# 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 |
| 0400 | TXI | Tax Information | 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 |

## 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, Allowance, or Charge Information | O | 1 | | | Used |
| **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: 4** |

**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 | | | | |
| 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.  Since this code clearly indicates the negative aspect of this document, the Quantity Invoiced (IT102) and Unit Price (IT104) must be unsigned.  An REF segment with REF01 = "OI" is required.*

| | |
|---|---|
| DR | Debit Memo |

*Indicates that this document is a debit adjustment to a previously transmitted document.  An REF segment with REF01 = "OI" is required.*

| | |
|---|---|
| PR | Product (or Service) |

*Indicates that this is an original invoice.*

## 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.

# 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 |

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
|---|---|---|---|---|---|---|
| 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**
GT      Goods and Service Tax Registration Number
        *GST Registration Number of Payee*
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)

*N103 is required in the N1 loop where N101 equals "RI". N103 will be ignored in all other N1 loops.*

**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

*N104 is required in the N1 loop where N101 equals "RI". N104 will be ignored in all other N1 loops.*

## 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 codes and Canadian provinces.* | | | | |
| 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 | Must use |
| | | **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 pruchaser'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.

# TXI **Tax Information**

| Pos: 0400 | Max: >1 |
| --- | --- |
| **Detail - Optional** | |
| **Loop: IT1** | **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

| 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.*

# 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 | Used |
| | | **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** | M | ID | 2/3 | Must use |

**Description:** Code qualifying the Reference Identification

**Code  Name**
EQ    Equipment Number
SI    Shipper's Identifying Number for Shipment (SID)

| 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 = "EQ", this value is the locomotive number receiving the product.*
*If REF01 = "SI", this element represents the unique identification number for the shipment/delivery being invoiced in IT1.  If delivery is via tank car, the tank car number must be shown.*

## 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** | | | | |
| | | 192     Delivery Ticket | | | | |
| 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.

*An occurrence of DTM with DTM01 = "192" is required for each IT1.*

# 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

<table>
<tr><td>Pos: 0300</td><td>Max: 1</td></tr>
<tr><td colspan="2">Summary - Optional</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 5</td></tr>
</table>

**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 |
|------|------|
| B | Barge |
| 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 |
| W | Inland Waterway |
| PL | Pipeline |

| 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 |
|-----|----|--------------|-----|------|---------|-------|
| CAD07 | 128 | **Reference Identification Qualifier** | O | ID | 2/3 | Must use |

**Description:** Code qualifying the Reference Identification
*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 | Must use |

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

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

*Rquired if a Table 3 SAC segment is sent 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 | Used |

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

| Code | Name |
|------|------|
| C030 | Delivery Surcharge |
| | *Direct-to-locomotive fueling charges* |
| C080 | Demurrage |
| D240 | Freight |
| D360 | Goods and Services Tax Charge |
| D870 | Inspection |
| D970 | Insurance Surcharge |
| E320 | Leaking Underground Storage Tax (LUST) |
| F890 | Pump Charge |
| G740 | Service Charge |
| H320 | State Motor Fuel |
| H330 | State Sales Charge |
| H550 | Surcharge |
| H660 | Tax - Federal Excise Tax, FET |
| H700 | Tax - Local Tax |
| H760 | Tax - State Hazardous Substance |
| H780 | Tax - Super Fund Excise Tax |
| H850 | Tax |
| | *Use this code only if one of the more specific tax codes does not apply, SAC15 is required to describe this tax.* |
| H950 | Terminal Differential |
| | *Pipeline line loss* |
| I610 | Weather Protection |
| | *Low pour additive charges* |

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
|-----|-----|--------------|-----|------|---------|-------|
| SAC05 | 610 | **Amount** | O | N2 | 1/15 | Used |

**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

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
|-----|-----|-----|-----|------|---------|-------|
| | | specified by the Reference Identification Qualifier | | | | |
| | | *Required for SAC02 = "D360", "H320", "H330", "H700", or "H760".  Used to identify the taxing location.*<br>*Format: SSZZZZZZZZZ   where*<br>*SS    is the postal abbrevation of the state/province of the taxing location.  This portion of the element is required.*<br>*ZZZZZZZZZ  is the postal zip of the txing location.  This portion of the element is required for sales tax at any level.* | | | | |
| SAC15 | 352 | **Description**<br>**Description:** A free-form description to clarify the related data elements and their content<br>*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

| 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.*

# 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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