810 Invoice

Functional Group=IN

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	ST	Transaction Set Header	M	1			Must use
0200	BIG	Beginning Segment for Invoice	M	1			Must use
0400	CUR	Currency	O	1			Used
0500	REF	Reference Identification	O	12			Used
LOOP ID - N1					**200**		
0700	N1	Name	O	1			Used
0800	N2	Additional Name Information	O	2			Used
0900	N3	Address Information	O	2			Used
1000	N4	Geographic Location	O	1			Used
1200	PER	Administrative Communications Contact	O	3			Used
1300	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
1500	FOB	F.O.B. Related Instructions	O	1			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - IT1					**200000**		
0100	IT1	Baseline Item Data (Invoice)	O	1			Used
LOOP ID - PID					**1000**		
0600	PID	Product/Item Description	O	1			Used
1200	REF	Reference Identification	O	>1			Used
1500	DTM	Date/Time Reference	O	10			Used
LOOP ID - SAC					**>1**		
1800	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
LOOP ID - TXI					**>1**		
1900	TXI	Tax Information	O	1			Used
LOOP ID - N1					**200**		
2400	N1	Name	O	1			Used
2500	N2	Additional Name Information	O	2			Used
2600	N3	Address Information	O	2			Used
2700	N4	Geographic Location	O	1			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	TDS	Total Monetary Value Summary	M	1			Must use
0300	CAD	Carrier Detail	O	1			Used
LOOP ID - SAC					**>1**		
0400	SAC	Service, Promotion,	O	1			Used

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
		Allowance, or Charge Information					
LOOP ID - TXI					**>1**		
0500	TXI	Tax Information	O	1			Used
0800	SE	Transaction Set Trailer	M	1			Must use

ST Transaction Set Header

Pos: 0100	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the start of a transaction set and to assign a control number

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use
		Description: Code uniquely identifying a Transaction Set				
		Code Name				
		810 Invoice				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
		Must be unique within the group.				

Semantics:

1. The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition.

BIG   Beginning Segment for Invoice

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

User Option (Usage): Must use

To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BIG01	373	**Date**	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
BIG02	76	**Invoice Number**	M	AN	1/22	Must use
		Description: Identifying number assigned by issuer				
		Control number for this document.				
BIG04	324	**Purchase Order Number**	O	AN	1/22	Used
		Description: Identifying number for Purchase Order assigned by the orderer/purchaser				
BIG05	328	**Release Number**	O	AN	1/30	Used
		Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction				
BIG07	640	**Transaction Type Code**	O	ID	2/2	Must use
		Description: Code specifying the type of transaction				

Codes other than "PR" may not be processed by all roads. Please verify whether an invoice type can be processed before sending.

Only the following codes will be accepted:

Code	Name
CO	Corrected

Indicates that this document replaces a previously transmitted invoice. A REF segment with code "OI" is required.

CR	Credit Memo

Indicates that this document is a credit adjustment to a previously transmitted document that is not covered by the code "MC". A SAC segment is required. A REF segment with code "OI" in REF01 is required and no IT1 detail loop is to be sent.

DR	Debit Memo

The debit memo is intended to be used for freight, or other special charges that were left off a previously transmitted invoice. A SAC segment is required. A REF segment with code "OI" in REF01 is required. The debit memo cannot adjust the price of a previously invoiced line item and no IT1 detail loop is to be sent.

MC	Material Credit Invoice

Indicates that this document is a credit that reverses a previously invoiced quantity. Since this code clearly indicates the negative aspects of this document, the Quantity Invoiced in IT102, and Unit Price IT104, should be unsigned. All requirements for the detail area of each affected line of the purchase order are required in this transaction.

PR	Product (or Service)

Indicates that this is the original transmission of this invoice for product or service.

Semantics:

1. BIG01 is the invoice issue date.
2. BIG03 is the date assigned by the purchaser to purchase order.
3. BIG10 is the consolidated invoice number associated with the invoice identified in BIG02. When BIG07 contains code CI (Consolidated Invoice), BIG02 will contain the consolidated invoice number and BIG10 is not used.

Comments:

1. BIG07 is used only to further define the type of invoice when needed.

If the invoice covers a purchase order, a release against a purchase order or a contract, element BIG04 is required.

CUR   Currency

Pos: 0400	Max: 1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR01	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		Only the following code will be accepted:				
		Code Name				
		SE Selling Party				
CUR02	100	**Currency Code**	M	ID	3/3	Must use
		Description: Code (Standard ISO) for country in whose currency the charges are specified				
		Only the following codes will be accepted:				
		CAD *Canadian Dollar*				
		MXP *Mexican Peso*				
		USD *US Dollar*				

Syntax Rules:

1. C0807 - If CUR08 is present, then CUR07 is required.
2. C0907 - If CUR09 is present, then CUR07 is required.
3. L101112 - If CUR10 is present, then at least one of CUR11 or CUR12 is required.
4. C1110 - If CUR11 is present, then CUR10 is required.
5. C1210 - If CUR12 is present, then CUR10 is required.
6. L131415 - If CUR13 is present, then at least one of CUR14 or CUR15 is required.
7. C1413 - If CUR14 is present, then CUR13 is required.
8. C1513 - If CUR15 is present, then CUR13 is required.
9. L161718 - If CUR16 is present, then at least one of CUR17 or CUR18 is required.
10. C1716 - If CUR17 is present, then CUR16 is required.
11. C1816 - If CUR18 is present, then CUR16 is required.
12. L192021 - If CUR19 is present, then at least one of CUR20 or CUR21 is required.
13. C2019 - If CUR20 is present, then CUR19 is required.
14. C2119 - If CUR21 is present, then CUR19 is required.

Comments:

1. See Figures Appendix for examples detailing the use of the CUR segment.

This segment must be sent if the invoice is payable in funds different from the native funds of the purchaser.

REF   Reference Identification

| Pos: 0500 | Max: 12 |
| Heading - Optional |
| Loop: N/A | Elements: 2 |

User Option (Usage): Used

To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code Name
BM   Bill of Lading Number
GT   Goods and Service Tax Registration Number
OI   Original Invoice Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	C	AN	1/50	Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

If REF01 = "OI", this number must consist of the concatenation of the original invoice Date BIG01 and the original Invoice Number BIG02 - No embedded blanks (i.e., CCYYMMDDNNNNNNN...).

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

If this invoice is for material purchased and used in Canada, an occurence of the REF segment is required with REF01 = "GT".

N1 Name

Pos: 0700	**Max: 1**
Heading - Optional	
Loop: N1	**Elements: 4**

User Option (Usage): Used

To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

Code **Name**
BT   Bill-to-Party
RI   Remit To
SF   Ship From
ST   Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	C	AN	1/60	Used

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	C	ID	1/2	Used

Description: Code designating the system/method of code structure used for Identification Code (67)

Code **Name**
92   Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	C	AN	2/80	Used

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

Four N1 loops are required for each invoice: one for N101 = "BT", "RI", "SF", and "ST".
The use of various segments and elements for each of the loops can be found in Table II of the Appendix.

N2 Additional Name Information

Pos: 0800	**Max: 2**
Heading - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

To specify additional names

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

See Table II of the Appendix.

N3 Address Information

Pos: 0900	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

See Table II of the Appendix.

N4 Geographic Location

Pos: 1000	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Must use
		Description: Free-form text for city name				
N402	156	**State or Province Code**	C	ID	2/2	Must use
		Description: Code (Standard State/Province) as defined by appropriate government agency				
		Code values conform to the standard postal abbreviations. See Table III of the Appendix for the US state and Canadian province codes.				
N403	116	**Postal Code**	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
		Nine digit zip codes are strongly recommended.				
N404	26	**Country Code**	C	ID	2/3	Used
		Description: Code identifying the country				
		Assume to be "US" when not present.				
		CA Canada				
		MX Mexico				
		US United States				

Syntax Rules:
1. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 is required.

Comments:
1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

SeeTable II of the Appendix.

PER Administrative Communications Contact

Pos: 1200   Max: 3
Heading - Optional
Loop: N1   Elements: 8

User Option (Usage): Used

To identify a person or office to whom administrative communications should be directed

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER01	366	**Contact Function Code**	M	ID	2/2	Must use
		Description: Code identifying the major duty or responsibility of the person or group named				
		Code Name				
		AR Accounts Receivable Department				
PER02	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				
PER03	365	**Communication Number Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code Name				
		EM Electronic Mail				
		FX Facsimile				
		TE Telephone				
PER04	364	**Communication Number**	C	AN	1/256	Used
		Description: Complete communications number including country or area code when applicable				
PER05	365	**Communication Number Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code Name				
		EM Electronic Mail				
		FX Facsimile				
		TE Telephone				
PER06	364	**Communication Number**	C	AN	1/256	Used
		Description: Complete communications number including country or area code when applicable				
PER07	365	**Communication Number Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code Name				
		EM Electronic Mail				
		FX Facsimile				
		TE Telephone				
PER08	364	**Communication Number**	C	AN	1/256	Used
		Description: Complete communications number including country or area code when applicable				

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

See Table II of the Appendix.

ITD Terms of Sale/Deferred Terms of Sale

Pos: 1300	Max: >1
Heading - Optional	
Loop: N/A	Elements: 5

User Option (Usage): Used

To specify terms of sale

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD01	336	**Terms Type Code**	O	ID	2/2	Must use

Description: Code identifying type of payment terms
Only the following codes will be accepted:

Code	Name
05	Discount Not Applicable
08	Basic Discount Offered

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD02	333	**Terms Basis Date Code**	O	ID	1/2	Must use

Description: Code identifying the beginning of the terms period
Only the following codes will be accepted:

Code	Name
3	Invoice Date
5	Invoice Receipt Date

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD03	338	**Terms Discount Percent**	O	R	1/6	Used

Description: Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date
Must not exceed 100%.
2% = 2 or 2.0

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD05	351	**Terms Discount Days Due**	C	N0	1/3	Used

Description: Number of days in the terms discount period by which payment is due if terms discount is earned

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD07	386	**Terms Net Days**	O	N0	1/3	Used

Description: Number of days until total invoice amount is due (discount not applicable)

Syntax Rules:

1. L03040513 - If ITD03 is present, then at least one of ITD04, ITD05 or ITD13 is required.
2. L08040513 - If ITD08 is present, then at least one of ITD04, ITD05 or ITD13 is required.
3. L091011 - If ITD09 is present, then at least one of ITD10 or ITD11 is required.

Semantics:

1. ITD15 is the percentage applied to a base amount used to determine a late payment charge.

Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

The following explains the use of the elements and codes:
If ITD01 = "05"
*   ITD07 is required*
*   ITD03 and ITD05 must not be sent*
IF ITD01 = "08"

ITD03, ITD05, and ITD07are required
ITD03 must be greater than zero

FOB F.O.B. Related Instructions

Pos: 1500	Max: 1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

To specify transportation instructions relating to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB01	146	**Shipment Method of Payment**	M	ID	2/2	Must use

Description: Code identifying payment terms for transportation charges

Code	Name
CC	Collect
DF	Defined by Buyer and Seller

Code "DF" indicates that the method of payment is not specified.

Code	Name
PC	Prepaid but Charged to Customer
PP	Prepaid (by Seller)
PU	Pickup

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB06	309	**Location Qualifier**	C	ID	1/2	Used

Description: Code identifying type of location

Code	Name
CI	City
DE	Destination (Shipping)
OR	Origin (Shipping Point)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB07	352	**Description**	O	AN	1/80	Used

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. C0302 - If FOB03 is present, then FOB02 is required.
2. C0405 - If FOB04 is present, then FOB05 is required.
3. C0706 - If FOB07 is present, then FOB06 is required.
4. C0809 - If FOB08 is present, then FOB09 is required.

Semantics:

1. FOB01 indicates which party will pay the carrier.
2. FOB02 is the code specifying transportation responsibility location.
3. FOB06 is the code specifying the title passage location.
4. FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

Required by the Rail Industry Forum.

IT1   Baseline Item Data (Invoice)

Pos: 0100	Max: 1
Detail - Optional	
Loop: IT1	Elements: 10

User Option (Usage): Used

To specify the basic and most frequently used line item data for the invoice and related transactions

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT101	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

If the purchaser's line number is sent on the purchase order, IT101 is required and must equal the line number on that purchase order. When an electronic purchase order is sent, the line number in PO101 for the item being invoiced is the line number that is required in the IT101.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT102	358	**Quantity Invoiced**	C	R	1/10	Must use

Description: Number of units invoiced (supplier units)
Value must be greater than zero.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT103	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken
Must equal the unit of measure as ordered by the buying party. See Table IV of the Appendix for Unit of Measure Code values.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT104	212	**Unit Price**	C	R	1/17	Must use

Description: Price per unit of product, service, commodity, etc.

Unit price will be expressed in unit of measure from data element 355. Unit price will be net of gross price, trade discounts and item-specific mark-ups, but will not be adjusted for payment terms or any order-specific special charges. Unit price must be greater than or equal to zero.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT106	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code **Name**
MF   Manufacturer
PI   Purchaser's Item Code

If the order was not sent electronically and the purchaser's item code is indicated, an occurrence of data elements 235/234 is required with 235 = "PI" and 234 equal to the purchaser's item code.
If the order was sent electronically with an occurrence of data elements 235/234 with 235 = "PI", then an occurrence of data elements 235/234 is required with 235 = "PI".

VP   Vendor's (Seller's) Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT107	234	**Product/Service ID**	C	AN	1/48	Used

Description: Identifying number for a product or service
IT108 through IT111 are repeating pairs of

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		data elements 235 and 234. *Notes shown in IT106 apply to all data* *elements 235.*				
IT108	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used

Code Name
MF   Manufacturer
PI   Purchaser's Item Code
VP   Vendor's (Seller's) Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT109	234	**Product/Service ID** **Description:** Identifying number for a product or service	C	AN	1/48	Used
IT110	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used

Code Name
MF   Manufacturer
PI   Purchaser's Item Code
VP   Vendor's (Seller's) Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT111	234	**Product/Service ID** **Description:** Identifying number for a product or service	C	AN	1/48	Used

Syntax Rules:

1. P020304 - If either IT102, IT103 or IT104 are present, then the others are required.
2. P0607 - If either IT106 or IT107 is present, then the other is required.
3. P0809 - If either IT108 or IT109 is present, then the other is required.
4. P1011 - If either IT110 or IT111 is present, then the other is required.
5. P1213 - If either IT112 or IT113 is present, then the other is required.
6. P1415 - If either IT114 or IT115 is present, then the other is required.
7. P1617 - If either IT116 or IT117 is present, then the other is required.
8. P1819 - If either IT118 or IT119 is present, then the other is required.
9. P2021 - If either IT120 or IT121 is present, then the other is required.
10. P2223 - If either IT122 or IT123 is present, then the other is required.
11. P2425 - If either IT124 or IT125 is present, then the other is required.

Semantics:

1. IT101 is the line item identification.

Comments:

1. Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2. IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

PID Product/Item Description

Pos: 0600   Max: 1
Detail - Optional
Loop: PID   Elements: 2

User Option (Usage): Used

To describe a product or process in coded or free-form format

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	**Item Description Type**	M	ID	1/1	Must use
		Description: Code indicating the format of a description				
		Code Name				
		F Free-form				
PID05	352	**Description**	C	AN	1/80	Must use
		Description: A free-form description to clarify the related data elements and their content				

Syntax Rules:
1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.
3. C0703 - If PID07 is present, then PID03 is required.
4. C0804 - If PID08 is present, then PID04 is required.
5. C0905 - If PID09 is present, then PID05 is required.

Semantics:
1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:
1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

REF Reference Identification

Pos: 1200   Max: >1
Detail - Optional
Loop: IT1   Elements: 2

User Option (Usage): Used

To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification	M	ID	2/3	Must use

Code Name
BM   Bill of Lading Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/50	Must use

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

DTM Date/Time Reference

Pos: 1500	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

User Option (Usage): Used

To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		Code Name				
		011 Shipped				
DTM02	373	**Date**	C	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

SAC Service, Promotion, Allowance, or Charge Information

Pos: 1800	Max: 1
Detail - Optional	
Loop: SAC	Elements: 5

User Option (Usage): Used

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator**	M	ID	1/1	Must use

Description: Code which indicates an allowance or charge for the service specified
Only the following codes will be accepted:

Code Name
A Allowance
C Charge

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC02	1300	**Service, Promotion, Allowance, or Charge Code**	C	ID	4/4	Must use

Description: Code identifying the service, promotion, allowance, or charge
Only the following codes will be accepted unless SAC05 equals zero.

Code Name
B750 Core Charge
C080 Demurrage
C110 Deposit
D240 Freight
D360 Goods and Services Tax Charge
D500 Handling
D870 Inspection
F180 Pallet
G660 Scrap Allowance
G740 Service Charge
H330 State Sales Charge
H550 Surcharge
H660 Tax - Federal Excise Tax, FET
H700 Tax - Local Tax
H760 Tax - State Hazardous Substance
H850 Tax

Use this code only if one of the more specific tax codes does not apply. SAC15 is required to describe this tax.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC05	610	**Amount**	O	N2	1/15	Must use

Description: Monetary amount
Must be greater than or equal to zero.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC13	127	**Reference Identification**	C	AN	1/50	Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Required for SAC02 = "D360", "H330", "H700", or "H760". Used to identify the taxing location.
Format: SSZZZZZZZZZ where
SS is the postal abbreviation of the

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		state/province of the taxing location. This portion of the element is required. *ZZZZZZZZ is the postal zip of the taxing location. This portion of the element is required for sales tax at any level.*				
SAC15	352	**Description** **Description:** A free-form description to clarify the related data elements and their content *Literal explanation of charge.*	C	AN	1/80	Used

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. C1413 - If SAC14 is present, then SAC13 is required.
7. C1615 - If SAC16 is present, then SAC15 is required.
8. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction with SAC03 to further define SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

TXI Tax Information

Pos: 1900	Max: 1
Detail - Optional	
Loop: TXI	**Elements: 4**

User Option (Usage): Used

To specify tax information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI01	963	**Tax Type Code**	M	ID	2/2	Must use

Description: Code specifying the type of tax

Code Name
FT   Federal Excise Tax
SP   State/Provincial Tax

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI02	782	**Monetary Amount**	C	R	1/18	Used

Description: Monetary amount

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI03	954	**Percent**	C	R	1/10	Used

Description: Percentage expressed as a decimal

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI07	662	**Relationship Code**	O	ID	1/1	Used

Description: Code indicating the relationship between entities

Code Name
D   Delete
I   Included
O   Information Only
S   Substituted

Syntax Rules:

1. R020306 - At least one of TXI02, TXI03 or TXI06 is required.
2. P0405 - If either TXI04 or TXI05 is present, then the other is required.
3. C0803 - If TXI08 is present, then TXI03 is required.

Semantics:

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

This segment is optional and is designated for purchases made by Canadian railroads.

N1 Name

Pos: 2400   Max: 1
Detail - Optional
Loop: N1   Elements: 4

User Option (Usage): Used

To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

Code Name
ST   Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	C	AN	1/60	Used

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	C	ID	1/2	Used

Description: Code designating the system/method of code structure used for Identification Code (67)

Code Name
92   Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	C	AN	2/80	Used

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N2 Additional Name Information

Pos: 2500   Max: 2
Detail - Optional
Loop: N1   Elements: 2

User Option (Usage): Used

To specify additional names

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 2600	**Max: 2**
Detail - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 2700	**Max: 1**
Detail - Optional	
Loop: N1	**Elements: 4**

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	C	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
		Code values conform to the standard postal abbrevations. See Table III of the Appendix for the US state and Canadian province codes.				
N403	116	**Postal Code**	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	**Country Code**	C	ID	2/3	Used
		Description: Code identifying the country				
		Assume fo be "US" when not present.				
		CA Canada				
		MX Mexico				
		US United States				

Syntax Rules:
1. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 is required.

Comments:
1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

TDS Total Monetary Value Summary

Pos: 0100	**Max: 1**
Summary - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

To specify the total invoice discounts and amounts

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TDS01	610	**Amount**	M	N2	1/15	Must use
		Description: Monetary amount				
		Must equal the sum of (IT102 X IT104) rounded to 2 decimals, for all IT1 segments plus the sum of all SAC05 elements (with the appropriate regard for the allowance or charge indicator, SAC01).				
TDS02	610	**Amount**	O	N2	1/15	Used
		Description: Monetary amount				

Semantics:

1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
2. TDS02 indicates the amount upon which the terms discount amount is calculated.
3. TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
4. TDS04 indicates the total amount of terms discount.

Comments:

1. TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

CAD Carrier Detail

Pos: 0300	Max: 1
Summary - Optional	
Loop: N/A	Elements: 9

User Option (Usage): Used

To specify transportation details for the transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD01	91	**Transportation Method/Type Code**	O	ID	1/2	Used

Description: Code specifying the method or type of transportation for the shipment

Code	Name
A	Air
B	Barge
C	Consolidation
D	Parcel Post
E	Expedited Truck
H	Customer Pickup
I	Common Irregular Carrier
J	Motor
L	Contract Carrier
	Contract carrier as specified by purchaser.
M	Motor (Common Carrier)
N	Private Vessel
O	Containerized Ocean
R	Rail
S	Ocean
U	Private Parcel Service
W	Inland Waterway
X	Intermodal (Piggyback)
PL	Pipeline
SS	Steamship

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD02	206	**Equipment Initial**	O	AN	1/4	Used

Description: Prefix or alphabetic part of an equipment unit's identifying number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD03	207	**Equipment Number**	O	AN	1/10	Used

Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD04	140	**Standard Carrier Alpha Code**	C	ID	2/4	Used

Description: Standard Carrier Alpha Code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD05	387	**Routing**	C	AN	1/35	Used

Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity
Alpha carrier name.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD06	368	**Shipment/Order Status Code**	O	ID	2/2	Used

Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction

Code	Name
BP	Shipment Partial, Back Order to Ship on (Date)
PR	Partial Shipment
SH	Shipped (Date)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD07	128	**Reference Identification Qualifier**	O	ID	2/3	Used

Description: Code qualifying the Reference Identification

Required except when CAD01 = "U".
Only the following code will be accepted:

Code **Name**
CN   Carrier's Reference Number (PRO/Invoice)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD08	127	**Reference Identification**	C	AN	1/50	Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Required except when CAD01 = "U".

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD09	284	**Service Level Code**	O	ID	2/2	Used

Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

Code **Name**
09   Premium Surface
3D   Three Day Service
AE   Air Economy
ND   Next Day Air
SC   Second Day Air
SG   Standard Ground

Syntax Rules:

1. R0504 - At least one of CAD05 or CAD04 is required.
2. C0708 - If CAD07 is present, then CAD08 is required.

This segment is required if a SAC segment is used with SAC02 = "D240" (Freight Charges)

SAC Service, Promotion, Allowance, or Charge Information

Pos: 0400   Max: 1
Summary - Optional
Loop: SAC   Elements: 5

User Option (Usage): Used

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator**	M	ID	1/1	Must use

Description: Code which indicates an allowance or charge for the service specified
Only the following codes will be accepted:

Code **Name**
A   Allowance
C   Charge

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC02	1300	**Service, Promotion, Allowance, or Charge Code**	C	ID	4/4	Must use

Description: Code identifying the service, promotion, allowance, or charge
Only the following codes will be accepted unless SAC05 equals zero.

Code **Name**
B750   Core Charge
C080   Demurrage
C110   Deposit
D240   Freight
D360   Goods and Services Tax Charge
D500   Handling
D870   Inspection
F180   Pallet
G660   Scrap Allowance
G740   Service Charge
H330   State Sales Charge
H550   Surcharge
H660   Tax - Federal Excise Tax, FET
H700   Tax - Local Tax
H760   Tax - State Hazardous Substance
H850   Tax

Use this code only if one of the more specific tax codes does not apply, SAC15 is required to describe this tax.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC05	610	**Amount**	O	N2	1/15	Must use

Description: Monetary amount
Must be greater than or equal to zero.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC13	127	**Reference Identification**	C	AN	1/50	Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Required for SAC02 = "D360", "H330", "H700", or "H760". Used to identify the taxing location.
Format: SSZZZZZZZZZ where
SS   is the postal abbrevation of the

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		state/province of the taxing location. This portion of the element is required. ZZZZZZZZ is the postal zip of the txing location. This portion of the element is required for sales tax at any level.				
SAC15	352	**Description** **Description:** A free-form description to clarify the related data elements and their content *Literal explanation of charge.*	C	AN	1/80	Used

Syntax Rules:
1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. C1413 - If SAC14 is present, then SAC13 is required.
7. C1615 - If SAC16 is present, then SAC15 is required.
8. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.

Semantics:
1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:
1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction with SAC03 to further define SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

TXI **Tax Information**

Pos: 0500	**Max: 1**
Summary - Optional	
Loop: TXI	**Elements: 4**

User Option (Usage): Used

To specify tax information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI01	963	**Tax Type Code**	M	ID	2/2	Must use
		Description: Code specifying the type of tax				

Code **Name**
GS   Goods and Services Tax
ST   State Sales Tax

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI02	782	**Monetary Amount**	C	R	1/18	Used
		Description: Monetary amount				
TXI03	954	**Percent**	C	R	1/10	Used
		Description: Percentage expressed as a decimal				
TXI07	662	**Relationship Code**	O	ID	1/1	Used
		Description: Code indicating the relationship between entities				

Code **Name**
D   Delete
I   Included
O   Information Only
S   Substituted

Syntax Rules:
1. R020306 - At least one of TXI02, TXI03 or TXI06 is required.
2. P0405 - If either TXI04 or TXI05 is present, then the other is required.
3. C0803 - If TXI08 is present, then TXI03 is required.

Semantics:
1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

This segment is optional and is designated for purchases made by Canadian railroads.

SE Transaction Set Trailer

Pos: 0800	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use
		Description: Total number of segments included in a transaction set including ST and SE segments				
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
		Must be identical to the transaction set control number in the ST segment.				

Comments:

1. SE is the last segment of each transaction set.

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