

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

This standard provides the standardized format and establishes the data contents of a ship notice/manifest transaction set. A ship notice/manifest lists 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.

Table 1: Heading

	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	ST	Transaction Set Header	M	1		
Must Use	BSN	Beginning Segment for Ship Notice	M	1		
Must Use	DTM	Date/Time Reference	M	10		

Table 2: Detail

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments	
Must Use	010	HL	HL - Shipment Level			200000		
	080	HL	Hierarchical Level	M	1			
	110	MEA	Measurements	M	40			
	120	TD1	Carrier Details (Quantity and Weight)	M	20			
	130	TD5	Carrier Details (Routing Sequence/Transit Time)	M	12			
	150	TD3	Carrier Details (Equipment)	M	12			
	150	REF	Reference Identification	M	200			
			LOOP ID - N1				200	
	220	N1	Name	M	1			
			HL - Order Level				200000	
	230	HL	Hierarchical Level	M	1			
	235	LIN	Item Identification	M	1			
	237	SN1	Sub line Item Detail	M	1			
			LOOP ID - CLD				200	
	170	CLD	Load Detail	M	1			
	180	REF	Reference Identification	M	200			

Table 3: Summary

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	CTT	Transaction Totals	M	1		
Must Use	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.
2. 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.

Segment:

ST Transaction Set Header

Loop:

Level:

Usage:

Max Use:

Syntax Notes:

Heading

Mandatory

1

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

Data Element Summary

	<u>Ref. Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	ST01	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	M ID 3/3
>>	ST02	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:
Loop:
Level:
Usage:
Max Use:
Purpose:

BSN Beginning Segment for Ship Notice

Heading
Mandatory
1

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

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	BSN01	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M ID 2/2
>>	BSN02	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment	M AN 2/30
>>	BSN03	ASN Creation Date Date expressed as CCYYMMDD	M DT 8/8
>>	BSN04	ASN Creation Time Time expressed in 24-hour clock time as follows: HHMM (Time range: 0000 through 2359)	M TM 4/8

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:
Syntax Notes:

DTM

Date/Time Reference

Heading
Mandatory
10

To specify pertinent dates and times: Date shipped/customs pass date

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	DTM01	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped	M ID 3/3
>>	DTM02	Shipment Date Date expressed as CCYYMMDD	M DT 8/8
>>	DTM03	Shipment Time Time expressed in 24-hour clock time as follows: HHMM (Time range: 0000 through 2359)	M TM 4/8

Segment: **HL** Hierarchical Level – Shipment Level

Loop:
Level: Detail
Usage: Mandatory
Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of segments
Syntax Notes: 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.
Comments: The HL segment defines a top-down/left-right ordered structure.

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.

HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

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.

Notes:

- Shipment: Data that applies to the whole shipment. (example: bill of lading number, carrier details etc.)
- Order: Data related to the customer's order. (example: part number, number of units shipped, etc.)
- Item: Data related to the product being shipped. (example: release number)

Data Element Summary

<u>Ref.</u>	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	HL01	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	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	M AN 1/12
>>	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M ID 1/2
		S Shipment	

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

MEA Measurements

Detail
Optional
40
To specify physical measurements weights or counts

Data Element Summary

	<u>Ref. Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	MEA01	Measurement Reference ID Code Code identifying the broad category to which a measurement applies PD – Physical Dimension Qualifier	M ID 2/2
>>	MEA02	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies G – Gross Weight Qualifier	M ID 1/3
>>	MEA03	Measurement Value The value of the measurement	M R 1/20
>>	MEA04	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 LB - Pounds	M ID 2/2

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

TD1 Carrier Details (Quantity and Weight)

HL
Detail
Mandatory
20

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

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	TD101	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 Refer to 4010 Data Element Dictionary for code values.	M AN 3/5
>>	TD102	Lading Quantity Number of units (pieces) of the lading commodity	M NO 1/7

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

TD5 Carrier Details (Routing Sequence/Transit Time)

HL
Detail
Mandatory
12

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

Data Element Summary

Ref.	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	TD501	Routing Sequence Code Code describing the relationship of a carrier to a specific shipment movement B – Origin/Delivery Carrier	M ID 1/2
>>	TD502	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) Standard Carrier Alpha code (SCAC)	M ID 1/2
>>	TD503	Identification Code Code identifying a party or other code	M AN 2/80
>>	TD504	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment Refer to 4010 Data Element Dictionary for code values.	M ID 1/2

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

TD3 Carrier Details (Equipment)

HL
Detail
Mandatory
12

To specify transportation details relating to the equipment used by the carrier

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	TD301	Equipment Description Code Code identifying type of equipment used for shipment TL – Trailer	M ID 2/2
>>	TD303	Equipment Number Trailer Number	M AN 1/10

Segment: REF Reference Identification
Loop: HL
Level: Detail
Usage: Optional
Max Use: 200
Purpose: To specify identifying information

Data Element Summary

<u>Ref. Des.</u>	<u>Name</u>	<u>Attributes</u>
>> REF01	Reference Number Qualifier Code qualifying the Reference Identification BM/PK Bill of Lading Number/ Packing list number	M ID 2/3
>> REF02	Reference Number Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

N1 Name

N1
Detail
Mandatory
1

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

Data Element Summary

Ref.	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	N101	Entity Identifier Code Qualifier Code identifying an organizational entity, a physical location, property or an individual SF Ship From ;SEWS assigned vendor/supplier code	M ID 2/3
	N102	Name Free-form name	X AN 1/60
>>	N103	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 92	M ID 1/2
>>	N104	Identification Code Code identifying a party or other code as specified in N101	M AN 2/80

Segment: **N1** Name
Loop: N1
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code

Data Element Summary

<u>Ref.</u>	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	N101	Entity Identifier Code Qualifier Code identifying an organizational entity, a physical location, property or an individual ST Ship-to	M ID 2/3
	N102	Name Free-form name	X AN 1/60
>>	N103	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 92	M ID 1/2
>>	N104	Identification Code Code identifying a party or other code as specified in N101	M AN 2/80

Segment: **HL** Hierarchical Level – Shipment Level
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1

Purpose:
Comments: To identify dependencies among and the content of hierarchically related groups of segments
 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.

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.

HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

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.

Data Element Summary

Ref.	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	HL01	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	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	M AN 1/12
>>	HL03	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure I Item	M ID 1/2

Segment: LIN Item Identification
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes: If either LIN02 or LIN03 is present, then the other is required
 If either LIN04 or LIN05 is present, then the other is required
 If either LIN06 or LIN07 is present, then the other is required
 If either LIN08 or LIN09 is present, then the other is required
 If either LIN10 or LIN11 is present, then the other is required
Comments: See the Data Dictionary for a complete list of IDs
 LIN02 through LIN11 provide for different product/service IDs for each item

Notes: Shipment: Data that applies to the whole shipment. (example: bill of lading number, carrier details etc.)
 Order: Data related to the customer's order. (example: partnumber, number of units shipped, etc.)
 Item: Data related to the product being shipped. (example: release number)

Data Element Summary

Ref.	Des.	Name	Attributes
>>	LIN02	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID BP Buyer's Part Number	M ID 2/2
>>	LIN03	Product/Service ID Identification number for a product or service On the label barcode, prefix should be P for wire product, C for color	M AN 1/35
>>	LIN04	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID PO Purchase Order Number	M ID 2/2
>>	LIN05	Product/Service ID Identifying number for a product or service	M AN 1/10
>>	LIN06	Reference Number Qualifier Code qualifying the Reference Identification IV Seller's Invoice Number	O ID 2/3
>>	LIN07	Reference Number Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/10

Segment:
 Loop:
 Level:
 Usage:
 Max Use:
 Purpose:

SN1 Sub Line Item Detail

HL
 Detail
 Mandatory
 1

To specify basic item identification data

Data Element Summary			
	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	SN101	Reference Qualifier PC Total quantity qualifier corresponding to the product/service ID in the LIN 03	M ID 2/2
>>	SN102	Reference Total shipped quantity corresponding to the product/service ID in the LIN 03	M R 1/10
>>	SN103	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 Refer to 4010 Data Element Dictionary for code values.	M ID 2/2
>>	SN105	Reference Qualifier PR Unit Price corresponding to data reference in LIN03	O ID 2/2
>>	SN106	Reference Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O M 1/10 D4

Segment:
Loop:
Level:
Usage:
Max Use:
Purpose:

CLD Load Detail

HL
Detail
Mandatory
9999
To identify the details of the load, i.e. pieces per serial

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	CLD01	Total number of serials Total number of serials shipped corresponding to the subsequent REF02 In the label barcode, prefix for serial/shipped quantity is Q	M R 1/10
>>	CLD02	Number of pieces Total number of pieces shipped corresponding to the subsequent REF 02	M R 1/10

Segment:
 Loop:
 Level:
 Usage:
 Max Use:
 Purpose:

REF Reference Identification

HL/CLD

Detail

Mandatory

9999

To specify identifying serial information.

Serial number should be unique, should not repeat in any shipment.

Serial number should start with an 'S' in ASN and barcode.

Serial number value in ASN data should match the barcode value on the label.

Supplier code should be included in the serial number.

Format: S<supplier code><unique counter>

Example:SABC1109756699

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	REF01	Reference Number Qualifier Code qualifying the Reference Identification LS Bar-Coded Box Serial Number	M ID 2/3
>>	REF02	Reference Number Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier: Bar-Coded Box Serial Number Serial number should be unique, should not repeat in any shipment. Serial number should start with an 'S' in ASN and barcode. Serial number value in ASN data should match the barcode value on the label. Supplier code should be included in the serial number. Format: S<supplier code><unique counter> Example:SABC1109756699	M AN 1/30

Segment:
 Loop:
 Level:
 Usage:
 Max Use:
 Purpose:
 Comments:

CTT Transaction Totals

Detail
 Mandatory
 9999
 To specify identifying serial information

Data Element Summary

Data Element Summary

Ref.	<u>Des.</u>	<u>Name</u>	<u>Attributes</u>
>>	CTT01	Number of Line Items Total number of line items in the transaction set	M NO 1/6
	CTT02	Hash Total 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

Sample 856:

ISA*00* *00* *01*999999999 *01*175638741 *180725*1551*U*00401*000000
001*0*P*>
GS*SH*999999999*175638741*20180725*1551*0001*X*004010
ST*856*0001
BSN*00*TEST01*20180725*1149
DTM*011*20180725*1149
HL*1**S
MEA*PD*G*12*LB
MEA*PD*N*10*LB
TD1*CTN90*1
TD5*B*2*PNII*LT
TD3*TL**99999
REF*PK*99999999
REF*BM*99999999
N1*SF**92*XXXX
N1*ST**92*942257585
HL*2*1*I
LIN**BP*TESTPART*PO*TESTPO
SN1**150*EA
CLD*1*100*CTN90
REF*LS*SXXXX999999999
CLD*1*25*CTN90
REF*LS*SXXXX999999998
REF*LS*SXXXX999999997
CTT*2
SE*23*000000001
GE*1*0001
IEA*1*0001