



856 Ship Notice/Manifest

X12/V4010/856 : 856 Ship Notice/Manifest

Version: 1.0

Company: Flexport

Table of Contents

| | |
|--|-----------|
| 856 Ship Notice/Manifest | 1 |
| ISA Interchange Control Header | 3 |
| GS Functional Group Header | 5 |
| ST Transaction Set Header | 7 |
| BSN Beginning Segment for Ship Notice | 8 |
| HL Loop Hierarchical Level | 9 |
| HL Hierarchical Level | 10 |
| TD1 Carrier Details (Quantity and Weight) | 11 |
| TD5 Carrier Details (Routing Sequence/Transit Time) | 13 |
| TD3 Carrier Details (Equipment) | 15 |
| REF Reference Identification | 17 |
| V1 Loop Vessel Identification | 18 |
| V1 Vessel Identification | 19 |
| R4 Port or Terminal | 20 |
| DTM Date/Time Reference | 21 |
| FOB F.O.B. Related Instructions | 22 |
| N1 Loop Name | 23 |
| N1 Name | 24 |
| N3 Address Information | 25 |
| N4 Geographic Location | 26 |
| HL Loop Hierarchical Level | 27 |
| HL Hierarchical Level | 28 |
| PRF Purchase Order Reference | 29 |
| HL Loop Hierarchical Level | 30 |
| HL Hierarchical Level | 31 |
| LIN Item Identification | 32 |
| SN1 Item Detail (Shipment) | 33 |
| PID Product/Item Description | 34 |
| CTT Transaction Totals | 35 |
| SE Transaction Set Trailer | 36 |
| GE Functional Group Trailer | 37 |
| IEA Interchange Control Trailer | 38 |

856 Ship Notice/Manifest

Functional Group=SH

Purpose: 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.

Not Defined:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|----------------------------|------------|----------------|---------------|--------------|--------------|
| | ISA | Interchange Control Header | M | 1 | | | Must use |
| | GS | Functional Group Header | M | 1 | | | Must use |

Heading:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|-----------------------------------|------------|----------------|---------------|--------------|--------------|
| 010 | ST | Transaction Set Header | M | 1 | | | Must use |
| 020 | BSN | Beginning Segment for Ship Notice | M | 1 | | | Must use |

Detail:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|---------------------|-----------|---|------------|----------------|---------------|----------------|--------------|
| LOOP ID - HL | | | | | 200000 | C2/010L | |
| 010 | HL | Hierarchical Level | M | 1 | | C2/010 | Must use |
| 110 | TD1 | Carrier Details (Quantity and Weight) | O | 20 | | | Used |
| 120 | TD5 | Carrier Details (Routing Sequence/Transit Time) | O | 12 | | | Used |
| 130 | TD3 | Carrier Details (Equipment) | O | 12 | | | Used |
| 150 | REF | Reference Identification | O | >1 | | | Used |
| LOOP ID - V1 | | | | | >1 | | |
| 360 | V1 | Vessel Identification | O | 1 | | | Used |
| 370 | R4 | Port or Terminal | O | >1 | | | Used |
| 200 | DTM | Date/Time Reference | O | 10 | | | Used |
| 210 | FOB | F.O.B. Related Instructions | O | 1 | | | Used |
| LOOP ID - N1 | | | | | 200 | | |
| 220 | N1 | Name | O | 1 | | | Used |
| 240 | N3 | Address Information | O | 2 | | | Used |
| 250 | N4 | Geographic Location | O | 1 | | | Used |
| LOOP ID - HL | | | | | 200000 | C2/010L | |
| 010 | HL | Hierarchical Level | M | 1 | | C2/010 | Must use |
| 050 | PRF | Purchase Order Reference | O | 1 | | | Used |
| LOOP ID - HL | | | | | 200000 | C2/010L | |

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|--------------------------|------------|----------------|---------------|--------------|--------------|
| 010 | HL | Hierarchical Level | M | 1 | | C2/010 | Must use |
| 020 | LIN | Item Identification | O | 1 | | | Used |
| 030 | SN1 | Item Detail (Shipment) | O | 1 | | | Used |
| 070 | PID | Product/Item Description | O | 200 | | | Used |

Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|-------------------------|------------|----------------|---------------|--------------|--------------|
| 010 | CTT | Transaction Totals | O | 1 | | N3/010 | Used |
| 020 | SE | Transaction Set Trailer | M | 1 | | | Must use |

Not Defined:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|-----------------------------|------------|----------------|---------------|--------------|--------------|
| | GE | Functional Group Trailer | M | 1 | | | Must use |
| | IEA | Interchange Control Trailer | M | 1 | | | Must use |

Notes:

3/010 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

ISA Interchange Control Header

| | |
|-------------------------|--------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 16 |

User Option (Usage): Must use

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|--|------------|-------------|----------------|--------------|
| ISA01 | I01 | Authorization Information Qualifier | M | ID | 2/2 | Must use |
| Description: Code to identify the type of information in the Authorization Information | | | | | | |
| CodeList Summary (Total Codes: 7, Included: 1) | | | | | | |
| Code Name | | | | | | |
| 00 No Authorization Information Present (No Meaningful Information in I02) | | | | | | |
| ISA02 | I02 | Authorization Information | M | AN | 10/10 | Must use |
| Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01) | | | | | | |
| ISA03 | I03 | Security Information Qualifier | M | ID | 2/2 | Must use |
| Description: Code to identify the type of information in the Security Information | | | | | | |
| CodeList Summary (Total Codes: 2, Included: 1) | | | | | | |
| Code Name | | | | | | |
| 00 No Security Information Present (No Meaningful Information in I04) | | | | | | |
| ISA04 | I04 | Security Information | M | AN | 10/10 | Must use |
| Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03) | | | | | | |
| ISA05 | I05 | Interchange ID Qualifier | M | ID | 2/2 | Must use |
| Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified | | | | | | |
| CodeList Summary (Total Codes: 38, Included: 1) | | | | | | |
| Code Name | | | | | | |
| ZZ Mutually Defined | | | | | | |
| ISA06 | I06 | Interchange Sender ID | M | AN | 15/15 | Must use |
| Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element | | | | | | |
| Notes: FLEXPORTEDI(Prod) / FLEXPORTEDIQA(Test) | | | | | | |
| ISA07 | I05 | Interchange ID Qualifier | M | ID | 2/2 | Must use |
| Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified | | | | | | |
| All valid standard codes are used. (Total Codes: 38) | | | | | | |

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|--|-------------|----------------|--------------|
| ISA08 | I07 | Interchange Receiver ID | M | AN | 15/15 | Must use |
| | | Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them | | | | |
| ISA09 | I08 | Interchange Date | M | DT | 6/6 | Must use |
| | | Description: Date of the interchange | | | | |
| ISA10 | I09 | Interchange Time | M | TM | 4/4 | Must use |
| | | Description: Time of the interchange | | | | |
| ISA11 | I10 | Interchange Control Standards Identifier | M | ID | 1/1 | Must use |
| | | Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer | | | | |
| | | All valid standard codes are used. (Total Codes: 1) | | | | |
| ISA12 | I11 | Interchange Control Version Number | M | ID | 5/5 | Must use |
| | | Description: Code specifying the version number of the interchange control segments | | | | |
| | | CodeList Summary (Total Codes: 14, Included: 1) | | | | |
| | | Code | Name | | | |
| | | 00401 | Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997 | | | |
| ISA13 | I12 | Interchange Control Number | M | N0 | 9/9 | Must use |
| | | Description: A control number assigned by the interchange sender | | | | |
| ISA14 | I13 | Acknowledgment Requested | M | ID | 1/1 | Must use |
| | | Description: Code sent by the sender to request an interchange acknowledgment (TA1) | | | | |
| | | All valid standard codes are used. (Total Codes: 2) | | | | |
| ISA15 | I14 | Usage Indicator | M | ID | 1/1 | Must use |
| | | Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information | | | | |
| | | All valid standard codes are used. (Total Codes: 3) | | | | |
| ISA16 | I15 | Component Element Separator | M | | 1/1 | Must use |
| | | Description: Type is not applicable; 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 | | | | |

GS Functional Group Header

| | |
|-------------------------|-------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 8 |

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|---|------------|-------------|----------------|--------------|
| GS01 | 479 | Functional Identifier Code | M | ID | 2/2 | Must use |
| Description: Code identifying a group of application related transaction sets | | | | | | |
| CodeList Summary (Total Codes: 240, Included: 1) | | | | | | |
| Code Name | | | | | | |
| SH Ship Notice/Manifest (856) | | | | | | |
| GS02 | 142 | Application Sender's Code | M | AN | 2/15 | Must use |
| Description: Code identifying party sending transmission; codes agreed to by trading partners | | | | | | |
| Notes: FLEXPORTEDI(Prod) / FLEXPORTEDIQA(Test) | | | | | | |
| GS03 | 124 | Application Receiver's Code | M | AN | 2/15 | Must use |
| Description: Code identifying party receiving transmission; codes agreed to by trading partners | | | | | | |
| GS04 | 373 | Date | M | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| GS05 | 337 | Time | M | TM | 4/8 | Must use |
| Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) | | | | | | |
| GS06 | 28 | Group Control Number | M | N0 | 1/9 | Must use |
| Description: Assigned number originated and maintained by the sender | | | | | | |
| GS07 | 455 | Responsible Agency Code | M | ID | 1/2 | Must use |
| Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 | | | | | | |
| All valid standard codes are used. (Total Codes: 2) | | | | | | |
| GS08 | 480 | Version / Release / Industry Identifier Code | M | AN | 1/12 | Must use |
| Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed | | | | | | |
| CodeList Summary (Total Codes: 39, Included: 1) | | | | | | |

| <u>Code</u> | <u>Name</u> |
|-------------|--|
| 004010 | Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997 |

ST Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---------------------------------|------------|-------------|----------------|--------------|
| ST01 | 143 | Transaction Set Identifier Code | M | ID | 3/3 | Must use |

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code Name

856 Ship Notice/Manifest

| | | | | | | |
|------|-----|--------------------------------|---|----|-----|----------|
| ST02 | 329 | Transaction Set Control Number | M | AN | 4/9 | Must use |
|------|-----|--------------------------------|---|----|-----|----------|

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Example:

ST*856*0001~

BSN Beginning Segment for Ship Notice

| | |
|---------------------|-------------|
| Pos: 020 | Max: 1 |
| Heading - Mandatory | |
| Loop: N/A | Elements: 5 |

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|-------------------------------------|------------|-------------|----------------|--------------|
| BSN01 | 353 | Transaction Set Purpose Code | M | ID | 2/2 | Must use |
| Description: Code identifying purpose of transaction set | | | | | | |
| CodeList Summary (Total Codes: 65, Included: 2) | | | | | | |
| Code Name | | | | | | |
| 00 Original | | | | | | |
| 04 Change | | | | | | |
| BSN02 | 396 | Shipment Identification | M | AN | 2/30 | Must use |
| Description: A unique control number assigned by the original shipper to identify a specific shipment | | | | | | |
| Notes: Flexport Standard = FLEX-ID formatted as FLEX-##### | | | | | | |
| BSN03 | 373 | Date | M | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| BSN04 | 337 | Time | M | TM | 4/8 | Must use |
| Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) | | | | | | |
| BSN05 | 1005 | Hierarchical Structure Code | O | ID | 4/4 | Used |
| Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set | | | | | | |
| CodeList Summary (Total Codes: 61, Included: 1) | | | | | | |
| Code Name | | | | | | |
| 0004 Shipment, Order, Item | | | | | | |

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.

Example:

*BSN*00*FLEX-555181*20190817*0227*0004~*

Loop Hierarchical Level

| | |
|-----------|-------------------|
| Pos: 010 | Repeat: 200000 |
| Mandatory | |
| Loop: HL | Elements: N/A |

User Option (Usage): Must use

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

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|---|------------|----------------|---------------|--------------|
| 010 | HL | Hierarchical Level | M | 1 | | Must use |
| 110 | TD1 | Carrier Details (Quantity and Weight) | O | 20 | | Used |
| 120 | TD5 | Carrier Details (Routing Sequence/Transit Time) | O | 12 | | Used |
| 130 | TD3 | Carrier Details (Equipment) | O | 12 | | Used |
| 150 | REF | Reference Identification | O | >1 | | Used |
| 360 | | Loop V1 | O | | >1 | Used |
| 200 | DTM | Date/Time Reference | O | 10 | | Used |
| 210 | FOB | F.O.B. Related Instructions | O | 1 | | Used |
| 220 | | Loop N1 | O | | 200 | Used |
| 010 | | Loop HL | M | | 200000 | Must use |
| 010 | | Loop HL | M | | 200000 | Must use |

HL Hierarchical Level

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Detail - Mandatory | |
| Loop: HL | Elements: 3 |

Loop Path: HL

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| HL01 | 628 | Hierarchical ID Number | M | AN | 1/12 | Must use |
| | | Description: 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 | Used |
| | | Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to | | | | |
| HL03 | 735 | Hierarchical Level Code | M | ID | 1/2 | Must use |
| | | Description: Code defining the characteristic of a level in a hierarchical structure | | | | |

CodeList Summary (Total Codes: 170, Included: 1)

Code Name

S Shipment

Example:

HL*1**S~

TD1 Carrier Details (Quantity and Weight)

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

Loop Path: HL

User Option (Usage): Used

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

Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
|-------|-----|----------------|-----|------|---------|-------|
| TD101 | 103 | Packaging Code | O | AN | 3/5 | Used |

Description: 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

CodeList Summary (Total Codes: 148, Included: 13)

Code Name

- BAG Bag
- BAL Bale
- BBL Barrel
- BDL Bundle
- BLK Bulk
- BOX Box
- CRT Crate
- CTN Carton
- DRM Drum
- PKG Package
- PLT Pallet
- ROL Roll
- SKD Skid

| | | | | | | |
|-------|----|-----------------|---|----|-----|------|
| TD102 | 80 | Lading Quantity | X | N0 | 1/7 | Used |
|-------|----|-----------------|---|----|-----|------|

Description: Number of units (pieces) of the lading commodity

| | | | | | | |
|-------|----|--------------------------|---|----|-----|----------|
| TD103 | 23 | Commodity Code Qualifier | O | ID | 1/1 | Not used |
|-------|----|--------------------------|---|----|-----|----------|

Description: Code identifying the commodity coding system used for Commodity Code

| | | | | | | |
|-------|----|----------------|---|----|------|----------|
| TD104 | 22 | Commodity Code | X | AN | 1/30 | Not used |
|-------|----|----------------|---|----|------|----------|

Description: Code describing a commodity or group of commodities

| | | | | | | |
|-------|----|--------------------|---|----|------|----------|
| TD105 | 79 | Lading Description | O | AN | 1/50 | Not used |
|-------|----|--------------------|---|----|------|----------|

Description: Description of an item as required for rating and billing purposes

| | | | | | | |
|-------|-----|------------------|---|----|-----|------|
| TD106 | 187 | Weight Qualifier | O | ID | 1/2 | Used |
|-------|-----|------------------|---|----|-----|------|

Description: Code defining the type of weight

CodeList Summary (Total Codes: 51, Included: 2)

Code Name

- B Billed Weight
- G Gross Weight

| | | | | | | |
|-------|-----|--|---|----|------|------|
| TD107 | 81 | Weight | X | R | 1/10 | Used |
| | | Description: Numeric value of weight | | | | |
| TD108 | 355 | Unit or Basis for Measurement Code | X | ID | 2/2 | Used |
| | | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | | |
| | | CodeList Summary (Total Codes: 794, Included: 2) | | | | |
| | | Code Name | | | | |
| | | KG Kilogram | | | | |
| | | LB Pound | | | | |
| TD109 | 183 | Volume | X | R | 1/8 | Used |
| | | Description: Value of volumetric measure | | | | |
| TD110 | 355 | Unit or Basis for Measurement Code | X | ID | 2/2 | Used |
| | | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | | |
| | | CodeList Summary (Total Codes: 794, Included: 2) | | | | |
| | | Code Name | | | | |
| | | CF Cubic Feet | | | | |
| | | CR Cubic Meter | | | | |

Syntax Rules:

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

Example:

*TD1*PKG*24****G*37831.3*LB*9.5*CR~*

TD5 Carrier Details (Routing Sequence/Transit Time)

| | |
|-------------------|-------------|
| Pos: 120 | Max: 12 |
| Detail - Optional | |
| Loop: HL | Elements: 9 |

Loop Path: HL

User Option (Usage): Used

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

Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
|-------|-----|-----------------------|-----|------|---------|-------|
| TD501 | 133 | Routing Sequence Code | O | ID | 1/2 | Used |

Description: Code describing the relationship of a carrier to a specific shipment movement

Notes: Flexport Standard = main freight carrier (carrier on leg departing from port of loading)

CodeList Summary (Total Codes: 23, Included: 1)

Code Name

O Origin Carrier (Air, Motor, or Ocean)

| | | | | | | |
|-------|----|-------------------------------|---|----|-----|------|
| TD502 | 66 | Identification Code Qualifier | X | ID | 1/2 | Used |
|-------|----|-------------------------------|---|----|-----|------|

Description: Code designating the system/method of code structure used for Identification Code (67)

CodeList Summary (Total Codes: 215, Included: 1)

Code Name

2 Standard Carrier Alpha Code (SCAC)

| | | | | | | |
|-------|----|---------------------|---|----|------|------|
| TD503 | 67 | Identification Code | X | AN | 2/80 | Used |
|-------|----|---------------------|---|----|------|------|

Description: Code identifying a party or other code

| | | | | | | |
|-------|----|---------------------------------|---|----|-----|------|
| TD504 | 91 | Transportation Method/Type Code | X | ID | 1/2 | Used |
|-------|----|---------------------------------|---|----|-----|------|

Description: Code specifying the method or type of transportation for the shipment

CodeList Summary (Total Codes: 71, Included: 2)

Code Name

A Air

S Ocean

| | | | | | | |
|-------|-----|---------|---|----|------|----------|
| TD505 | 387 | Routing | X | AN | 1/35 | Not used |
|-------|-----|---------|---|----|------|----------|

Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity

| | | | | | | |
|-------|-----|----------------------------|---|----|-----|------|
| TD506 | 368 | Shipment/Order Status Code | X | ID | 2/2 | Used |
|-------|-----|----------------------------|---|----|-----|------|

Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction

CodeList Summary (Total Codes: 102, Included: 1)

Code Name

CC Shipment Complete on (Date)

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|--|-----------|-------------------------------|------------|-------------|----------------|--------------|
| TD507 | 309 | Location Qualifier | O | ID | 1/2 | Not used |
| Description: Code identifying type of location | | | | | | |
| CodeList Summary (Total Codes: 172, Included: 1) | | | | | | |
| Code Name | | | | | | |
| UN United Nations Location Code (UNLOCODE) | | | | | | |
| TD508 | 310 | Location Identifier | X | AN | 1/30 | Not used |
| Description: Code which identifies a specific location | | | | | | |
| TD509 | 731 | Transit Direction Code | O | ID | 2/2 | Used |
| Description: The point of origin and point of direction | | | | | | |
| CodeList Summary (Total Codes: 7, Included: 1) | | | | | | |
| Code Name | | | | | | |
| SB Seller to Buyer | | | | | | |

Semantics:

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.

Example:

*TD5*O*2*ONEY*S**CC***SB~*

TD3 Carrier Details (Equipment)

| | |
|-------------------|--------------|
| Pos: 130 | Max: 12 |
| Detail - Optional | |
| Loop: HL | Elements: 10 |

Loop Path: HL

User Option (Usage): Used

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|--------------------------|----------------|--------------|
| TD301 | 40 | Equipment Description Code | X | ID | 2/2 | Used |
| | | Description: Code identifying type of equipment used for shipment | | | | |
| | | CodeList Summary (Total Codes: 134, Included: 2) | | | | |
| | | Code | | Name | | |
| | | AF | | Air Freight (Break Bulk) | | |
| | | CN | | Container | | |
| TD302 | 206 | Equipment Initial | O | AN | 1/4 | Used |
| | | Description: Prefix or alphabetic part of an equipment unit's identifying number | | | | |
| TD303 | 207 | Equipment Number | X | AN | 1/10 | Used |
| | | Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) | | | | |
| TD304 | 187 | Weight Qualifier | O | ID | 1/2 | Not used |
| | | Description: Code defining the type of weight | | | | |
| | | All valid standard codes are used. (Total Codes: 51) | | | | |
| TD305 | 81 | Weight | X | R | 1/10 | Not used |
| | | Description: Numeric value of weight | | | | |
| TD306 | 355 | Unit or Basis for Measurement Code | X | ID | 2/2 | Not used |
| | | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | | |
| | | All valid standard codes are used. (Total Codes: 794) | | | | |
| TD307 | 102 | Ownership Code | O | ID | 1/1 | Not used |
| | | Description: Code indicating the relationship of equipment to carrier or ownership of equipment | | | | |
| | | All valid standard codes are used. (Total Codes: 5) | | | | |
| TD308 | 407 | Seal Status Code | O | ID | 2/2 | Not used |
| | | Description: Code indicating condition of door seal upon arrival | | | | |
| | | All valid standard codes are used. (Total Codes: 4) | | | | |
| TD309 | 225 | Seal Number | O | AN | 2/15 | Used |
| | | Description: Unique number on seal used to close a shipment | | | | |
| TD310 | 24 | Equipment Type | X | ID | 4/4 | Used |

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

Description: Code identifying equipment type

Syntax Rules:

1. E0110 - Only one of TD301 or TD310 may be present.
2. C0203 - If TD302 is present, then TD303 is required.

Example:

*TD3*CN**TCNU8408606*****TW167378B*42G0~*

REF Reference Identification

| | |
|-------------------|-------------|
| Pos: 150 | Max: >1 |
| Detail - Optional | |
| Loop: HL | Elements: 2 |

Loop Path: HL

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|------------------------------------|------------|-------------|----------------|--------------|
| REF01 | 128 | Reference Identification Qualifier | M | ID | 2/3 | Must use |

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 7)

Code Name

| | |
|----|---------------------------|
| AW | Air Waybill Number |
| BM | Bill of Lading Number |
| BN | Booking Number |
| MA | Master Air Waybill Number |
| MB | Master Bill of Lading |
| RE | Customs Entry Number |
| SN | Seal Number |

| | | | | | | |
|-------|-----|--------------------------|---|----|------|------|
| REF02 | 127 | Reference Identification | X | AN | 1/30 | Used |
|-------|-----|--------------------------|---|----|------|------|

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

Example:

*REF*BM*ONEYNK8GL4635600~*

Loop Vessel Identification

| | |
|----------|---------------|
| Pos: 360 | Repeat: >1 |
| Optional | |
| Loop: V1 | Elements: N/A |

Loop Path: HL

User Option (Usage): Used

Purpose: To provide vessel details and voyage number

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|-----------------------|------------|----------------|---------------|--------------|
| 360 | V1 | Vessel Identification | O | 1 | | Used |
| 370 | R4 | Port or Terminal | O | >1 | | Used |

V1 Vessel Identification

| | |
|-------------------|-------------|
| Pos: 360 | Max: 1 |
| Detail - Optional | |
| Loop: V1 | Elements: 3 |

Loop Path: HL-V1

User Option (Usage): Used

Purpose: To provide vessel details and voyage number

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|-----------------|-------------|----------------|--------------|
| V102 | 182 | Vessel Name | X | AN | 2/28 | Must use |
| | | Description: Name of ship as documented in "Lloyd's Register of Ships" | | | | |
| V104 | 55 | Flight/Voyage Number | O | AN | 2/10 | Must use |
| | | Description: Identifying designator for the particular flight or voyage on which the cargo travels | | | | |
| V109 | 91 | Transportation Method/Type Code | O | ID | 1/2 | Used |
| | | Description: Code specifying the method or type of transportation for the shipment | | | | |
| | | CodeList Summary (Total Codes: 73, Included: 2) | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | 10 | LCL VES NON-CON | | | |
| | | 11 | FULL CTNR LOAD | | | |

Syntax Rules:

1. R0102 - At least one of V101 or V102 is required.

Example:

V1**HYUNDAI SMART**027E*****10

R4 Port or Terminal

| | |
|-------------------|-------------|
| Pos: 370 | Max: >1 |
| Detail - Optional | |
| Loop: V1 | Elements: 5 |

Loop Path: HL-V1

User Option (Usage): Used

Purpose: Contractual or operational port or point relevant to the movement of the cargo

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---------------------------------------|------------|-------------|----------------|--------------|
| R401 | 115 | Port or Terminal Function Code | M | ID | 1/1 | Must use |

Description: Code defining function performed at the port or terminal with respect to a shipment

CodeList Summary (Total Codes: 30, Included: 2)

Code Name

D Port of Discharge (Operational)

L Port of Loading (Operational)

| | | | | | | |
|------|-----|---------------------------|---|----|-----|------|
| R402 | 309 | Location Qualifier | X | ID | 1/2 | Used |
|------|-----|---------------------------|---|----|-----|------|

Description: Code identifying type of location

All valid standard codes are used. (Total Codes: 172)

| | | | | | | |
|------|-----|----------------------------|---|----|------|------|
| R403 | 310 | Location Identifier | X | AN | 1/30 | Used |
|------|-----|----------------------------|---|----|------|------|

Description: Code which identifies a specific location

| | | | | | | |
|------|-----|------------------|---|----|------|------|
| R404 | 114 | Port Name | O | AN | 2/24 | Used |
|------|-----|------------------|---|----|------|------|

Description: Free-form name for the place at which an offshore carrier originates or terminates (by transshipment or otherwise) its actual ocean carriage of property

| | | | | | | |
|------|----|---------------------|---|----|-----|------|
| R405 | 26 | Country Code | O | ID | 2/3 | Used |
|------|----|---------------------|---|----|-----|------|

Description: Code identifying the country

Syntax Rules:

1. P0203 - If either R402 or R403 is present, then the other is required.

Comments:

1. R4 is required for each port to be identified.

Example:

*R4*L*KRPUS*Busan, South Korea*KR*

*R4*D*USNYC*Newark, United States*US*

DTM Date/Time Reference

| | |
|-------------------|-------------|
| Pos: 200 | Max: 10 |
| Detail - Optional | |
| Loop: HL | Elements: 4 |

Loop Path: HL

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---------------------|------------|-------------|----------------|--------------|
| DTM01 | 374 | Date/Time Qualifier | M | ID | 3/3 | Must use |

Description: Code specifying type of date or time, or both date and time

CodeList Summary (Total Codes: 1112, Included: 4)

Code Name

011 Shipped
 017 Estimated Delivery
 274 Requested Departure Date
 AA1 Estimated Point of Arrival

| | | | | | | |
|-------|-----|------|---|----|-----|------|
| DTM02 | 373 | Date | X | DT | 8/8 | Used |
|-------|-----|------|---|----|-----|------|

Description: Date expressed as CCYYMMDD

| | | | | | | |
|-------|-----|------|---|----|-----|------|
| DTM03 | 337 | Time | X | TM | 4/8 | Used |
|-------|-----|------|---|----|-----|------|

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

| | | | | | | |
|-------|-----|-----------|---|----|-----|------|
| DTM04 | 623 | Time Code | O | ID | 2/2 | Used |
|-------|-----|-----------|---|----|-----|------|

Description: Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

All valid standard codes are used. (Total Codes: 51)

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.

Example:

*DTM*011*20200829*

*DTM*017*20201002*

*DTM*274*20200829*

*DTM*AA1*20200923*

FOB F.O.B. Related Instructions

| | |
|-------------------|-------------|
| Pos: 210 | Max: 1 |
| Detail - Optional | |
| Loop: HL | Elements: 1 |

Loop Path: HL

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|----------------------------|------------|-------------|----------------|--------------|
| FOB01 | 146 | Shipment Method of Payment | M | ID | 2/2 | Must use |

Description: Code identifying payment terms for transportation charges

CodeList Summary (Total Codes: 28, Included: 1)

| <u>Code</u> | <u>Name</u> |
|-------------|-------------|
| CC | Collect |

Semantics:

1. FOB01 indicates which party will pay the carrier.

Example:

FOB*CC

Loop Name

| | |
|----------|---------------|
| Pos: 220 | Repeat: 200 |
| Optional | |
| Loop: N1 | Elements: N/A |

Loop Path: HL

User Option (Usage): Used

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

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|---------------------|------------|----------------|---------------|--------------|
| 220 | N1 | Name | O | 1 | | Used |
| 240 | N3 | Address Information | O | 2 | | Used |
| 250 | N4 | Geographic Location | O | 1 | | Used |

N1 Name

| | |
|-------------------|-------------|
| Pos: 220 | Max: 1 |
| Detail - Optional | |
| Loop: N1 | Elements: 4 |

Loop Path: HL-N1**User Option (Usage):** Used**Purpose:** To identify a party by type of organization, name, and code**Element Summary:**

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|-------------------------------|------------|-------------|----------------|--------------|
| N101 | 98 | Entity Identifier Code | M | ID | 2/3 | Must use |

Description: Code identifying an organizational entity, a physical location, property or an individual**CodeList Summary** (Total Codes: 1312, Included: 4)**Code Name**

| | |
|----|-----------------------|
| CN | Consignee |
| SF | Ship From |
| ST | Ship To |
| SU | Supplier/Manufacturer |

| | | | | | | |
|------|----|-------------|---|----|------|------|
| N102 | 93 | Name | X | AN | 1/60 | Used |
|------|----|-------------|---|----|------|------|

Description: Free-form name

| | | | | | | |
|------|----|--------------------------------------|---|----|-----|------|
| N103 | 66 | Identification Code Qualifier | X | ID | 1/2 | Used |
|------|----|--------------------------------------|---|----|-----|------|

Description: Code designating the system/method of code structure used for Identification Code (67)**CodeList Summary** (Total Codes: 215, Included: 2)**Code Name**

| | |
|----|--|
| US | Unique Supplier Identification Number (USIN) |
| ZZ | Mutually Defined |

| | | | | | | |
|------|----|----------------------------|---|----|------|------|
| N104 | 67 | Identification Code | X | AN | 2/80 | Used |
|------|----|----------------------------|---|----|------|------|

Description: Code identifying a party or other code**Syntax Rules:**

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Example:*N1*SF*SUPPLIER1, LTD*UN*CNDOM~*

N3 Address Information

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

Loop Path: HL-N1

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|-------------|----------------|--------------|
| N301 | 166 | Address Information | M | AN | 1/55 | Must use |
| | | Description: Address information | | | | |
| N302 | 166 | Address Information | O | AN | 1/55 | Used |
| | | Description: Address information | | | | |

Example:

*N3*PARK DISTRICT*SUITE 300~*

N4 Geographic Location

| | |
|-------------------|-------------|
| Pos: 250 | Max: 1 |
| Detail - Optional | |
| Loop: N1 | Elements: 4 |

Loop Path: HL-N1

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| N401 | 19 | City Name | O | AN | 2/30 | Used |
| | | Description: Free-form text for city name | | | | |
| N402 | 156 | State or Province Code | O | ID | 2/2 | Used |
| | | Description: Code (Standard State/Province) as defined by appropriate government agency | | | | |
| N403 | 116 | Postal Code | O | ID | 3/15 | Used |
| | | Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States) | | | | |
| N404 | 26 | Country Code | O | ID | 2/3 | Used |
| | | Description: Code identifying the country | | | | |

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.

Example:

*N4*NANJING*32**CN~*

Loop Hierarchical Level

| | |
|-----------|-------------------|
| Pos: 010 | Repeat: 200000 |
| Mandatory | |
| Loop: HL | Elements: N/A |

Loop Path: HL

User Option (Usage): Must use

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

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|--------------------------|------------|----------------|---------------|--------------|
| 010 | HL | Hierarchical Level | M | 1 | | Must use |
| 050 | PRF | Purchase Order Reference | O | 1 | | Used |

HL Hierarchical Level

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Detail - Mandatory | |
| Loop: HL | Elements: 3 |

Loop Path: HL-HL

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| HL01 | 628 | Hierarchical ID Number | M | AN | 1/12 | Must use |
| | | Description: 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 | Used |
| | | Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to | | | | |
| HL03 | 735 | Hierarchical Level Code | M | ID | 1/2 | Must use |
| | | Description: Code defining the characteristic of a level in a hierarchical structure | | | | |

CodeList Summary (Total Codes: 170, Included: 1)

| <u>Code</u> | <u>Name</u> |
|-------------|-------------|
| O | Order |

Example:

HL*2*1*O~

PRF Purchase Order Reference

| | |
|-------------------|-------------|
| Pos: 050 | Max: 1 |
| Detail - Optional | |
| Loop: HL | Elements: 1 |

Loop Path: HL-HL

User Option (Usage): Used

Purpose: To provide reference to a specific purchase order

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|-----------------------|------------|-------------|----------------|--------------|
| PRF01 | 324 | Purchase Order Number | M | AN | 1/22 | Must use |

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

Example:

*PRF*694832~*

Loop Hierarchical Level

| | |
|-----------|-------------------|
| Pos: 010 | Repeat: 200000 |
| Mandatory | |
| Loop: HL | Elements: N/A |

Loop Path: HL

User Option (Usage): Must use

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

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|--------------------------|------------|----------------|---------------|--------------|
| 010 | HL | Hierarchical Level | M | 1 | | Must use |
| 020 | LIN | Item Identification | O | 1 | | Used |
| 030 | SN1 | Item Detail (Shipment) | O | 1 | | Used |
| 070 | PID | Product/Item Description | O | 200 | | Used |

HL Hierarchical Level

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Detail - Mandatory | |
| Loop: HL | Elements: 3 |

Loop Path: HL-HL

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| HL01 | 628 | Hierarchical ID Number | M | AN | 1/12 | Must use |
| | | Description: 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 | Used |
| | | Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to | | | | |
| HL03 | 735 | Hierarchical Level Code | M | ID | 1/2 | Must use |
| | | Description: Code defining the characteristic of a level in a hierarchical structure | | | | |

CodeList Summary (Total Codes: 170, Included: 1)

| <u>Code</u> | <u>Name</u> |
|-------------|-------------|
| I | Item |

Example:

*HL*3*2*I~*

LIN Item Identification

| | |
|-------------------|-------------|
| Pos: 020 | Max: 1 |
| Detail - Optional | |
| Loop: HL | Elements: 5 |

Loop Path: HL-HL

User Option (Usage): Used

Purpose: To specify basic item identification data

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|-------------|----------------|--------------|
| LIN01 | 350 | Assigned Identification | O | AN | 1/20 | Used |
| | | Description: Alphanumeric characters assigned for differentiation within a transaction set | | | | |
| LIN02 | 235 | Product/Service ID Qualifier | M | ID | 2/2 | Must use |
| | | Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | | | |
| | | CodeList Summary (Total Codes: 477, Included: 1) | | | | |
| | | Code Name | | | | |
| | | VP Vendor's (Seller's) Part Number | | | | |
| LIN03 | 234 | Product/Service ID | M | AN | 1/48 | Must use |
| | | Description: Identifying number for a product or service | | | | |
| LIN04 | 235 | Product/Service ID Qualifier | X | ID | 2/2 | Used |
| | | Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | | | |
| | | CodeList Summary (Total Codes: 477, Included: 1) | | | | |
| | | Code Name | | | | |
| | | BP Buyer's Part Number | | | | |
| LIN05 | 234 | Product/Service ID | X | AN | 1/48 | Used |
| | | Description: Identifying number for a product or service | | | | |

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.

Semantics:

1. LIN01 is the line item identification

Example:

LIN*1*VP*ITEM1*BP*SAMPLE1~

SN1 Item Detail (Shipment)

| | |
|-------------------|-------------|
| Pos: 030 | Max: 1 |
| Detail - Optional | |
| Loop: HL | Elements: 6 |

Loop Path: HL-HL

User Option (Usage): Used

Purpose: To specify line-item detail relative to shipment

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|-------------|-------------|----------------|--------------|
| SN101 | 350 | Assigned Identification | O | AN | 1/20 | Used |
| | | Description: Alphanumeric characters assigned for differentiation within a transaction set | | | | |
| SN102 | 382 | Number of Units Shipped | M | R | 1/10 | Must use |
| | | Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set | | | | |
| SN103 | 355 | Unit or Basis for Measurement Code | M | ID | 2/2 | Must use |
| | | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | | |
| | | CodeList Summary (Total Codes: 794, Included: 1) | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | EA | Each | | | |
| SN104 | 646 | Quantity Shipped to Date | O | R | 1/15 | Not used |
| | | Description: Number of units shipped to date | | | | |
| SN105 | 330 | Quantity Ordered | X | R | 1/15 | Used |
| | | Description: Quantity ordered | | | | |
| SN106 | 355 | Unit or Basis for Measurement Code | X | ID | 2/2 | Used |
| | | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | | |
| | | CodeList Summary (Total Codes: 794, Included: 1) | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | EA | Each | | | |

Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

Semantics:

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

Comments:

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

Example:

SN1**50*EA**50*EA*~

PID Product/Item Description

| | |
|-------------------|-------------|
| Pos: 070 | Max: 200 |
| Detail - Optional | |
| Loop: HL | Elements: 5 |

Loop Path: HL-HL

User Option (Usage): Used

Purpose: To describe a product or process in coded or free-form format

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|-----------------------|------------|-------------|----------------|--------------|
| PID01 | 349 | Item Description Type | M | ID | 1/1 | Must use |

Description: Code indicating the format of a description

CodeList Summary (Total Codes: 3, Included: 1)

Code Name

F Free-form

| | | | | | | |
|-------|-----|-------------------------------------|---|----|-----|----------|
| PID02 | 750 | Product/Process Characteristic Code | O | ID | 2/3 | Not used |
|-------|-----|-------------------------------------|---|----|-----|----------|

Description: Code identifying the general class of a product or process characteristic

| | | | | | | |
|-------|-----|-----------------------|---|----|-----|----------|
| PID03 | 559 | Agency Qualifier Code | X | ID | 2/2 | Not used |
|-------|-----|-----------------------|---|----|-----|----------|

Description: Code identifying the agency assigning the code values

CodeList Summary (Total Codes: 176, Included: 1)

Code Name

ZZ Mutually Defined

| | | | | | | |
|-------|-----|--------------------------|---|----|------|----------|
| PID04 | 751 | Product Description Code | X | AN | 1/12 | Not used |
|-------|-----|--------------------------|---|----|------|----------|

Description: A code from an industry code list which provides specific data about a product characteristic

Notes: PID04 = US Tariff Number when PID03 = ZZ

| | | | | | | |
|-------|-----|-------------|---|----|------|------|
| PID05 | 352 | Description | X | AN | 1/80 | Used |
|-------|-----|-------------|---|----|------|------|

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.

Example:

*PID*F*ZZ*98110060**HARDWARE KIT~*

CTT Transaction Totals

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Summary - Optional | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Used

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|----------------------|------------|-------------|----------------|--------------|
| CTT01 | 354 | Number of Line Items | M | N0 | 1/6 | Must use |

Description: Total number of line items in the transaction set

| | | | | | | |
|-------|-----|------------|---|---|------|------|
| CTT02 | 347 | Hash Total | O | R | 1/10 | Used |
|-------|-----|------------|---|---|------|------|

Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

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

Example:

CTT*5~

SE Transaction Set Trailer

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

User Option (Usage): Must use

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)

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|-------------|----------------|--------------|
| SE01 | 96 | Number of Included Segments | M | N0 | 1/10 | Must use |
| | | Description: Total number of segments included in a transaction set including ST and SE segments | | | | |
| SE02 | 329 | Transaction Set Control Number | M | AN | 4/9 | Must use |
| | | Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set | | | | |

Comments:

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

Example:

SE*40*0001~

GE Functional Group Trailer

| | |
|-------------------------|-------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| GE01 | 97 | Number of Transaction Sets Included | M | N0 | 1/6 | Must use |
| | | Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element | | | | |
| GE02 | 28 | Group Control Number | M | N0 | 1/9 | Must use |
| | | Description: Assigned number originated and maintained by the sender | | | | |

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

| | |
|-------------------------|-------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|-------------|----------------|--------------|
| IEA01 | I16 | Number of Included Functional Groups | M | N0 | 1/5 | Must use |
| | | Description: A count of the number of functional groups included in an interchange | | | | |
| IEA02 | I12 | Interchange Control Number | M | N0 | 9/9 | Must use |
| | | Description: A control number assigned by the interchange sender | | | | |

DATA FILE EXAMPLE: BY CONTAINER, ONE PO

ST*856*0001~
BSN*00*FLEX-555181*20190817*0227*0004~
HL*1**S~
TD1*PKG*24****G*37831.3*LB*9.5*CR~
TD5*O*2*ONEY*S**CC***SB~
TD3*CN**TCNU8408606*****TW167378B*42G0~
REF*BM*ONEYNK8GL4635600~
DTM*011*20190801*0400~
DTM*017*20190917*1600~
FOB*CC~
N1*SF*SUPPLIER1., LTD*US*0001~
N3*PARK DISTRICT*SUITE 300~
N4*NANJING*32**CN~
N1*ST*DISTRIBUTION*9*0354585215427~
N3*600 LAS COLINAS BLVD E*SUITE 400~
N4*LOS ANGELES*CA*75039-5616*US~
HL*2*1*O~
PRF*694832~
HL*3*2*I~
LIN*1*VP*ITEM1*BP*SAMPLE1~
SN1**250*EA**250*EA~
PID*F*ZZ*860111876**HARDWARE KIT~
HL*4*2*I~
LIN*2*VP*OTR4515QHD*BP*SAMPLE2~
SN1**6250*EA**6250*EA~
PID*F***Q HARDWARE BRAKE KIT W/HD SPRING~
HL*5*2*I~
LIN*3*VP*OTR4515X*BP*SAMPLE3~
SN1**500*EA**500*EA~
PID*F***16.5 FRUEHAUF X3 HARDWARE KIT~
HL*6*2*I~
LIN*4*VP*OTR4524QM*BP*SAMPLE4~
SN1**500*EA**500*EA~
PID*F***MACK HARDWARE KIT W/OFFSET SPRING~
HL*7*2*I~
LIN*5*VP*OTR4702*BP*SAMPLE5~
SN1**500*EA**500*EA~
PID*F***15X4 Q-PLUS FRONT HARDWARE KIT~
CTT*5~
SE*40*0001~

DATA FILE EXAMPLE: BY CONTAINER, MULTIPLE PO's

ST*856*0002~
BSN*00*FLEX-555107*20190816*0136*0004~
HL*1**S~
TD1*PKG*18****G*35699.4*LB*18.5*CR~
TD5*O*2*EGLV*S**CC***SB~
TD3*CN**TEMU416058~
REF*BM*EGLV143982064624~
DTM*011*20190801*0400~
DTM*017*20190902*1700~
FOB*CC~
N1*SF*SUPPLIER23 LTD*US*0001~
N3*#1 QUIHA ROAD~
N4*HAINING CITY*33*314422*CN~
N1*ST*DISTRIBUTION*9*0754585215403~
N3*600 LAS SPECIAL BLVD E*SUITE 400~
N4*LOS ANGELES*TX*75039-5616*US~
HL*2*1*O~
PRF*9299445~
HL*3*2*I~
LIN*1*VP*B-4707Q*BP*Q2~
SN1**1008*EA**11760*EA~
PID*F****4707Q NEW STEEL SHOE~
HL*4*1*O~
PRF*9247816~
HL*5*4*I~
LIN*2*VP*B-4711Q*BP*B2~
SN1**1512*EA**2000*EA~
PID*F****4711Q NEW STEEL SHOE~
CTT*5~
SE*30*0002~