Customer EDI Guidelines

856 Advance Ship Notice

Author: **CSC Consulting**

856 Ship Notice/Manifest

Functional Group=SH

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.

Segments:

Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
ISA	Interchange Control Header	M	1			Used
GS	Functional Group Header	M	1			Used

Heading:

Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
ST	Transaction Set Header	M	1			Must use
BSN	Beginning Segment for Ship Notice	M	1			Must use
DTM	Date/Time Reference	O	10			Used

Detail:

Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	200000					
HL	Hierarchical Level - Shipment	M	1		C2/010	Must use
TD1	Carrier Details (Quantity and Weight)	O	20			Used
	200					
N1	Name	O	1			Used
N3	Address Information	O	2			Used
N4	Geographic Location	O	1			Used
	200000					
HL	Hierarchical Level - Pack	M	1		C2/010	Must use
TD1	Carrier Details (Quantity and Weight)	O	20			Used
REF	Reference Identification	O	12			Used
	200000					
HL	Hierarchical Level – PO/Item	M	1		C2/010	Must use
LIN	Item Identification	O	1			Used
SN1	Item Detail (Shipment)	O	1			Used
SLN	Subline Item Detail	O	1000			Used
PRF	Purchase Order Reference	O	1			Used
PID	Product/Item Description	O	200			Used
DTM	Date/Time Reference	O	10			Used

Summary:

Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
SE	Transaction Set Trailer	M	1			Must use

Segments:

Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
GE	Functional Group Trailer	M	1			Used
IEA	Interchange Control Trailer	M	1			Used

Comments:

2/010 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

ISA Interchange Control Header

Max: 1
- Mandatory
Loop: N/A **Elements: 16**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
ISA01	**Authorization Information Qualifier** **Description:** Code to identify the type of information in the Authorization Information All valid standard codes are used.	**M**	**ID**	**2/2**	**Must use**
ISA02	**Authorization Information** **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)	**M**	**AN**	**10/10**	**Must use**
ISA03	**Security Information Qualifier** **Description:** Code to identify the type of information in the Security Information All valid standard codes are used.	**M**	**ID**	**2/2**	**Must use**
ISA04	**Security Information** **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)	**M**	**AN**	**10/10**	**Must use**
ISA05	**Interchange ID Qualifier** **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.	**M**	**ID**	**2/2**	**Must use**
ISA06	**Interchange Sender ID** **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	**M**	**AN**	**15/15**	**Must use**
ISA07	**Interchange ID Qualifier** **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.	**M**	**ID**	**2/2**	**Must use**
ISA08	**Interchange Receiver ID** **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	**M**	**AN**	**15/15**	**Must use**
ISA09	**Interchange Date** **Description:** Date of the interchange	**M**	**DT**	**6/6**	**Must use**
ISA10	**Interchange Time** **Description:** Time of the interchange	**M**	**TM**	**4/4**	**Must use**
ISA11	**Interchange Control Standards Identifier** **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.	**M**	**ID**	**1/1**	**Must use**
ISA12	**Interchange Control Version Number** **Description:** This version number covers the interchange control segments All valid standard codes are used.	**M**	**ID**	**5/5**	**Must use**
ISA13	**Interchange Control Number** **Description:** A control number assigned by the interchange sender	**M**	**N0**	**9/9**	**Must use**
ISA14	**Acknowledgment Requested** **Description:** Code sent by the sender to request an interchange acknowledgment (TA1)	**M**	**ID**	**1/1**	**Must use**

Ref	Element Name	Req	Type	Min/Max	Usage
	All valid standard codes are used.				
ISA15	**Usage Indicator** **Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	**M**	**ID**	**1/1**	**Must use**
ISA16	**Component Element Separator** **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	**M**		**1/1**	**Must use**

GS Functional Group Header

Max: 1 **- Mandatory**
Loop: N/A **Elements: 8**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
GS01	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets All valid standard codes are used.	**M**	**ID**	**2/2**	**Must use**
GS02	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners	**M**	**AN**	**2/15**	**Must use**
GS03	**Application Receiver's Code** **Description:** Code identifying party receiving transmission. Codes agreed to by trading partners	**M**	**AN**	**2/15**	**Must use**
GS04	**Date** **Description:** Date expressed as CCYYMMDD	**M**	**DT**	**8/8**	**Must use**
GS05	**Time** **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)	**M**	**TM**	**4/8**	**Must use**
GS06	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	**M**	**N0**	**1/9**	**Must use**
GS07	**Responsible Agency Code** **Description:** Code used in conjunction with Data Element 480 to identify the issuer of the standard All valid standard codes are used.	**M**	**ID**	**1/2**	**Must use**
GS08	**Version / Release / Industry Identifier Code** **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 All valid standard codes are used.	**M**	**AN**	**1/12**	**Must use**

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transaction Set Header

Max: 1
Heading - Mandatory
Loop: N/A **Elements: 2**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
ST01	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set Value: 856 Advance Ship Notice **Code Name** 856 Advance Ship Notice	**M**	**ID**	**3/3**	**Must use**
ST02	**Transaction Set Control Number** **Description:** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M**	**AN**	**4/9**	**Must use**

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).

BSN Beginning Segment for Ship Notice

Max: 1
Heading - Mandatory
Loop: N/A **Elements: 4**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
BSN01	**Transaction Set Purpose Code** **Description:** Code identifying purpose of transaction set **User Note 1:** *GMLG is using a default of 00* Code Name 00 Original	**M**	**ID**	**2/2**	**Must use**
BSN02	**Shipment Identification** **Description:** A unique control number assigned by the original shipper to identify a specific shipment **User Note 1:** *GMLG is using the SAP Shipment Number as the Shipment Identification Number*	**M**	**AN**	**2/30**	**Must use**
BSN03	**Date** **Description:** Date expressed as CCYYMMDD **User Note 1:** *GMLG is using the date that the IDOC was created in the SAP system*	**M**	**DT**	**8/8**	**Must use**
BSN04	**Time** **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) **User Note 1:** *GMLG is using the time that the IDOC was created in the SAP system.*	**M**	**TM**	**4/8**	**Must use**

Syntax:

1. BSN07 C0706 -- If BSN07 is present, then BSN06 is required

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.
3. BSN06 is limited to shipment related codes.

Comments:

1. BSN06 and BSN07 differentiate the functionality of use for the transaction set.

DTM Date/Time Reference

Max: 10
Heading - Optional
Loop: N/A **Elements: 4**

To specify pertinent dates and times

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
DTM01	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **User Note 1:** *GMLG will default this element to 1* Code / Name 011 Shipped	**M**	**ID**	**3/3**	**Must use**
DTM02	**Date** **Description:** Date expressed as CCYYMMDD **User Note 1:** *Date that the IDOC was created in the SAP system*	**C**	**DT**	**8/8**	**Used**
DTM03	**Time** **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) **User Note 1:** *The Time that the IDOC was created in the SAP system.*	**C**	**TM**	**4/8**	**Used**
DTM04	**Time Code** **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 **User Note 1:** *GMLG will use ES for Eastern Time since the SAP production equipment is in this time zone.* Code / Name ES Eastern Standard Time	**O**	**ID**	**2/2**	**Used**

Syntax:

1. DTM02 R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
2. DTM04 C0403 -- If DTM04 is present, then DTM03 is required
3. DTM05 P0506 -- If either DTM05 or DTM06 are present, then the others are required.

HL Hierarchical Level 1 - Shipment

Max: 1	
Detail - Mandatory	
Loop: HL	Elements: 3

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	**628**	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure **User Note 1:** *GMLG uses HL loops for the Shipment, Pack, and PO/line-item. The Shipment loop is defaulted to 1 since there is only one shipment per EDI message.*	**M**	**AN**	**1/12**	**Must use**
HL03	**735**	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **User Note 1:** *For the shipment HL level, GMLG uses a default of S.* **Code** / **Name** I Item P Pack S Shipment	**M**	**ID**	**1/2**	**Must use**
HL04	**736**	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **User Note 1:** *For the shipment HL level use a default of 1.* All valid standard codes are used.	**O**	**ID**	**1/1**	**Used**

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. 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.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. 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.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

TD1 Carrier Details (Quantity and Weight)

Max: 20
Detail - Optional
Loop: HL **Elements: 4**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
TD102	**Lading Quantity** **Description:** Number of units (pieces) of the lading commodity **User Note 1:** *GMLG will send the sum of actual quantity delivered. This is the LFIMG field in the IDOC.*	**C**	**N0**	**1/7**	**Used**
TD106	**Weight Qualifier** **Description:** Code defining the type of weight **User Note 1:** *GMLG will use a default of N for Actual Net Weight.* **Code** **Name** N Actual Net Weight	**O**	**ID**	**1/2**	**Used**
TD107	**Weight** **Description:** Numeric value of weight **User Note 1:** *GMLG will send the numeric value of the weight. This element uses the SAP field, NTGEW, in the IDOC*	**C**	**R**	**1/10**	**Used**
TD108	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **User Note 1:** *GMLG will send a default of PN for Pounds Net.* **Code** **Name** PN Pounds Net	**C**	**ID**	**2/2**	**Used**

Syntax:

C0102 -- If TD101 is present, then TD102 is required
C0304 -- If TD103 is present, then TD104 is required
C0607 -- If TD106 is present, then TD107 is required
P0708 -- If either TD107 or TD108 are present, then the others are required.
P0910 -- If either TD109 or TD110 are present, then the others are required.

N1 Name

Max: 1
Detail - Optional
Loop: N1 **Elements: 2**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
N101	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **User Note 1:** *GMLG will send Ship-to using default qualifier ST.* **Code** **Name** ST Ship To	**M**	**ID**	**2/3**	**Must use**
N102	**Name** **Description:** Free-form name **User Note 1:** *GMLG will send the name of the party referred to in N101. This element uses the SAP NAME1 field found in the IDOC.*	**C**	**AN**	**1/60**	**Used**

Syntax:

1. N102 R0203 -- At least one of N102 or N103 is required.
2. N103 P0304 -- If either N103 or N104 are present, then the others are 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.
2. N105 and N106 further define the type of entity in N101.

N3 Address Information

Max: 2
Detail - Optional
Loop: N1 **Elements: 2**

To specify the location of the named party

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
N301	**Address Information** **Description:** Address information **User Note 1:** *This element will be transmitted by GMLG to provide address information pertaining to the parties involved. This element uses the SAP field STREET1 in the IDOC.*	**M**	**AN**	**1/55**	**Must use**
N302	**Address Information** **Description:** Address information **User Note 1:** *This element will be transmitted by EMD to provide address information pertaining to the parties involved.*	**O**	**AN**	**1/55**	**Used**

N4 Geographic Location

Max: 1
Detail - Optional
Loop: N1 **Elements: 3**

To specify the geographic place of the named party

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
N401	**City Name** **Description:** Free-form text for city name **User Note 1:** *GMLG will transmit the city name in free-form text.. This element uses the SAP field, CITY1 in the IDOC.*	**O**	**AN**	**2/30**	**Used**
N402	**State or Province Code** **Description:** Code (Standard State/Province) as defined by appropriate government agency **User Note 1:** *GMLG will transmit the defined state abbreviation or province code This element uses the SAP field, REGION in the IDOC..*	**O**	**ID**	**2/2**	**Used**
N403	**Postal Code** **Description:** Code defining international postal zone code excluding punctuation and blanks (zip code for United States) **User Note 1:** *GMLG will transmit the international postal code, excluding punctuation and blanks, or the zip code for the United States. This element uses the SAP field, POSTL_COD1 in the IDOC..*	**O**	**ID**	**3/15**	**Used**

Syntax:

1. N406 C0605 -- If N406 is present, then N405 is required

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.

HL Hierarchical Level 1 – Pack

Max: 1
Detail - Mandatory
Loop: HL **Elements: 4**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
HL01	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure **User Note 1:** *GMLG uses HL loops for the Shipment, Pack, and PO/line-item. Each Pack HL ID Number is incremented by one to make it unique.*	**M**	**AN**	**1/12**	**Must use**
HL02	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to **User Note 1:** *This value equals HL01 in the shipment level.*	**O**	**AN**	**1/12**	**Used**
HL03	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **User Note 1:** *For the Pack HL level, GMLG uses a default of P.*	**M**	**ID**	**1/2**	**Must use**
HL04	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **User Note 1:** *For the Pack HL level use a default of 1.* All valid standard codes are used.	**O**	**ID**	**1/1**	**Used**

Code	Name
I	Item
P	Pack
S	Shipment

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. 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.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. 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.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

TD1 Carrier Details (Quantity and Weight)

Max: 20
Detail - Optional
Loop: HL **Elements: 4**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
TD102	**Lading Quantity** **Description:** Number of units (pieces) of the lading commodity **User Note 1:** *GMLG will send the sum of actual quantity delivered. This element uses the SAP field, LFIMG, in the IDOC.*	**C**	**N0**	**1/7**	**Used**
TD106	**Weight Qualifier** **Description:** Code defining the type of weight **User Note 1:** *GMLG will use a default of N for Actual Net Weight..* **Code** **Name** N Actual Net Weight	**O**	**ID**	**1/2**	**Used**
TD107	**Weight** **Description:** Numeric value of weight **User Note 1:** *GMLG will send the numeric value of the weight. This element uses the SAP field, NTGEW, in the IDOC.*	**C**	**R**	**1/10**	**Used**
TD108	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **User Note 1:** *GMLG will send a default of PN for Pounds Net.* **Code** **Name** PN Pounds Net	**C**	**ID**	**2/2**	**Used**

Syntax:

C0102 -- If TD101 is present, then TD102 is required
C0304 -- If TD103 is present, then TD104 is required
C0607 -- If TD106 is present, then TD107 is required
P0708 -- If either TD107 or TD108 are present, then the others are required.
P0910 -- If either TD109 or TD110 are present, then the others are required.

REF Reference Identification

Max: 12
Detail - Optional
Loop: N1 **Elements: 2**

To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	**128**	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **User Note 1:** *GMLG will transmit a default of PJ for Packer Number.* **Code** / **Name** PJ Packer Number	**M**	**ID**	**2/3**	**Must use**
REF02	**127**	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **User Note 1:** *GMLG will transmit the reference number or identification number as defined for a particular transaction set, or as specified by REF01. The SAP field, EXIDV, will be taken from the IDOC.*	**C**	**AN**	**1/30**	**Used**

Syntax:

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

Semantics:

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

HL Hierarchical Level 1 – PO/Item

Max: 1
Detail - Mandatory
Loop: HL **Elements: 4**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
HL01	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure **User Note 1:** *GMLG uses HL loops for the Shipment, Pack, and PO/line-item. Each PO/Item HL ID Number is incremented by one to make it unique.*	**M**	**AN**	**1/12**	**Must use**
HL02	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to **User Note 1:** *This value equals HL01 in the parent Pack loop*	**O**	**AN**	**1/12**	**Used**
HL03	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **User Note 1:** *For the PO/Item HL level, GMLG uses a default of I.*	**M**	**ID**	**1/2**	**Must use**
HL04	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **User Note 1:** *For the PO/Item HL level use a default of 0.*	**O**	**ID**	**1/1**	**Used**

Code	Name
I	Item
P	Pack
S	Shipment

All valid standard codes are used.

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. 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.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. 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.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

LIN Item Identification

Max: 1
Detail - Optional
Loop: HL **Elements: 4**

To specify basic item identification data

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
LIN02	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **User Note 1:** *GMLG will transmit a default of VP for Vendor's (Seller's) Part Number, if E1EDL24002-MATNR exists.* **Code** **Name** VP Vendor's (Seller's) Part Number	**M**	**ID**	**2/2**	**Must use**
LIN03	**Product/Service ID** **Description:** Identifying number for a product or service **User Note 1:** *This element contains GMLG's part number. The SAP field, MATNR, will be taken from the IDOC if E1EDL24002-MATNR exists.*	**M**	**AN**	**1/48**	**Must use**
LIN04	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **User Note 1:** *GMLG will transmit a default of PI for Purchaser's Item Code, if E1EDL24002-KDMAT exists.* **Code** **Name** PI Purchaser's Item Code	**C**	**ID**	**2/2**	**Used**
LIN05	**Product/Service ID** **Description:** Identifying number for a product or service **User Note 1:** *This element contains the purchaser's part number. The SAP field, KDMAT, will be taken from the IDOC, if E1EDL24002-KDMAT exists.*	**C**	**AN**	**1/48**	**Used**

Syntax:

P0405 -- If either LIN04 or LIN05 are present, then the others are required.
P0607 -- If either LIN06 or LIN07 are present, then the others are required.
P0809 -- If either LIN08 or LIN09 are present, then the others are required.
P1011 -- If either LIN10 or LIN11 are present, then the others are required.
P1213 -- If either LIN12 or LIN13 are present, then the others are required.
P1415 -- If either LIN14 or LIN15 are present, then the others are required.
P1617 -- If either LIN16 or LIN17 are present, then the others are required.
P1819 -- If either LIN18 or LIN19 are present, then the others are required.
P2021 -- If either LIN20 or LIN21 are present, then the others are required.
P2223 -- If either LIN22 or LIN23 are present, then the others are required.
P2425 -- If either LIN24 or LIN25 are present, then the others are required.
P2627 -- If either LIN26 or LIN27 are present, then the others are required.
P2829 -- If either LIN28 or LIN29 are present, then the others are required.
P3031 -- If either LIN30 or LIN31 are present, then the others are required.

Semantics:

1. LIN01 is the line item identification

Comments:

1. See the Data Dictionary for a complete list of IDs.
2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

SN1 Item Detail (Shipment)

Max: 1
Detail - Optional
Loop: HL **Elements: 2**

To specify line-item detail relative to shipment

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
SN102	**Number of Units Shipped** **Description:** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set **User Note 1:** *GMLG will transmit the number of units shipped in the manufacturer's shipping units for a line item. The SAP field, LFIMG, will be taken from the IDOC*	**M**	**R**	**1/10**	**Must use**
SN103	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **User Note 1:** *GMLG will send a default of EA for each.* **Code** **Name** EA Each	**M**	**ID**	**2/2**	**Must use**

Syntax:

1. SN105 P0506 -- If either SN105 or SN106 are present, then the others are required.

Semantics:

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

Comments:

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

SLN Subline Item Detail

Max: 1000
Detail - Optional
Loop: HL **Elements: 7**

To specify product subline detail item data

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
SLN01	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set **User Note 1:** *Seller assigned warehouse ticket number. If additional characters are required, continue the number in SLN02. The SAP field, E1EDL37001-EXIDV, will be taken from the IDOC.*	**M**	**AN**	**1/20**	**Must use**
SLN02	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	**O**	**AN**	**1/20**	**Used**
SLN03	**Relationship Code** **Description:** Code indicating the relationship between entities **User Note 1:** *GMLG will use a default of I for Included.* **Code** / **Name** I Included	**M**	**ID**	**1/1**	**Must use**
SLN04	**Quantity** **Description:** Numeric value of quantity **User Note 1:** *This uses the SAP field, E1EDL24002-LFIMG, in the IDOC..*	**C**	**R**	**1/15**	**Used**
SLN05	**Composite Unit of Measure** **Description:** To identify a composite unit of measure(See Figures Appendix for examples of use) **User Note 1:** *GMLG will send a default of EA for Each.*	**C**	**Comp**		**Used**
	Unit or Basis for Measurement Code **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **Code** / **Name** EA Each	**M**	**ID**	**2/2**	**Must use**
SLN09	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **User Note 1:** *GMLG will send a default of ZZ for Mutually Defined.* **Code** / **Name** ZZ Mutually Defined	**C**	**ID**	**2/2**	**Used**
SLN10	**Product/Service ID** **Description:** Descriptive number. **User Note 1:** *Seller assigned warehouse ticket number The SAP field, E1EDK37001-EXIDV, will be taken from the IDOC...* **Code** / **Name**	**C**	**ID**	**2/2**	**Used**

Ref	Element Name	Req	Type	Min/Max	Usage
	ZZ Mutually Defined				

Syntax:

1. SLN04 P0405 -- If either SLN04 or SLN05 are present, then the others are required.
2. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
3. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
4. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
5. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
6. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
7. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
8. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
9. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
10. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
11. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
12. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
13. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are required.

Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

PRF Purchase Order Reference

Max: 1
Detail - Optional
Loop: HL **Elements: 3**

To provide reference to a specific purchase order

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
PRF01	**Purchase Order Number** **Description:** Identifying number for Purchase Order assigned by the purchaser **User Note 1:** *Customer Purchase Order is taken from the SAP IDOC field, BSTNR.*	**M**	**AN**	**1/22**	**Must use**
PRF04	**Date** **Description:** Date expressed as CCYYMMDD **User Note 1:** *Customer Purchase Order date is taken from the SAP IDOC field, BSTDT.*	**O**	**DT**	**8/8**	**Used**
PRF05	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set **User Note 1:** *GMLG transmits the Purchase Order line number in this element.. This element is taken from the SAP IDOC field, POSEX.*	**O**	**AN**	**1/20**	**Used**

Semantics:

1. PRF04 is the date assigned by the purchaser to purchase order.

PID Product/Item Description

Max: 200
Detail - Optional
Loop: HL **Elements: 2**

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

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
PID01	**Item Description Type** **Description:** Code indicating the format of a description **User Note 1:** *GMLG transmits F for Free form.* Code Name F Free-form	**M**	**ID**	**1/1**	**Must use**
PID05	**Description** **Description:** A free-form description to clarify the related data elements and their content **User Note 1:** *GMLG transmits the SAP IDOC field ORKTX.*	**C**	**AN**	**1/80**	**Used**

Syntax:

1. PID04 C0403 -- If PID04 is present, then PID03 is required
2. PID04 R0405 -- At least one of PID04 or PID05 is required.
3. PID07 C0703 -- If PID07 is present, then PID03 is required
4. PID08 C0804 -- If PID08 is present, then PID04 is required
5. PID09 C0905 -- If PID09 is present, then 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.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

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.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

DTM Date/Time Reference

Max: 10
Detail - Optional
Loop: HL **Elements: 2**

To specify pertinent dates and times

Element Summary:

Ref	Element Name	Req	Type	Min/Max	Usage
DTM01	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **User Note 1:** *GMLG transmits 008 for Purchase Order Received Date.* **Code** **Name** 008 Purchase Order Received	**M**	**ID**	**3/3**	**Must use**
DTM02	**Date** **Description:** Date expressed as CCYYMMDD **User Note 1:** *GMLG transmits the SAP IDOC field, BSTDT.*	**C**	**DT**	**8/8**	**Used**

Syntax:

1. DTM02 R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
2. DTM04 C0403 -- If DTM04 is present, then DTM03 is required
3. DTM05 P0506 -- If either DTM05 or DTM06 are present, then the others are required.

SE Transaction Set Trailer

Max: 1
Summary - Mandatory
Loop: N/A **Elements: 2**

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:

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

Comments:

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

GE Functional Group Trailer

Max: 1
- Mandatory
Loop: N/A **Elements: 2**

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

Element Summary:

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

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

Max: 1
- Mandatory
Loop: N/A **Elements: 2**

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

Element Summary:

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