

Recommended Business Practices: Implementing the EDI 856 Ship Notice / Manifest Transaction

Overview

The 856 Ship Notice / Manifest, commonly known as the Advance Ship Notice (ASN), is used by the supplier to transmit data pertinent to the shipment. The main purpose of the ASN is to track shipments and simplify the receiving process. It should always be transmitted as the shipment leaves the supplier's dock; otherwise, the information is not available to the customer when it is needed. Do not send the ASN before the shipment leaves the supplier's dock.

To enable the customer to keep track of the in-transit shipments, the ASN contains carrier information such as the Standard Carrier Alpha Coded (SCAC), trailer number, method of transport, etc. The customer uses this information to plan receipts and to track shipments when they do not arrive as expected. The customer is also able to simplify receipts by receiving against the ASN. If the ASN is correct, all of the shipment information is already in the customer's system, and receipt process need only indicate that a particular shipment has arrived. If the ASN is not accurate, delays will occur for both the customer and supplier.

To create an ASN correctly it is important to understand the shipment documents and how they work. There are many different ways to refer to the shipment documents. What follows are definitions as they are used in this recommendation.

A **shipment** in the broadest sense of the term is a single conveyance leaving the supplier's location. However, for the purposes of this document, the term shipment will be used in the context describing the movement of freight from one specific location to a specific destination.

A **packing slip** is a materials document that accompanies a shipment and provides the part number detail information of the shipment. There is always at least one packing slip for each destination in the shipment.

A **bill of lading** is a transportation document that the carrier signs. It is used to indicate the physical characteristics of the shipment, for example, 4 skids and 2 boxes. If the shipment contains multiple packing slips going to the same destination, there would be one bill of lading referencing all containers on all of the packing slips. The bill of lading has only one destination, but there may be multiple bills of lading per shipment.

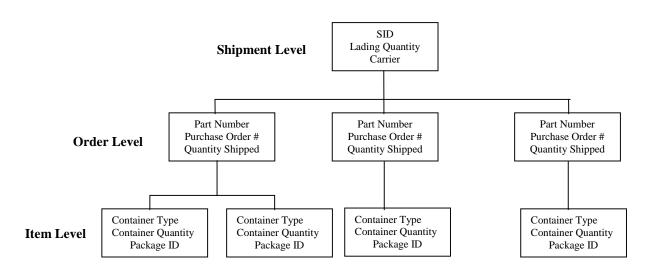
If the shipment has multiple destinations, a **master bill of lading** is used and the carrier signs it instead of the individual bill of lading. The master bill of lading would reference all containers and weights on all of the individual bills of lading. A shipment can have only one master bill of lading.

After the shipment process is completed, an invoice is created. In an Evaluated Receipts Settlement (ERS) environment, the customer pays from the supplier's shipping documents, most likely the ASN, and from their internal receiving reports. The supplier uses the invoice to update their accounts receivable system, but does not send the customer an invoice for the material that was delivered.

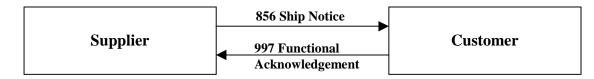
A **Shipment Identification** (SID) number is assigned for each destination of the shipment. There can only be one SID per destination. It is recommended that the packing slip, bill of lading, and invoice reference the SID number. The SID permits a simple, single reference number to be exchanged between supplier and customer.

The ASN has a one-to-one relationship with the SID, which is transmitted in the beginning segment (BSN) of the ASN. The master bill of lading number is transmitted in a reference segment. This means more than one ASN can refer to the same master bill of lading number.

The ASN has a structure that is made up of hierarchical levels. The three levels that should be used are the Shipment Level, the Order Level, and the Item Level. The shipment level contains information for the entire shipment (for example SID, shipment date,...). The order level will occur one or more times under the shipment level and contains information about each part in the shipment (for example, part number, total quantity shipped,...). The item level will occur one or more times under the order level and contains information about each line item in the shipment (for example, container quantity, bar code package ID number, ...).



When the customer receives an ASN, a 997 Functional Acknowledgement should be transmitted to the supplier. The Functional Acknowledgment lets the supplier know the transmission was received and whether the ASN was syntactically correct, for example missing data elements or missing segments. The customer should transmit the 824 Application Advice to indicate errors in the data content; for example incorrect part number or invalid purchase order number. There are three conditions that may be returned on an 824 Application Advice: line item accepted, line item accepted with errors, and line item rejected. If there are minor errors, the customer may accept the ASN and advise the supplier to correct the errors before the next ASN transmission using the code for line item accepted with errors. The ASN should be rejected if errors in the data are severe enough that the customer's application requires the supplier to correct and retransmit the ASN in its entirety.



Information Required

Header Information: Shipment Level

Shipment Identification Number Shipment Date and Time Carrier SCAC Conveyance Mode Code Equipment Description Code Trailer or Conveyance Number Supplier and/or Ship From Location DUNS Number Ship To Location DUNS Number Gross / Net Weight of Shipment Total Number of Containers

Detail Information: Order Level

Part Number	Container Description Code / Number of Parts per Container
Quantity Shipped	Physical Dimensions
Purchase Order Number	Heat Code /Bar Code Package Id for each Container

Detail Information: Item Level

Transaction Set Detail

Header Information

<u>BSN</u>

The BSN segment is the beginning segment of the ASN and one BSN is required for each ASN that is transmitted.

The BSN01 element is used for the Transaction Set Purpose Code. A code of "00" is transmitted to indicate an original, or "01" is transmitted to indicate a cancellation. To change an ASN that has been accepted, the ASN should first be cancelled and then retransmitted as an original. Alternatively, a code of "05" can be retransmitted to indicate the supplier is resending the entire ASN with changes/corrections.

The BSN02 element is the SID since it is the unique number that identifies the shipment and will enable both the customer and the supplier to tie the payment back to the shipment. When a master bill of lading is used there should be one ASN for each SID on the master bill of lading.

The BSN03 and BSN04 elements indicate the date and time of ASN generation. They are not used for the physical or actual date and time the shipment occurred.

DTM

The DTM segment is used to convey the date and time the shipment left the supplier's dock.

The element DTM01 must be "011" (shipped).

The time in element DTM03 and time zone code in element DTM04 should reflect the local time of the supplier's shipment location.

It is recommended that the element DTM05 should be used to indicate the century by sending the first two digits of the year; for example, "20" if the year is 2002.

Shipment Information

<u>HL</u>

The hierarchical level is used to indicate to which section of the ASN the segments following the HL belong. The HL segment here indicates that all the segments between here and the next HL segment are part of the shipment level of the ASN. In other words, the information they contain relates to the entire ASN. There must always be one HL segment indicating shipment level. The element HL01 will always be "1" at the shipment level. The element HL02 is not used at the shipment level. The HL03 will always be "S" at the shipment level.

Note: HL01 contains a number indicating which HL segment this is in the transaction set. It is determined by counting the HL segments preceding the current HL segment and adding one. This means the first HL segment in the transaction set has an HL01 of "1", the second HL segment in the transaction set has an HL01 of "2", the third HL segment has an HL01 of "3", and so on.

MEA

The MEA segment is used to specify the weight of the shipment.

The element MEA01 will always have a code of "PD" (physical dimension). Element MEA02 is used to indicate whether the weight is gross weight or net weight. At least one occurrence of the MEA is required and there must be a "G" in element MEA02 indicating gross weight. For rail shipments, as second MEA segment is needed which has an "N" for net weight in element MEA02. Element MEA04 contains either "LB" for pounds or "KG" for kilograms. The MEA segment at the shipment level is for transportation data only.

<u>TD1</u>

Only one TD1 is used to convey packaging information for the entire ASN and is used to indicate the total number of containers.

Below is a list of suggested codes for element TD101.

BAG71 - bag	BAL71 - bale	BBL71 - barrel	BDL71 - bundle
BOX71 - box	CNT71 - container	COL71 - coil	PLT71 - pallet
RCK71 - rack	ROL71 -roll	SHT71 - sheet	LSE71 - loose
LFT71 - lift	CNT71 - carton		

Element TD102 is the total number of loose packages. For example, 12 boxes shrink-wrapped on 5 pallets would have a TD101 of "PLT71" and a TD102 of "5".

<u>TD5</u>

The TD5 segment is used to transmit carrier details.

The element TD501 always contains a value of "B" (origin/delivery carrier) and element TD502 always contains a value of "2" to indicate that the data in TD503 is a Standard Carrier Alpha Code (SCAC). The SCAC can be obtained from the *Directory of Standard Multi-Modal Carriers and Tariff Agents Codes (SCAC-STAC), NMF Series*, available from the National Motor Freight Association Inc.

The conveyance mode code in TD504 is the method of shipment. Below is a chart showing the relationship between elements TD504, TD507, and TD508:

If TD504 is:	Then TD507 is:	And TD508 is:
air charter – AC	OR	three-character airport code
air express – AE	OR	three-character airport code
consolidation – C	PP	customer assigned pool code
expedited truck – E	not used	not used
less than truck load – LT	PP	customer assigned pool code
motor (common carrier) - M	М	customer assigned pool code
motor (package carrier) - MP	not used	not used
private carrier – P	not used	not used
rail – R	not used	not used
roadrailer (piggyback) – RR	not used	not used
Ocean – S	not used	not used
inland waterways - W	not used	not used

<u>TD3</u>

The TD3 segment is used to transmit information about the equipment delivering the shipment.

The element TD301 is the code describing the equipment. Following is a chart of recommended codes.

If TD504 is:	Then TD301 is:	And TD302 is :	And TD303 is:
AC	aircraft - AP	not used	not used
AE	aircraft - AP	not used	not used
C	trailer - TL	SCAC of delivering carrier if	trailer number
		brokered; otherwise, not used	
E	trailer - TL	SCAC of delivering carrier if	trailer number
		brokered; otherwise, not used	
LT	trailer - TL	SCAC of delivering carrier if	trailer number
		brokered; otherwise, not used	
М	trailer - TL	SCAC of delivering carrier if	trailer number
		brokered; otherwise, not used	
MP	trailer - TL	not used	trailer number
Р	trailer - TL	not used	trailer number
R	rail car - RR	alpha portion of rail car id	alpha portion of rail car id
RR	rail car -RR	alpha portion of rail car id	alpha portion of rail car id
S	vessel, ocean - VE	alpha portion of ISO container id	alpha portion of ISO container id
W	vessel, lake - VL	alpha portion of ISO container id	alpha portion of ISO container id

TD4

The TD4 segment is used only when the shipment contains material that has been classified as hazardous and/or requires special handling.

<u>REF</u>

The REF segment at the shipment level is used to indicate master bill of lading number, bill of lading number, packing slip number, or air waybill number for the shipment. The following chart shows the recommended usage.

If REF01 is:	Then REF02 contains:
MB	master bill of lading number
BM	bill of lading number
РК	packing slip number
AW	air waybill number

<u>N1</u>

The N1 segment is used to identify information that applies to all parts in the detail area.

The Material Release Issuer (MI), Supplier (SU) or Ship From (SF), and Ship To (ST) identifiers must be transmitted in the N101 element. The DUNS number for these identifiers must be transmitted in the N104 element.

DUNS numbers must have internal spaces and dashes suppressed. For example, DUNS number 123-45-6789 would be sent as 123456789.

The Material Release Issuer is the party responsible for paying the supplier and establishing the contract.

The Supplier is the party responsible for the product or service.

The Ship From is the ship from location.

The Supplier or Ship From entity identifier code must be sent, but only one should be transmitted when the SU and the SF are the same location. If the SU and SF are different locations then the use of both SU and SF is allowed. The use of the SU and SF should be consistent across all transaction sets. The entity identifier code used and cum control should be agreed upon between trading partners.

The Ship To (ST) is the location where the Material Release Issuer (MI) wants the supplier to ship the product. The ST and MI may or may not be the same based on the company's processing.

Detail Information

Order Level

<u>HL</u>

The hierarchical level is used to indicate to which section of the ASN the segments following the HL belong. The HL segment here indicates the order level of the ASN. The HL Segment starts a loop of segments containing information describing order type information, for example, part number, PO number, quantity. There will be one HL loop at the order level for each part/purchase order/engineering change combination on the ASN. There must always be at least one HL segment indicating order level. The element HL01 will be the sequential number indicating which HL segment this is within the transaction set. Since there is only one HL at the shipment level, the first HL at the order level will have a "2". The element HL02 is "1" at the order level. The element HL03 will always be "O" at the order level.

Note: HL01 contains a number indicating which HL segment this is in the transaction set. It is determined by counting the HL segments preceding the current HL segment and adding one. This means the first HL segment in the transaction set has an HL01 of "1", the second HL segment in the transaction set has an HL01 of "2", the third HL segment has an HL01 of "3", and so on.

LIN

There will be one LIN for each part and purchase order number combination on the ASN. The chart below shows the possible values for elements LIN02 to LIN05:

If LIN02 is:	Then LIN03 is:	If LIN04 is:	Then LIN05 is:
BP	customer part number		
RC	returnable container number		
		EC	engineering change level

<u>SN1</u>

The SN1 segment is used to indicate actual ship quantities. Element SN102 is the total quantity shipped of this line item.

The SN03 is the shipping unit of measure provided on the 830 Material Release and/or 862 Shipping Schedule. This element SN104 is the cumulative quantity shipped including this shipment since last cum reset.

<u>PRF</u>

The PRF segment is used to transmit the purchase order number. Element PRF01 is a reference to the purchaser's PO number.

<u>REF</u>

The REF segment at this level is optional and used primarily to indicate material routing.

Item Level

HL

The hierarchical level is used to indicate to which section of the ASN the segments following the HL belong. The HL segment here indicates the item level of the ASN. The HL Segment starts a loop of segments containing information that describes details about the line items on the ASN. There will be at least one HL loop at the item level for each part on the ASN. There must always be at least one HL segment indicating item level. The element HL01 will be the sequential number indicating which HL segment this is within the transaction set. The element HL02 contains the same value HL01 contained at the order level for this part and purchase order number combination. The element HL03 will always be "I" at the item level.

Note: HL01 contains a number indicating which HL segment this is in the transaction set. It is determined by counting the HL segments preceding the current HL segment and adding one. This means the first HL segment in the transaction set has an HL01 of "1", the second HL segment in the transaction set has an HL01 of "2", the third HL segment has an HL01 of "3", and so on.

MEA

The MEA segment at the item level is an optional segment used to indicate the physical dimensions of individual coils of steel and other primary metals.

The chart below shows the possible values for elements MEA02:

WT	Weight
WD	Width
TH	Thickness
LN	Length

Element MEA03 will contain the actual measurement qualified by MEA02. Element MEA04 will indicate the composite unit of measure of the value in MEA03

<u>REF</u>

This REF segment is used to convey reference data for the part specified in the current HL Level (Item Level). The chart below shows the possible values for elements REF segment:

If REF01 is:	Then REF02 contains:
DK	dock code
LF	line feed
LS	bar code package ID number
SE	serial number

<u>CLD</u>

The CLD segment is used to identify the containers the parts where shipped in and the quantity per container.

Element CLD01 is the number of containers of the type specified in element CLD03.

Element CLD02 is the number of parts in the container.

Below is a list of suggested codes for element CLD03. The Customer will advise the supplier which code(s) to transmit.

BAG71 – bag	BAL71 – bale	BBL71 – barrel	BDL71 – bundle
BOX71 – box	CNT71 – container	COL71 – coil	PLT71 – pallet
RCK71 – rack	ROL71 – roll	SHT71 – sheet	LSE71 – loose
LFT71 – lift			

<u>REF</u>

The REF segment in the CLD loop is used to convey the package ID number for the containers specified in the previous CLD segment.

НС	heat code
LS	bar code package ID number
SE	serial number

<u>ETD</u>

This optional segment is a good way to transmit an authorization number for excess or premium transportation. This segment should only be required if the customer's system is capable of tracking premium freight cost automatically. Only put an authorization number for those parts that caused the excess or premium transportation.

Element ETD01 identifies the reason code.

Element ETD02 will contain "A" if the customer will incur the charge or "S" if the supplier will incur the charge. Element ETD03 contains "AE" indicating that the authorization number for the expense is contained in element ETD04. This number is customer assigned and can be used to track premium freight charges.

Summary Information

<u>CTT</u>

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

Element CTT01 is used to transmit the total number of HL segments to ensure the integrity of the transmission. Element CTT02 is the sum of all SN102 segments.

Recommended Practices

- Do not pre-assign or send ASNs before the shipment leaves the dock.
- The ASN should be sent with the departure of the conveyance (as the shipment leaves).
- Suppliers should check 997s and 824s in a timely manner and immediately act on errors.
- Customers should not delay sending 997s or 824s or the supplier will not be able to respond promptly.
- Automate ASN creation to eliminate data entry errors. For example, bar code scan to create or verify the ASN. Do no manually key the ASN data.
- Do not send more than one LIN segment per part/purchase order/engineering change combination on an ASN.
- Do not confuse ASN generation time (BSN04) and shipment time (DTM03).
- If you reset cums annually then reset them using January 1 as the after inventory date.
- If you use cums shipped, it should always include the current shipment quantity.
- If cums are used between the trading partners, the 824 Application Advice should be used by the supplier to identify and resolve any cum discrepancies.
- If, upon receipt of the material, there are any discrepancies between the material received and the material referenced by the ASN, the customer should generate an 861 referencing the SID.
- For freight companies, use Standard Carrier Alpha Codes that are contained in the *Directory of Standard Multi-Modal Carriers and Tariff Agents Codes (SCAC-STAC), NMF Series*, available from the National Motor Freight Association Inc. Do not invent codes. If the SCAC is not known, the supplier should contact the customer.
- If a duplicate ASN is received, the customer should not overwrite the original ASN but should reject the ASN and send an 824 with an error code indicating a duplicate ASN.
- To change an ASN that has been accepted by the customer, the supplier must cancel the ASN and then retransmit the ASN with corrections as an original ASN. Alternatively, the ASN can make use of the "05" code to indicate the ASN is a replacement of the original document.
- The Supplier must clearly mark each mixed load as MIXED LOAD.
- The receiver of the material should brake down the mixed load shipment so that each Part/PO combination is received as either a single pack-item, or as a multi-pack/mixed quantity pack-item.
- Mixed loads should be the exception, not the norm, when the Customer orders a Supplier shipment.