

EDI to XML

The following slides provide a brief comparison of traditional X12 EDI and XML. We have used a simple receipt schedule to show how the two data formats would convey the same information.

EDI Schedule, Product and Mode Segments

Schedules

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 TOR, SDR, CCR and/or other report type sections of this map.

Beginning of Schedules Tax Form Segment

Pos. No. 0100

Element ID	Elem Ref. #	Sub-Element Ref. #	Field Status	Field Name	Field Type	Length		Field Description
						Min	Max	
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 schedule code list in Appendix on page B-2
TFS03	128		X	Reference Identification Qualifier	ID	2	2	"PG" = Product Group
TFS04	127		X	Reference Identification	AN	3	3	Product Code See Product Codes in Appendix on page C-2
TFS05	66		X	Identification Code Qualifier	ID	2	2	"94" = Mode
TFS06	67		X	Identification Code	AN	2	2	Transaction Type Mode Code See Code List in Appendix on page E-2

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.

EDI Origin and Seller Segments

Point of Origin Name Segment 1								(One of the three options is used) Pos. No. 0500	
Element ID	Elem Ref. #	Sub-Element Ref. #	Field Status	Field Name	Field Type	Length Min 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 www.irs.gov/businesses/page/0,,id=6964,00.html)	
N1~OT~TC~T81MT4007\									
Syntax Notes: N103 and N104 are required.									
FTA Notes: None									

Seller Information Name Segment 2								Pos. No. 0500	
Element ID	Elem Ref. #	Sub-Element Ref. #	Field Status	Field Name	Field Type	Length Min 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.									

EDI Carrier and Destination Segments

Carrier Information									Pos. No. 0500	
Name Segment 6										
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field		
ID	Ref. #	Ref. #	Status		Type	Min	Max	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.										

Option 3

Point of Destination									(One of the three options is used)	
Name Segment 8									Pos. No. 0500	
Element	Elem	Sub-Ele	Field	Field Name	Field	Length		Field		
ID	Ref. #	Ref. #	Status		Type	Min	Max	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										

EDI Bill of Lading Date and Gallons Segments

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)
 Gallons/Liters.

Bill of Lading Forms Group Segment								Pos.No. 1000
Element ID	Elem Ref #	Sub-El 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

Bill of Lading Date Date/Time Reference Segment								Pos.No. 1200
Element ID	Elem Ref #	Sub-El 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

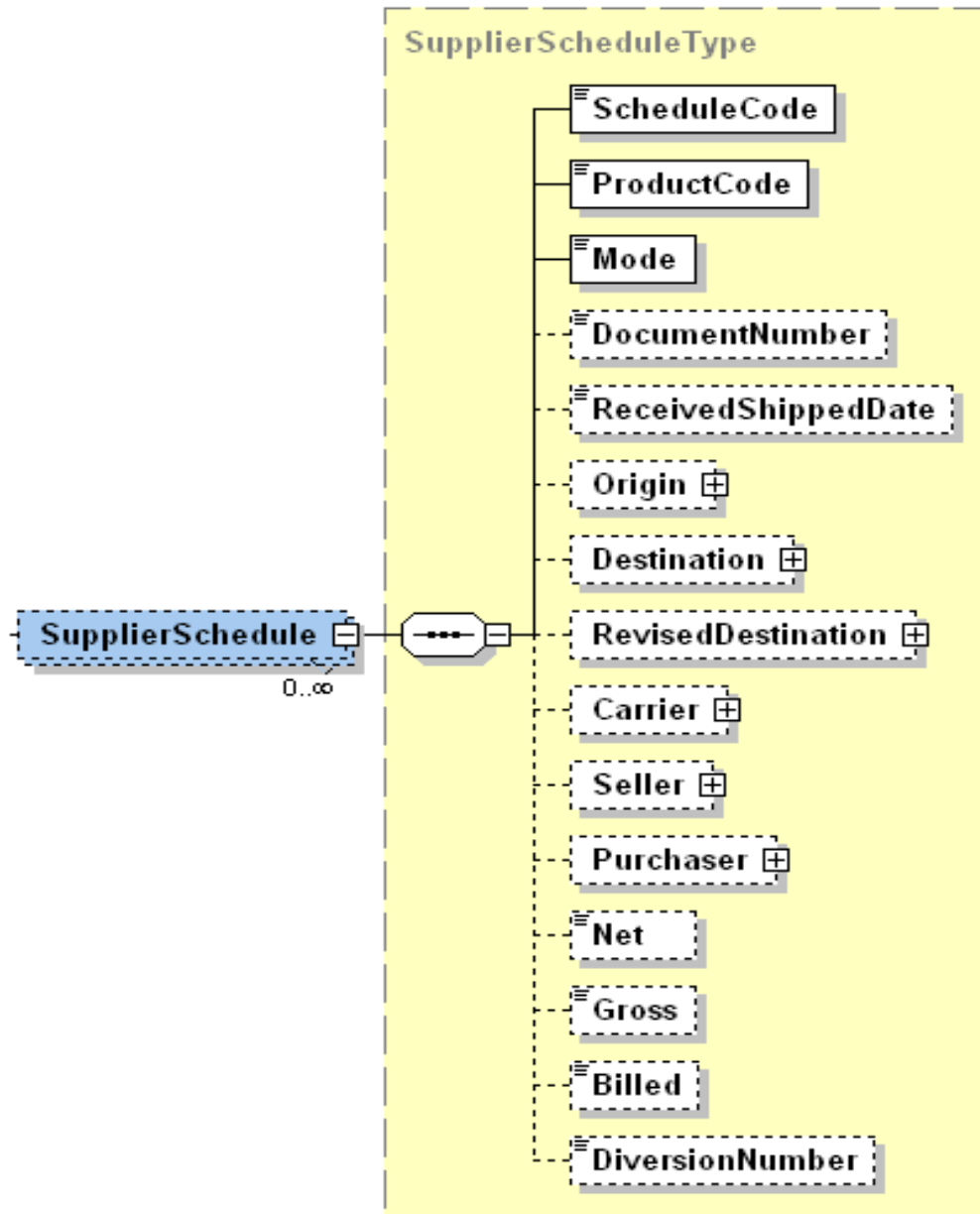
Bill of Lading Net Tax Information and Amount Segment								Pos.No. 1800
Element ID	Elem Ref #	Sub-El Ref #	Field Status	Field Name	Field Type	Length Min	Length Max	Field Description
TIA01	C037	817	M	Tax Information ID Number	AN	4	4	"S005" = Net
TIA02 and TIA03 are not used.								
TIA04	380		X	Quantity	R	1	15	Quantity
TIA05	C001	355	M	Unit of Measurement Code	ID	2	2	"GA" = Gallons "LT" = Liters

TIA~5005~8000~GA

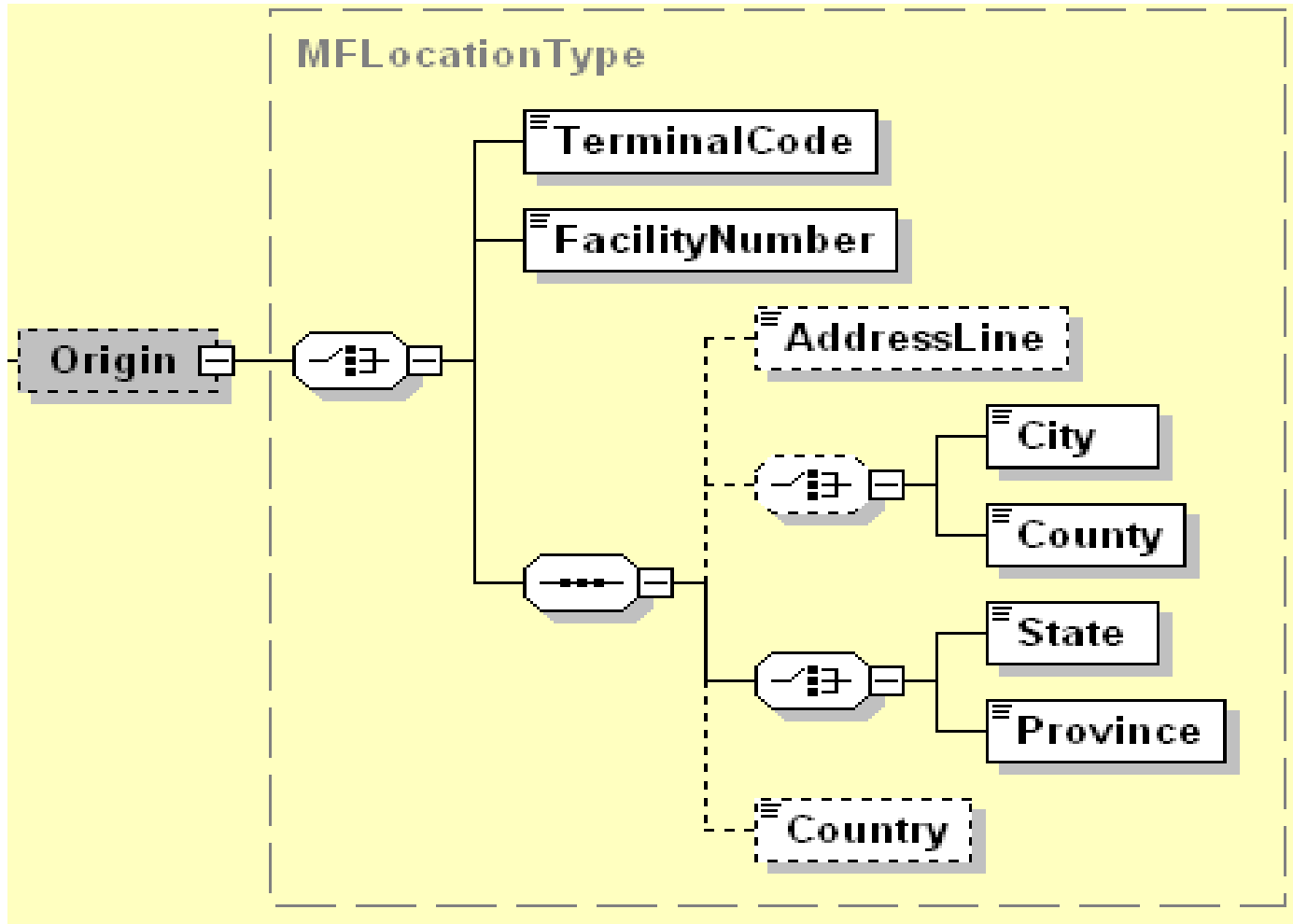
Syntax Notes: TIA04 and TIA05 are required.

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

XML Schedule Structure

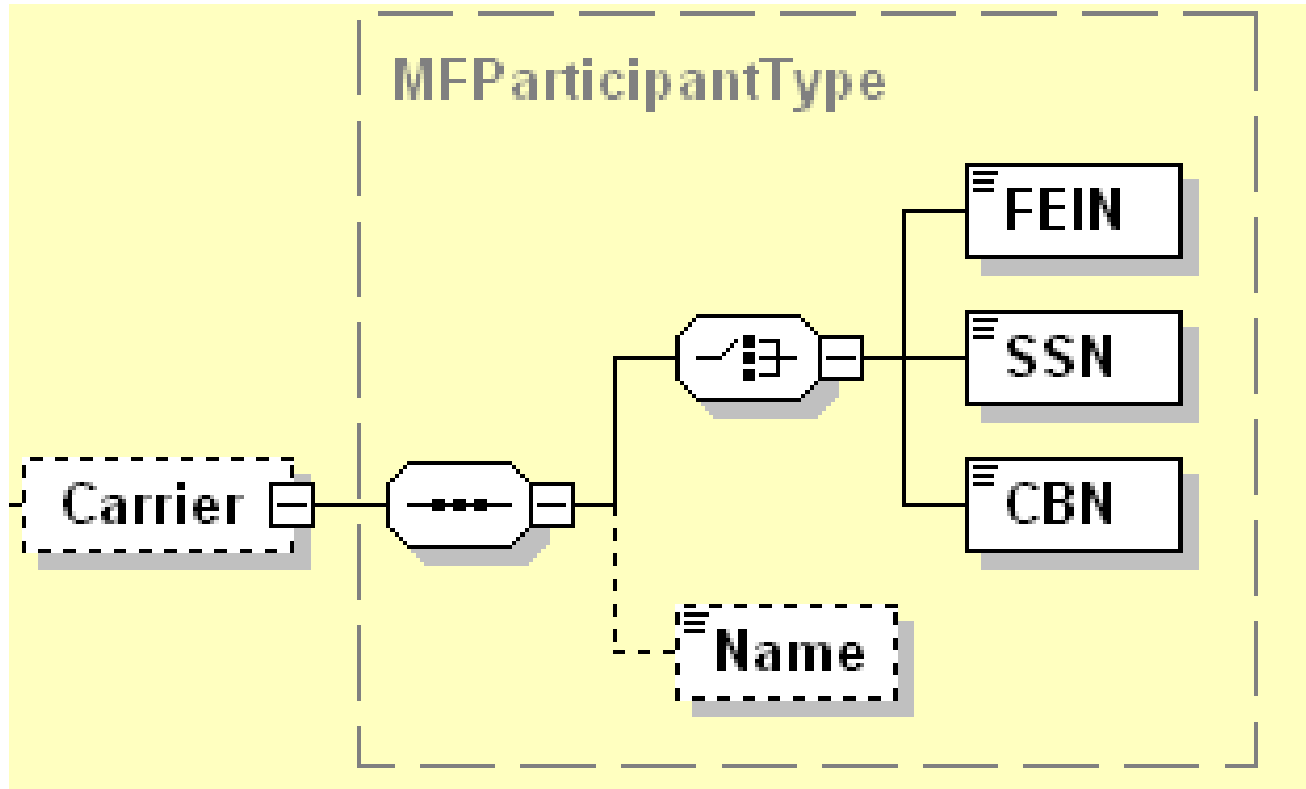


XML Location Structure



* MFLocationType used for Origin, Destination and Revised Destination detail

XML Participant Structure



* MFPParticipantType used for Carrier, Seller and Purchaser detail

Compare EDI and XML Output

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>

EDI Receipt Schedule Output

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

N1~OT~~TC~T62TN2200\

N1~SE~FUNKY FUEL INC.~24~137777777\

N1~CA~HAULING STUFF~24~591234567\

N1~WD~~FA~018500002\

FGS~D~BM~ SampleRec\

DTM~095~20090211\

TIA~5005~~~1065~GA\

XML Receipt Schedule Output

- **<SupplierSchedule>**
- **<ScheduleCode>3A</ScheduleCode>**
- **<ProductCode>065</ProductCode>**
- **<Mode>J</Mode>**
- **<DocumentNumber>SampleRec</DocumentNumber>**
- **<ReceivedShippedDate>20090211</ReceivedShippedDate>**
- **<Origin>**
- **<TerminalCode>T62TN2200</TerminalCode>**
- **</Origin>**
- **<Destination>**
- **<FacilityNumber>018500002</FacilityNumber>**
- **</Destination>**
- **<Carrier>**
- **<Fein>591234567</Fein>**
- **<Name>HAULING STUFF</Name>**
- **</Carrier>**
- **<Seller>**
- **<Fein>137777777</Fein>**
- **<Name>FUNKY FUEL INC.</Name>**
- **</Seller>**
- **<Net>1065</Net>**
- **</SupplierSchedule>**

EDI to XML

This simple example was designed to help with the understanding of how XML relates to legacy EDI data structures. We hope this will aid those states that currently use EDI to capture their return data, but are considering moving to XML.

Obviously, there are other components such as the header and financial transaction that are shared with the MeF program. TIGERS and the Motor Fuel Uniformity Committee have created the XML needed to process the Supplier, Operator, Distributor, Carrier and Retailer reports.

You can access the most current version of the Motor Fuel Schemas via the TIGERS Webpage.