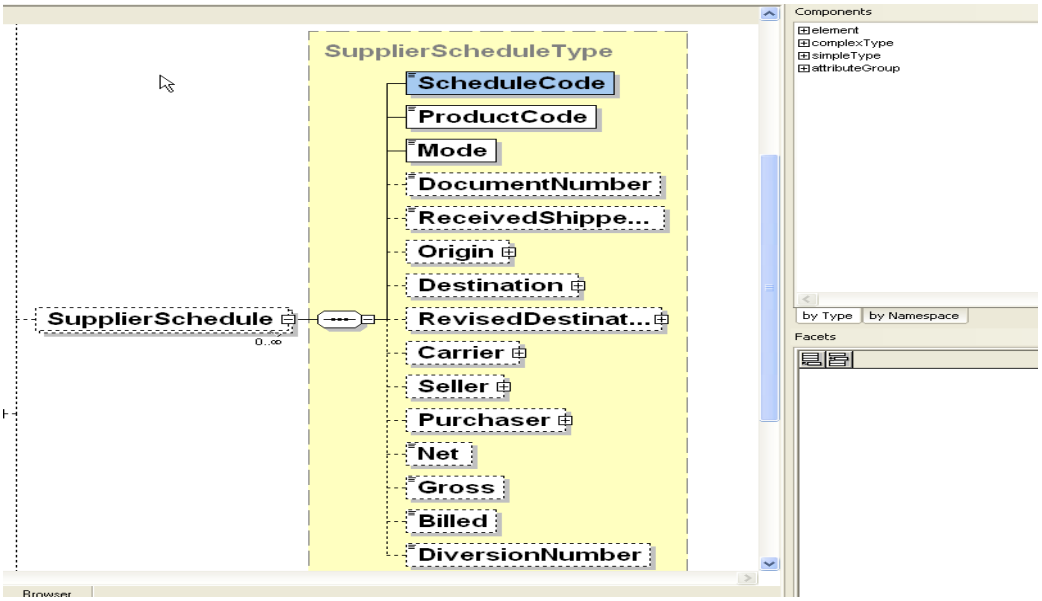
In the following example, the reportUOM (MFUnitsOfMeasureType)) and reportCurrency (MFCurrencyType) attributes values are defined in the above enumerated list table.



Sample: Enumerated List Included in Schema



Sample: Enumerated List that may be restricted by the State

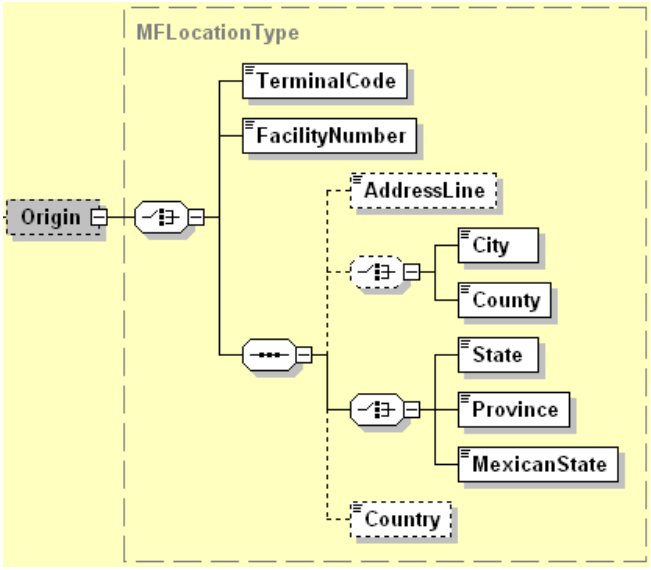


Complex Type Elements

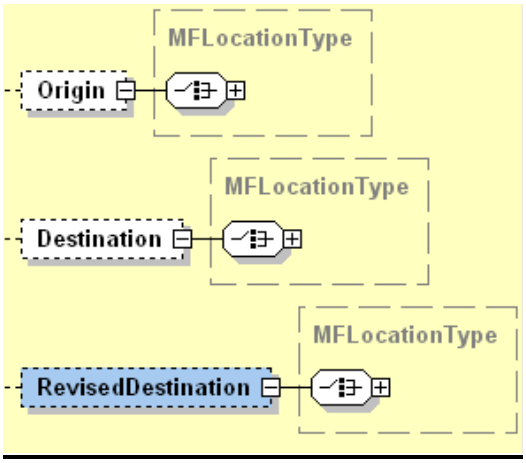
ComplexType elements are a predetermined set of elements that are used in more than one area of a schema. ComplexType elements are easier to maintain if changes are made. The change would be made in the ComplexType and not each time the data is used throughout the schema.

MFLocationType is used for Origin, Destination and RevisedDestination because the same information is needed for all. One XML structure works for all. The structure allows you to choose Terminal Code, Facility Number or Address as the information used to identify the Location.

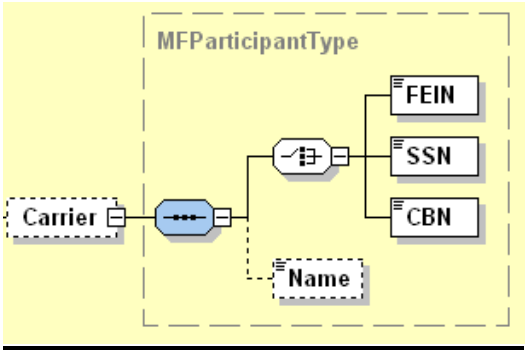
The MFLocationType is also used by the Distributor, Operator, Carrier and Retailer returns.



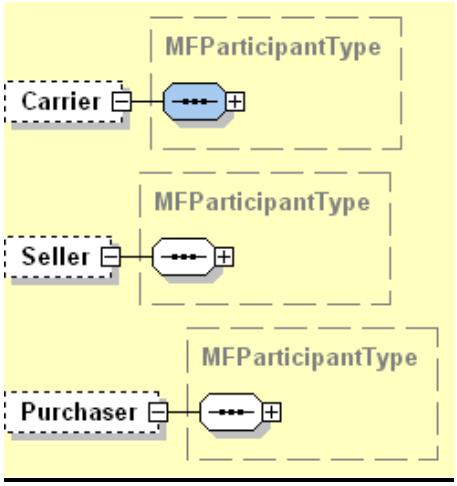
Shared elements that use the MFLocationType.



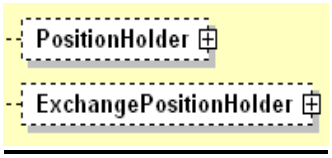
MFParticipantType is used by Supplier, Distributor, Operator, Retailer and Carrier. One XML structure works for all.



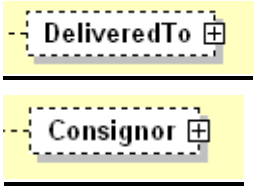
Shared elements that use the MFParticipantType.



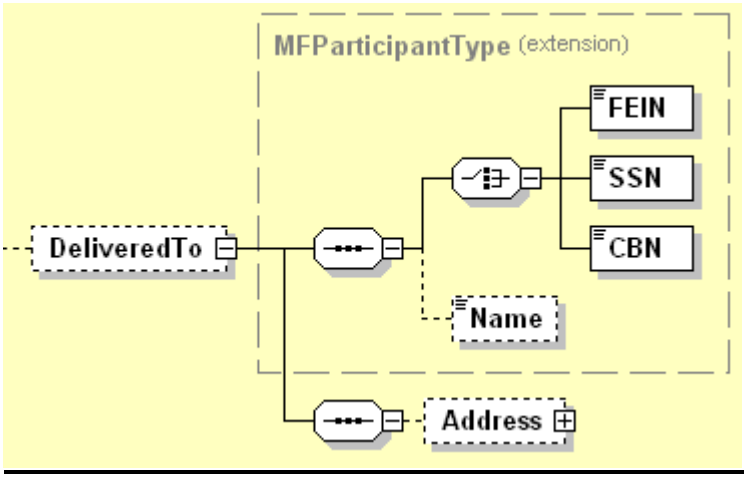
Terminal Operator elements that use the MFParticipateType.



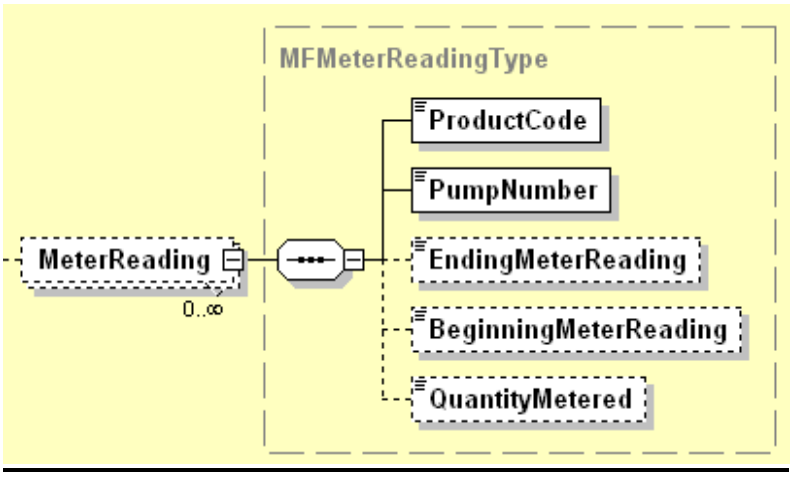
Carrier elements that use the MFParticipateType



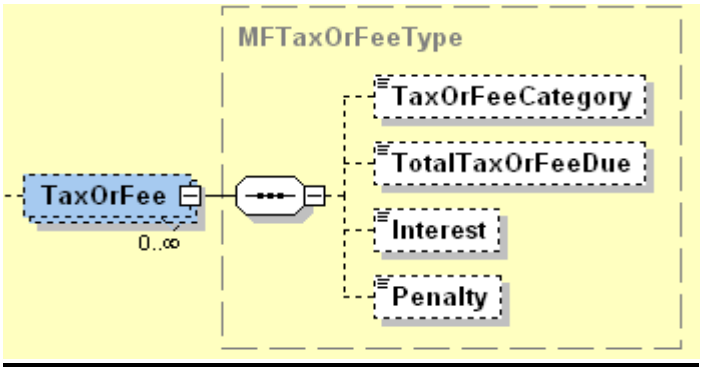
The MFParticipantType has been modified for the DeliveredTo element. The Address was added to meet a carrier specific data requirement. This is called “extension of a base type”. (DeliveredTo extends MFParticipate base type for carrier only data.)



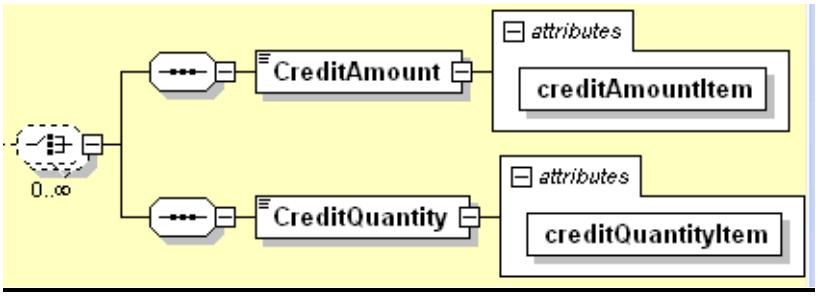
MFMeterReadingType is unique to the Retailer.



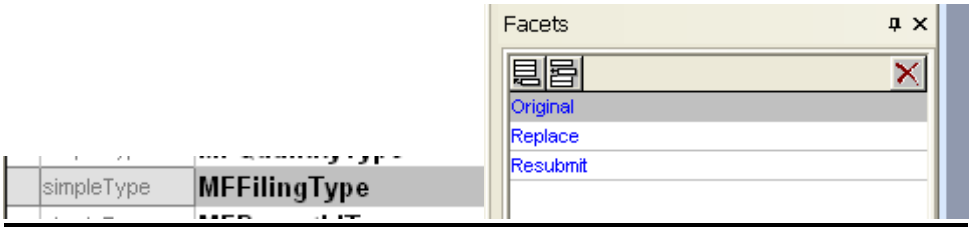
MFTaxorFee Type allows the individual state to use their own field names, but within a defined way. The state may include the list of allowable TaxorFeeCategory element names. If included within the XML schema they restrict the values (names) that can be passed in the file. This is another use of the enumerated list concept. Name of Tax or Fee category are defined by the State and could be included as an enumerated list.



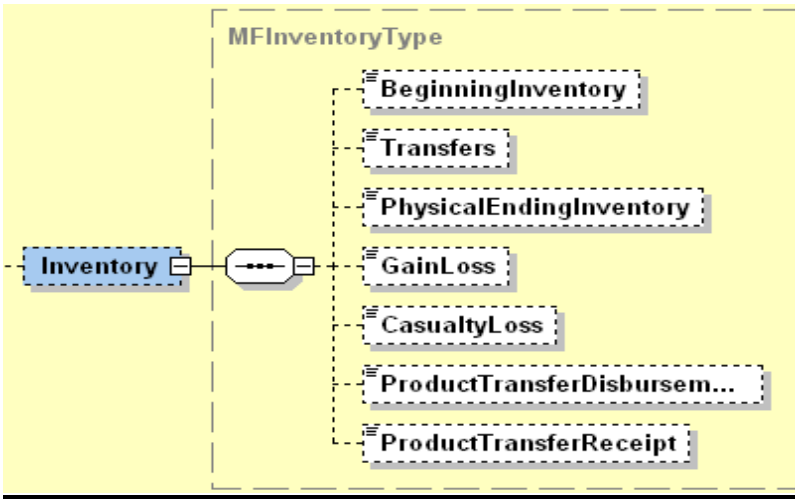
CreditAmount or **CreditQuantity** are generic structures that allow states to process credit amount and/or quantity information. For the CreditAmount the name of the credit is defined by the State and could be included in the schema as an enumerated list. Credit Amount or QuantityAmount data may be submitted as many times as needed (0 to Infinity). Similar to the looping structure in X12 mapping.



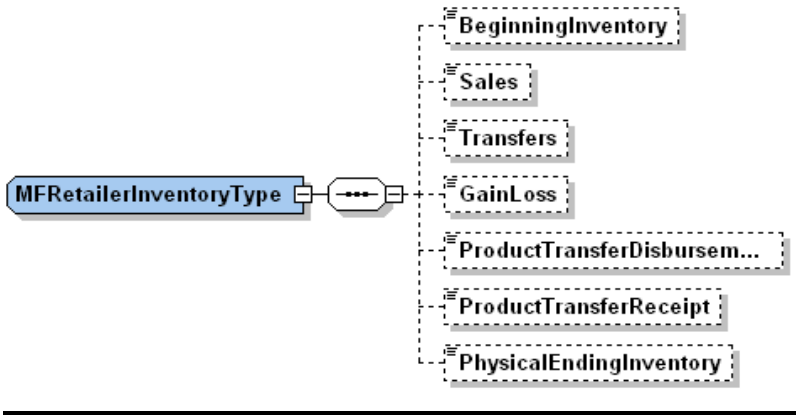
MFFilingType is a simple data element, but includes the enumerated list of allowable values.



MFInventoryType is a complex type that has multiple data elements. The MFInventoryType is used by Supplier, Operator and Distributor return Retailer.



MFRetailerInventoryType is based on the MFInventoryType, but was modified to handle the Retailer report's unique data requirements.



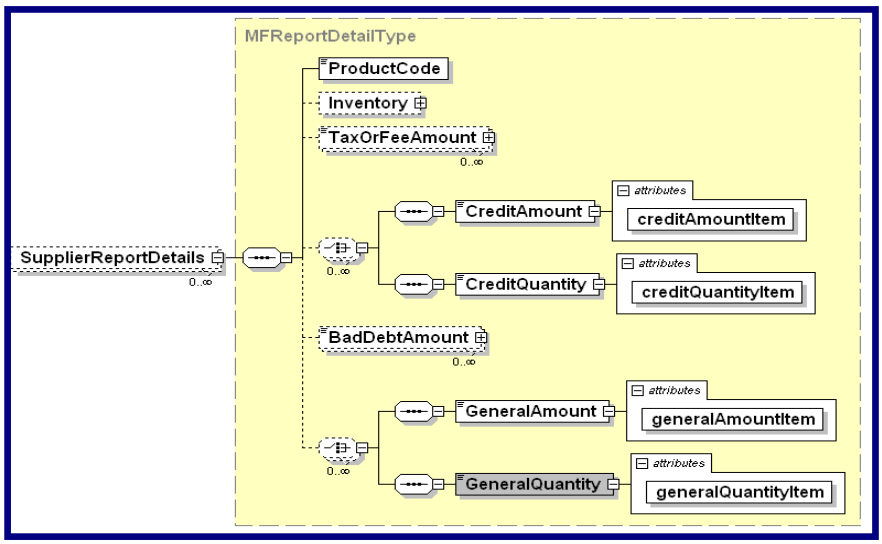
Motor Fuel eFile Types

The following table includes the Filing types created specifically for Motor Fuel. Some have a single data element (simpleType), while others may have several data elements within the structure (complexType).

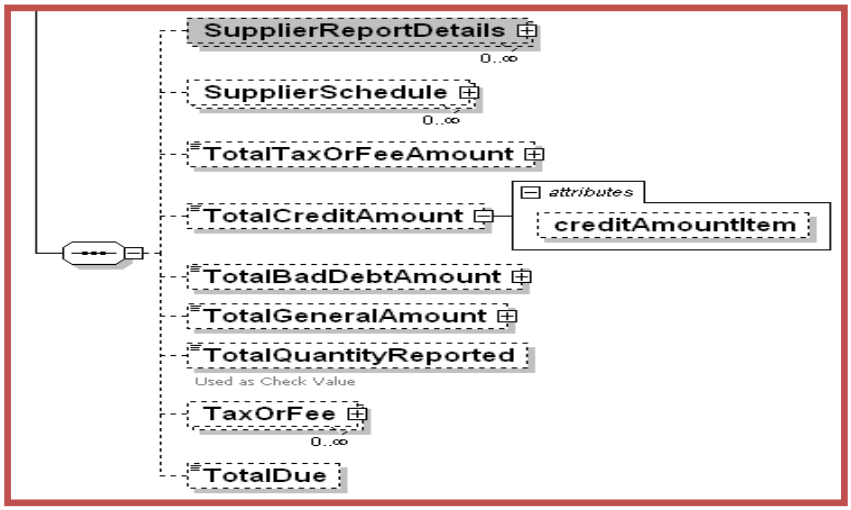
comment	The following "MF" prefixed Types are specific to MotorFuels:	
comment		
simpleType	**MFAmountType**	ann: Type for a money amount field--15 total digits with 2 decimal places (8+2)
simpleType	**MFIntegerType**	ann:
simpleType	**MFQuantityType**	ann:
simpleType	**MFFilingType**	ann:
simpleType	**MFReportIdType**	ann:
simpleType	**MFAmendedReasonType**	ann:
simpleType	**MFDocumentNumberType**	ann:
simpleType	**MFDiversionNumberType**	ann:
simpleType	**MFTerminalNameType**	ann:
simpleType	**MFTerminalLocationType**	ann:
simpleType	**MFTerminalCodeType**	ann:
simpleType	**MFFacilityNumberType**	ann:
simpleType	**MFTypeOfContactType**	ann:
simpleType	**MFTypeOfAddressType**	ann:
comment		
complexType	**MFAddressType**	ann:
complexType	**MFPhoneNumberType**	ann: Includes optional area code and extension
comment		
complexType	**MFSignatureType**	ann: Electronic Signature and security.
complexType	**MFFilerType**	ann: The Taxpayer or Filer for the Filing
complexType	**MFContactType**	ann: Contact Information with type attribute
complexType	**MFParticipantType**	ann: Any business or person participating in a Motor Fuel transaction.
comment	Type for both Origin and Destination:	
complexType	**MFLocationType**	ann: Origin or Destination
comment		
comment	Terminal Report Information:	
complexType	**TerminalReportDetailType**	ann:
comment		
comment	Distributor and Supplier Report Information:	
complexType	**MFInventoryType**	ann: Report Information
complexType	**MFReportDetailType**	ann:
comment		
comment	Retailer Report Information:	
complexType	**MFRetailerInventoryType**	ann:
complexType	**MFMeterReadingType**	ann:
complexType	**RetailerReportDetailType**	ann:
comment		
comment	General Information for each Report:	
complexType	**MFReportType**	ann:
comment		
complexType	**MFTaxOrFeeType**	ann:

Examples of Complex Types (Miscellaneous samples)

Example of Credit with Mandatory Product Code



Example of Summary level Credit Amount



Chapter 6 - Use of Business Rules in the Schema

A potential advantage of XML is that much of the logic for accepting or rejecting a return can be in the schema. Having this logic in the schema makes it clear as to exactly what constitutes much of the acceptance or rejection criteria.

The business rules should be:

- Generally only one cause for the business rule
- Clearly worded
- Properly organized by category
- Rule number indicates form to which it applies
- Could not be prevented by a schema validation error

The downside of validation errors is that there are nearly an infinite number of ways that they can occur and can be difficult to communicate to taxpayers when they do occur. Therefore, states should strive to not be too restrictive compared to their legacy e-file application.

Other Schema best practices relating to Business rules:

- Provide your business rules in the comment section of the XPath Document
- Don't require information in the schema that is not on the form. This depends solely on your form/system requirements.
- Any restriction or unique characteristics for an element should be included in the business rule document.
- States should write business rules so they can be easily understood by taxpayers. Avoid use of tag names in the business rule text, use line numbers on the tax forms instead.

Chapter 7 - Getting your Schema approved by the Uniformity Committee

To ensure compliance with the FTA Motor Fuel Uniformity standards, please follow these general rules:

- The FTA Motor Fuel Uniformity Committee will be the keeper of the uniform XML schema.
- States cannot add elements that are not in the master schema, but can elect to use a subset of the FTA defined elements.
- States cannot rename elements that are in the master schema.
- States cannot alter schema structure from the master schema.
- States can restrict data, but cannot expand it (reduce field length, but not increase).

Bottom line: any XML instance document that validates against the state-specific schema must still validate against the master schema.

Please go to the following link to ensure your XML will comply with the Uniformity standards.

Chapter 8 - XPath Documentation

Explanation of XPath Document

The previous section provided an explanation of the basic XML schema components and the rules that govern the use of the schemas by the individual states. This section will provide an example of how states may use the XPath document to link the paper form to the XML. The XPath document also has additional information about how the individual data elements are used within the particular XML schema. In our case, we have expanded the Excel spreadsheet to include form (Uniformity and State) information, field attributes and field specific business rules.

To view XPath document open the Excel spreadsheet with file name (**Motor Fuel XPath Documents V001.xls**) found on the annual Motor Fuel Uniformity guide CD.

The spreadsheet is organized to follow the sequence of the data within the individual schema. We have an XPath document for the Header, 5 return types and Financial Transaction. You may notice that the sequence of the data in the XML is different from the paper form. There was a conscious decision made to organize the XML schema data in a "logical" vs. "paper form" based structure. The XPath document provides you the crosswalk between the paper form fields and corresponding XML data elements. Below is the legend for the XPath columns.

a) Uniformity Form Name - Terminal, Supplier, Distributor, Retailer and Carrier
b) Uniformity Field Name – Field names assigned by Uniformity Forms committee
c) State Form Name – State Form Name and/or number
d) State Field Name – Field name on State Form
e) State Line Number – Line number that corresponds to state field name
f) State Field Description – Field is typically a single important note.
g) Schema – Provides the parent XML schema name.
h) XPath – Provides the path/location to the particular date element within the Schema.
i) eFile Type – Defines the eFile (Data) type used to create this particular element.
j) Field Type – Defines whether field is Alpha, Numeric or Alphanumeric
k) Length – maximum field length
l) Required – X means the field is Mandatory.
m) Notes/Comments – Field used to highlight data attributes and/or business rules.

The following example provides an overview of how the paper form relates to the XML. The example is based on a supplier schedule transaction. It includes a "paper" schedule transaction, XMLSpy diagram of the schema structure, supporting XPath document and browser view of the actual XML output.

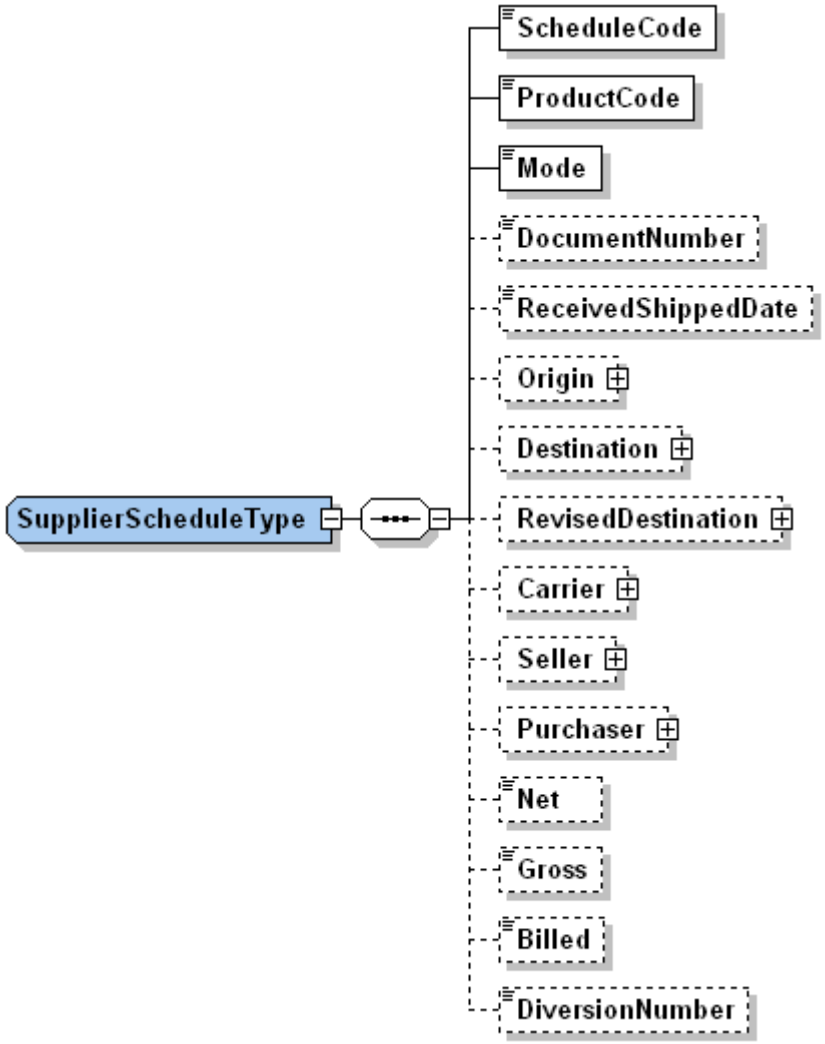
Sample Supplier Schedule Transaction

Supplier Schedule of Receipts

Supplier Name:	License Number:	FEIN:	Schedule	Filing Period End:	Product Code:
XYZ Corp.	23XX333333	594444444	Type: 3A	(CCYYMMDD) 20130318	065

(1) Carrier Name	(2) Carrier FEIN	(3) Mode	(4) Point of		(5) Seller Name	(6) Seller FEIN	(7) Date Shipped	(8) Document Number	(9) Net Gallons	(10) Gross Gallons	(11) Billed Gallons
			Origin State:	Destination State:							
Hauling	137777777	J	T62TN2200	018500002	Fuel Inc	591234567	20130311	XX12345	1065	1068	1066

Diagram of the Supplier Schema Data Structure



XPath Document for Example

- **Green rows correspond to Paper Schedule Data Fields**
- **State Field Description (column F) reflects Schedule sample data**

Column A-G of the XPath Document

	A	B	C	D	E	F	G
1	Uniformity Form Name	Uniformity Field Name	State Form Name	State Field Name	State Line Number	State Field Description	Schema
2	Supplier	SCHEDULE TYPE				3A	SupplierReportType.xsd
3	Supplier	PRODUCT TYPE				65	SupplierReportType.xsd
4	Supplier	MODE				J	SupplierReportType.xsd
5	Supplier	DOCUMENT NUMBER				XX12345	SupplierReportType.xsd
6	Supplier	DATE SHIPPED				20130311	SupplierReportType.xsd
7	Supplier	POINT OF ORIGIN - TERMINAL CODE				T62TN2200	SupplierReportType.xsd
8	Supplier	POINT OF ORIGIN - FACILITY NUMBER					SupplierReportType.xsd
9	Supplier	POINT OF ORIGIN - ADDRESS					SupplierReportType.xsd
10	Supplier	POINT OF ORIGIN - CITY					SupplierReportType.xsd
11	Supplier	POINT OF ORIGIN - COUNTY					SupplierReportType.xsd
12	Supplier	POINT OF ORIGIN - STATE					SupplierReportType.xsd
13	Supplier	POINT OF ORIGIN - PROVINCE					SupplierReportType.xsd
14	Supplier	POINT OF ORIGIN - MEXICAN STATE					SupplierReportType.xsd
15	Supplier	POINT OF ORIGIN - COUNTRY					SupplierReportType.xsd
16	Supplier	POINT OF DEST - TERMINAL CODE					SupplierReportType.xsd
17	Supplier	POINT OF DEST - FACILITY NUMBER				18500002	SupplierReportType.xsd
18	Supplier	POINT OF DEST - ADDRESS					SupplierReportType.xsd
19	Supplier	POINT OF DEST - CITY					SupplierReportType.xsd
20	Supplier	POINT OF DEST - COUNTY					SupplierReportType.xsd
21	Supplier	POINT OF DEST - STATE					SupplierReportType.xsd
22	Supplier	POINT OF DEST - PROVINCE					SupplierReportType.xsd
23	Supplier	POINT OF DEST - MEXICAN STATE					SupplierReportType.xsd
24	Supplier	POINT OF DEST - COUNTRY					SupplierReportType.xsd
25	Supplier	REVISED DESTINATION - TERMINAL CODE					SupplierReportType.xsd
26	Supplier	REVISED DESTINATION - FACILITY NUMBER					SupplierReportType.xsd
27	Supplier	REVISED DESTINATION - ADDRESS					SupplierReportType.xsd
28	Supplier	REVISED DESTINATION - CITY					SupplierReportType.xsd
29	Supplier	REVISED DESTINATION - COUNTY					SupplierReportType.xsd
30	Supplier	REVISED DESTINATION - STATE					SupplierReportType.xsd
31	Supplier	REVISED DESTINATION - PROVINCE					SupplierReportType.xsd
32	Supplier	REVISED DESTINATION - MEXICAN STATE					SupplierReportType.xsd
33	Supplier	REVISED DESTINATION - COUNTRY					SupplierReportType.xsd
34	Supplier	CARRIER FEIN				137777777	SupplierReportType.xsd
35	Supplier	CARRIER SSN					SupplierReportType.xsd
36	Supplier	CARRIER CBN					SupplierReportType.xsd
37	Supplier	CARRIER NAME				Hauling	SupplierReportType.xsd
38	Supplier	SELLER'S FEIN				591234567	SupplierReportType.xsd
39	Supplier	SELLER'S SSN					SupplierReportType.xsd
40	Supplier	SELLER'S CBN					SupplierReportType.xsd
41	Supplier	SELLER'S NAME				Fuel Inc	SupplierReportType.xsd
42	Supplier	PURCHASER'S FEIN					SupplierReportType.xsd
43	Supplier	PURCHASER'S SSN					SupplierReportType.xsd
44	Supplier	PURCHASER'S CBN					SupplierReportType.xsd
45	Supplier	PURCHASER'S NAME					SupplierReportType.xsd
46	Supplier	NET GALLONS				1065	SupplierReportType.xsd
47	Supplier	GROSS GALLONS				1068	SupplierReportType.xsd
48	Supplier	BILLED GALLONS				1066	SupplierReportType.xsd
49	Supplier	DIVERSION NUMBER					SupplierReportType.xsd

Note: The State Form Name, State Field Name, State Line Number and State Field Description would be used when the XPath document is created for a state specific Implementation Guide.

Additional columns from the XPath Document (A-G on previous page)

	H	I	J	K	N	O
1	X Path	Efile Type	Field Type	Length	Required	Notes/ Comments
2	MotorFuelsFiling/SupplierReport/SupplierSchedule/ScheduleCode	MFSupplierScheuleCode	Alphanumeric	3	X	
3	MotorFuelsFiling/SupplierReport/SupplierSchedule/ProductCode	MFProductCode	Alphanumeric	3	X	
4	MotorFuelsFiling/SupplierReport/SupplierSchedule/Mode	MFModeCode	Alpha	2	X	
5	MotorFuelsFiling/SupplierReport/SupplierSchedule/DocumentNumber	MFDocumentNumberType	Numeric	10		
6	MotorFuelsFiling/SupplierReport/SupplierSchedule/ReceivedShippedDate	DateType	Numeric	8		
7	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/TerminalCode	MFTerminalCodeType	Alphanumeric	9		
8	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/FacilityNumber	MFFacilityNumberType	Alphanumeric	20		
9	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/AddressLine	StreetAddressType	Alphanumeric	35		
10	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/City	CityType	Alphanumeric	22		
11	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/County	CountyType	Alphanumeric	20		
12	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/State	StateOnlyType	Alpha	2		
13	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/Province	ProvinceType	Alpha	2		
14	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/MexicanState	MexicanStateType	Alpha	2		
15	MotorFuelsFiling/SupplierReport/SupplierSchedule/Origin/Country	CountyType	Alpha	2		
16	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/TerminalCode	MFTerminalCodeType	Alphanumeric	9		
17	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/FacilityNumber	MFFacilityNumberType	Alphanumeric	20		
18	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/AddressLine	StreetAddressType	Alphanumeric	35		
19	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/City	CityType	Alphanumeric	22		
20	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/County	CountyType	Alphanumeric	20		
21	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/State	StateOnlyType	Alpha	2		
22	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/Province	ProvinceType	Alpha	2		
23	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/MexicanState	MexicanStateType	Alpha	2		
24	MotorFuelsFiling/SupplierReport/SupplierSchedule/Destination/Country	CountryType	Alpha	2		
25	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/TerminalCode	MFTerminalCodeType	Alphanumeric	9		
26	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/FacilityNumber	MFFacilityNumberType	Alphanumeric	20		
27	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/AddressLine	StreetAddressType	Alphanumeric	35		
28	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/City	CityType	Alphanumeric	22		
29	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/County	CountyType	Alphanumeric	20		
30	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/State	StateOnlyType	Alpha	2		
31	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/Province	ProvinceType	Alpha	2		
32	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/MexicanState	MexicanStateType	Alpha	2		
33	MotorFuelsFiling/SupplierReport/SupplierSchedule/RevisedDestination/Country	CountryType	Alpha	2		
34	MotorFuelsFiling/SupplierReport/SupplierSchedule/Carrier/FEIN	EINType	Numeric	9		
35	MotorFuelsFiling/SupplierReport/SupplierSchedule/Carrier/SSN	EINType	Numeric	9		
36	MotorFuelsFiling/SupplierReport/SupplierSchedule/Carrier/CBN	CanadianBusinessName	Alphanumeric	9		
37	MotorFuelsFiling/SupplierReport/SupplierSchedule/Carrier/Name	String50Type	Alphanumeric	50		
38	MotorFuelsFiling/SupplierReport/SupplierSchedule/Seller/FEIN	EINType	Numeric	9		
39	MotorFuelsFiling/SupplierReport/SupplierSchedule/Seller/SSN	EINType	Numeric	9		
40	MotorFuelsFiling/SupplierReport/SupplierSchedule/Seller/CBN	CanadianBusinessName	Alphanumeric	9		
41	MotorFuelsFiling/SupplierReport/SupplierSchedule/Seller/Name	String50Type	Alphanumeric	50		
42	MotorFuelsFiling/SupplierReport/SupplierSchedule/Purchaser/FEIN	EINType	Numeric	9		
43	MotorFuelsFiling/SupplierReport/SupplierSchedule/Purchaser/SSN	EINType	Numeric	9		
44	MotorFuelsFiling/SupplierReport/SupplierSchedule/Purchaser/CBN	CanadianBusinessName	Alphanumeric	9		
45	MotorFuelsFiling/SupplierReport/SupplierSchedule/Purchaser/Name	String50Type	Alphanumeric	50		
46	MotorFuelsFiling/SupplierReport/SupplierSchedule/Net	MFQuantityType	Numeric	11		
47	MotorFuelsFiling/SupplierReport/SupplierSchedule/Gross	MFQuantityType	Numeric	11		
48	MotorFuelsFiling/SupplierReport/SupplierSchedule/Billed	MFQuantityType	Numeric	11		
49	MotorFuelsFiling/SupplierReport/SupplierSchedule/DiversionNumber	MFDiversionNumberType	Alphanumeric	20		

Note: The field length may be reduced to meet state backend processing requirements, but can't be increased unless the Uniformity XML standard is changed. The fields that are optional in the XML can be made mandatory by the individual state, but the mandatory fields can't be changed to optional. The Notes/Comments area should be used, by the state, to provide additional information about the particular data field.

Browser view of XML Output

```
- <efile:SupplierSchedule>
    <efile:ScheduleCode>3A</efile:ScheduleCode>
    <efile:ProductCode>065</efile:ProductCode>
    <efile:Mode>J</efile:Mode>
    <efile:DocumentNumber>XX12345</efile:DocumentNumber>
    <efile:ReceivedShippedDate>20130311</efile:ReceivedShippedDate>
  - <efile:Origin>
      <efile:TerminalCode>T62TN2200</efile:TerminalCode>
    </efile:Origin>
  - <efile:Destination>
      <efile:FacilityNumber>018500002</efile:FacilityNumber>
    </efile:Destination>
  - <efile:Carrier>
      <efile:FEIN>137777777</efile:FEIN>
      <efile:Name>Hauling</efile:Name>
    </efile:Carrier>
  - <efile:Seller>
      <efile:FEIN>591234567</efile:FEIN>
      <efile:Name>Fuel Inc</efile:Name>
    </efile:Seller>
    <efile:Net>1065</efile:Net>
    <efile:Gross>1068</efile:Gross>
    <efile:Billed>1066</efile:Billed>
  </efile:SupplierSchedule>
```

Link to Complete Set of XPath Documents

Please go to the following link to access the complete set of XPath document(s) for the Header, Reports and Financial Transaction.

Chapter 9 - Security

XML digital signature

The XML Signature specification is a joint effort of World Wide Web Consortium (W3C) and Internet Engineering Task Force (IETF). XML Signatures provide integrity, message authentication and/or signer authentication services for data of any type, whether located within the XML that includes the signature or elsewhere.

XML Encryption

W3C's XML Encryption specification addresses the issue of data confidentiality using encryption techniques. Encrypted data is wrapped inside XML tags defined by the XML Encryption specification.

XKMS (XML Key Management Specification)

The XML Key Management Specification (XKMS) is comprised of the XML Key Information Service Specification (X-KISS) and the XML Key Registration Service Specification (X-KRSS). The X-KISS specification defines a protocol for a Trust service that resolves public key information contained in XML-SIGelements. The X-KISS protocol allows a client of such a service to delegate part or all of the tasks required to process elements. The X-KRSS specification defines a protocol for a web service that accepts registration of public key information. Once registered, the public key may be used in conjunction with other web services including X-KISS.

SAML (Secure Assertion Markup Language)

SAML is an XML-based framework for communicating user authentication, entitlement and attribute information. As its name suggests, SAML allows business entities to make assertions regarding the identity, attributes, and entitlements of a subject (an entity that is often a human user) to other entities, such as a partner company or another enterprise application. The OASIS Security Services Technical Committee is in charge of defining, enhancing, and maintaining the specifications that define SAML.

Credits

Maintenance by

Cheryl Gilson – Avalara

Bill Gray – Sinclair Oil

Gene Holland – Phillips 66

Hal Lovell – California Department of Tax and Fee Administration

Jonathan Lyon – FTA

Ray Mattson-Grimm – SICPA

Doreen Warren – Idaho State Tax Commission

Assembled by:

Ray Mattson-Grimm – SICPA