



**Health Industry Business Communications Council -
eBusiness Committee**

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

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. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BSN	Beginning Segment for Ship Notice	M	1		
	040	DTM	Date/Time Reference	O	10		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - HL			200000	
M	010	HL	Hierarchical Level SHIPMENT	M	1		c1
	110	TD1	Carrier Details (Quantity and Weight)	O	20		
	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
	130	TD3	Carrier Details (Equipment)	O	12		
	140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		
	150	REF	Reference Identification	O	>1		
	160	DTM	Date/Time Reference	O	10		
			LOOP ID - N1			200	
	220	N1	Name	O	1		
	240	N3	Address Information	O	2		
	250	N4	Geographic Location	O	1		
			LOOP ID - HL			200000	

	260	HL	Hierarchical Level	TARE	O	1	c2
	261	MAN	Marks and Numbers		O	>1	
						200000	
	270	HL	Hierarchical Level	PACK	O	1	c3
	271	MAN	Marks and Numbers		O	>1	
						200000	
M	285	HL	Hierarchical Level	ORDER	M	1	c4
	286	PRF	Purchase Order Reference		O	1	
	288	REF	Reference Identification		O	1	
						200000	
M	300	HL	Hierarchical Level	ITEM	M	1	c5
	305	LIN	Item Identification		O	1	
	310	SN1	Item Detail (Shipment)		O	1	
	380	DTM	Date/Time Reference		O	>1	
	390	SDQ	Destination Quantity		O	50	

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
	010	CTT	Transaction Totals	O	1		n1
M	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. 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.

Transaction Set Comments

1. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
2. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
3. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
4. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
5. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	M ID 3/3
M	ST02	329	Transaction Set Control Number 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

Segment: **BSN** Beginning Segment for Ship Notice
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Syntax Notes: 1 If BSN07 is present, then BSN06 is required.
Semantic Notes: 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.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	BSN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original 01 Cancellation 05 Replace	M ID 2/2
M	BSN02	396	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment	M AN 2/30
M	BSN03	373	Date Date expressed as CCYYMMDD	M DT 8/8
M	BSN04	337	Time 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

Segment: **DTM** Date/Time Reference
Position: 040
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:

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

Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped 017 Estimated Delivery	M ID 3/3
	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: **HL** Hierarchical Level SHIPMENT
Position: 010
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

- 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.
The HL segment defines a top-down/left-right ordered structure.
 - 2 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.
 - 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 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.
 - 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Shipment Level

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	HL01	628 Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
	HL02	734 Hierarchical Parent ID Number	O AN 1/12
		Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
M	HL03	735 Hierarchical Level Code	M ID 1/2
		Code defining the characteristic of a level in a hierarchical structure	
		S Shipment	
	HL04	736 Hierarchical Child Code	O ID 1/1
		Code indicating if there are hierarchical child data segments subordinate to the level being described	
		1 Additional Subordinate HL Data Segment in This Hierarchical Structure.	

Segment: **TD1** Carrier Details (Quantity and Weight)
Position: 110
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes:

- 1 If TD101 is present, then TD102 is required.
- 2 If TD103 is present, then TD104 is required.
- 3 If TD106 is present, then TD107 is required.
- 4 If either TD107 or TD108 is present, then the other is required.
- 5 If either TD109 or TD110 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD101	103	Packaging Code 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 CTN Carton PCK Packed - not otherwise specified PLT Pallet SLP Slip Sheet Shipping containers utilizing slip sheets, which are cardboard platforms used to hold product for storage or transportation	O AN 3/5
TD102	80	Lading Quantity Number of units (pieces) of the lading commodity	X N0 1/7
TD106	187	Weight Qualifier Code defining the type of weight A3 Shippers Weight	O ID 1/2
TD107	81	Weight Numeric value of weight	X R 1/10
TD108	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken 01 Actual Pounds LB Pound	X ID 2/2

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)
Position: 120
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

- 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
- 2 If TD502 is present, then TD503 is required.
- 3 If TD507 is present, then TD508 is required.
- 4 If TD510 is present, then TD511 is required.
- 5 If TD513 is present, then TD512 is required.
- 6 If TD514 is present, then TD513 is required.
- 7 If TD515 is present, then TD512 is required.

Semantic Notes:

- 1 TD515 is the country where the service is to be performed.

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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD502	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 2 Standard Carrier Alpha Code (SCAC)	X ID 1/2
TD503	67	Identification Code Code identifying a party or other code	X AN 2/80
TD504	91	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment 7 Mail Type of transportation provided by the U.S. Postal Service A Air AE Air Express H Customer Pickup LT Less Than Trailer Load (LTL) M Motor (Common Carrier) R Rail S Ocean SR Supplier Truck T Best Way (Shippers Option) U Private Parcel Service	X ID 1/2
TD505	387	Routing Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	X AN 1/35
TD506	368	Shipment/Order Status Code 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 SQ Scheduled to ship (Summary quantity)	X ID 2/2
TD509	731	Transit Direction Code The point of origin and point of direction SB Seller to Buyer	O ID 2/2

Segment: **TD3** Carrier Details (Equipment)
Position: 130
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify transportation details relating to the equipment used by the carrier
Syntax Notes:

- 1 Only one of TD301 or TD310 may be present.
- 2 If TD302 is present, then TD303 is required.
- 3 If TD304 is present, then TD305 is required.
- 4 If either TD305 or TD306 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD301	40	Equipment Description Code Code identifying type of equipment used for shipment AP Aircraft CN Container RR Rail Car TL Trailer (not otherwise specified) TV Truck, Van VE Vessel, Ocean	X ID 2/2
TD303	207	Equipment Number Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	X AN 1/10

Segment: **TD4** Carrier Details (Special Handling, or Hazardous Materials, or Both)

Position: 140

Loop: HL Mandatory

Level: Detail

Usage: Optional

Max Use: 5

Purpose: To specify transportation special handling requirements, or hazardous materials information, or both

Syntax Notes: 1 At least one of TD401 TD402 or TD404 is required.

2 If TD402 is present, then TD403 is required.

Semantic Notes: 1 TD405 identifies if a Material Safety Data Sheet (MSDS) exists for this product. A "Y" indicates an MSDS exists for this product; an "N" indicates an MSDS does not exist for this product.

Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD401	152	Special Handling Code Code specifying special transportation handling instructions	X ID 2/3
TD402	208	Hazardous Material Code Qualifier Code which qualifies the Hazardous Material Class Code (209)	X ID 1/1
TD403	209	Hazardous Material Class Code Code specifying the kind of hazard for a material	X AN 1/4
TD404	352	Description A free-form description to clarify the related data elements and their content	X AN 1/80
TD405	1073	Yes/No Condition or Response Code Code indicating a Yes or No condition or response N No Y Yes	O ID 1/1

Segment: **REF** Reference Identification
Position: 150
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification BM Bill of Lading Number CN Carrier's Reference Number (PRO/Invoice) LT Lot Number	M ID 2/3
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

Segment: **DTM** Date/Time Reference
Position: 160
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:

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

Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped	M ID 3/3
	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: **N1** Name
Position: 220
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Entity Identifier Code</u>	<u>M ID 2/3</u>
M	N101	98	
		Code identifying an organizational entity, a physical location, property or an individual	
		BG Buying Group	
		BS Bill and Ship To	
		BT Bill-to-Party	
		BY Buying Party (Purchaser)	
		CN Consignee	
		DB Distributor Branch	
		DS Distributor	
		EN End User	
		MA Party for whom Item is Ultimately Intended	
		MF Manufacturer of Goods	
		QC Patient	
		Individual receiving medical care	
		SE Selling Party	
		SF Ship From	
		SN Store	
		SO Sold To If Different From Bill To	
		ST Ship To	
		VN Vendor	
		WH Warehouse	
	N102	93	X AN 1/60
		Name	
		Free-form name	
	N103	66	X ID 1/2
		Identification Code Qualifier	
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		2 Standard Carrier Alpha Code (SCAC)	
		8 UCC/EAN Global Product Identification Prefix	
		The first part of a UCC/EAN Product Identification Code within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system; A globally unique 3 to 10 digit code for the identification of the company assigning the remainder of the ID code, such as U.P.C., EAN-13, SCC-	

- 14, EAN-14 or SSCC-18
- 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix
- 10 Department of Defense Activity Address Code (DODAAC)
- 11 Drug Enforcement Administration (DEA)
- 21 Health Industry Number (HIN)
- 91 Assigned by Seller or Seller's Agent
- 92 Assigned by Buyer or Buyer's Agent
- LI Labeler Identification Code (LIC)

N104

67

Identification Code

X AN 2/80

Code identifying a party or other code

Segment: N3 Address Information
Position: 240
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref.	Data	Name	Attributes
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	N301	166	Address Information Address information	M AN 1/55
	N302	166	Address Information Address information	O AN 1/55

Segment: **N4 Geographic Location**
Position: 250
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.
Semantic Notes:
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.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15

Segment: **HL** Hierarchical Level TARE
Position: 260
Loop: HL Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

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.
The HL segment defines a top-down/left-right ordered structure.
- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

Tare Level

Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
M	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
M	HL03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure T Shipping Tare	M ID 1/2
	HL04	736	Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to the level being described 1 Additional Subordinate HL Data Segment in This Hierarchical Structure.	O ID 1/1

Segment: **MAN** Marks and Numbers

Position: 261

Loop: HL Optional

Level: Detail

Usage: Optional

Max Use: >1

Purpose: To indicate identifying marks and numbers for shipping containers

Syntax Notes:

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

Semantic Notes:

- 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. 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.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	MAN01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) AA SSSC-18 AI UCC/EAN-128 Application Identifier (AI) and Data GM SSSC-18 and Application Identifier SM Shipper Assigned	M ID 1/2
M	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	M AN 1/48

Segment: **HL** Hierarchical Level PACK
Position: 270
Loop: HL Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

- 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.
The HL segment defines a top-down/left-right ordered structure.
 - 2 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.
 - 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 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.
 - 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Pack Level

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	HL01	628 Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
	HL02	734 Hierarchical Parent ID Number	O AN 1/12
		Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
M	HL03	735 Hierarchical Level Code	M ID 1/2
		Code defining the characteristic of a level in a hierarchical structure	
		P Pack	
	HL04	736 Hierarchical Child Code	O ID 1/1
		Code indicating if there are hierarchical child data segments subordinate to the level being described	
		1 Additional Subordinate HL Data Segment in This Hierarchical Structure.	

Segment: **MAN** Marks and Numbers

Position: 271

Loop: HL Optional

Level: Detail

Usage: Optional

Max Use: >1

Purpose: To indicate identifying marks and numbers for shipping containers

Syntax Notes:

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

Semantic Notes:

- 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. 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.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	MAN01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) AA SSSC-18 AI UCC/EAN-128 Application Identifier (AI) and Data GM SSSC-18 and Application Identifier SM Shipper Assigned	M ID 1/2
M	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	M AN 1/48

Segment: **HL** Hierarchical Level **ORDER**
Position: 285
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

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.
The HL segment defines a top-down/left-right ordered structure.
- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

Order Level

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	HL01	628 Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
	HL02	734 Hierarchical Parent ID Number	O AN 1/12
		Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
M	HL03	735 Hierarchical Level Code	M ID 1/2
		Code defining the characteristic of a level in a hierarchical structure	
		O Order	
	HL04	736 Hierarchical Child Code	O ID 1/1
		Code indicating if there are hierarchical child data segments subordinate to the level being described	
		1 Additional Subordinate HL Data Segment in This Hierarchical Structure.	

Segment: **PRF** Purchase Order Reference
Position: 286
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: 1 PRF04 is the date assigned by the purchaser to purchase order.
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	PRF01	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser	M AN 1/22
	PRF04	373	Date Date expressed as CCYYMMDD	O DT 8/8
	PRF05	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
	PRF07	92	Purchase Order Type Code Code specifying the type of Purchase Order DS Dropship	O ID 2/2

Segment: **REF** Reference Identification
Position: 288
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification CO Customer Order Number IV Seller's Invoice Number VN Vendor Order Number VR Vendor ID Number	M ID 2/3
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

Segment: **HL** Hierarchical Level ITEM
Position: 300
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

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.
The HL segment defines a top-down/left-right ordered structure.
- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

Item Level

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	HL01	628 Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
	HL02	734 Hierarchical Parent ID Number	O AN 1/12
		Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
M	HL03	735 Hierarchical Level Code	M ID 1/2
		Code defining the characteristic of a level in a hierarchical structure	
		I Item	
	HL04	736 Hierarchical Child Code	O ID 1/1
		Code indicating if there are hierarchical child data segments subordinate to the level being described	
		0 No Subordinate HL Segment in This Hierarchical Structure.	

Segment: **LIN** Item Identification

Position: 305

Loop: HL Mandatory

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes:

- 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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
LIN01	350	Assigned Identification	O AN 1/20
		Alphanumeric characters assigned for differentiation within a transaction set	
M	LIN02	Product/Service ID Qualifier	M ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		CB	Buyer's Catalog Number
		CG	Commodity Grouping
		DG	Discount Grouping
		FS	National Stock Number
		HI	HIBC (Health Care Industry Bar Code)
		IN	Buyer's Item Number
		LT	Lot Number
		MG	Manufacturer's Part Number
		N1	National Drug Code in 4-4-2 Format 4-digit manufacturer ID, 4-digit product ID, 2-digit trade package size
		N2	National Drug Code in 5-3-2 Format 5-digit manufacturer ID, 3-digit product ID, 2-digit trade package size
		N3	National Drug Code in 5-4-1 Format 5-digit manufacturer ID, 4-digit product ID, 1-digit trade package size
		N4	National Drug Code in 5-4-2 Format 5-digit manufacturer ID, 4-digit product ID, 2-digit trade package size
		N5	National Health Related Item Code in 5-5 Format
		N6	National Health Related Item Code in 4-6 Format

ND National Drug Code (NDC)
 NH National Health Related Item Code
 PL Purchaser's Order Line Number
 SN Serial Number
 UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)
 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)
 VC Vendor's (Seller's) Catalog Number

M	LIN03	234	Product/Service ID Identifying number for a product or service	M AN 1/48
	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to LIN02 for code values.	X ID 2/2
	LIN05	234	Product/Service ID Identifying number for a product or service	X AN 1/48
	LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to LIN02 for code values.	X ID 2/2
	LIN07	234	Product/Service ID Identifying number for a product or service	X AN 1/48

Segment: **SN1** Item Detail (Shipment)
Position: 310
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: 1 If either SN105 or SN106 is present, then the other is required.
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
	SN101	350	Assigned Identification	O AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
M	SN102	382	Number of Units Shipped	M R 1/10
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	
M	SN103	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	

Segment: **DTM** Date/Time Reference
Position: 380
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify pertinent dates and times
Syntax Notes:

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

Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 036 Expiration Date coverage expires 208 Lot Number Expiration	M ID 3/3
	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: **SDQ** Destination Quantity
Position: 390
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 50
Purpose: To specify destination and quantity detail
Syntax Notes:

- 1 If either SDQ05 or SDQ06 is present, then the other is required.
- 2 If either SDQ07 or SDQ08 is present, then the other is required.
- 3 If either SDQ09 or SDQ10 is present, then the other is required.
- 4 If either SDQ11 or SDQ12 is present, then the other is required.
- 5 If either SDQ13 or SDQ14 is present, then the other is required.
- 6 If either SDQ15 or SDQ16 is present, then the other is required.
- 7 If either SDQ17 or SDQ18 is present, then the other is required.
- 8 If either SDQ19 or SDQ20 is present, then the other is required.
- 9 If either SDQ21 or SDQ22 is present, then the other is required.

Semantic Notes:

- 1 SDQ23 identifies the area within the location identified in SDQ03, SDQ05, SDQ07, SDQ09, SDQ11, SDQ13, SDQ15, SDQ17, SDQ19, and SDQ21.

Comments:

- 1 SDQ02 is used only if different than previously defined in the transaction set.
- 2 SDQ03 is the store number.
- 3 SDQ23 may be used to identify areas within a store, e.g., front room, back room, selling outpost, end aisle display, etc. The value is agreed to by trading partners or industry conventions.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SDQ01	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
	SDQ02	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	O ID 1/2
M	SDQ03	67	Identification Code Code identifying a party or other code	M AN 2/80
M	SDQ04	380	Quantity Numeric value of quantity	M R 1/15

Segment: **CTT** Transaction Totals
Position: 010
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
 2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354	Number of Line Items Total number of line items in the transaction set	M N0 1/6

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
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)

Syntax Notes:

Semantic Notes:

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

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
M	SE02	329	Transaction Set Control Number 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