

A Book Industry System Advisory Committee Implementation Guideline for EDI

856 Ship Notice/Manifest - ASN

VERSION: MAY 1999 FINAL

Publication Date:	MAY 1999
Trading Partner:	BISAC Members
Created:	November 08, 1998 12:07 PM
Modified:	May 18, 1999 10:22 PM

856 Ship Notice/Manifest

Functional Group=SH

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.

Notes:

- 2/010 Table 2 has 4 different HL Loop formats to define the Shipment, Order, Pack and Item Hierarchical Levels. The loop ID has been changed to reflect the HL03 Hierarchical Level Code to use with the format defined in that HL loop.
(S-shipment, O-order, P-pack, I-item)
- 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:

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

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			Required
020	BSN	Beginning Segment for Ship Notice	M	1			Required

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>
------------	-----------	---------------------	------------	----------------	---------------	--------------	--------------

<u>LOOP ID - HL - S</u>			<u>200000</u>				
010	HL	Hierarchical Level - SHIPMENT	M	1		C&N2/0 10	Required
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
150	REF	Reference Identification	O	>1			Used
200	DTM	Date/Time Reference	O	10			Used
<u>LOOP ID - N1</u>			<u>200</u>				
220	N1	Name	O	1			Used
230	N2	Additional Name Information	O	2			Used
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
<u>LOOP ID - HL - O</u>			<u>200000</u>				
010	HL	Hierarchical Level - ORDER	M	1			Required
050	PRF	Purchase Order Reference	O	1			Used

LOOP ID - CLD			200		
170	CLD	Load Detail	O	1	Used
180	REF	Reference Identification	O	200	Used

LOOP ID - HL - P			200000		
010	HL	Hierarchical Level - PACK	M	1	Required
080	MEA	Measurements	O	40	Used
190	MAN	Marks and Numbers	O	>1	Used

LOOP ID - HL - I			200000		
010	HL	Hierarchical Level - ITEM	M	1	Required
020	LIN	Item Identification	O	1	Used
030	SN1	Item Detail (Shipment)	O	1	Used
040	SLN	Subline Item Detail	O	1000	Used
080	MEA	Measurements	O	40	Used
310	CUR	Currency	O	1	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	Required
020	SE	Transaction Set Trailer	M	1			Required

ST Transaction Set Header

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

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

Semantics:

- 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).

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	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set <u>Code Name</u> 856 X12.10 Ship Notice/Manifest	M	ID	3/3	Required
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Required

BSN Beginning Segment for Ship Notice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 7

To transmit identifying numbers, dates, and other basic data relating to the transaction set

Syntax:

C0706 -- If BSN07 is present, then BSN06 is required

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.
3. BSN06 is limited to shipment related codes.

Comments:

1. BSN06 and BSN07 differentiate the functionality of use for 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	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	M	ID	2/2	Required
		<u>Code Name</u>				
		00 Original				
		05 Replace				
		07 Duplicate				
BSN02	396	Shipment Identification Description: A unique control number assigned by the original shipper to identify a specific shipment	M	AN	2/30	Required
BSN03	373	Date Description: Date (YYMMDD)	M	DT	6/6	Required
BSN04	337	Time Description: 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)	M	TM	4/8	Required
BSN05	1005	Hierarchical Structure Code Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set	O	ID	4/4	Used
		<u>Code Name</u>				
		0001 Shipment, Order, Packaging, Item				
		0002 Shipment, Order, Item, Packaging				
* BSN06	640	Transaction Type Code Description: Code specifying the type of transaction	C	ID	2/2	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* BSN07	641	Status Reason Code	O	ID	3/3	Not Used

Description: Code indicating the status reason

HL Hierarchical Level - SHIPMENT

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL - S	Elements: 4

To identify dependencies among and the content of hierarchically related groups of data segments

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.

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	Hierarchical ID Number Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Required
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Required
		<u>Code</u> <u>Name</u>				
		I Item				
		O Order				
		P Pack				
		S Shipment				
HL04	736	Hierarchical Child Code Description: Code indicating if there are hierarchical child data segments subordinate to the level being described	O	ID	1/1	Used
		<u>Code</u> <u>Name</u>				
		1 Additional Subordinate HL Data Segment in This Hierarchical Structure.				

TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 20
Detail - Optional	
Loop: HL - S	Elements: 10

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

Syntax:

1. TD101 C0102 -- If TD101 is present, then TD102 is required
2. TD103 C0304 -- If TD103 is present, then TD104 is required
3. TD106 C0607 -- If TD106 is present, then TD107 is required
4. TD107 P0708 -- If either TD107 or TD108 are present, then the others are required.
5. TD109 P0910 -- If either TD109 or TD110 are present, then the others are required.

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 Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material <u>Code Name</u> CNT Container Description: (Gaylord) CTN25 Carton, corrugated or solid PLT94 Pallet, wood UNT76 Unit, paper	O	AN	3/5	Used
TD102	80	Lading Quantity Description: Number of units (pieces) of the lading commodity	C	N0	1/7	Used
TD103	23	Commodity Code Qualifier Description: Code identifying the commodity coding system used for Commodity Code <u>Code Name</u> Z Mutually defined. Description: The Book Industry uses this value for insurance commodity codes.	O	ID	1/1	Used
TD104	22	Commodity Code Description: Code describing a commodity or group of commodities	C	AN	1/30	Used
TD105	79	Lading Description Description: Description of an item as required for rating and billing purposes	O	AN	1/50	Used
TD106	187	Weight Qualifier Description: Code defining the type of weight <u>Code Name</u> G Gross Weight	O	ID	1/2	Used
TD107	81	Weight Description: Numeric value of weight	C	R	1/10	Used

<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	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken <u>Code Name</u> KG Kilogram LB Pound	C	ID	2/2	Used
* TD109	183	Volume Description: Value of volumetric measure	C	R	1/8	Not Used
* TD110	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	C	ID	2/2	Not Used

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 120	Max: 12
Detail - Optional	
Loop: HL - S	Elements: 14

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

Syntax:

1. TD502 R0204050612 -- At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. TD502 C0203 -- If TD502 is present, then TD503 is required
3. TD507 C0708 -- If TD507 is present, then TD508 is required
4. TD510 C1011 -- If TD510 is present, then TD511 is required
5. TD513 C1312 -- If TD513 is present, then TD512 is required
6. TD514 C1413 -- If TD514 is present, then TD513 is required

Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

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	Routing Sequence Code Description: Code describing the relationship of a carrier to a specific shipment movement <u>Code Name</u> B Origin/Delivery Carrier (Any Mode)	O	ID	1/2	Used
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) <u>Code Name</u> 2 Standard Carrier Alpha Code (SCAC) 91 Assigned by Seller or Seller's Agent 92 Assigned by Buyer or Buyer's Agent	C	ID	1/2	Used
TD503	67	Identification Code Description: Code identifying a party or other code	C	AN	2/20	Used
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment <u>Code Name</u> A Air C Consolidation D Parcel Post H Customer Pickup L Contract Carrier M Motor (Common Carrier) P Private Carrier T Best Way (Shippers Option) U Private Parcel Service	C	ID	1/2	Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		AE Air Express				
TD505	387	Routing Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	C	AN	1/35	Used
TD506	368	Shipment/Order Status Code Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction <u>Code Name</u> CC Shipment Complete on (Date) CP Partial Shipment on (Date),Considered No Backorder SS Split Shipment	C	ID	2/2	Used
* TD507	309	Location Qualifier Description: Code identifying type of location	O	ID	1/2	Not Used
* TD508	310	Location Identifier Description: Code which identifies a specific location	C	AN	1/30	Not Used
* TD509	731	Transit Direction Code Description: The point of origin and point of direction	O	ID	2/2	Not Used
TD510	732	Transit Time Direction Qualifier Description: Code specifying the value of time used to measure the transit time <u>Code Name</u> CD Calendar Days (Includes weekends and Holidays) WD Working Days (Excludes weekends and holidays)	O	ID	2/2	Used
TD511	733	Transit Time Description: The numeric amount of transit time	C	R	1/4	Used
* TD512	284	Service Level Code Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier	C	ID	2/2	Not Used
* TD513	284	Service Level Code Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier	C	ID	2/2	Not Used
* TD514	284	Service Level Code Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier	O	ID	2/2	Not Used

REF Reference Identification

Pos: 150	Max: >1
Detail - Optional	
Loop: HL - S	Elements: 4

To specify identifying information

Syntax:

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

Semantics:

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

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 Description: Code Qualifying the Reference Identification	M	ID	2/3	Required
		<u>Code Name</u>				
		BC Buyer's Contract Number				
		BM Bill of Lading Number				
		CN Carrier's Reference Number (PRO/Invoice)				
		CO Customer Order Number				
		Description: This is the order number from the ultimate consumer.				
		DP Department Number				
		MA Ship Notice/Manifest Number				
		MB Master Bill of Lading				
		PO Purchase Order Number				
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used
REF03	352	Description Description: A free-form description to clarify the related data elements and their content	C	AN	1/80	Used
* REF04	C040	Reference Identifier Description: To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O	Comp		Not Used
*	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	M	ID	2/3	Not Used
*	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN	1/30	Not Used
*	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	C	ID	2/3	Not Used
*	127	Reference Identification	C	AN	1/30	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
*	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	C	ID	2/3	Not Used
*	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Not Used

DTM Date/Time Reference

Pos: 200	Max: 10
Detail - Optional	
Loop: HL - S	Elements: 7

To specify pertinent dates and times

Syntax:

R020306 -- At least one of DTM02, DTM03 or DTM06 is required.

P0607 -- If either DTM06 or DTM07 are present, then the others are required.

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 Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Required
		<u>Code</u> <u>Name</u>				
		011 Shipped				
		037 Ship Not Before				
		038 Ship No Later				
		039 Ship Week of				
		063 Do Not Deliver After				
		064 Do Not Deliver Before				
		067 Current Schedule Delivery				
		068 Current Schedule Ship				
		073 Scheduled for Delivery (Prior to and Including)				
		095 Bill of Lading				
		178 Hold (as of)				
		182 Will Advise (as of)				
DTM02	373	Date Description: Date (YYMMDD)	C	DT	6/6	Required
DTM03	337	Time Description: 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)	C	TM	4/8	Used
DTM04	623	Time Code Description: Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	O	ID	2/2	Used
		<u>Code</u> <u>Name</u>				
		CD Central Daylight Time				
		CS Central Standard Time				
		CT Central Time				
		ED Eastern Daylight Time				
		ES Eastern Standard Time				
		ET Eastern Time				
		LT Local Time				
		MD Mountain Daylight Time				
		MS Mountain Standard Time				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		MT Mountain Time				
		PD Pacific Daylight Time				
		PS Pacific Standard Time				
		PT Pacific Time				
DTM05	624	Century Description: The first two characters in the designation of the year (CCYY)	O	N0	2/2	Required
* DTM06	1250	Date Time Period Format Qualifier Description: Code indicating the date format, time format, or date and time format	C	ID	2/3	Not Used
* DTM07	1251	Date Time Period Description: Expression of a date, a time, or range of dates, times or dates and times	C	AN	1/35	Not Used

N1 Name

Pos: 220	Max: 1
Detail - Optional	
Loop: N1	Elements: 6

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

Syntax:

R0203 -- At least one of N102 or N103 is required.

P0304 -- If either N103 or N104 are present, then the others are 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.

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	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, or an individual	M	ID	2/2	Required
		<u>Code Name</u>				
		BT Bill-to-Party				
		SF Ship From				
		ST Ship To				
		VN Vendor				
N102	93	Name Description: Free-form name	C	AN	1/35	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	C	ID	1/2	Used
		<u>Code Name</u>				
		1 D-U-N-S Number,Dun & Bradstreet				
		9 D-U-N-S+4,D-U-N-S Number with Four Character Suffix				
		15 Standard Address Number (SAN)				
		92 Assigned by Buyer or Buyer's Agent				
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/20	Used
* N105	706	Entity Relationship Code Description: Code describing entity relationship	O	ID	2/2	Not Used
* N106	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, or an individual	O	ID	2/2	Not Used

N2

Additional Name Information

Pos: 230	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

To specify additional names or those longer than 35 characters in length

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>
N201	93	Name Description: Free-form name	M	AN	1/35	Required
N202	93	Name Description: Free-form name	O	AN	1/35	Used

N3 Address Information

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

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	Address Information Description: Address information	M	AN	1/35	Required
N302	166	Address Information Description: Address information	O	AN	1/35	Used

N4 Geographic Location

Pos: 250	Max: 1
Detail - Optional	
Loop: N1	Elements: 6

To specify the geographic place of the named party

Syntax:

1. N406 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.

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	City Name Description: Free-form text for city name	O	AN	2/30	Used
N402	156	State or Province Code Description: Code (Standard State/Province) as defined by appropriate government agency	O	ID	2/2	Used
N403	116	Postal Code Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O	ID	3/15	Used
N404	26	Country Code Description: Code identifying the country	O	ID	2/3	Used
* N405	309	Location Qualifier Description: Code identifying type of location	C	ID	1/2	Not Used
* N406	310	Location Identifier Description: Code which identifies a specific location	O	AN	1/30	Not Used

HL Hierarchical Level - ORDER

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL - O	Elements: 4

To identify dependencies among and the content of hierarchically related groups of data segments

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.

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	Hierarchical ID Number Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Required
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Required
HL04	736	Hierarchical Child Code Description: Code indicating if there are hierarchical child data segments subordinate to the level being described	O	ID	1/1	Used

PRF Purchase Order Reference

Pos: 050	Max: 1
Detail - Optional	
Loop: HL - O	Elements: 7

To provide reference to a specific purchase order

Semantics:

1. PRF04 is the date assigned by the purchaser to 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	Purchase Order Number Description: Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Required
PRF02	328	Release Number Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
PRF03	327	Change Order Sequence Number Description: Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set	O	AN	1/8	Used
PRF04	373	Date Description: Date (YYMMDD)	O	DT	6/6	Used
PRF05	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
PRF06	367	Contract Number Description: Contract number	O	AN	1/30	Used
PRF07	92	Purchase Order Type Code Description: Code specifying the type of Purchase Order	O	ID	2/2	Used

CLD Load Detail

Pos: 170	Max: 1
Detail - Optional	
Loop: CLD	Elements: 5

To specify the number of material loads shipped

Semantics:

1. CLD05 is used to dimension the value given in CLD04.

Comments:

1. The CLD data segment may be used to provide information to aid in the preparation of move tags and/or bar coded labels.

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>
CLD01	622	Number of Loads Description: Number of customer-defined loads shipped by the supplier	M	N0	1/5	Required
CLD02	382	Number of Units Shipped Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M	R	1/10	Required
CLD03	103	Packaging Code Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material	O	AN	3/5	Used
		<u>Code</u> <u>Name</u>				
		CNT Container				
		Description: (Gaylord)				
		CTN25 Cartons, corrugated or solid				
		PLT94 Pallet, wood				
		UNT76 Unit, paper				
* CLD04	357	Size Description: Size of supplier units in pack	O	R	1/8	Not Used
* CLD05	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used

REF Reference Identification

Pos: 180	Max: 200
Detail - Optional	
Loop: CLD	Elements: 4

To specify identifying information

Syntax:

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

Semantics:

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

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 Description: Code Qualifying the Reference Identification	M	ID	2/3	Required
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used
REF03	352	Description Description: A free-form description to clarify the related data elements and their content	C	AN	1/80	Used
REF04	C040	Reference Identifier Description: To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O	Comp		Used
	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	M	ID	2/3	Required
	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN	1/30	Required
	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	C	ID	2/3	Used
	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used
	128	Reference Identification Qualifier Description: Code Qualifying the Reference Identification	C	ID	2/3	Used
	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
------------	-----------	---------------------	------------	-------------	----------------	--------------

HL Hierarchical Level - PACK

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL - P	Elements: 4

To identify dependencies among and the content of hierarchically related groups of data segments

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.

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	Hierarchical ID Number Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Required
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Required
HL04	736	Hierarchical Child Code Description: Code indicating if there are hierarchical child data segments subordinate to the level being described	O	ID	1/1	Used

MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL - P	Elements: 10

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

Syntax:

1. MEA03 R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. MEA05 C0504 -- If MEA05 is present, then MEA04 is required
3. MEA06 C0604 -- If MEA06 is present, then MEA04 is required
4. MEA07 L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. MEA08 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.

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	Measurement Reference ID Code Description: Code identifying the broad category to which a measurement applies <u>Code Name</u> PA Pallet Dimensions PD Physical Dimensions PK Package Dimensions	O	ID	2/2	Used
MEA02	738	Measurement Qualifier Description: Code identifying a specific product or process characteristic to which a measurement applies <u>Code Name</u> HT Height LN Length SZ Skid Height WD Width WT Weight	O	ID	1/3	Used
MEA03	739	Measurement Value Description: The value of the measurement	C	R	1/20	Used
MEA04	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	C	Comp		Used
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Required

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code Name</u>				
		CM Centimeter				
		E5 Inches,Fraction--Actual				
		E8 Inches,Decimal--Actual				
		KG Kilogram				
		LB Pound				
		OZ Ounce - Av				
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* MEA05	740	Range Minimum Description: The value specifying the minimum of the measurement range	C	R	1/20	Not Used
* MEA06	741	Range Maximum Description: The value specifying the maximum of the measurement range	C	R	1/20	Not Used
* MEA07	935	Measurement Significance Code Description: Code used to benchmark, qualify or further define a measurement value	O	ID	2/2	Not Used
* MEA08	936	Measurement Attribute Code Description: Code used to express an attribute response when a numeric measurement value cannot be determined	C	ID	2/2	Not Used
* MEA09	752	Surface/Layer/Position Code Description: Code indicating the product surface, layer or position that is being described	O	ID	2/2	Not Used
* MEA10	1373	Measurement Method or Device Description: The method or device used to record the measurement	O	ID	2/4	Not Used

MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL - P	Elements: 6

To indicate identifying marks and numbers for shipping containers

Syntax:

1. MAN04 P0405 -- If either MAN04 or MAN05 are present, then the others are required.
2. MAN06 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.

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 Description: Code specifying the application or source of Marks and Numbers (87)	M	ID	1/2	Required
		<u>Code Name</u>				
		GM UCC/EAN-128 Serial Shipping Container Code Format				
		MC Master Carton Number				
		Description: The identification number of the outermost (external) container in a shipment leaving the supplier's dock				
		SM Shipper Assigned				
		SS Shipper Assigned Skid Number				
		UC U.P.C. Shipping Container Code				
MAN02	87	Marks and Numbers Description: Marks and numbers used to identify a shipment or parts of a shipment	M	AN	1/48	Required
MAN03	87	Marks and Numbers Description: Marks and numbers used to identify a shipment or parts of a shipment	O	AN	1/48	Used
* MAN04	88	Marks and Numbers Qualifier Description: Code specifying the application or source of Marks and Numbers (87)	C	ID	1/2	Not Used
* MAN05	87	Marks and Numbers Description: Marks and numbers used to identify a shipment or parts of a shipment	C	AN	1/48	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* MAN06	87	Marks and Numbers Description: Marks and numbers used to identify a shipment or parts of a shipment	O	AN	1/48	Not Used

HL Hierarchical Level - ITEM

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL - I	Elements: 4

To identify dependencies among and the content of hierarchically related groups of data segments

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.

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	Hierarchical ID Number Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Required
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Required
HL04	736	Hierarchical Child Code Description: Code indicating if there are hierarchical child data segments subordinate to the level being described	O	ID	1/1	Used

LIN Item Identification

Pos: 020	Max: 1
Detail - Optional	
Loop: HL - I	Elements: 31

To specify basic item identification data

Syntax:

1. LIN04 P0405 -- If either LIN04 or LIN05 are present, then the others are required.
2. LIN06 P0607 -- If either LIN06 or LIN07 are present, then the others are required.
3. LIN08 P0809 -- If either LIN08 or LIN09 are present, then the others are required.
4. LIN10 P1011 -- If either LIN10 or LIN11 are present, then the others are required.
5. LIN12 P1213 -- If either LIN12 or LIN13 are present, then the others are required.
6. LIN14 P1415 -- If either LIN14 or LIN15 are present, then the others are required.
7. LIN16 P1617 -- If either LIN16 or LIN17 are present, then the others are required.
8. LIN18 P1819 -- If either LIN18 or LIN19 are present, then the others are required.
9. LIN20 P2021 -- If either LIN20 or LIN21 are present, then the others are required.
10. LIN22 P2223 -- If either LIN22 or LIN23 are present, then the others are required.
11. LIN24 P2425 -- If either LIN24 or LIN25 are present, then the others are required.
12. LIN26 P2627 -- If either LIN26 or LIN27 are present, then the others are required.
13. LIN28 P2829 -- If either LIN28 or LIN29 are present, then the others are required.
14. LIN30 P3031 -- If either LIN30 or LIN31 are present, then the others are 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., UPC No., ISBN No., Model No., or SKU.

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>
LIN01	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
LIN02	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	M	ID	2/2	Required
		<u>Code</u> <u>Name</u>				
		AI Alternate ISBN				
		B1 Volume Set				
		B2 Library of Congress Code				
		B3 Edition Code				
		B4 Binding Code				
		B5 Title Code				
		B6 Author Code				
		B7 Publisher Code				
		CB Buyer's Catalog Number				
		CG Commodity Grouping				
		EN European Article Number (EAN) (2-5-5-1)				
		GC Grade Code				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: When using a qualifier value of GC then data element 234 should be one of the following values: 00 General Condition New or Used 01 New Condition Only 02 Used, Good Condition Only 03 Used, Poor Condition 04 Used, Any Condition 05 No Marked Complimentary Copies IB International Standard Book Number (ISBN) RP Replaced Part Number Description: This is used when a different ISBN or UPC is shipped. This is the ISBN or UPC from the original order. RU Run Number Description: This represents the print number for the title. SK Stock Keeping Unit (SKU) UP U.P.C. Consumer Package Code (1-5-5-1)				
LIN03	234	Product/Service ID Description: Identifying number for a product or service	M	AN	1/40	Required
LIN04	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN05	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN06	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN07	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN08	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN09	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN10	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN11	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN12	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN13	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN14	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN15	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN16	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN17	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN18	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN19	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN20	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN21	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN22	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN23	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN24	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN25	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN26	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN27	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN28	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN29	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used
LIN30	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
LIN31	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Used

SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL - I	Elements: 8

To specify line-item detail relative to shipment

Syntax:

1. SN105 P0506 -- If either SN105 or SN106 are present, then the others are required.

Semantics:

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

Comments:

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

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>
SN101	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
SN102	382	Number of Units Shipped Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M	R	1/10	Required
SN103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken <u>Code Name</u> CH Container CT Carton EA Each Description: For non-book items. PL Pallet/Unit Load ST Set UN Unit	M	ID	2/2	Required
SN104	646	Quantity Shipped to Date Description: Number of units shipped to date	O	R	1/9	Used
SN105	330	Quantity Ordered Description: Quantity ordered	C	R	1/9	Used
SN106	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	C	ID	2/2	Used
* SN107	728	Returnable Container Load Make-Up Code Description: Code identifying the load make-up of the returnable containers in the shipment	O	ID	1/2	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* SN108	668	Line Item Status Code Description: Code specifying the action taken by the seller on a line item requested by the buyer	O	ID	2/2	Not Used

SLN Subline Item Detail

Pos: 040	Max: 1000
Detail - Optional	
Loop: HL - I	Elements: 28

To specify product subline detail item data

Syntax:

1. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
2. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
3. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
4. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
5. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
6. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
7. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
8. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
9. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
10. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
11. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
12. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are 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., UPC No., ISBN No., Model No., or SKU.

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	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	M	AN	1/20	Required
SLN02	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
SLN03	662	Relationship Code Description: Code indicating the relationship between entities <u>Code Name</u> I Included	M	ID	1/1	Required
SLN04	380	Quantity Description: Numeric value of quantity	M	R	1/15	Required

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SLN05	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	M	Comp		Required
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Required
		<u>Code Name</u>				
		CH Container				
		CT Carton				
		EA Each				
		PL Pallet/Unit Load				
		ST Set				
		UN Unit				
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being	O	ID	2/2	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		expressed, or manner in which a measurement has been taken				
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
SLN06	212	Unit Price Description: Price per unit of product, service, commodity, etc.	C	R	1/17	Used
SLN07	639	Basis of Unit Price Code Description: Code identifying the type of unit price for an item	O	ID	2/2	Used
* SLN08	662	Relationship Code Description: Code indicating the relationship between entities	O	ID	1/1	Not Used
* SLN09	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN10	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN11	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN12	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN13	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN14	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN15	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN16	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN17	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN18	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN19	235	Product/Service ID Qualifier	C	ID	2/2	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN20	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN21	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN22	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN23	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN24	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN25	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN26	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used
* SLN27	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Not Used
* SLN28	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/40	Not Used

MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL - I	Elements: 10

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

Syntax:

1. MEA03 R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. MEA05 C0504 -- If MEA05 is present, then MEA04 is required
3. MEA06 C0604 -- If MEA06 is present, then MEA04 is required
4. MEA07 L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. MEA08 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.

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	Measurement Reference ID Code Description: Code identifying the broad category to which a measurement applies <u>Code Name</u> PA Pallet Dimensions PD Physical Dimensions PK Package Dimensions	O	ID	2/2	Used
MEA02	738	Measurement Qualifier Description: Code identifying a specific product or process characteristic to which a measurement applies <u>Code Name</u> HT Height LN Length SZ Skid Height WD Width WT Weight	O	ID	1/3	Used
MEA03	739	Measurement Value Description: The value of the measurement	C	R	1/20	Used
MEA04	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	C	Comp		Used
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Required

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code Name</u>				
		CM Centimeter				
		E5 Inches,Fraction--Actual				
		E8 Inches,Decimal--Actual				
		KG Kilogram				
		LB Pound				
		OZ Ounce - Av				
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used
*	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Not Used
*	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Not Used
*	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MEA05	740	Range Minimum Description: The value specifying the minimum of the measurement range	C	R	1/20	Used
MEA06	741	Range Maximum Description: The value specifying the maximum of the measurement range	C	R	1/20	Used
* MEA07	935	Measurement Significance Code Description: Code used to benchmark, qualify or further define a measurement value	O	ID	2/2	Not Used
* MEA08	936	Measurement Attribute Code Description: Code used to express an attribute response when a numeric measurement value cannot be determined	C	ID	2/2	Not Used
* MEA09	752	Surface/Layer/Position Code Description: Code indicating the product surface, layer or position that is being described	O	ID	2/2	Not Used
* MEA10	1373	Measurement Method or Device Description: The method or device used to record the measurement	O	ID	2/4	Not Used

CUR Currency

Pos: 310	Max: 1
Detail - Optional	
Loop: HL - I	Elements: 21

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

Syntax:

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

Comments:

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

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>
CUR01	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, or an individual <u>Code Name</u> BY Buying Party (Purchaser) SE Selling Party	M	ID	2/2	Required
CUR02	100	Currency Code Description: Code (Standard ISO) for country in whose currency the charges are specified	M	ID	3/3	Required
* CUR03	280	Exchange Rate Description: Value to be used as a multiplier conversion factor to convert monetary value from one currency to another	O	R	4/10	Not Used
* CUR04	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, or an individual	O	ID	2/2	Not Used
* CUR05	100	Currency Code Description: Code (Standard ISO) for country in whose currency the charges are specified	O	ID	3/3	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* CUR06	669	Currency Market/Exchange Code Description: Code identifying the market upon which the currency exchange rate is based	O	ID	3/3	Not Used
* CUR07	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Not Used
* CUR08	373	Date Description: Date (YYMMDD)	O	DT	6/6	Not Used
* CUR09	337	Time Description: 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)	O	TM	4/8	Not Used
* CUR10	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Not Used
* CUR11	373	Date Description: Date (YYMMDD)	C	DT	6/6	Not Used
* CUR12	337	Time Description: 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)	C	TM	4/8	Not Used
* CUR13	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Not Used
* CUR14	373	Date Description: Date (YYMMDD)	C	DT	6/6	Not Used
* CUR15	337	Time Description: 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)	C	TM	4/8	Not Used
* CUR16	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Not Used
* CUR17	373	Date Description: Date (YYMMDD)	C	DT	6/6	Not Used
* CUR18	337	Time Description: 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)	C	TM	4/8	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
* CUR19	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Not Used
* CUR20	373	Date Description: Date (YYMMDD)	C	DT	6/6	Not Used
* CUR21	337	Time Description: 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)	C	TM	4/8	Not Used

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 7

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

Syntax:

P0304 -- If either CTT03 or CTT04 are present, then the others are required.

P0506 -- If either CTT05 or CTT06 are present, then the others are required.

Comments:

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

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	Number of Line Items Description: Total number of line items in the transaction set	M	N0	1/6	Required
CTT02	347	Hash Total Description: 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.	O	R	1/10	Used
* CTT03	81	Weight Description: Numeric value of weight	C	R	1/10	Not Used
* CTT04	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	C	ID	2/2	Not Used
* CTT05	183	Volume Description: Value of volumetric measure	C	R	1/8	Not Used
* CTT06	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	C	ID	2/2	Not Used
* CTT07	352	Description Description: A free-form description to clarify the related data elements and their content	O	AN	1/80	Not Used

SE Transaction Set Trailer

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

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

Comments:

- SE is the last segment of each 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>
SE01	96	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Required
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Required