

# **850 Purchase Order - Outbound from iTN**

**X12/V4010/850: 850 Purchase Order/Replacement**

**Version: 1.4**

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<b>Publication:</b>	<b>05/06/2008</b>
<b>Notes:</b>	<b>This version includes the extensions for handling order revisions, product substitutions, price bracket information and PO replacements.</b>

# 850 Purchase Order

## Functional Group=PO

**Purpose:** This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) 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 placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

### Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Mandatory
	GS	Functional Group Header	M	1			Mandatory

### Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Mandatory
020	BEG	Beginning Segment for Purchase Order	M	1			Mandatory
050	REF	Reference Identification	M	4			Mandatory
080	FOB	F.O.B. Related Instructions	O	1			Recommended

#### LOOP ID - SAC

5

120	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Recommended
150	DTM	Date/Time Reference	O	3			Recommended
240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1			Recommended

#### LOOP ID - N9

1

295	N9	Reference Identification	O	1			Recommended
300	MSG	Message Text	O	30			Recommended

#### LOOP ID - N1

8

310	N1	Name	O	1			Recommended
330	N3	Address Information	O	1			Recommended
340	N4	Geographic Location	C	1			Recommended
360	PER	Administrative Communications Contact	O	1			Recommended

### Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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#### LOOP ID - PO1

100000

010	PO1	Baseline Item Data	M	1		N2/010	Mandatory
049	MEA	Measurements	O	40			Recommended

#### LOOP ID - PID

1

050	PID	Product/Item Description	O	1			Recommended
100	REF	Reference Identification	O	2			Recommended

#### LOOP ID - SAC

5

130	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Recommended
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#### LOOP ID - N9

1

330	N9	Reference Identification	O	1			Recommended
340	MSG	Message Text	O	30			Recommended

### Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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#### LOOP ID - CTT

1

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	CTT	Transaction Totals	M	1		N3/010	Mandatory
030	SE	Transaction Set Trailer	M	1			Mandatory

**Not Defined:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Mandatory
	IEA	Interchange Control Trailer	M	1			Mandatory

**Notes:**

2/010 PO102 is required.

3/010 The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

**Change History:**

*Change history of Outbound 850 from version 1.3 (June 4, 2003) to version 1.4 (May 6, 2008).*

- . *Transaction Set purpose codes '01' cancellation and '05' replace added to BEG01.*
- . *Purchase order type codes 'CP' PO Change and 'IN' Information Copy added to BEG02.*
- . *Release Number added to BEG04.*
- . *Header-level REF codes 'CB' PO link number, 'L7' Customer Release Number, 'OP' Original PO number, 'PL' Price List number, 'VN' Vendor Order number, 'VR' Vendor ID, 'YB' Vendor Order Revision number, and 'ZI' Buyer Order Revision Number added.*
- . *N1 code 'OB' added for Original Ordering Party.*
- . *SAC notes modified to explicitly account for pricing adjustments, and SAC09 UOM 'KG' added. SAC02 codes expanded to include all trading-partner approved codes.*
- . *Transportation Method simplified to either 'H' FOB or 'M' Delivered in TD504.*
- . *Note added to PO101 indicating that the line number is used as the unique line item identifier and should be persisted.*
- . *Notes added to PO1 segment indicating that UOM codes are based upon trading partner acceptance, and that price and quantity UOMs must be consistent.*
- . *'KG' UOM code for Kilogram added to the MEA04.*
- . *'KG' Kilogram UOM code added to CTT04, and 'CR' Cubic Meter added to CTT06.*

# ISA Interchange Control Header

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 14</b>

**User Option (Usage):** Mandatory

**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	<b>Authorization Information Qualifier</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Code to identify the type of information in the Authorization Information				
		<b>Code Name</b>				
		00 No Authorization Information Present (No Meaningful Information in I02)				
ISA03	I03	<b>Security Information Qualifier</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Code to identify the type of information in the Security Information				
		<b>Code Name</b>				
		00 No Security Information Present (No Meaningful Information in I04)				
ISA05	I05	<b>Interchange ID Qualifier</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified				
		<b>Code Name</b>				
		08 UCC EDI Communications ID (Comm ID)				
ISA06	I06	<b>Interchange Sender ID</b>	M	AN	15/15	Mandatory
		<b>Description:</b> Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element				
		<b>User Note 1:</b> <i>iTN's Production ID - 4225200000</i> <i>iTN's Test ID - 422520TEST</i>				
ISA07	I05	<b>Interchange ID Qualifier</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified				
		<b>All valid standard codes are used.</b>				
ISA08	I07	<b>Interchange Receiver ID</b>	M	AN	15/15	Mandatory
		<b>Description:</b> Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them				
ISA09	I08	<b>Interchange Date</b>	M	DT	6/6	Mandatory
		<b>Description:</b> Date of the interchange				
ISA10	I09	<b>Interchange Time</b>	M	TM	4/4	Mandatory
		<b>Description:</b> Time of the interchange				
ISA11	I10	<b>Interchange Control Standards Identifier</b>	M	ID	1/1	Mandatory
		<b>Description:</b> Code to identify the agency responsible for the control standard used by the				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		message that is enclosed by the interchange header and trailer <b>All valid standard codes are used.</b>				
ISA12	I11	<b>Interchange Control Version Number</b>  <b>Description:</b> Code specifying the version number of the interchange control segments  <b>Code Name</b> 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M	ID	5/5	Mandatory
ISA13	I12	<b>Interchange Control Number</b>  <b>Description:</b> A control number assigned by the interchange sender	M	N0	9/9	Mandatory
ISA14	I13	<b>Acknowledgment Requested</b>  <b>Description:</b> Code sent by the sender to request an interchange acknowledgment (TA1)  <b>Code Name</b> 0 No Acknowledgment Requested	M	ID	1/1	Mandatory
ISA15	I14	<b>Usage Indicator</b>  <b>Description:</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information  <b>Code Name</b> P Production Data T Test Data	M	ID	1/1	Mandatory
ISA16	I15	<b>Component Element Separator</b>  <b>Description:</b> Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator  <b>User Note 1:</b> <i>iTN uses the '@' symbol on its outbound transactions.</i>	M	AN	1/1	Mandatory

**User Note 1:**

*iTradeNetwork will send the asterisk ("\*\*") as the element separator.  
iTradeNetwork will send the asterisk ("~") as the segment terminator.  
iTradeNetwork will send the at sign ("@" ) as the composite delimiter*

# GS Functional Group Header

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 8</b>

**User Option (Usage):** Mandatory

**Purpose:** To indicate the beginning of a functional group and to provide control information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	<b>Functional Identifier Code</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Code identifying a group of application related transaction sets				
		<b>Code Name</b>				
		PO Purchase Order (850)				
GS02	142	<b>Application Sender's Code</b>	M	AN	2/15	Mandatory
		<b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners				
		<b>User Note 1:</b> iTN Production and test ID - 4225200000				
GS03	124	<b>Application Receiver's Code</b>	M	AN	2/15	Mandatory
		<b>Description:</b> Code identifying party receiving transmission; codes agreed to by trading partners				
GS04	373	<b>Date</b>	M	DT	8/8	Mandatory
		<b>Description:</b> Date expressed as CCYYMMDD				
GS05	337	<b>Time</b>	M	TM	4/8	Mandatory
		<b>Description:</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				
GS06	28	<b>Group Control Number</b>	M	N0	1/9	Mandatory
		<b>Description:</b> Assigned number originated and maintained by the sender				
GS07	455	<b>Responsible Agency Code</b>	M	ID	1/2	Mandatory
		<b>Description:</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480				
		<b>Code Name</b>				
		X Accredited Standards Committee X12				
GS08	480	<b>Version / Release / Industry Identifier Code</b>	M	AN	1/12	Mandatory
		<b>Description:</b> Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed				

**Code   Name**

004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

**Semantics:**

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

**Comments:**

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

# ST Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Mandatory

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b>	M	ID	3/3	Mandatory
<p><b>Description:</b> Code uniquely identifying a Transaction Set</p> <p><b>User Note 1:</b> <i>The Transaction Set Identifier Code (ST-01) is "850" [Purchase Order]</i></p> <p><b>All valid standard codes are used.</b></p>						
ST02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Mandatory
<p><b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set</p> <p><b>User Note 1:</b> <i>Transaction Set Control Number (ST-02) is an identifying number assigned by iTradeNetwork.</i></p>						

## Semantics:

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

# BEG Beginning Segment for Purchase Order

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

**User Option (Usage):** Mandatory

**Purpose:** To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BEG01	353	Transaction Set Purpose Code	M	ID	2/2	Mandatory

**Description:** Code identifying purpose of transaction set

**Code Name**

00 Original

01 Cancellation

**User Note 1:**

*Code '01' indicates that the order has been cancelled.*

05 Replace

**User Note 1:**

*Based upon the setup agreement, iTradeNetwork may support multiple PO transmissions. PO replacements need to be agreed upon and pre-configured. PO transmissions after the original PO transmission are considered replacements.*

BEG02	92	Purchase Order Type Code	M	ID	2/2	Mandatory
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**Description:** Code specifying the type of Purchase Order

**Code Name**

CP Change to Purchase Order

DS Dropship

IN Information Copy

NE New Order

BEG03	324	Purchase Order Number	M	AN	1/22	Mandatory
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**Description:** Identifying number for Purchase Order assigned by the orderer/purchaser

BEG04	328	Release Number	O	AN	1/30	Used
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**Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction

**User Note 1:** *Order revision number.*

BEG05	373	Date	M	DT	8/8	Mandatory
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**Description:** Date expressed as CCYYMMDD

**User Note 1:** *Date assigned by purchaser to purchase order.*

## Semantics:

1. BEG05 is the date assigned by the purchaser to purchase order.

# REF Reference Identification

<b>Pos: 050</b>	<b>Max: 4</b>
<b>Heading - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 3</b>

**User Option (Usage):** Mandatory

**Purpose:** To specify identifying information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference Identification

**Code Name**

CB Combined Shipment

**User Note 1:**

*PO Link number used for combined shipments.*

CR Customer Reference Number

**User Note 1:**

*Customer Reference Number is an additional Order Control Number that is assigned at the Buyer's Corporate level.*

FI File Identifier

**User Note 1:**

*File Identifier is an additional Order Control number that is assigned for a specific product category by the Buyer.*

IL Internal Order Number

**User Note 1:**

*iTN will always send the "IL" qualifier to indicate the Internal Order Number. This number is used to track all related documents within the EFS Application. Partners are required to return this number in the 855 PO Ack.*

L7 Customer's Release Number

OP Original Purchase Order

**User Note 1:**

*Original customer order number.*

PL Price List Number

**User Note 1:**

*Price Bracket ID.*

VN Vendor Order Number

VR Vendor ID Number

**User Note 1:**

*Proprietary vendor ID.*

YB Revision Number

**User Note 1:**

*OPTIONAL: The vendor's order revision number. Following confirmation receipt, this should match the REF\*YB sent on the latest confirmation.*

YD Buyer Identification

**User Note 1:**

*This proprietary ID is used to assign a member as the buyer for a PO.*

ZI Reference Version Number

**User Note 1:**

*MANDATORY FOR ORDER CHANGE: The buyer's order revision number. This numeric revision number will increment for each new transaction for an order. It need not be contiguous from transaction to transaction, but will monotonically increase.*

REF02	127	Reference Identification	X	AN	1/30	Recommended
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**Description:** Reference information as defined for a

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		particular Transaction Set or as specified by the Reference Identification Qualifier				
REF03	352	<b>Description</b>	X	AN	1/80	Used
		<b>Description:</b> A free-form description to clarify the related data elements and their content				
		<b>User Note 1:</b> <i>Used when REF02='YD' to include the buyer's name.</i>				

### Syntax Rules:

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

# FOB F.O.B. Related Instructions

Pos: 080	Max: 1
Heading - Optional	
Loop: N/A	Elements: 1

**User Option (Usage):** Recommended

**Purpose:** To specify transportation instructions relating to shipment

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FOB01	146	Shipment Method of Payment	M	ID	2/2	Mandatory

**Description:** Code identifying payment terms for transportation charges

### Code Name

BP	Paid by Buyer
CC	Collect
PB	Customer Pick-up/Backhaul
PC	Prepaid but Charged to Customer
PE	Prepaid and Summary Bill
PP	Prepaid (by Seller)
PU	Pickup
TP	Third Party Pay

## Semantics:

1. FOB01 indicates which party will pay the carrier.

# SAC Service, Promotion, Allowance, or Charge Information

Pos: 120	Max: 1
Heading - Optional	
Loop: SAC	Elements: 15

**User Option (Usage):** Recommended

**Purpose:** 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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	<b>Allowance or Charge Indicator</b>	M	ID	1/1	Mandatory
		<b>Description:</b> Code which indicates an allowance or charge for the service specified				
		<b>Code Name</b>				
		A Allowance				
		C Charge				
SAC02	1300	<b>Service, Promotion, Allowance, or Charge Code</b>	X	ID	4/4	Recommended
		<b>Description:</b> Code identifying the service, promotion, allowance, or charge				
		<b>User Note 1:</b> Accepted codes are dependant upon the trading relationship. Please confirm code acceptance with trading partner.				
		<b>All valid standard codes are used.</b>				
SAC03	559	<b>Agency Qualifier Code</b>	X	ID	2/2	Recommended
		<b>Description:</b> Code identifying the agency assigning the code values				
		<b>Code Name</b>				
		AB Assigned by Buyer				
		AS Assigned by Seller				
SAC04	1301	<b>Agency Service, Promotion, Allowance, or Charge Code</b>	X	AN	1/10	Recommended
		<b>Description:</b> Agency maintained code identifying the service, promotion, allowance, or charge				
SAC05	610	<b>Amount</b>	O	N2	1/15	Recommended
		<b>Description:</b> Monetary amount				
SAC06	378	<b>Allowance/Charge Percent Qualifier</b>	X	ID	1/1	Recommended
		<b>Description:</b> Code indicating on what basis allowance or charge percent is calculated				
		<b>All valid standard codes are used.</b>				
SAC07	332	<b>Percent</b>	X	R	1/6	Recommended
		<b>Description:</b> Percent expressed as a percent				
		<b>User Note 1:</b> Informational only. Total amount or rate x quantity are used to determine the amount of the allowance or charge.				
SAC08	118	<b>Rate</b>	O	R	1/9	Recommended
		<b>Description:</b> Rate expressed in the standard monetary denomination for the currency specified				
SAC09	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Recommended
		<b>Description:</b> Code specifying the units in which a				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		value is being expressed, or manner in which a measurement has been taken				
		<b><u>Code</u> <u>Name</u></b>				
		CA Case				
		DO Dollars, U.S.				
		EA Each				
		KG Kilogram				
		LB Pound				
SAC10	380	<b>Quantity</b>	X	R	1/15	Recommended
		<b>Description:</b> Numeric value of quantity				
SAC11	380	<b>Quantity</b>	O	R	1/15	Recommended
		<b>Description:</b> Numeric value of quantity				
SAC12	331	<b>Allowance or Charge Method of Handling Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code indicating method of handling for an allowance or charge				
		<b><u>Code</u> <u>Name</u></b>				
		01 Bill Back				
		02 Off Invoice				
		06 Charge to be Paid by Customer				
SAC13	127	<b>Reference Identification</b>	X	AN	1/30	Recommended
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
SAC14	770	<b>Option Number</b>	O	AN	1/20	Recommended
		<b>Description:</b> A unique number identifying available promotion or allowance options when more than one is offered				
SAC15	352	<b>Description</b>	X	AN	1/80	Recommended
		<b>Description:</b> A free-form description to clarify the related data elements and their content				

### 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. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 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 to further the code in SAC02.

**User Note 1:**

*Trading Partners must send this information if it affects pricing and completeness of the transaction.*

**User Note 2:**

*Only allowances and charges are supported. Informational only SAC are not allowed.*

**User Note 3:**

*SAC total amount OR rate x quantity must be included to determine the total amount of the allowance or charge.*

# DTM Date/Time Reference

Pos: 150	Max: 3
Heading - Optional	
Loop: N/A	Elements: 2

**User Option (Usage):** Recommended

**Purpose:** To specify pertinent dates and times

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	<b>Date/Time Qualifier</b>	M	ID	3/3	Mandatory
<p><b>Description:</b> Code specifying type of date or time, or both date and time</p> <p><b>User Note 1:</b> <i>iTN will pass one of these values for DTM01 based on what the buying organization sends to iTN.</i></p> <p><b>Code Name</b></p> <p>002 Delivery Requested</p> <p>010 Requested Ship</p> <p>118 Requested Pick-up</p>						
DTM02	373	<b>Date</b>	X	DT	8/8	Recommended
<p><b>Description:</b> Date expressed as CCYYMMDD</p>						

### User Note 1:

*If only one date is provided, date pair may be calculated in iTN.*

# TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 240	Max: 1
Heading - Optional	
Loop: N/A	Elements: 1

**User Option (Usage):** Recommended

**Purpose:** To specify the carrier and sequence of routing and provide transit time information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD504	91	Transportation Method/Type Code	X	ID	1/2	Mandatory

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

### Code Name

H	Customer Pickup
M	Motor (Common Carrier)

# N9 Reference Identification

Pos: 295	Max: 1
Heading - Optional	
Loop: N9	Elements: 2

**User Option (Usage):** Recommended

**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Mandatory
<b>Description:</b> Code qualifying the Reference Identification						
<b>Code Name</b>						
L1 Letters or Notes						
<b>User Note 1:</b>						
<i>iTN will pass order notes from the buying organization in the N9 and MSG segments.</i>						
N902	127	<b>Reference Identification</b>	X	AN	1/30	Recommended
<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						
<b>User Note 1:</b> <i>iTN will send "GEN" in N902 to indicate that the MSG Segment contains General Notes.</i>						

# MSG Message Text

Pos: 300	Max: 30
Heading - Optional	
Loop: N9	Elements: 1

**User Option (Usage):** Recommended

**Purpose:** To provide a free-form format that allows the transmission of text information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MSG01	933	Free-Form Message Text	M	AN	1/264	Mandatory

**Description:** Free-form message text

## Syntax Rules:

1. C0302 - If MSG03 is present, then MSG02 is required.

## User Note 1:

*See Usage Notes in N9 segment for information regarding the usage of the MSG segment.*

# N1 Name

<b>Pos: 310</b>	<b>Max: 1</b>
<b>Heading - Optional</b>	
<b>Loop: N1</b>	<b>Elements: 4</b>

**User Option (Usage):** Recommended

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	<b>Entity Identifier Code</b>	M	ID	2/3	Mandatory

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

### Code Name

BO Broker or Sales Office

BT Bill-to-Party

#### **User Note 1:**

*iTN will always send an N1 segment with "BT" qualifier to identify the Bill To address.*

BY Buying Party (Purchaser)

#### **User Note 1:**

*iTN will always send an N1 segment with a "BY" qualifier to identify the Buying Party*

CA Carrier

OB Ordered By

PW Pick Up Address

SF Ship From

ST Ship To

#### **User Note 1:**

*iTN will always send an N1 segment with "ST" qualifier to identify the Ship To location.*

VN Vendor

#### **User Note 1:**

*iTN will always send an N1 segment with "VN" qualifier to identify the Vendor.*

N102	93	<b>Name</b>	X	AN	1/60	Recommended
------	----	-------------	---	----	------	-------------

**Description:** Free-form name

N103	66	<b>Identification Code Qualifier</b>	X	ID	1/2	Recommended
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**Description:** Code designating the system/method of code structure used for Identification Code (67)

### Code Name

1 D-U-N-S Number, Dun & Bradstreet

9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix

54 Warehouse

91 Assigned by Seller or Seller's Agent

92 Assigned by Buyer or Buyer's Agent

#### **User Note 1:**

*iTN will send a "92" qualifier to indicate that the code is assigned by Buyer.*

N104	67	<b>Identification Code</b>	X	AN	2/80	Recommended
------	----	----------------------------	---	----	------	-------------

**Description:** Code identifying a party or other code

**User Note 1:** *Configurable proprietary ID or corporate DUNS number may be transmitted.*

## 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.

# N3 Address Information

Pos: 330	Max: 1
Heading - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Recommended

**Purpose:** To specify the location of the named party

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	<b>Address Information</b>	M	AN	1/55	Mandatory
		<b>Description:</b> Address information				
N302	166	<b>Address Information</b>	O	AN	1/55	Recommended
		<b>Description:</b> Address information				

# N4 Geographic Location

Pos: 340	Max: 1
Heading - Conditional	
Loop: N1	Elements: 4

**User Option (Usage):** Recommended

**Purpose:** To specify the geographic place of the named party

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	<b>City Name</b>	O	AN	2/30	Recommended
		<b>Description:</b> Free-form text for city name				
N402	156	<b>State or Province Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency				
N403	116	<b>Postal Code</b>	O	ID	3/15	Recommended
		<b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	<b>Country Code</b>	O	ID	2/3	Recommended
		<b>Description:</b> Code identifying the country				

## Syntax Rules:

1. C0605 - If N406 is present, then N405 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.

# PER Administrative Communications Contact

Pos: 360	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Recommended

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PER01	366	<b>Contact Function Code</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Code identifying the major duty or responsibility of the person or group named				
		<b>Code Name</b>				
		CN General Contact				
PER02	93	<b>Name</b>	O	AN	1/60	Recommended
		<b>Description:</b> Free-form name				
PER03	365	<b>Communication Number Qualifier</b>	X	ID	2/2	Dependent
		<b>Description:</b> Code identifying the type of communication number				
		<b>All valid standard codes are used.</b>				
PER04	364	<b>Communication Number</b>	X	AN	1/80	Recommended
		<b>Description:</b> 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.

## User Note 1:

*This segment is used in N1 Loop for a specific purpose declared in N1-01 element.*

# PO1 Baseline Item Data

Pos: 010	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 11

**User Option (Usage):** Mandatory

**Purpose:** To specify basic and most frequently used line item data

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO101	350	<b>Assigned Identification</b>	O	AN	1/20	Recommended
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
		<b>User Note 1:</b> <i>This line identifier is persisted throughout the life of the order, and will be consistent for all transmissions.</i>				
PO102	330	<b>Quantity Ordered</b>	X	R	1/15	Recommended
		<b>Description:</b> Quantity ordered				
PO103	355	<b>Unit or Basis for Measurement Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>User Note 1:</b> <i>Code usage dependent upon trading partner acceptance.</i>				
		<b><u>Code</u> <u>Name</u></b>				
		BG Bag				
		BX Box				
		CA Case				
		CN Can				
		CS Cassette				
		DR Drum				
		EA Each				
		GA Gallon				
		LB Pound				
		OZ Ounce - Av				
		PA Pail				
		PC Piece				
		PK Package				
		TE Tote				
		UN Unit				
PO104	212	<b>Unit Price</b>	X	R	1/17	Recommended
		<b>Description:</b> Price per unit of product, service, commodity, etc.				
PO105	639	<b>Basis of Unit Price Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code identifying the type of unit price for an item				
		<b>User Note 1:</b> <i>Price UOM and quantity UOM must be consistent.</i>				
		<b><u>Code</u> <u>Name</u></b>				
		PE Price per Each				
		PK Price per Kilogram				
		PP Price per Pound				
PO106	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Recommended

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>Code Name</b>				
		UA U.P.C./EAN Case Code (2-5-5)				
		UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)				
		UP U.P.C. Consumer Package Code (1-5-5-1)				
PO107	234	<b>Product/Service ID</b>	X	AN	1/48	Recommended
		<b>Description:</b> Identifying number for a product or service				
PO108	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Mandatory
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>Code Name</b>				
		MG Manufacturer's Part Number				
		VN Vendor's (Seller's) Item Number				
		VP Vendor's (Seller's) Part Number				
PO109	234	<b>Product/Service ID</b>	X	AN	1/48	Mandatory
		<b>Description:</b> Identifying number for a product or service				
PO110	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Mandatory
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>Code Name</b>				
		PI Purchaser's Item Code				
PO111	234	<b>Product/Service ID</b>	X	AN	1/48	Mandatory
		<b>Description:</b> Identifying number for a product or service				

### Syntax Rules:

1. C0302 - If PO103 is present, then PO102 is required.
2. C0504 - If PO105 is present, then PO104 is required.
3. P0607 - If either PO106 or PO107 is present, then the other is required.
4. P0809 - If either PO108 or PO109 is present, then the other is required.
5. P1011 - If either PO110 or PO111 is present, then the other is required.
6. P1213 - If either PO112 or PO113 is present, then the other is required.
7. P1415 - If either PO114 or PO115 is present, then the other is required.
8. P1617 - If either PO116 or PO117 is present, then the other is required.
9. P1819 - If either PO118 or PO119 is present, then the other is required.
10. P2021 - If either PO120 or PO121 is present, then the other is required.
11. P2223 - If either PO122 or PO123 is present, then the other is required.
12. P2425 - If either PO124 or PO125 is present, then the other is required.

### Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. PO101 is the line item identification.
3. PO106 through PO125 provide for ten different product/service IDs per each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

**User Note 1:**

*iTN will send the supplier product code with qualifier "VP". UPC and Buyer product code will be sent if available.*

# MEA Measurements

Pos: 049	Max: 40
Detail - Optional	
Loop: PO1	Elements: 3

**User Option (Usage):** Recommended

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MEA02	738	<b>Measurement Qualifier</b>	O	ID	1/3	Mandatory
		<b>Description:</b> Code identifying a specific product or process characteristic to which a measurement applies				
		<b>Code Name</b>				
		G		Gross Weight		
		T		Tare Weight		
		WT		Weight		
MEA03	739	<b>Measurement Value</b>	X	R	1/20	Mandatory
		<b>Description:</b> The value of the measurement				
MEA04	C001	<b>Composite Unit of Measure</b>	X	Comp		Used
		<b>Description:</b> To identify a composite unit of measure(See Figures Appendix for examples of use)				
	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Mandatory
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>Code Name</b>				
		KG		Kilogram		
		LB		Pound		

## Syntax Rules:

1. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.

## Semantics:

1. MEA04 defines the unit of measure for MEA03.

# PID Product/Item Description

Pos: 050	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

**User Option (Usage):** Recommended

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

## Element Summary:

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

## Semantics:

- 1.

## Comments:

1. If PID01 equals "F", then PID05 is used.

# REF Reference Identification

Pos: 100	Max: 2
Detail - Optional	
Loop: PO1	Elements: 2

**User Option (Usage):** Recommended

**Purpose:** To specify identifying information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference Identification

**Code Name**

BD Bid Number

**User Note 1:**

*If REF01 is "BD", then REF02 will be the Bid Number.*

WM Weight Agreement Number

**User Note 1:**

*If REF01 is "WM", then REF02 will be the Price Bracket.*

REF02	127	Reference Identification	M	AN	1/30	Mandatory
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**Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

# SAC Service, Promotion, Allowance, or Charge Information

Pos: 130	Max: 1
Detail - Optional	
Loop: SAC	Elements: 15

**User Option (Usage):** Recommended

**Purpose:** 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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	<b>Allowance or Charge Indicator</b>	M	ID	1/1	Mandatory
		<b>Description:</b> Code which indicates an allowance or charge for the service specified				
		<b>Code Name</b>				
		A Allowance				
		C Charge				
SAC02	1300	<b>Service, Promotion, Allowance, or Charge Code</b>	C	ID	4/4	Mandatory
		<b>Description:</b> Code identifying the service, promotion, allowance, or charge				
		<b>User Note 1:</b> Accepted codes are dependent upon the trading relationship. Please confirm code acceptance with trading partner.				
		<b>All valid standard codes are used.</b>				
SAC03	559	<b>Agency Qualifier Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code identifying the agency assigning the code values				
		<b>Code Name</b>				
		AB Assigned by Buyer				
		AS Assigned by Seller				
SAC04	1301	<b>Agency Service, Promotion, Allowance, or Charge Code</b>	O	AN	1/10	Recommended
		<b>Description:</b> Agency maintained code identifying the service, promotion, allowance, or charge				
SAC05	610	<b>Amount</b>	O	N2	1/15	Recommended
		<b>Description:</b> Monetary amount				
SAC06	378	<b>Allowance/Charge Percent Qualifier</b>	C	ID	1/1	Recommended
		<b>Description:</b> Code indicating on what basis allowance or charge percent is calculated				
		<b>All valid standard codes are used.</b>				
SAC07	332	<b>Percent</b>	X	R	1/6	Used
		<b>Description:</b> Percent expressed as a percent				
		<b>User Note 1:</b> Informational only. Total amount or rate x quantity are used to determine the amount of the allowance or charge.				
SAC08	118	<b>Rate</b>	O	R	1/9	Used
		<b>Description:</b> Rate expressed in the standard monetary denomination for the currency specified				
SAC09	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		value is being expressed, or manner in which a measurement has been taken				
		<b>Code Name</b>				
		CA Case				
		DO Dollars, U.S.				
		EA Each				
		KG Kilogram				
		LB Pound				
SAC10	380	<b>Quantity</b>	O	R	1/15	Used
		<b>Description:</b> Numeric value of quantity				
SAC11	380	<b>Quantity</b>	O	R	1/15	Recommended
		<b>Description:</b> Numeric value of quantity				
SAC12	331	<b>Allowance or Charge Method of Handling Code</b>	O	ID	2/2	Recommended
		<b>Description:</b> Code indicating method of handling for an allowance or charge				
		<b>Code Name</b>				
		01 Bill Back				
		02 Off Invoice				
		06 Charge to be Paid by Customer				
SAC13	127	<b>Reference Identification</b>	X	AN	1/30	Recommended
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
SAC14	770	<b>Option Number</b>	O	AN	1/20	Recommended
		<b>Description:</b> A unique number identifying available promotion or allowance options when more than one is offered				
SAC15	352	<b>Description</b>	X	AN	1/80	Recommended
		<b>Description:</b> A free-form description to clarify the related data elements and their content				

### 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. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 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 to further the code in 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.

**User Note 1:**

*Trading Partners must send this information if it affects pricing and completeness of the transaction.*

**User Note 2:**

*Only allowances and charges are supported. Informational only SAC are not allowed.*

**User Note 3:**

*SAC total amount OR rate x quantity must be included to determine the total amount of the allowance or charge.*

# N9 Reference Identification

Pos: 330	Max: 1
Detail - Optional	
Loop: N9	Elements: 2

**User Option (Usage):** Recommended

**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Mandatory
		<b>Description:</b> Code qualifying the Reference Identification				
		<b>Code Name</b>				
		L1 Letters or Notes				
N902	127	<b>Reference Identification</b>	X	AN	1/30	Recommended
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

# MSG Message Text

Pos: 340	Max: 30
Detail - Optional	
Loop: N9	Elements: 1

**User Option (Usage):** Recommended

**Purpose:** To provide a free-form format that allows the transmission of text information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MSG01	933	Free-Form Message Text	M	AN	1/264	Mandatory

**Description:** Free-form message text

# CTT Transaction Totals

Pos: 010	Max: 1
Summary - Mandatory	
Loop: CTT	Elements: 6

**User Option (Usage):** Mandatory

**Purpose:** To transmit a hash total for a specific element in the transaction set

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	<b>Number of Line Items</b>	M	N0	1/6	Mandatory
		<b>Description:</b> Total number of line items in the transaction set				
CTT02	347	<b>Hash Total</b>	O	R	1/10	Mandatory
		<b>Description:</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.				
CTT03	81	<b>Weight</b>	X	R	1/10	Recommended
		<b>Description:</b> Numeric value of weight				
CTT04	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Recommended
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>Code Name</b>				
		GA Gallon				
		KG Kilogram				
		LB Pound				
		OZ Ounce - Av				
CTT05	183	<b>Volume</b>	X	R	1/8	Recommended
		<b>Description:</b> Value of volumetric measure				
CTT06	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Recommended
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>Code Name</b>				
		CF Cubic Feet				
		CI Cubic Inches				
		CR Cubic Meter				
		CY Cubic Yard				

## Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

# SE Transaction Set Trailer

Pos: 030	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Mandatory

**Purpose:** 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:

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

## Comments:

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

# GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Mandatory

**Purpose:** To indicate the end of a functional group and to provide control information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	<b>Number of Transaction Sets Included</b>	M	N0	1/6	Mandatory
		<b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
GE02	28	<b>Group Control Number</b>	M	N0	1/9	Mandatory
		<b>Description:</b> Assigned number originated and maintained by the sender				

## Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

## Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

# IEA Interchange Control Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Mandatory

**Purpose:** To define the end of an interchange of zero or more functional groups and interchange-related control segments

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	<b>Number of Included Functional Groups</b>	M	N0	1/5	Mandatory
		<b>Description:</b> A count of the number of functional groups included in an interchange				
IEA02	I12	<b>Interchange Control Number</b>	M	N0	9/9	Mandatory
		<b>Description:</b> A control number assigned by the interchange sender				