IBX X12 4010 856 Ship Notice Specification

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Product Management

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Company Public Information

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1. Introduction

The EDI (Electronic Data Interchange) Standard (X12), version (4010) and Transaction Set (810) is a globally standardized Invoice format developed by ANSI (American National Standards Institute), a private not-for-profit organization that oversees the creation, promulgation and use of thousands of norms and guidelines that directly impact businesses.

This format is most commonly used in the United States, the IBX Connect platform has implemented support in receiving shipment notices from North American suppliers via e-mail and FTP Polling. This format support will allow suppliers to send EDI shipment notices to the IBX Connect platform without implementing mappings from their internal EDI format to XML.

Below is an example typical structure format used by the IBX Connect Platform when communicating the ANSI X12 810 transaction set.

2. Purpose

The purpose of this document is to detail the information contained in the segments of the EDI X12 format as sent by the IBX Connect platform. More information regarding ANSI X12-4010 transaction sets can be found at http://www.disa.org. Please note publications are available at a cost.

3. Schema Validation

Any EDI X12 4010 856 Ship Notice received by IBX Connect from suppliers must be valid according to the global X12 4010 schema for the document type 856 - Ship Notice. Documents which do not comply with the standard EDI X12 4010 specifications might not be accepted by the IBX Connect platform.

4. IBX EDI X12 856 Ship Notice

4.1 General information

4.1.1 ANSI X12 Version

IBX Connect Platform supports ANSI X12, Version 004010. No other ANSI X12 versions can be received.

4.2 ISA - Interchange Control Header

This segment starts and identifies an interchange of one or more groups or loops and their related segments. This segment is ended by the IEA segment. Only one ISA-IEA control loop may be used per transmission.

Element	Meaning	Length (min/max)	Required?
ISA01	Authorization Information Qualifier Default: "00" = "No Authorization Information Present"	2/2	Yes
ISA02	Authorization Information Default: empty	10/10	Yes
ISA03	Security Information Qualifier Default: "00" = "No Security Information Present"	2/2	Yes
ISA04	Security Information Default: empty	10/10	Yes
ISA05	Interchange ID Qualifier Default: "ZZ" = "Mutually Defined"	2/2	Yes
ISA06	Interchange Sender ID	15/15	Yes
ISA07	Interchange ID Qualifier Default: "ZZ" = "Mutually Defined" Other values e.g.: "01" = "DUNS number"	2/2	Yes
ISA08	Interchange Receiver ID	15/15	Yes
ISA09	Interchange Date - YYMMDD	6/6	Yes
ISA10	Interchange Time - HHMM	4/4	Yes
ISA11	Repetition Separator - provides the delimiter used to separate repeated occurrences of a simple data element or a composite data structure; this value must be different than the data element separator, component element separator, and the segment terminator. Example: "*"	1/1	Yes
ISA12	Interchange Control Version Number - Indicates	5/5	Yes

	the version of the ISA/IEA envelope		
ISA13	ISA13 - Interchange Control Number - A control number assigned by the interchange sender. May take any numeric value, but is usually incremented by one for each interchange sent to the same trading partner.	9/9	Yes
ISA14	Acknowledgment Requested Default: "0"	1/1	Yes
ISA15	Test Indicator "T" = Test "P" = Production	1/1	Yes
ISA16	The component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator Example: ">"	1/1	Yes

Example: `ISA*00* *00* *ZZ*SenderID *ZZ*ReceiverID *130421*1232*U*00402*163100545*0*T*>`

4.3 GS - Functional Group Header

The GS segment indicates the beginning of a functional group and provides control information. The GS segment is ended by the GE segment. One or more GS-GE control loops may be used per transmission by the sender, but at least one is mandatory.

Element	Meaning	Length (min/max)	Required?
GS01	Functional Group Header Code - Same as the Group Type of the included Transaction Sets Example: "SH" = Functional code for "Ship Notice"	2/2	Yes
GS02	Application Sender's Code	24/24	Yes
GS03	Application Receiver's Code	24/24	Yes
GS04	Date - YYMMDD, or CCYYMMDD as of 4010	8/8	Yes

GS05	Time - HHMM	4/4	Yes
GS06	Group Control Number - Like the ISA control number, is used for audit and to detect duplicates, missing, or out of sequence groups. Most importantly, the 997 Functional Acknowledgement, which acts as a return receipt for the group, references the group control number. May take any numeric value so long as there are no duplicates in the interchange, but is usually incremented by one for each group of this type sent to the same trading partner	9/9	Yes
GS07	Responsible Agency Code – "X" for X12 or "T" for TDCC Default: "X"	1/1	Yes
GS08	Version/Release/Industry Identifier Code - The first six characters specify the X12 version and release, while any of the last six may be used to indicate an Industry standard or Implementation Convention reference. Default: "004010"	5/5	Yes

Example:

```
GS*SH*SenderID*ReceiverID*20130410*1232*163100545*X*004010
```

4.4 X12 4010 856 Ship Notice Transaction Set

4.4.1 Overview

See below the structure of the X12 4010 856 Ship Notice Transaction Set with the segments used by IBX Connect Platform in bold font.

Table 1

pos.no	seg.id	name	req.des	max	loop.rep
0100	**ST**	**Transaction Set Header**	**M**	**1**	
0200	**BSN**	**Beginning Segment for Ship Notice**	**M**	**1**	
0400	DTM	Date/Time Reference	O	10	

Table 2

pos.no	seg.id	name	req.des	max	loop.rep

LOOP ID - HL				200000
C 0100 HL	Hierarchical Level	M	1	
0200 LIN	Item Identification	O	1	
0300 SN1	Item Detail (Shipment)	O	1	
0400 SLN	Subline Item Detail	O	1000	
0500 PRF	Purchase Order Reference	O	1	
0600 PO4	Item Physical Details	O	1	
0700 PID	Product/Item Description	O	200	
0800 MEA	Measurements	O	40	
0900 PWK	Paperwork	O	25	
1000 PKG	Marking, Packaging, Loading	O	25	
1100 TD1	Carrier Details (Quantity and Weight)	O	20	
1200 TD5	Carrier Details (Routing Sequence/Transit Time)	O	12	
LOOP ID - TD3				12
1300 TD3	Carrier Details (Equipment)	O	1	
1350 AT9	Trailer or Container Dimension and Weight	O	1	

1400 TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5	
1450 TSD	Trailer Shipment Details	O	1	
1500 REF	Reference Information	O	>1	
1510 PER	Administrative Communications Contact	O	3	
LOOP ID - LH1				**100**
1520 LH1	Hazardous Identification Information	O	1	
1530 LH2	Hazardous Classification Information	O	4	
1540 LH3	Hazardous Material Shipping Name Information	O	12	
1550 LFH	Free-form Hazardous Material Information	O	20	
1560 LEP	EPA Required Data	O	>1	
1570 LH4	Canadian Dangerous Requirements	O	4	
1580 LHT	Transborder Hazardous Requirements	O	3	
1590 LHR	Hazardous Material Identifying Reference Numbers	O	10	
1600 PER	Administrative Communications Contact	O	5	
1610 LHE	Empty Equipment Hazardous Material Information	O	1	
LOOP ID - CLD				**200**

1700 CLD	Load Detail	O	1	
1800 REF	Reference Information	O	200	
1850 DTP	Date or Time or Period	O	1	
1900 MAN	Marks and Numbers Information	O	>1	
2000 DTM	**Date/Time Reference**	**O**	**10**	
2100 FOB	**F.O.B. Related Instructions**	**O**	**1**	
2150 PAL	Pallet Type and Load Characteristics	O	1	
LOOP ID - N1				**200**
2200 N1	**Party Identification**	**O**	**1**	
2300 N2	**Additional Name Information**	**O**	**2**	
2400 N3	**Party Location**	**O**	**2**	
2500 N4	**Geographic Location**	**O**	**1**	
2600 REF	**Reference Information**	**O**	**12**	
2700 PER	**Administrative Communications Contact**	**O**	**3**	
2800 FOB	F.O.B. Related Instructions	O	1	
2900 SDQ	Destination Quantity	O	50	

3000 ETD	Excess Transportation Detail	O	1	
3100 CUR	Currency	O	1	
LOOP ID - SAC				>1
3200 SAC	Service, Promotion, Allowance, or Charge Information	O	1	
3250 CUR	Currency	O	1	
3300 GF	Furnished Goods and Services	O	1	
3350 YNQ	Yes/No Question	O	10	
LOOP ID - LM				10
3400 LM	Code Source Information	O	1	
3500 LQ	Industry Code Identification	M	100	
LOOP ID - V1				>1
3600 V1	Vessel Identification	O	1	
3700 R4	Port or Terminal	O	>1	
3800 DTM	Date/Time Reference	O	>1	

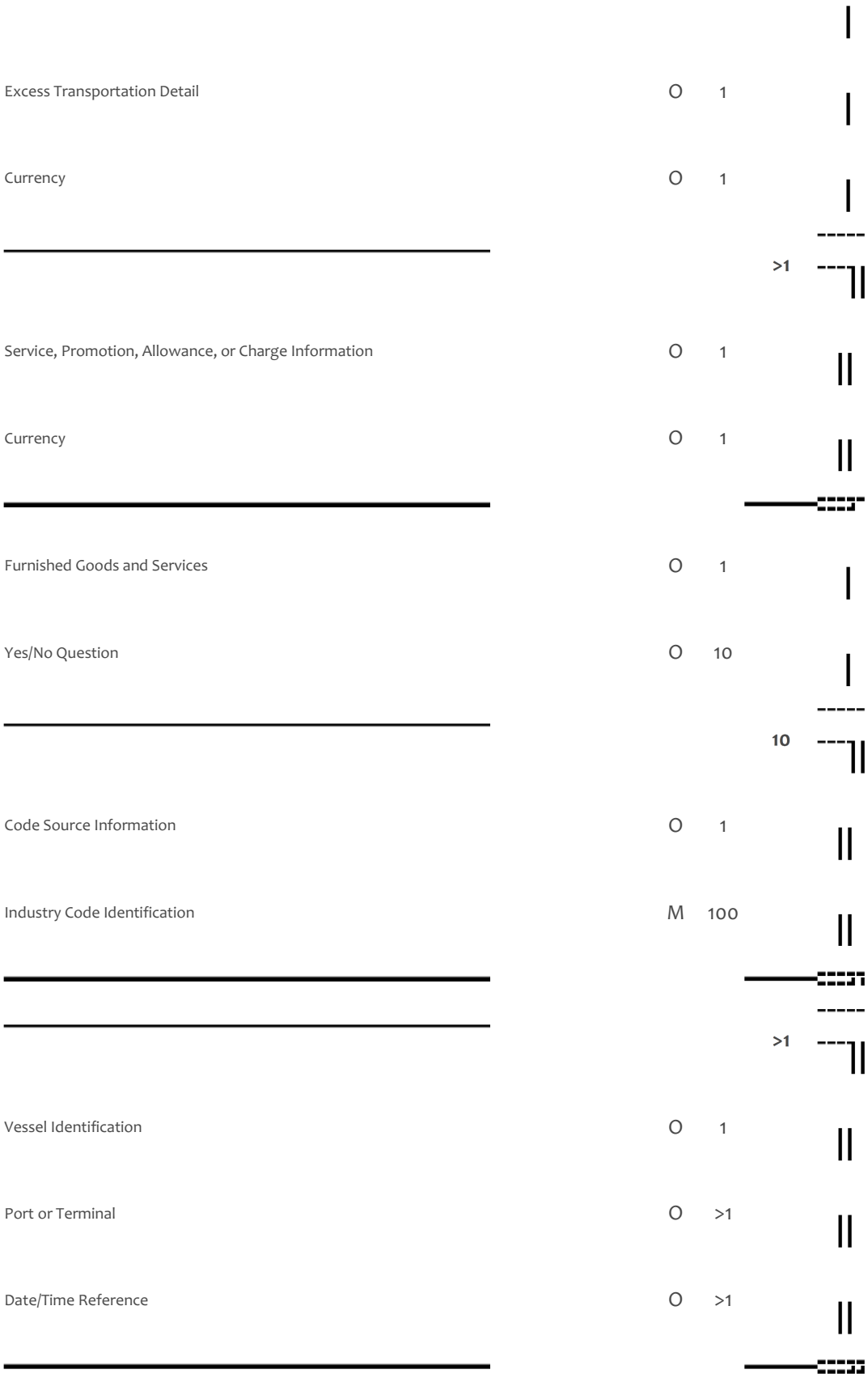

Table 3

pos.no	seg.id	name	req.des	max	loop.rep
N 0100	CTT	Transaction Totals	O	1	
0200	SE	Transaction Set Trailer	M	1	

4.4.2 ST - Transaction Set Header

This segment indicates the start of a transaction set and assigns a control number. It is ended by the SE segment. Invoices may be transmitted within one ST-SE control loop, but only Ship Notices may be present within this mandatory segment.

Element	Meaning	Length (min/max)	Required?
ST01	Transaction Set Identifier Code - A three digit numeric code identifying the Transaction Set type, from the Transaction Set table. Default: "856" = "Ship Notice"	3/3	Yes
ST02	Transaction Set Control Number - May take any alphanumeric value so long as there are no duplicates in the functional group. Usually starts with 0001 in each group, but there are several other numbering schemes in common usage. Example: "00545"	4/9	Yes

Example: `ST*856*00545~`

4.4.3 BSN - Beginning Segment for Ship Notice

This segment is used to transmit identifying numbers, dates, and other basic data relating to the transaction set.

Element	Meaning	Length (min/max)	Required?
BSN01	Transaction Set Purpose Code - Code identifying purpose of transaction set. Example: "00" = "Original" "01" = "Cancellation" "05" = "Replace"	2/2	Yes

	"06" = "Confirmation" "07" = "Duplicate"		
BSN02	Shipment Identification - A unique control number assigned by the original shipper to identify a specific shipment (ASNNumber)	2/30	Yes
BSN03	Date - the date the shipment transaction set is created, expressed as CCYYMMDD where CC represents the first two digits of the calendar year.	8/8	Yes
BSN04	Time - the time the shipment transaction set is created. 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).	4/8	No

Example: `BSN*00*163100545*20130402*1231`

4.4.4 HL - Hierarchical Level – Shipment Notice header

This segment can be used to identify dependencies among and the content of hierarchically related groups of data segments. Here first described is the hierarchical level "S" = "Shipment", meaning the document or header level.

Element	Meaning	Length (min/max)	Required?
HL01	Hierarchical ID Number - A unique number assigned by the sender to identify a particular data segment in a hierarchical 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.	1/12	Yes
HL03	Hierarchical Level Code - Code specifying the characteristic of a level in a hierarchical structure. 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,	1/2	Yes

	order, or item-level information. Example: "S" = "Shipment"		

Example: `HL*1**S`

4.4.5 PRF - Purchase Order Reference

This segment can be used to provide reference to a specific purchase order.

Element	Meaning	Length (min/max)	Required?
PRF01	Purchase Order Number - Identifying number for Purchase Order assigned by the orderer/purchaser.	1/22	Yes

Example: `PRF*Order12345`

4.4.6 TD5 - Carrier Details (Routing Sequence/Transit Time)

This segment can be used to specify the carrier and sequence of routing and provide transit time information.

Element	Meaning	Length (min/max)	Required?
TD503	Identification Code - Code identifying a party or other code. Used as ID of the carrier party.	2/80	No
TD505	Routing - Free-form description of the routing or requested routing for shipment, or the originating carrier's identity. Used as name of the carrier party.	1/35	No
TD512	Service Level Code - Code indicating the level of transportation service or the billing service offered by the transportation carrier. Example: "ZZ" = Mutually Defined" Mandatory when TD515 is provided.	2/3	No
TD515	Country Code - Code identifying the country. TD515 is the country where the service is to be	2/3	No

	performed. Used as the country code of the carrier party		

Example: `TD5**2*FXP**FEDEX GROUND*******ZZ***US`

4.4.7 REF - Reference Information

This segment can be used to specify identifying information.

Element	Meaning	Length (min/max)	Required?
REF01	Reference Identification Qualifier - Code identifying the Reference Identification. Example: "SI" = "Shipper's Identifying Number for Shipment (SID)" - A unique number (to the shipper) assigned by the shipper to identify the shipment "PK" = "Packing List Number" "CT" = "Contract Number" "BM" = "Bill of Lading Number" "CN" = "Carrier's Reference Number (PRO/Invoice)" "ZZ" = "Mutually Defined"	2/3	Yes
REF02	Reference Identification - Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier. Used as name of the carrier party.	1/80	Yes
REF0401	Reference Identification Qualifier - Code identifying the Reference Identification. Example: "RU" = "Route Number"	2/3	No
REF0402	Reference Identification - Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier. Must be a numeric value, otherwise the	1/80	No

	transformation to the TransportRouteID in IBX canonical xCBL format will produce an error.		

Example:
```
REF*BM*0844478773
REF*CN*987654321**RU>123456789
REF*SI*SID12345
REF*PK*PackingListNumber12345
REF*CT*ContractNumber12345
REF*ZZ*MutuallyDefinedID12345
```

4.4.8 DTM - Date/Time

This segment is used to specify dates and times for the entire order.

Element	Meaning	Length (min/max)	Required?
DTM01	Code specifying type of date or time, or both date and time Example: "011" = "Shipped" (ShippedDate) "070" = "Scheduled for Delivery (After and Including)" (DeliveryDate) "252" = "Early Start" (EarliestDeliveryDate) "254" = "Late Start" (LatestDeliveryDate)	3/3	Yes
DTM02	Date - Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year.	8/8	No
DTM03	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)	4/8	No

Example:
```
DTM*011*20110705*1200
```

4.4.9 FOB - F.O.B. Related Instructions

This segment is used to specify transportation instructions relating to shipment.

Element	Meaning	Length (min/max)	Required?
FOB01	Shipment Method of Payment Code - Code identifying payment terms for transportation charges, indicates which party will pay the carrier. Default: "DF" = "Defined by Buyer and Seller"	2/2	Yes
FOB02	Location Qualifier - Code identifying type of location, specifying transportation responsibility location. Default: "ZZ" = "Mutually Defined"	1/2	Yes
FOB04	Transportation Terms Qualifier Code - Code identifying the source of the transportation terms Example: "01" = "Incoterms"	2/2	Yes (when FOB05 is provided)
FOB05	Transportation Terms Code - Code identifying the trade terms which apply to the shipment transportation responsibility Example: "CFR" = "CostAndFreight" "FCA" = "FreeCarrier" etc.	3/3	No
FOB06	Location Qualifier - Code identifying type of location, specifying the title passage location.	1/2	Yes (when FOB07 is provided)
FOB07	Description - A free-form description to clarify the related data elements and their content. (TermsOfDeliveryDescription).	1/80	No
FOB09	Description - A free-form description to clarify the related data elements and their content. (TransportDescription)	1/80	No

Example: `FOB*DF*ZZ**ZZ*FCA*01*TermsOfDeliveryDescription free text note**TransportDescription free text note`

4.4.10 N1 - Party Identification

This segment is used to specify information about the buyer party, seller party, ship to party, bill to party, remit to party or ship from party. Used alone, it provides the most efficient method of providing organizational identification. The BIG segment identifies a party by type of organization, name, and code.

Element	Meaning	Length (min/max)	Required?
N101	Entity Identifier Code. Example: "BY" ="Buying Party" "SE" = "Selling Party" "ST" = "Ship To" "SF" = "Ship From" "BT" = "Bill-to-Party"	2/3	Yes
N102	Name of Entity	1/60	No
N103	Identification Code Qualifier. Code designating the system/method of code structure used for Identification Code Default: "92" = "Assigned by Buyer or Buyer's Agent"	1/2	No
N104	Identification Code. Code identifying a party or other code. Usually an internal ID of the party in the buyer's system.	21/80	No

Example: `N1*BY*BuyerName1*92*BuyerIDREF*CT*ContractNumber`

4.4.11 N2 - Additional Name Information

This segment is be used only to specify additional name information. It is used if the information contained in N1 regarding the name of the entity is not enough.

Element	Meaning	Length (min/max)	Required?
N201N901	Free-form name	1/60	Yes
N202	Free-form name	1/60	No

Example: `N2*BuyerName2*BuyerName3`

4.4.12 N3 - Address Information

This segment is used to specify the location of the named party in N1.

Element	Meaning	Length (min/max)	Required?
N301	Address Information (Street) - Free-form message text.	1/55	Yes

Example: `N3*BuyerStreet 12`

4.4.13 N4 - Geographic Location

This segment is used to specify the location of the named party from N1.

Element	Meaning	Length (min/max)	Required?
N401	City Name	2/30	No
N402	State or Province Code	2/2	No
N403	Postal Code	3/15	No
N404	Country Code	2/3	No

Example: `N4*BuyerCity*CA*12345*US`

4.4.14 PER - Administration Communication Contact

This segment is used to identify a person or office to which administrative communications should be directed.indicate the tax information for the invoice.

Element	Meaning	Length (min/max)	Required?
PER01	Contact Function Code (Mandatory according to X12, however currently not supported by IBX)	2/2	Yes
PER02	Name	1/60	No
PER03	Communication Number Qualifier – Can be specified as 'EM' for email, 'TE' for telephone or 'FX' for Fax	2/2	No
PER04	Communication Number – Value according to the qualifier above	1/256	No

PER05	Communication Number Qualifier – Can be specified as 'EM' for email, 'TE' for telephone or 'FX' for Fax	2/2	No
PER06	Communication Number – Value according to the qualifier above	1/256	No
PER07	Communication Number Qualifier – Can be specified as 'EM' for email, 'TE' for telephone or 'FX' for Fax	2/2	No
PER08	Communication Number – Value according to the qualifier above	1/256	No

Example:
`PER*RE*GoodsReceiverName*EM*GoodsReceiver@buyer.com*TE*+46081234567*FX*+46081234111*GoodsReceiverID`

4.4.15 HL - Hierarchical Level – Order Reference

This segment can be used to identify dependencies among and the content of hierarchically related groups of data segments. Here described is the hierarchical level "O" = "Order" followed by the order number which this shipment notice and the following items refer to.

Element	Meaning	Length (min/max)	Required?
HL01	Hierarchical ID Number - A unique number assigned by the sender to identify a particular data segment in a hierarchical 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.	1/12	Yes
HL03	Hierarchical Level Code - Code specifying the characteristic of a level in a hierarchical structure. 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. Example: "O" = "Order"	1/2	Yes

Example: `HL*2*1*O*1`

4.4.16 PRF - Purchase Order Reference

This segment can be used to provide reference to a specific purchase order.

Element	Meaning	Length (min/max)	Required?
PRF01	Purchase Order Number - Identifying number for Purchase Order assigned by the orderer/purchaser.	1/22	Yes

Example: `PRF*Order12345`

4.4.17 HL - Hierarchical Level – Items

This segment can be used to identify dependencies among and the content of hierarchically related groups of data segments. Here first described is the hierarchical level "I" = "Item", meaning the item details level within the document.

Element	Meaning	Length (min/max)	Required?
HL01	Hierarchical ID Number - A unique number assigned by the sender to identify a particular data segment in a hierarchical 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.	1/12	Yes
HL03	Hierarchical Level Code - Code specifying the characteristic of a level in a hierarchical structure. 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. Example: "I" = "Item"	1/2	Yes

Example: `HL*3*2*I`

4.4.18 LIN – Item identification

This segment is used to specify basic item identification data

Element	Meaning	Length (min/max)	Required?
LIN01	LIN01 is the line item identification number. Example: "010", "020" etc.	1/20	Yes
LIN02, LIN04, …, LIN30	Product/Service ID Qualifier - Code identifying the type/source of the descriptive number used in Product/Service ID (LIN03)	2/2	Yes
LIN03, LIN05, LIN07, …, LIN31	Product/Service ID - Identifying number for a product or service Examples: "VP" = Vendor's (Seller's) Part Number "VN" = Vendor's (Seller's) Item Number "BP" = Buyer's Part Number "MG" = Manufacturer's Part Number	1/80	Yes

Example: `LIN*010*VP*100*MG*aaxxqq`

4.4.19 SN1 – Item detail (shipment)

This segment is used to specify line-item detail relative to shipment.

Element	Meaning	Length (min/max)	Required?
SN101	Assigned Identification - SN101 is the ship notice line-item identification. Example: "010", "020" etc.	1/20	Yes
SN102	Number of Units Shipped - Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set.	2/10	Yes
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. Example: "PK" = Package	2/2	Yes

Example: `SN1*010*2*PK`

4.4.20 CTT - Transaction Totals

To transmit a total for the number of line items for elements in the transaction set, we use this segment.

Element	Meaning	Length (min/max)	Required?
CTT01	Total number of line items in the transaction set Example: "1"	1/6	Yes
CTT03	Weight - Numeric value of weight	1/10	Required if CTT04 is present
CTT04	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.	2/2	Required if CTT03 is present
CTT05	Volume - Value of volumetric measure	1/8	Required if CTT06 is present
CTT06	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.	2/2	Required if CTT05 is present
CTT07	Description - A free-form description to clarify the related data elements and their content.	1/80	No

Example: `CTT*1**10*KG*10*LT*ShipmentSummaryNote`

4.4.21 SE - Transaction Set Trailer

This segment is used to indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Element	Meaning	Length (min/max)	Required?
SE01	Number of Included Segments	1/10	Yes
SE02	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. Example: "00545"	4/9	Yes

Example: `SE*39*00545`

4.5 GE - Functional Group Trailer

This segment indicates the end of a functional group and provides control information. It ends the Functional Envelope.

Element	Meaning	Length (min/max)	Required?
GE01	Number of included Transaction Sets - This is used for message integrity	1/6	Yes

Example: GE*1*163100545

4.6 IEA - Interchange Control Trailer

This segment defines the end of an interchange of one or more functional groups and interchange-related control segments.

Element	Meaning	Length (min/max)	Required?
IEA01	Tax Type Code Example: "VA" = "ValueAddedTax"	1/5	Yes
IEA02	Monetary Amount (= TaxAmount)	9/9	No

Example: IEA*1*163100545

5. Example

```
ISA*00*          *00*          *ZZ*SenderID       *ZZ*ReceiverID
*130421*1232*U*00402*163100545*0*P*>

GS*SH*SenderID*ReceiverID*20130410*1232*163100545*X*004010

ST*856*00545

BSN*00*163100545*20130402*1231

HL*1**S

PRF*Order12345

TD5**2*FXP**FEDEX GROUND*******ZZ***US

REF*BM*0844478773

REF*CN*987654321**RU>123456789

REF*SI*SID12345

REF*PK*PackingListNumber12345
```

```
REF*CT*ContractNumber12345

REF*ZZ*MutuallyDefinedID12345

DTM*011*20110705*1200

FOB*DF*ZZ**01*FCA*ZZ*TermsOfDeliveryDescription free text
note**TransportDescription free text note

N1*BY*BuyerName1*92*1619

N2*BuyerName2*BuyerName3

N3*BuyerStreet 12

N4*BuyerCity*CA*12345*US

PER*OC*RequisitionerName*EM*Requisitioner@buyer.com*TE*+46081234567*FX*+4608123
4111*RequisitionerID

N1*SE*SellerName1*92*VendorID

N3*SellerStreet 12

N4*SellerCity*CA*12345*US

PER*SU*SellerOrderContactName*TE*+4681234567*EM*SellerOrderContact@seller.com*F
X*+4681234567

N1*ST*ShipToName1*92*8628

N2*ShipToName2*ShipToName3

N3*ShipToStreet 12

N4*ShipToCity*CA*12345*US

PER*RE*GoodsReceiverName*EM*GoodsReceiver@buyer.com*TE*+46081234567*FX*+4608123
4111*GoodsReceiverID

N1*BT*BillToName1*92*1619

N2*BillToName2*BillToName3

N3*BillToStreet 12

N4*BillToCity*CA*12345*US

PER*AP*BillingContactName*EM*BillingContact@buyer.com*TE*+46081234567*FX*+46081
234111

HL*2*1*O*1

PRF*2400037750

HL*3*2*I

LIN*010*VP*100*MG*aaxxqq

SN1*010*2*PK

CTT*1**10*KG*****ShipmentSummaryNote

SE*39*00545

GE*1*163100545

IEA*1*163100545
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