



# 856 Ship Notice/Manifest -

X12/V4010/856: 856 Ship Notice/Manifest

**Version: 5.1 4010 Final**

<b>Company:</b>	<b>iTradeNetwork</b>
<b>Publication:</b>	<b>9/7/2018</b>
<b>Trading Partner:</b>	<b>iTN Supplier Version</b>
<b>Notes:</b>	<b>Universal 856 Draft version to accommodate supplier requirements for ASNs across multiple trading partners. This version supports both palletized and non-palletized ASN.</b>

# 856 Ship Notice/Manifest

## Functional Group=SH

**Purpose:** This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

### 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			Must use
020	BSN	Beginning Segment for Ship Notice	M	1			Must use

### 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>
<b>LOOP ID - HL</b>					<b><u>1</u></b>	<b><u>C2/010L</u></b>	
010	HL	Hierarchical Level	M	1		C2/010	Must use
110	TD1	Carrier Details (Quantity and Weight)	O	2			Recommended
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1			Recommended
130	TD3	Carrier Details (Equipment)	O	2			Used
150	REF	Reference Identification	O	1			Used
190	MAN	Marks and Numbers	O	>1			Used
200	DTM	Date/Time Reference	O	5			Must use
<b>LOOP ID - N1</b>					<b><u>6</u></b>		
220	N1	Name	M	1			Must use
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
270	PER	Administrative Communications Contact	O	3			Not used
<b>LOOP ID - HL</b>					<b><u>200000</u></b>		
010	HL	Hierarchical Level	M	1			Must use
030	SN1	Item Detail (Shipment)	O	1			Used
050	PRF	Purchase Order Reference	M	1			Must use
100	PKG	Marking, Packaging, Loading	O	25			Used
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
150	REF	Reference Identification	M	5			Must use
<b>LOOP ID - N1</b>					<b><u>3</u></b>		

<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>
220	N1	Name	M	1			Recommended
<b><u>LOOP ID - HL</u></b>					<b><u>200000</u></b>		
010	HL	Hierarchical Level	C	1			Used
100	PKG	Marking, Packaging, Loading	O	25			Used
110	TD1	Carrier Details (Quantity and Weight)	C	2			Used
150	REF	Reference Identification	O	>1			Used
190	MAN	Marks and Numbers	C	>1			Used
215	PAL	Pallet Information	C	1			Used
<b><u>LOOP ID - N1</u></b>					<b><u>200</u></b>		
220	N1	Name	O	1			Used
<b><u>LOOP ID - HL</u></b>					<b><u>200000</u></b>		
010	HL	Hierarchical Level	M	1			Must use
020	LIN	Item Identification	M	1			Must use
030	SN1	Item Detail (Shipment)	O	1			Must use
040	SLN	Subline Item Detail	O	1000			Used
070	PID	Product/Item Description	O	200			Used
080	MEA	Measurements	O	40			Used
190	MAN	Marks and Numbers	O	>1			Used
<b><u>LOOP ID - HL</u></b>					<b><u>200000</u></b>		
010	HL	Hierarchical Level	O	1			Used
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
080	MEA	Measurements	O	40			Used
190	MAN	Marks and Numbers	O	>1			Used
200	DTM	Date/Time Reference	O	2			Used

**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>
010	CTT	Transaction Totals	O	1		N3/010	Must use
020	SE	Transaction Set Trailer	M	1			Must use

**Notes:**

3/010 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

**Comments:**

2/010L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

2/010 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

**iTradeNetwork User Notes:**

*Original draft issued April 17, 2013. Final Draft issued December 2013.*

*This specification represents a universal EDI X12 856 v.4010 that will account for a physical pallet specification that satisfies the iTN, DOT, and PTI requirements, as well as future trading partners.*

*To arrive at this final spec, several liberties will be necessary to adhere to the basic structure and intent of the distributor 856s. The noted changes were needed to get to this 4010 version. Also note that attributes that are not in use by a distributor can still be sent on the 856, but will not be passed to the distributor. (6/23/2014)- Finally, some attributes listed in this specification are for future use but can be supported upon request.*

*January 29, 2014- Batch-level case quantity moved from SLN segment to SN1 segment to remain consistent with pack level.*

*June 19, 2014- Palletized and non-palletized versions combined. Non-palletized removes Tare HL loop.*

*May 26, 2017- TD5 segment changed from 'Not Used' to 'Recommended'*

*-PID segment changed from 'Not Used' to 'Used'.*

*- Note indicating that HL03 'P' heirarchical Level indicator can be substituted with HL 'I'.*

*November 2, 2017 - DTM Qualifier Requirements for WalMart Added. Supports the iTraceFresh TRANSIT - Storage and Delivery solution for traceability.*

*September 9, 2018 - REF code 'LO' added for Load Planning Number in detail area. Notes added to REF code 'BM' in detail area. Notes added to TD106 in detail area.*

# ST Transaction Set Header

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

**User Option (Usage):** Must use

**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	Must use
		<b>Description:</b> Code uniquely identifying a Transaction Set				
		<b>CodeList Summary</b> (Total Codes: 298, Included: 1)				
		<b>Code Name</b>				
		856 Ship Notice/Manifest				
ST02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Must use
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

## 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).

# BSN Beginning Segment for Ship Notice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

**User Option (Usage):** Must use

**Purpose:** To transmit identifying numbers, dates, and other basic data relating to 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>
BSN01	353	<b>Transaction Set Purpose Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code identifying purpose of transaction set				
		<b>CodeList Summary</b> (Total Codes: 65, Included: 2)				
		<b>Code</b>		<b>Name</b>		
		00		Original		
		<b>WalMart Specific Notes:</b>				
		<i>Originals and Replace accepted by WalMart.</i>				
		05		Replace		
BSN02	396	<b>Shipment Identification</b>	M	AN	2/30	Must use
		<b>Description:</b> A unique control number assigned by the original shipper to identify a specific shipment				
BSN03	373	<b>Date</b>	M	DT	8/8	Must use
		<b>Description:</b> Date expressed as CCYYMMDD				
BSN04	337	<b>Time</b>	M	TM	4/8	Must use
		<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)				

## Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.

## Comments:

1. BSN06 and BSN07 differentiate the functionality of use for the transaction set.

# HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

**User Option (Usage):** Must use

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Not used
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 170, Included: 1)				
		<b>Code Name</b>				
		S	Shipment			

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

## iTradeNetwork User Notes:

*Shipment Level*

# TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 2
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Recommended

**Purpose:** To specify the transportation details relative to commodity, weight, and quantity

## 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>
TD101	103	Packaging Code	O	AN	3/5	Recommended

**Description:** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

**CodeList Summary** (Total Codes: 148, Included: 5)

**Code Name**

- CAS Case
- CTN Carton
- INT Intermediate Container

**iTradeNetwork User Notes:**

*Use INT code for Returnable Pallets or Returnable Plastic Containers only.*

- MIX Mixed Container Types

**Description:** More than one type of container is included in a shipment (shipment could consist of 3 pieces that include 1 box, 1 crate, and 1 basket)

- PLT Pallet

TD102	80	Lading Quantity	X	N0	1/7	Used
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**Description:** Number of units (pieces) of the lading commodity

**WalMart Specific Notes:** TD1 02 is the number of pallets in the shipment as described in TD1 01.

TD106	187	Weight Qualifier	O	ID	1/2	Dependent
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**Description:** Code defining the type of weight

**iTradeNetwork User Notes:** TD1 repeats 2 times if both Gross and Net weights are included

**CodeList Summary** (Total Codes: 51, Included: 2)

**Code Name**

- G Gross Weight
- N Actual Net Weight

TD107	81	Weight	X	R	1/10	Recommended
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**Description:** Numeric value of weight



<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD108	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Dependent

**Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

**CodeList Summary** (Total Codes: 794, Included: 2)

**Code Name**

KG Kilogram

LB Pound

### Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0607 - If TD106 is present, then TD107 is required.
3. P0708 - If either TD107 or TD108 is present, then the other is required.

### WalMart Specific Notes:

*At least one instance of this segment is requested by WalMart and should contain either a Lading Quantity TD1 02 or Weight TD1 07.*

# TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 120	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

**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>
TD501	133	<b>Routing Sequence Code</b>	O	ID	1/2	Used
<p><b>Description:</b> Code describing the relationship of a carrier to a specific shipment movement</p> <p><b>CodeList Summary</b> (Total Codes: 23, Included: 1)</p> <p><b>Code Name</b></p> <p>B Origin/Delivery Carrier (Any Mode)</p>						
TD502	66	<b>Identification Code Qualifier</b>	X	ID	1/2	Used
<p><b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)</p> <p><b>CodeList Summary</b> (Total Codes: 215, Included: 1)</p> <p><b>Code Name</b></p> <p>2 Standard Carrier Alpha Code (SCAC)</p>						
TD503	67	<b>Identification Code</b>	X	AN	2/80	Used
<p><b>Description:</b> Code identifying a party or other code</p> <p><b>iTradeNetwork User Notes:</b> SCAC code.</p>						
TD504	91	<b>Transportation Method/Type Code</b>	X	ID	1/2	Used
<p><b>Description:</b> Code specifying the method or type of transportation for the shipment</p> <p><b>CodeList Summary</b> (Total Codes: 71, Included: 2)</p> <p><b>Code Name</b></p> <p>H Customer Pickup</p> <p>M Motor (Common Carrier)</p>						
TD505	387	<b>Routing</b>	X	AN	1/35	Used
<p><b>Description:</b> Free-form description of the routing or requested routing for shipment, or the originating carrier's identity</p> <p><b>iTradeNetwork User Notes:</b> Vessel/Carrier Name</p>						

## Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.

**WalMart Specific Notes:**

*At least one instance of this segment is required by WalMart and must contain the SCAC code in the Identification Code TD5 03 with Standard Carrier Alpha Code (2) qualifier in the Identification Code Qualifier TD5 02.*

# TD3 Carrier Details (Equipment)

Pos: 130	Max: 2
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify transportation details relating to the equipment used by the carrier

## 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>
TD302	206	<b>Equipment Initial</b>	O	AN	1/4	Used
		<b>Description:</b> Prefix or alphabetic part of an equipment unit's identifying number <b>iTradeNetwork User Notes:</b> <i>Container prefix</i>				
TD303	207	<b>Equipment Number</b>	X	AN	1/10	Used
		<b>Description:</b> Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) <b>iTradeNetwork User Notes:</b> <i>Container ID</i>				
TD308	407	<b>Seal Status Code</b>	O	ID	2/2	Used
		<b>Description:</b> Code indicating condition of door seal upon arrival <b>CodeList Summary</b> (Total Codes: 4, Included: 2) <u>Code</u> <u>Name</u> 01 Intact 04 Replaced				
TD309	225	<b>Seal Number</b>	O	AN	2/15	Used
		<b>Description:</b> Unique number on seal used to close a shipment				

## Syntax Rules:

1. C0203 - If TD302 is present, then TD303 is required.

## iTradeNetwork User Notes:

*For original seal numbers, one iteration of the TD3 segment should be transmitted where TD308='01' (Intact).*

*For replacement seal numbers, two iterations of the TD3 segment should be transmitted. The first TD308='01' (Intact) should be transmitted indicating the existing seal number. The second TD308='04' (Replaced) should be transmitted indicating the seal number that was replaced.*

# REF Reference Identification

Pos: 150	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**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	Used

**Description:** Code qualifying the Reference Identification

**CodeList Summary** (Total Codes: 1503, Included: 7)

**Code Name**

2I Tracking Number

AO Appointment Number

**WalMart Specific Notes:**

*WalMart requires the Appointment Number, use this qualifier for that purpose.*

BM Bill of Lading Number

**WalMart Specific Notes:**

*WalMart requires the Bill of Lading Number, use code UCB for Bill of Lading Number for Walmart.*

DJ Delivery Ticket Number

LO Load Planning Number

**WalMart Specific Notes:**

*WalMart requires the Load Planning Number, use this qualifier for that purpose.*

MG Meter Number

P8 Pickup Reference Number

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

## Syntax Rules:

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

# MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## 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>
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use

**Description:** Code specifying the application or source of Marks and Numbers (87)

**iTradeNetwork User Notes:** *This segment is used to specify a single GS1-128 Serial Shipping Container Code to identify an entire shipment, e.g. a full trailer.*

**CodeList Summary** (Total Codes: 20, Included: 1)

### Code Name

GM SSCC-18 and Application Identifier

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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**Description:** Marks and numbers used to identify a shipment or parts of a shipment

## Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.
2. C0605 - If MAN06 is present, then MAN05 is required.

## Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

## Comments:

1. When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
2. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
3. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

# DTM Date/Time Reference

Pos: 200	Max: 5
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Must use

**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	Must use
		<b>Description:</b> Code specifying type of date or time, or both date and time				
		<b>CodeList Summary</b> (Total Codes: 1112, Included: 2)				
		<b>Code Name</b>				
		011 Shipped				
		067 Current Schedule Delivery				
DTM02	373	<b>Date</b>	X	DT	8/8	Used
		<b>Description:</b> Date expressed as CCYYMMDD				
DTM03	337	<b>Time</b>	X	TM	4/8	Used
		<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)				

## Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.

# N1 Name

Pos: 220	Max: 1
Detail - Mandatory	
Loop: N1	Elements: 4

**User Option (Usage):** Must use

**Purpose:** 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

**CodeList Summary** (Total Codes: 1312, Included: 2)

**Code Name**

SF Ship From  
ST Ship To

N102	93	Name	X	AN	1/60	Must use
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**Description:** Free-form name

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

**CodeList Summary** (Total Codes: 215, Included: 4)

**Code Name**

9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix  
91 Assigned by Seller or Seller's Agent  
92 Assigned by Buyer or Buyer's Agent  
UL UCC/EAN Location Code

**Description:** A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system

**iTradeNetwork User Notes:**

GLN (Global Location Number)

N104	67	Identification Code	X	AN	2/80	Must use
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**Description:** Code identifying a party or other code

## Syntax Rules:

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

## Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction



processing party.

# N3 Address Information

Pos: 240	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Used

**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	Must use
		<b>Description:</b> Address information				
N302	166	<b>Address Information</b>	O	AN	1/55	Used
		<b>Description:</b> Address information				

# N4 Geographic Location

Pos: 250	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Used

**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	Used
		<b>Description:</b> Free-form text for city name				
N402	156	<b>State or Province Code</b>	O	ID	2/2	Used
		<b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency				
N403	116	<b>Postal Code</b>	O	ID	3/15	Used
		<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	Used
		<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: 270	Max: 3
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Not used

**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	Not used
		<b>Description:</b> Code identifying the major duty or responsibility of the person or group named				
		<b>CodeList Summary</b> (Total Codes: 230, Included: 1)				
		<b>Code</b>		<b>Name</b>		
		SH		Shipper Contact		
PER02	93	<b>Name</b>	O	AN	1/60	Not used
		<b>Description:</b> Free-form name				
PER03	365	<b>Communication Number Qualifier</b>	O	ID	2/2	Not used
		<b>Description:</b> Code identifying the type of communication number				
		<b>CodeList Summary</b> (Total Codes: 40, Included: 1)				
		<b>Code</b>		<b>Name</b>		
		TE		Telephone		
PER04	364	<b>Communication Number</b>	O	AN	1/80	Not used
		<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.
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.

## iTradeNetwork User Notes:

*PER used for Ship From only.*

# HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

**User Option (Usage):** Must use

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	M	AN	1/12	Used
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 170, Included: 1)				
		<b><u>Code</u></b>	<b><u>Name</u></b>			
		O	Order			

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

## iTradeNetwork User Notes:

*Order Level*

# SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify line-item detail relative 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>
SN102	382	<b>Number of Units Shipped</b>	M	R	1/10	Must use
		<b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

**CodeList Summary** (Total Codes: 794, Included: 1)

**Code Name**

PL Pallet/Unit Load

## Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

## Semantics:

1. SN101 is the ship notice line-item identification.

## Comments:

1. SN103 defines the unit of measurement for both SN102 and SN104.

# PRF Purchase Order Reference

Pos: 050	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 5

**User Option (Usage):** Must use

**Purpose:** To provide reference to a specific purchase order

## 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>
PRF01	324	<b>Purchase Order Number</b>  <b>Description:</b> Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Must use
PRF02	328	<b>Release Number</b>  <b>Description:</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
PRF03	327	<b>Change Order Sequence Number</b>  <b>Description:</b> Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set	O	AN	1/8	Used
PRF04	373	<b>Date</b>  <b>Description:</b> Date expressed as CCYYMMDD <b>iTradeNetwork User Notes:</b> <i>Order creation date</i>	O	DT	8/8	Must use
PRF07	92	<b>Purchase Order Type Code</b>  <b>Description:</b> Code specifying the type of Purchase Order  <b>CodeList Summary</b> (Total Codes: 69, Included: 2) <b>Code Name</b> DS Dropship SO Shipped Order	O	ID	2/2	Used

## Semantics:

1. PRF04 is the date assigned by the purchaser to purchase order.

# PKG Marking, Packaging, Loading

Pos: 100	Max: 25
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To describe marking, packaging, loading, and unloading requirements

## 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>
PKG01	349	<b>Item Description Type</b>	X	ID	1/1	Used
		<b>Description:</b> Code indicating the format of a description				
		<b>CodeList Summary</b> (Total Codes: 3, Included: 1)				
		<b><u>Code</u> <u>Name</u></b>				
		F Free-form				
PKG02	753	<b>Packaging Characteristic Code</b>	O	ID	1/5	Used
		<b>Description:</b> Code specifying the marking, packaging, loading and related characteristics being described				
		<b>CodeList Summary</b> (Total Codes: 44, Included: 1)				
		<b><u>Code</u> <u>Name</u></b>				
		68 Skid/Pallet Type				
PKG05	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				

## Syntax Rules:

1. R040506 - At least one of PKG04, PKG05 or PKG06 is required.
2. C0403 - If PKG04 is present, then PKG03 is required.
3. C0501 - If PKG05 is present, then PKG01 is required.

## Semantics:

1. PKG04 should be used for industry-specific packaging description codes.

## Comments:

1. Use the MEA (Measurements) Segment to define dimensions, tolerances, weights, counts, physical restrictions, etc.
2. If PKG01 equals "F", then PKG05 is used. If PKG01 equals "S", then PKG04 is used. If PKG01 equals "X", then both PKG04 and PKG05 are used.
3. Use PKG03 to indicate the organization that publishes the code list being referred to.
4. Special marking or tagging data can be given in PKG05 (description).



# TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 20
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

**Purpose:** To specify the transportation details relative to commodity, weight, and quantity

## 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>
TD101	103	<b>Packaging Code</b>	O	AN	3/5	Used

**Description:** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

**CodeList Summary** (Total Codes: 148, Included: 2)

Code Name

CTN Carton

PLT Pallet

TD102	80	<b>Lading Quantity</b>	X	N0	1/7	Used
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**Description:** Number of units (pieces) of the lading commodity

TD106	187	<b>Weight Qualifier</b>	O	ID	1/2	Used
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**Description:** Code defining the type of weight

**CodeList Summary** (Total Codes: 51, Included: 1)

Code Name

G Gross Weight

TD107	81	<b>Weight</b>	X	R	1/10	Used
-------	----	---------------	---	---	------	------

**Description:** Numeric value of weight

TD108	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
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**Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

**CodeList Summary** (Total Codes: 794, Included: 2)

Code Name

KG Kilogram

LB Pound

## Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.

5. P0910 - If either TD109 or TD110 is present, then the other is required.

# REF Reference Identification

Pos: 150	Max: 5
Detail - Mandatory	
Loop: HL	Elements: 2

**User Option (Usage):** Must use

**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	Must use

**Description:** Code qualifying the Reference Identification

**iTradeNetwork User Notes:** Code IL required on 856 for iTN order identification

**CodeList Summary** (Total Codes: 1503, Included: 8)

### Code Name

CR Customer Reference Number

IL Internal Order Number

**iTradeNetwork User Notes:**

*iTN Internal Order number - This is required if you did not send a Sales Order Number in the 855.*

IV Seller's Invoice Number

L1 Letters or Notes

VN Vendor Order Number

**iTradeNetwork User Notes:**

*Vendor Sales Order number is required if you do not send the "IL"*

VR Vendor ID Number

**iTradeNetwork User Notes:**

*Buyer's Internal Vendor ID*

YB Revision Number

YD Buyer Identification

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

## Syntax Rules:

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

## iTradeNetwork User Notes:

*REF\*IL originally transmitted on the EDI 850 is required to be returned on the 856.*

# N1 Name

Pos: 220	Max: 1
Detail - Mandatory	
Loop: N1	Elements: 4

**User Option (Usage):** Recommended

**Purpose:** 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	Recommended

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

**iTradeNetwork User Notes:** Codes VN and BY required for iTN order identification.

**CodeList Summary** (Total Codes: 1312, Included: 3)

### Code Name

BY	Buying Party (Purchaser)
MA	Party for whom Item is Ultimately Intended
VN	Vendor

N102	93	Name	X	AN	1/60	Recommended
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**Description:** Free-form name

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

**CodeList Summary** (Total Codes: 215, Included: 4)

### Code Name

9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix
91	Assigned by Seller or Seller's Agent
92	Assigned by Buyer or Buyer's Agent
UL	UCC/EAN Location Code

**Description:** A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system

### iTradeNetwork User Notes:

GLN (Global Location Number)

N104	67	Identification Code	M	AN	2/80	Recommended
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**Description:** Code identifying a party or other code

## Syntax Rules:

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

**Comments:**

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

**iTradeNetwork User Notes:**

*Suppliers are required to send N1\*VN and N1\*BY segments.*

# HL Hierarchical Level

Pos: 010	Max: 1
Detail - Conditional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	M	AN	1/12	Used
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 170, Included: 1)				
		<b><u>Code</u></b>	<b><u>Name</u></b>			
		T	Shipping Tare			

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

## iTradeNetwork User Notes:

### *Pallet/Tare Level*

*This Tare HL loop is required for palletized ASNs and omitted for non-palletized ASNs. Please confirm with your buyer as to whether palletized or non-palletized ASNs are needed. When Tare HL loop is omitted, the Order HL loop is followed by the Pack HL loop. An individual ASN transaction must adhere to either a palletized or non-palletized format, and cannot be a combination of formats.*

# PKG Marking, Packaging, Loading

Pos: 100	Max: 25
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To describe marking, packaging, loading, and unloading requirements

## 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>
PKG01	349	<b>Item Description Type</b>	X	ID	1/1	Used
		<b>Description:</b> Code indicating the format of a description				
		<b>CodeList Summary</b> (Total Codes: 3, Included: 1)				
		<b>Code</b>		<b>Name</b>		
		F		Free-form		
PKG02	753	<b>Packaging Characteristic Code</b>	O	ID	1/5	Used
		<b>Description:</b> Code specifying the marking, packaging, loading and related characteristics being described				
		<b>WalMart Specific Notes:</b> <i>All valid standard codes are used.</i>				
PKG05	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				

## Syntax Rules:

1. R040506 - At least one of PKG04, PKG05 or PKG06 is required.
2. C0403 - If PKG04 is present, then PKG03 is required.
3. C0501 - If PKG05 is present, then PKG01 is required.

## Semantics:

1. PKG04 should be used for industry-specific packaging description codes.

## Comments:

1. Use the MEA (Measurements) Segment to define dimensions, tolerances, weights, counts, physical restrictions, etc.
2. If PKG01 equals "F", then PKG05 is used. If PKG01 equals "S", then PKG04 is used. If PKG01 equals "X", then both PKG04 and PKG05 are used.
3. Use PKG03 to indicate the organization that publishes the code list being referred to.
4. Special marking or tagging data can be given in PKG05 (description).

# TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 2
Detail - Conditional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

**Purpose:** To specify the transportation details relative to commodity, weight, and quantity

## 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>
TD101	103	<b>Packaging Code</b>	O	AN	3/5	Must use
		<b>Description:</b> Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required				
		<b>CodeList Summary</b> (Total Codes: 148, Included: 1)				
		<u>Code</u>	<u>Name</u>			
		CAS	Case			
TD102	80	<b>Lading Quantity</b>	X	N0	1/7	Must use
		<b>Description:</b> Number of units (pieces) of the lading commodity				
TD106	187	<b>Weight Qualifier</b>	O	ID	1/2	Used
		<b>Description:</b> Code defining the type of weight				
		<b>CodeList Summary</b> (Total Codes: 51, Included: 2)				
		<u>Code</u>	<u>Name</u>			
		G	Gross Weight			
		<b>iTradeNetwork User Notes:</b>				
		<i>Pallet Gross weight is required for palletized ASN.</i>				
		N	Actual Net Weight			
TD107	81	<b>Weight</b>	X	R	1/10	Used
		<b>Description:</b> Numeric value of weight				
TD108	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>WalMart Specific Notes:</b> <i>All valid codes are used.</i>				

## Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0607 - If TD106 is present, then TD107 is required.
3. P0708 - If either TD107 or TD108 is present, then the other is required.



**iTradeNetwork User Notes:**

*Required for palletized ASNs.*

# REF Reference Identification

Pos: 150	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**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	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		<b>CodeList Summary</b> (Total Codes: 1503, Included: 1)				
		<b>Code Name</b>				
		MG		Meter Number		
REF02	127	<b>Reference Identification</b>	X	AN	1/30	Used
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

## 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.

## iTradeNetwork User Notes:

*Use Lot Number at either the Tare/Pallet or the Item/Case Level.*

# MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Conditional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## 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>
MAN01	88	<b>Marks and Numbers Qualifier</b>	M	ID	1/2	Must use
<p><b>Description:</b> Code specifying the application or source of Marks and Numbers (87)</p> <p><b>CodeList Summary</b> (Total Codes: 20, Included: 1)</p> <p><b>Code Name</b></p> <p>GM SSCC-18 and Application Identifier</p>						
MAN02	87	<b>Marks and Numbers</b>	M	AN	1/48	Must use
<p><b>Description:</b> Marks and numbers used to identify a shipment or parts of a shipment</p> <p><b>iTradeNetwork User Notes:</b> <i>LPN Number or 20-digit pallet identifier.</i></p>						
MAN04	88	<b>Marks and Numbers Qualifier</b>	X	ID	1/2	Used
<p><b>Description:</b> Code specifying the application or source of Marks and Numbers (87)</p> <p><b>CodeList Summary</b> (Total Codes: 20, Included: 1)</p> <p><b>Code Name</b></p> <p>SI Self-Identifying Container via Radio Frequency ID Device</p> <p><b>Description:</b> <i>Inbound containers that do not need manual routing</i></p>						
MAN05	87	<b>Marks and Numbers</b>	X	AN	1/48	Used
<p><b>Description:</b> Marks and numbers used to identify a shipment or parts of a shipment</p>						

## Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.

## Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.

## Comments:

1. When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
2. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
3. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the

two ID numbers must be maintained.

**iTradeNetwork User Notes:**

*The Tare level MAN is used to specify the identification number for the pallet. Mandatory only for palletized ASNs.*

# PAL Pallet Information

Pos: 215                      Max: 1  
 Detail - Conditional  
 Loop: HL                    Elements: 3

**User Option (Usage):** Used

**Purpose:** To identify the type and physical attributes of the pallet, and, gross weight, gross volume, and height of the load and the pallet

**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>
PAL01	883	<b>Pallet Type Code</b>	O	ID	1/2	Used
		<b>Description:</b> Code indicating the type of pallet				
		<b>CodeList Summary</b> (Total Codes: 7, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		4		Standard		
PAL02	884	<b>Pallet Tiers</b>	O	N0	1/3	Used
		<b>Description:</b> The number of layers per pallet				
PAL03	885	<b>Pallet Blocks</b>	O	N0	1/3	Used
		<b>Description:</b> The number of pieces (cartons) per layer on the pallet				

# N1 Name

Pos: 220	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Used

**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	Must use

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

**CodeList Summary** (Total Codes: 1312, Included: 1)

**Code Name**

SN Store

N102	93	<b>Name</b>	X	AN	1/60	Used
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**Description:** Free-form name

N103	66	<b>Identification Code Qualifier</b>	X	ID	1/2	Used
------	----	--------------------------------------	---	----	-----	------

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

**CodeList Summary** (Total Codes: 215, Included: 4)

**Code Name**

9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix  
 91 Assigned by Seller or Seller's Agent  
 92 Assigned by Buyer or Buyer's Agent  
 UL UCC/EAN Location Code

**Description:** A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system

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

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

## Syntax Rules:

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

## Comments:

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

## iTradeNetwork User Notes:

*This segment is used to identify the product destination, e.g. store, in a cross-docking environment.*

# HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

**User Option (Usage):** Must use

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 170, Included: 1)				
		<b><u>Code</u></b>	<b><u>Name</u></b>			
		P	Pack			

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

## iTradeNetwork User Notes:

*Pack/Item/Case Level*

*Note that hierarchial level code 'I' can be substituted for 'P' in the HL03.*



# LIN Item Identification

Pos: 020	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 9

**User Option (Usage):** Must use

**Purpose:** To specify basic item identification data

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	Assigned Identification	O	AN	1/20	Must use

**Description:** Alphanumeric characters assigned for differentiation within a transaction set

**iTradeNetwork User Notes:** *LIN01 should match the PO101 from the 850 for a particular line item. ITN will augment the document with the appropriate value from our database unless duplicate product codes exist on separate lines.*

LIN02	235	Product/Service ID Qualifier	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 477, Included: 3)

**Code Name**

UA U.P.C./EAN Case Code (2-5-5)

UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)

**Description:** *A 14-digit code that uniquely identifies the manufacturer's shipping unit, including the packaging indicator and check digit; the first digit is the packaging indicator, the next two digits are the number system characters, the next five digits are the manufacturer ID number, the second five digits are the item code, and the final digit is the check digit*

UP U.P.C. Consumer Package Code (1-5-5-1)

LIN03	234	Product/Service ID	C	AN	1/48	Used
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**Description:** Identifying number for a product or service

LIN04	235	Product/Service ID Qualifier	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 477, Included: 2)

**Code Name**

MG Manufacturer's Part Number

VN Vendor's (Seller's) Item Number

LIN05	234	Product/Service ID	C	AN	1/48	Used
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<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> Identifying number for a product or service				
LIN06	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Must use
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>CodeList Summary</b> (Total Codes: 477, Included: 1)				
		<b>Code Name</b>				
		PI Purchaser's Item Code				
LIN07	234	<b>Product/Service ID</b>	C	AN	1/48	Must use
		<b>Description:</b> Identifying number for a product or service				
LIN08	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>iTradeNetwork User Notes:</b> <i>Either Case Code or Product Code required in LIN03, LIN05 or LIN07. Country of Origin can be sent either in the pack or batch level but not both.</i>				
		<b>CodeList Summary</b> (Total Codes: 477, Included: 1)				
		<b>Code Name</b>				
		CH Country of Origin Code				
		<b>iTradeNetwork User Notes:</b> <i>To identify the country of origin, the ISO Country Code is used. To identify more than one country: country code, space, country code, etc.</i>				
LIN09	234	<b>Product/Service ID</b>	X	AN	1/48	Used
		<b>Description:</b> Identifying number for a product or service				

### Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.

### Semantics:

1. LIN01 is the line item identification

### Comments:

1. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

### iTradeNetwork User Notes:

*Either Case Code or Product Code required in LIN03, LIN05 or LIN07. Country of Origin can be sent either at the pack or batch level, but not both.*

# SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Must use

**Purpose:** To specify line-item detail relative 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>
SN102	382	<b>Number of Units Shipped</b>	M	R	1/10	Must use
		<b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

**CodeList Summary** (Total Codes: 794, Included: 1)

Code Name

CA Case

## Comments:

- SN103 defines the unit of measurement for both SN102 and SN104.

# SLN Subline Item Detail

Pos: 040	Max: 1000
Detail - Optional	
Loop: HL	Elements: 10

**User Option (Usage):** Used

**Purpose:** To specify product subline detail 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>
SLN01	350	<b>Assigned Identification</b>	M	AN	1/20	Must use
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
SLN03	662	<b>Relationship Code</b>	M	ID	1/1	Must use
		<b>Description:</b> Code indicating the relationship between entities				
		<b>CodeList Summary</b> (Total Codes: 5, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		S		Substituted		
SLN04	380	<b>Quantity</b>	X	R	1/15	Used
		<b>Description:</b> Numeric value of quantity				
SLN05	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)				
SLN05-01	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>CodeList Summary</b> (Total Codes: 794, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		CA		Case		
SLN09	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<b>CodeList Summary</b> (Total Codes: 477, Included: 3)				
		<u>Code</u>		<u>Name</u>		
		UA		U.P.C./EAN Case Code (2-5-5)		
		UK		U.P.C./EAN Shipping Container Code (1-2-5-5-1)		
		<b>Description:</b> A 14-digit code that uniquely identifies the manufacturer's shipping unit, including the packaging indicator and check digit; the first digit is the packaging indicator, the next two digits are the number system				

**Code Name**

*characters, the next five digits are the manufacturer ID number, the second five digits are the item code, and the final digit is the check digit*

UP U.P.C. Consumer Package Code (1-5-5-1)

SLN10	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

SLN11	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 477, Included: 2)

**Code Name**

MG Manufacturer's Part Number

VN Vendor's (Seller's) Item Number

SLN12	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

SLN13	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 477, Included: 1)

**Code Name**

PI Purchaser's Item Code

SLN14	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

**Syntax Rules:**

1. P0405 - If either SLN04 or SLN05 is present, then the other is required.
2. C0706 - If SLN07 is present, then SLN06 is required.
3. C0806 - If SLN08 is present, then SLN06 is required.
4. P0910 - If either SLN09 or SLN10 is present, then the other is required.
5. P1112 - If either SLN11 or SLN12 is present, then the other is required.
6. P1314 - If either SLN13 or SLN14 is present, then the other is required.
7. P1516 - If either SLN15 or SLN16 is present, then the other is required.
8. P1718 - If either SLN17 or SLN18 is present, then the other is required.
9. P1920 - If either SLN19 or SLN20 is present, then the other is required.
10. P2122 - If either SLN21 or SLN22 is present, then the other is required.
11. P2324 - If either SLN23 or SLN24 is present, then the other is required.
12. P2526 - If either SLN25 or SLN26 is present, then the other is required.
13. P2728 - If either SLN27 or SLN28 is present, then the other is required.

**Semantics:**

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

**Comments:**

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 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.

**iTradeNetwork User Notes:**

*Pack-level SLN is used to identify a product substitution. The originally ordered product is identified in this segment.*

# PID Product/Item Description

Pos: 070	Max: 200
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**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	Not used
		<b>Description:</b> Code indicating the format of a description				
		<b>CodeList Summary</b> (Total Codes: 3, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		F		Free-form		
PID05	352	<b>Description</b>	X	AN	1/80	Not used
		<b>Description:</b> A free-form description to clarify the related data elements and their content				

## Syntax Rules:

1. R0405 - At least one of PID04 or PID05 is required.



# MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**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>
MEA01	737	<b>Measurement Reference ID Code</b>	O	ID	2/2	Used
<p><b>Description:</b> Code identifying the broad category to which a measurement applies</p> <p><b>CodeList Summary</b> (Total Codes: 152, Included: 1)</p> <p><u>Code</u> <u>Name</u></p> <p>WT Weights</p>						
MEA02	738	<b>Measurement Qualifier</b>	O	ID	1/3	Used
<p><b>Description:</b> Code identifying a specific product or process characteristic to which a measurement applies</p> <p><b>CodeList Summary</b> (Total Codes: 920, Included: 3)</p> <p><u>Code</u> <u>Name</u></p> <p>G Gross Weight</p> <p>N Actual Net Weight</p> <p>VOL Volume</p>						
MEA03	739	<b>Measurement Value</b>	O	R	1/20	Used
<p><b>Description:</b> The value of the measurement</p>						
MEA04	C001	<b>Composite Unit of Measure</b>	X	Comp		Used
<p><b>Description:</b> To identify a composite unit of measure(See Figures Appendix for examples of use)</p>						
MEA04-01	355	<b>Unit or Basis for Measurement Code</b>	O	ID	2/2	Used
<p><b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken</p> <p><b>CodeList Summary</b> (Total Codes: 794, Included: 3)</p> <p><u>Code</u> <u>Name</u></p> <p>CF Cubic Feet</p> <p>KG Kilogram</p> <p>LB Pound</p>						

## Syntax Rules:

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

2. C0504 - If MEA05 is present, then MEA04 is required.

**Semantics:**

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

# MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## 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>
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Used

**Description:** Code specifying the application or source of Marks and Numbers (87)

**CodeList Summary** (Total Codes: 20, Included: 1)

**Code Name**

GM SSCC-18 and Application Identifier

MAN02	87	Marks and Numbers	M	AN	1/48	Used
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**Description:** Marks and numbers used to identify a shipment or parts of a shipment

MAN04	88	Marks and Numbers Qualifier	X	ID	1/2	Used
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**Description:** Code specifying the application or source of Marks and Numbers (87)

**CodeList Summary** (Total Codes: 20, Included: 1)

**Code Name**

SI Self-Identifying Container via Radio Frequency ID Device

**Description:** *Inbound containers that do not need manual routing*

MAN05	87	Marks and Numbers	X	AN	1/48	Used
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**Description:** Marks and numbers used to identify a shipment or parts of a shipment

## Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.

## Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.

## Comments:

1. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

## iTradeNetwork User Notes:

*Used for Case-level tracking*

# HL Hierarchical Level

Pos: 010	Max: 1
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	M	AN	1/12	Used
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 170, Included: 1)				
		<b>Code Name</b>				
		UT	Unit or Lot			

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

## iTradeNetwork User Notes:

*Batch/Lot Level*

# LIN Item Identification

Pos: 020	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify basic item identification data

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use

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

**CodeList Summary** (Total Codes: 477, Included: 1)

**Code Name**

LT Lot Number

LIN03	234	Product/Service ID	M	AN	1/48	Must use
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**Description:** Identifying number for a product or service

LIN04	235	Product/Service ID Qualifier	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 477, Included: 1)

**Code Name**

CH Country of Origin Code

**iTradeNetwork User Notes:**

*To identify the country of origin, the ISO Country Code is used. To identify more than one country: country code, space, country code, etc.*

LIN05	234	Product/Service ID	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

## Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.

12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

**Semantics:**

1. LIN01 is the line item identification

**Comments:**

1. See the Data Dictionary for a complete list of IDs.
2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

# SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify line-item detail relative 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>
SN102	382	<b>Number of Units Shipped</b>	M	R	1/10	Must use

**Description:** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

SN103	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
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**Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

**CodeList Summary** (Total Codes: 794, Included: 1)

<u>Code</u>	<u>Name</u>
CA	Case

## Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

## Semantics:

1. SN101 is the ship notice line-item identification.

## Comments:

1. SN103 defines the unit of measurement for both SN102 and SN104.

## iTradeNetwork User Notes:

*The batch level SN1 quantities should total the pack level SN1 quantity.*

# MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**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>
MEA01	737	<b>Measurement Reference ID Code</b>	O	ID	2/2	Used
<p><b>Description:</b> Code identifying the broad category to which a measurement applies</p> <p><b>CodeList Summary</b> (Total Codes: 152, Included: 1)</p> <p><u>Code</u> <u>Name</u> WT Weights</p>						
MEA02	738	<b>Measurement Qualifier</b>	O	ID	1/3	Used
<p><b>Description:</b> Code identifying a specific product or process characteristic to which a measurement applies</p> <p><b>CodeList Summary</b> (Total Codes: 920, Included: 1)</p> <p><u>Code</u> <u>Name</u> N Actual Net Weight</p>						
MEA03	739	<b>Measurement Value</b>	X	R	1/20	Used
<p><b>Description:</b> The value of the measurement</p>						
MEA04	C001	<b>Composite Unit of Measure</b>	X	Comp		Used
<p><b>Description:</b> To identify a composite unit of measure(See Figures Appendix for examples of use)</p>						
MEA04-01	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
<p><b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken</p> <p><b>CodeList Summary</b> (Total Codes: 794, Included: 3)</p> <p><u>Code</u> <u>Name</u> CF Cubic Feet KG Kilogram LB Pound</p>						

## Syntax Rules:

1. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. C0504 - If MEA05 is present, then MEA04 is required.
3. C0604 - If MEA06 is present, then MEA04 is required.



4. L07030506 - If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. E0803 - Only one of MEA08 or MEA03 may be present.

**Semantics:**

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:**

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**iTradeNetwork User Notes:**

*Batch level MEA is used for variable weight items.*

# MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## 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>
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use

**Description:** Code specifying the application or source of Marks and Numbers (87)

**CodeList Summary** (Total Codes: 20, Included: 2)

### Code Name

AI UCC/EAN-128 Application Identifier (AI) and Data  
GM SSCC-18 and Application Identifier

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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**Description:** Marks and numbers used to identify a shipment or parts of a shipment

## Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.
2. C0605 - If MAN06 is present, then MAN05 is required.

## Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

## Comments:

1. When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
2. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
3. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

## iTradeNetwork User Notes:

*MAN segments can be included at either the Pallet, Item/Case or Lot level.*

# DTM Date/Time Reference

Pos: 200	Max: 2
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**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	Date/Time Qualifier	M	ID	3/3	Used

**Description:** Code specifying type of date or time, or both date and time

**CodeList Summary** (Total Codes: 1112, Included: 5)

**Code Name**

036 Expiration

**Description:** *Date coverage expires*

405 Production

**Description:** *Used to identify dates and times that operations or processes were performed*

510 Date Packed

**WalMart Specific Notes:**

*At least one Date Packed (510) qualifier is required by WalMart for Produce from cold storage (e.g. Apples, Pears, Onion, Potatoes, etc). When sent the DTM02 must contain the date the product was Packaged. This should match the GS1-128 Application Identifier (AI) of Package Date (13) if sent on the PTI label of the pack.*

511 Shelf Life Expiration

**WalMart Specific Notes:**

*At least one Shelf Life Expiration (511) qualifier is required by WalMart for Bagged Salad, Broccoli Florets, Baby Peeled Carrots., etc. When sent the DTM02 must contain the expiration date of the product. This should match the GS1-128 Application Identifier (AI) of Best Before (15) if sent on the PTI label of the pack.*

906 Collection

**WalMart Specific Notes:**

*At least one Collection (906) qualifier is required by WalMart for Fresh Cultivated Produce even if that product is re-packaged after harvest. When sent the DTM02 must contain the expiration date of the product. This should match the GS1-128 Application Identifier (AI) of Package Date (13) if sent on the PTI label of the pack*

DTM02	373	Date	X	DT	8/8	Used
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**Description:** Date expressed as CCYYMMDD

## Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.

# CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 6

**User Option (Usage):** Must use

**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	Must use
		<b>Description:</b> Total number of line items in the transaction set				
CTT02	347	<b>Hash Total</b>	O	R	1/10	Used
		<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	Used
		<b>Description:</b> Numeric value of weight				
CTT04	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>WalMart Specific Notes:</b> All valid codes are used.				
CTT05	183	<b>Volume</b>	X	R	1/8	Used
		<b>Description:</b> Value of volumetric measure				
CTT06	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

## 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.

**Comments:**

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

# SE Transaction Set Trailer

Pos: 020	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Must use

**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	Must use
		<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	Must use
		<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.