HAMBURG SÜD

ASC X12 Release 4010

301
Booking Confirmation (Ocean)

Message Implementation Guide

Version 1.0.0

Change history

Version	Date	Comments
1.0.0	28-Jul-2017	Initial version

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Contents

1 Audience

This document is intended for business, technical and EDI personnel engaged in establishing an electronic connection with Hamburg Süd for the purpose of receiving booking confirmations for bookings placed at Hamburg Süd via ASC X12 301 Release 4010.

The following chapters provide information regarding General Conventions and Message Specifications.

2 General Information

2.1 Terminology

Within this manual specific terminology will be used that you may not be familiar with. In order to give you some guidance, please find below the most important EDI terms and their according definitions.

Directory

An EDI directory is published three times a year and versioned. The version number is a four digit numeric code that is incremented by each release. The specifications within this manual conform to the directory approved by the ASC X12 Board in October 1997 the directory code of X12-4010.

Each directory contains sub-directories for messages, segments, composites and data elements, all of which may change with directory versions. However, since a directory version is permanent, there is no need to update computer applications when specific directory has been adopted.

Interchange

An interchange is a group of messages that are sent in one transmission. This means that it is possible to have more than one message within an interchange.

Message

A message can be described as a business transaction. Therefore, where appropriate, a message is often referred to as a transaction rather than a message. A transaction could be a new entry, a new line, a change to a line, a cancellation of line etc.
A full list of messages can be retrieved from a sub-directory within all directory versions, called the message directory. Each message has its own description and structure, which may differ by directory version.

Segment

A segment is uniquely identified by a three character mnemonic tag, which is used as a reference to a common group of business information. Usually this defines one segment contains one item of business data (i.e. field or attribute). For example Place of Origin, Port of Loading, Port of Discharge are all locations. The segment used for location is called R4. There are, however, segments that include more than one item of business data. For example Transport Mode, Voyage Number and Vessel are all classified as transport details included in the respective segment.

Whilst a message has a standard structure of segments, there is also a separate subdirectory for segments within directory versions, known as the segment directory. Each segment has its own description and structure, which may differ by directory version.

Service Segment

A service segment is a segment that contains non-business related data. These segments usually include interchanges and messages, in the form of headers and trailers. For example ISA and GS are typical service segments.

Segment Group

A segment group is a collection of segments that are related within a message structure. A simple example would be a group for details of transport. This would typically include a segment for the voyage (using Q2), reference (using N9) and the locations (using R4).

Composite Element

A composite element is a lower level of detail to identify business data within segment. It is normally used when a data item requires addition information. Each composite element has a unique code identifying it. A composite element could be used, for example when a data item is in the form of a code and it requires a type qualifier and also organization responsible for its maintenance.

Whilst a segment has a standard structure, there is also a separate subdirectory for composite elements within directory versions, known as the composite data element directory. Each composite element has its own description and structure, which may differ within directory version.

Data Element

A data element is the lowest level within the EDI structure for holding data. Each data element has a unique code identifying it. A data element can exist as a stand-alone element or as a sub-element within a composite element.

There is also a separate sub-directory for data elements within directory versions, known as the data element directory. Like many other sub-directories, the data element sub-directory contains descriptions and other information. In addition, some data elements also have associated code lists, which are published by organizations such as the International Standards Organization (ISO), or the United Nations. However, it is often possible for trading partners to use their own code list.

2.2 Processing Guidelines

Hamburg Süd is sending booking confirmations via 301 messages to the customer. A single message contains only one confirmation.

EDI communication depends on Trading Partnership and will be mutually defined within a separate agreement. Common protocols for the transmission of messages are e.g. FTP or SFTP.

2.3 Functional Description

Hazardous Material

Please note that all necessary information about Hazardous Material is being reported in the H1 segment. It's not possible to just flag the shipment as Hazardous and transfer the data in a reference or free text segment! Same also applies for the 300 Booking Request message!

2.4 Status Indicators and Usage Indicators

Status Indicators
Status Indicators (“M” and “C”) form part of the ANSI X12 standard and indicate a minimum requirement to fulfill the needs of the message structure. They are not adequate for implementation purposes.
The Status Indicators are:

Value	Description
M	Mandatory The entity marked as such must appear in all messages, and apply to these messages as well as to any associated implementation guidelines (and consequently is also a Usage Indicator).
C	Conditional The entity is used by agreement between trading partners

Usage Indicators
Usage Indicators are implementation–related indicators that further detail the use of “Conditional” Status Indicators. Usage Indicators are applied at all levels of the guidelines and shown adjacent to data items such as segment groups, segments, composite data elements and simple data elements. They dictate the agreed usage of the data items or entities.
The Usage Indicators are:

Value	Description
M	Mandatory Indicates the item is mandatory in the UN/EDIFACT message.
R	Required Indicates the item must be transmitted in this implementation.
D	Dependent Indicates that the use of the item is depending on a well-defined condition or set of conditions. These conditions must be clearly specified in the relevant implementation guideline.
O	Optional Indicates that this item is at the need or discretion of both trading partners.
X	Not Used Indicates that this item is not used in this implementation. If present, it will be disregarded.
NA	Not Recommended (Advised) Indicates the item needn’t be transmitted in this implementation.
A	Advised Indicates the item must is recommended to be transmitted in this implementation.

Where an item within a segment group, segment or composite data element is marked with Usage Indicators “M” or “R”, but the segment group, segment or composite data element has been marked “O” or “D” (or for that matter “X”), the item is only to be transmitted when the segment group, segment or composite of which it is a part, is used.

Format
The format is used to describe the official format requirements within ASC X12-4010 directory.

Examples

a3	3 alphabetic characters, fixed length

n6	6 numeric characters, fixed length
an5	5 alphanumeric characters, fixed length
a..6	up to 6 alphabetic characters
an..35	up to 35 alphanumeric characters
n..6	up to 6 numeric characters

3 ANSI X12 301 segment table of contents

Functional Group ID=RO

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Confirmation (Ocean) Transaction Set (301) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide all the information necessary for an ocean carrier to confirm space, container, and equipment availability in response to the Reservation (Booking Request) (Ocean) Transaction Set (300); or to notify other parties such as terminal operators or other ocean carriers.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	005	ISA	Interchange Control Header	M	1		
M	008	GS	Functional Group Header	M	1		
M	010	ST	Transaction Set Header	M	1		
M	020	B1	Beginning Segment for Booking or Pick-up/Delivery	M	1		
X	025	G61	Contact	O	3		
X	030	Y6	Authentication	O	2		
M	040	Y3	Space Confirmation	M	1		
			LOOP ID - Y4			10	
	050	Y4	Container Release	O	1		
	051	W09	Equipment and Temperature	O	1		
	054	N9	Reference Identification	O	100		
X	055	R2A	Route Information with Preference	O	25		
			LOOP ID - N1			4	
	060	N1	Name	O	1		
	070	N2	Additional Name Information	O	1		
	080	N3	Address Information	O	2		
	090	N4	Geographic Location	O	1		
X	100	G61	Contact	O	3		
			LOOP ID - R4			20	
M	110	R4	Port or Terminal	M	1		
	120	DTM	Date/Time Reference	O	15		
X	130	W09	Equipment and Temperature	O	1		
X	140	H3	Special Handling Instructions	O	6		
	150	EA	Equipment Attributes	O	5		

Detail:

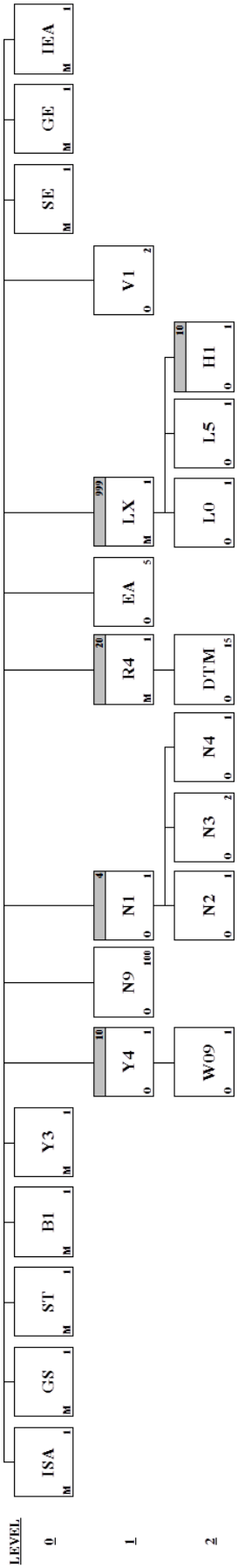
	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LX			999	
M	010	LX	Assigned Number	M	1		

X	020	N7	Equipment Details	O	1		
X	021	W09	Equipment and Temperature	O	1		
X	030	K1	Remarks	O	10		
	040	L0	Line Item - Quantity and Weight	O	1		
	050	L5	Description, Marks and Numbers	O	1		
X	055	L4	Measurement	O	1		
X	057	L1	Rate and Charges	O	1		
			LOOP ID - H1			10	
	060	H1	Hazardous Material	O	1		
X	070	H2	Additional Hazardous Material Description	O	10		
	080	V1	Vessel Identification	O	2		
X	090	V9	Event Detail	O	10		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	SE	Transaction Set Trailer	M	1		
M	015	GE	Functional Group Trailer	M	1		
M	020	IEA	Interchange Control Trailer	M	1		

4 Branch Diagram



5 Segment Description

Segment: **ISA Interchange Control Header**
Position: 005
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments
Comments:
Notes: Example Syntax

ISA*00* *00* *ZZ*HAMSUD *ZZ*PARTNERID *160526*2245*U*00401*053849086*0*P*>~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**ISA01**	**I01**	**Authorization Information Qualifier** Code to identify the type of information in the Authorization Information Provided values: 00 No Authorization Information Present (No Meaningful Information in I02)	**M ID 2/2**
M	**ISA02**	**I02**	**Authorization Information** 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**
M	**ISA03**	**I03**	**Security Information Qualifier** Code to identify the type of information in the Security Information Provided values: 00 No Security Information Present (No Meaningful Information in I04)	**M ID 2/2**
M	**ISA04**	**I04**	**Security Information** 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**
M	**ISA05**	**I05**	**Interchange ID Qualifier** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Provided values: ZZ Mutually Defined	**M ID 2/2**
M	**ISA06**	**I06**	**Interchange Sender ID** 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 Provided values:	**M AN 15/15**
M	**ISA07**	**I05**	**Interchange ID Qualifier** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Provided values: ZZ Mutually Defined	**M ID 2/2**
M	**ISA08**	**I07**	**Interchange Receiver ID**	**M AN 15/15**

			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	**ISA09**	**I08**	**Interchange Date**	**M**	**DT 6/6**
			Date of the interchange Format YYMMDD Example: 160526 (26th May 2016)		
M	**ISA10**	**I09**	**Interchange Time**	**M**	**TM 4/4**
			Time of the interchange Format HHMM Example: 2245 (10:45 pm)		
M	**ISA11**	**I10**	**Interchange Control Standards Identifier**	**M**	**ID 1/1**
			Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer Provided values: Refer to 004010 Data Element Dictionary for acceptable code values.		
M	**ISA12**	**I11**	**Interchange Control Version Number**	**M**	**ID 5/5**
			This version number covers the interchange control segments Provided values: 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997		
M	**ISA13**	**I12**	**Interchange Control Number**	**M**	**N0 9/9**
			A control number assigned by the interchange sender		
M	**ISA14**	**I13**	**Acknowledgment Requested**	**M**	**ID 1/1**
			Code sent by the sender to request an interchange acknowledgment (TA1) Provided values: 0 No Acknowledgment Requested		
M	**ISA15**	**I14**	**Usage Indicator**	**M**	**ID 1/1**
			Code to indicate whether data enclosed by this interchange envelope is test, production or information Provided values: P Production Data T Test Data		
M	**ISA16**	**I15**	**Component Element Separator**	**M**	**AN 1/1**
			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		

Segment: **GS** **Functional Group Header**
Position: 008
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of a functional group and to provide control information
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.
Notes: Example Syntax

GS*RO*HAMSUD*RECEIVER ID*20160526*2245*1000*X*004010~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**GS01**	**479**	**Functional Identifier Code** Code identifying a group of application related transaction sets Provided values: RO Ocean Booking Information (300, 301, 303)	**M ID 2/2**
M	**GS02**	**142**	**Application Sender's Code** Code identifying party sending transmission; codes agreed to by trading partners Provided values:	**M AN 2/15**
M	**GS03**	**124**	**Application Receiver's Code** Code identifying party receiving transmission; codes agreed to by trading partners Trading Partner's ID	**M AN 2/15**
M	**GS04**	**373**	**Date** Date expressed as CCYYMMDD Example: 20160526 (26th May 2016)	**M DT 8/8**
M	**GS05**	**337**	**Time** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) Example: 224529 (10:45:29 pm)	**M TM 4/8**
M	**GS06**	**28**	**Group Control Number** Assigned number originated and maintained by the sender	**M N0 1/9**
M	**GS07**	**455**	**Responsible Agency Code** Code used in conjunction with Data Element 480 to identify the issuer of the standard Provided values: X Accredited Standards Committee X12	**M ID 1/2**
M	**GS08**	**480**	**Version / Release / Industry Identifier Code** 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	**M AN 1/12**

segment is T, then other formats are allowed

Provided values:	
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Segment: **ST** **Transaction Set Header**
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Comments:
Notes: Example Syntax

ST*301*0001~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**ST01**	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set Provided values: 301 Confirmation (Ocean)	**M ID 3/3**
M	**ST02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

Segment: **B1** **Beginning Segment for Booking or Pick-up/Delivery**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	B101	**140**	**Standard Carrier Alpha Code** Standard Carrier Alpha Code	**O**	**ID 2/4**
M	**B102**	**145**	**Shipment Identification Number** Identification number assigned to the shipment by the shipper that uniquely identifies the shipment from origin to ultimate destination and is not subject to modification; (Does not contain blanks or special characters) Customer shipment identifier if exists. Else HSDG Booking Number.	**M**	**AN 1/30**
	B103	**373**	**Date** Date expressed as CCYYMMDD Date of Booking Confirmation	**O**	**DT 8/8**
	B104	**558**	**Reservation Action Code** Code identifying action on reservation or offering HSDG supports these values: A for accept, D for decline, U for update Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**

Segment: **Y3** **Space Confirmation**
Position: 040
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To specify confirmation information for space booking including numbers, dates, and load time
Comments: **1** If space is available, all of the conditional data elements in segment Y3 are required. If the requested space is not available, Y301 is the booking number 'decline'.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**Y301**	**13**	**Booking Number**	**M**	**AN 1/17**
			Number assigned by the carrier for space reservation		
			HSDG Booking Number		
	Y302	**140**	**Standard Carrier Alpha Code**	**O**	**ID 2/4**
			Standard Carrier Alpha Code		
			Depending on the Brand: SUDU, ANRM or CCNR		
	Y303	**373**	**Date**	**O**	**DT 8/8**
			Date expressed as CCYYMMDD		
			ETD / sailing date at POL		
	Y304	**373**	**Date**	**O**	**DT 8/8**
			Date expressed as CCYYMMDD		
			ETA date at POD		
X	**Y305**	**154**	**Standard Point Location Code**	**O**	**ID 6/9**
X	**Y306**	**112**	**Pier Name**	**O**	**AN 2/14**
	Y307	**373**	**Date**	**O**	**DT 8/8**
			Date expressed as CCYYMMDD		
			Cut-off date		
X	**Y308**	**337**	**Time**	**X**	**TM 4/8**
	Y309	**91**	**Transportation Method/Type Code**	**O**	**ID 1/2**
			Code specifying the method or type of transportation for the shipment		
			Always "O" ocean		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	Y310	**375**	**Tariff Service Code**	**O**	**ID 2/2**
			Code specifying the types of services for rating purposes		
			used values: PP for port to port DD for door to door PD for port to door DP for door to port		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**Y311**	**623**	**Time Code**	**O**	**ID 2/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		

Segment: **Y4** **Container Release**
Position: 050
Loop: Y4 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To transmit information relative to containers available for release
Comments:
Notes: Y4 segments will be grouped by same Equipment Type (ISO Code)

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	Y401	**13**	**Booking Number**	**O**	**AN 1/17**
			Number assigned by the carrier for space reservation		
			HSDG Booking Number		
X	**Y402**	**13**	**Booking Number**	**O**	**AN 1/17**
	Y403	**373**	**Date**	**O**	**DT 8/8**
			Date expressed as CCYYMMDD		
			local Cargo Pickup date		
X	**Y404**	**154**	**Standard Point Location Code**	**O**	**ID 6/9**
	Y405	**95**	**Number of Containers**	**O**	**N0 1/4**
			Number of shipping containers		
	Y406	**24**	**Equipment Type**	**O**	**ID 4/4**
			Code identifying equipment type		
			Equipment ISO Code		
X	**Y407**	**140**	**Standard Carrier Alpha Code**	**O**	**ID 2/4**
X	**Y408**	**309**	**Location Qualifier**	**X**	**ID 1/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**Y409**	**310**	**Location Identifier**	**X**	**AN 1/30**
X	**Y410**	**56**	**Type of Service Code**	**O**	**ID 2/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		

Segment: **W09** **Equipment and Temperature**
Position: 051
Loop: Y4 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To relate equipment type and required temperatures
Comments:
Notes: Reefer data used from first item ISO Code group.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	W0901	40	**Equipment Description Code** Code identifying type of equipment used for shipment Always "CZ" Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
	W0902	408	**Temperature** Temperature Requested temperature	X R 1/4
	W0903	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Always "CE" Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
	W0904	408	**Temperature** Temperature Requested temperature	X R 1/4
	W0905	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Always "CE" Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
X	W0906	3	**Free Form Message**	O AN 1/60
X	W0907	1122	**Vent Setting Code** Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/1
X	W0908	488	**Percent**	O N0 1/3
	W0909	380	**Quantity** Numeric value of quantity Ventilation setting (cbm). Always "0" if ventilation is CLOSED.	O R 1/15

Segment: **N9** **Reference Identification**
Position: 054
Loop:
Level: Heading
Usage: Optional
Max Use: 100
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier
Comments:
Notes: max. 3 occurences:
SI - Shipper
BN - Booking number
FB - Fowarder reference

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**N901**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification one of: SI - Shipper BN - Booking number FB - Fowarder reference Refer to 004010 Data Element Dictionary for acceptable code values.	**M**	**ID 2/3**
	N902	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X**	**AN 1/30**
X	**N903**	**369**	**Free-form Description**	**X**	**AN 1/45**
X	**N904**	**373**	**Date**	**O**	**DT 8/8**
X	**N905**	**337**	**Time**	**X**	**TM 4/8**
X	**N906**	**623**	**Time Code** Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
X	**N907**	**C040**	**Reference Identifier** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	**O**	
X	**C04001**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	**M**	**ID 2/3**
X	**C04002**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**M**	**AN 1/30**
X	**C04003**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	**X**	**ID 2/3**
X	**C04004**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X**	**AN 1/30**
X	**C04005**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	**X**	**ID 2/3**
X	**C04006**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as	**X**	**AN 1/30**

specified by the Reference Identification Qualifier

Segment: **N1** **Name**
Position: 060
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
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.
Notes: max. occurence 2:
SH - shipper
CN - consignee

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**N101**	**98**	**Entity Identifier Code**	**M ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			values used: SH for shipper MC for trucker	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
	N102	**93**	**Name**	**X AN 1/60**
			Free-form name	
			Partner Name	
	N103	**66**	**Identification Code Qualifier**	**X ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)	
			Always 25 (Carrier's Customer Code)	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
	N104	**67**	**Identification Code**	**X AN 2/80**
			Code identifying a party or other code	
			HSDG partner code	
X	**N105**	**706**	**Entity Relationship Code**	**O ID 2/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.	
X	**N106**	**98**	**Entity Identifier Code**	**O ID 2/3**
			Refer to 004010 Data Element Dictionary for acceptable code values.	

Segment: **N2** **Additional Name Information**
Position: 070
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify additional names or those longer than 35 characters in length
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**N201**	**93**	**Name**	**M**	**AN 1/60**
			Free-form name		
			Partner Name 2		
	N202	**93**	**Name**	**O**	**AN 1/60**
			Free-form name		
			Partner Name 3		

Segment: **N3** **Address Information**
Position: 080
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**N301**	**166**	**Address Information** Address information	**M**	**AN 1/55**
	N302	**166**	**Address Information** Address information	**O**	**AN 1/55**

Segment: **N4** **Geographic Location**
Position: 090
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
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.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	N401	**19**	**City Name**	**O**	**AN 2/30**
			Free-form text for city name		
	N402	**156**	**State or Province Code**	**O**	**ID 2/2**
			Code (Standard State/Province) as defined by appropriate government agency		
	N403	**116**	**Postal Code**	**O**	**ID 3/15**
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)		
	N404	**26**	**Country Code**	**O**	**ID 2/3**
			Code identifying the country		
X	**N405**	**309**	**Location Qualifier**	**X**	**ID 1/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**N406**	**310**	**Location Identifier**	**O**	**AN 1/30**

Segment: **R4** **Port or Terminal**
Position: 110
Loop: R4 Mandatory
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: Contractual or operational port or point relevant to the movement of the cargo
Comments: **1** R4 is required for each port to be identified.
Notes: HSDG will report
POR as the origin of the transport
POL as the origin of the next transport leg
POD as the destination of the next transport leg
PLD as the destination of the transport

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**R401**	**115**	**Port or Terminal Function Code** Code defining function performed at the port or terminal with respect to a shipment used values: R for Place of Receipt L for Port of Loading D for Port of Discharge E for Place of Delivery Refer to 004010 Data Element Dictionary for acceptable code values.	**M**	**ID 1/1**
	R402	**309**	**Location Qualifier** Code identifying type of location For locations in the US: D Outside US: K in case the D/K code is unknown: UN Refer to 004010 Data Element Dictionary for acceptable code values.	**X**	**ID 1/2**
	R403	**310**	**Location Identifier** Code which identifies a specific location Corresponding to Location Qualifier	**X**	**AN 1/30**
	R404	**114**	**Port Name** Free-form name for the place at which an offshore carrier originates or terminates (by transshipment or otherwise) its actual ocean carriage of property From L**04 (Place name)	**O**	**AN 2/24**
	R405	**26**	**Country Code** Code identifying the country UN country code (2 characters)	**O**	**ID 2/3**
X	**R406**	**174**	**Terminal Name**	**O**	**AN 2/30**
X	**R407**	**113**	**Pier Number**	**O**	**AN 1/4**
	R408	**156**	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency L**05 State code	**O**	**ID 2/2**

Segment: **DTM** **Date/Time Reference**
Position: 120
Loop: R4 Mandatory
Level: Heading
Usage: Optional
Max Use: 15
Purpose: To specify pertinent dates and times
Comments:
Notes: Used for documentation cutoff, specified for POL only (R4=L)

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**DTM01**	**374**	**Date/Time Qualifier**	**M**	**ID 3/3**
			Code specifying type of date or time, or both date and time		
			Always 649		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	DTM02	**373**	**Date**	**X**	**DT 8/8**
			Date expressed as CCYYMMDD		
X	**DTM03**	**337**	**Time**	**X**	**TM 4/8**
X	**DTM04**	**623**	**Time Code**	**O**	**ID 2/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**DTM05**	**1250**	**Date Time Period Format Qualifier**	**X**	**ID 2/3**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**DTM06**	**1251**	**Date Time Period**	**X**	**AN 1/35**

Segment: **EA** **Equipment Attributes**
Position: 150
Loop:
Level: Heading
Usage: Optional
Max Use: 5
Purpose: To specify attributes required for a piece of equipment
Comments: **1** When EA01 is "PCO", "PSE", "DHT", "DWI", "YEA" or "MCP", EA02 and EA03 are required.
Notes: Only supplied if a Genset is required.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**EA01**	**1402**	**Equipment Attribute Code** Code specifying attributes of a piece of equipment Always "GEN" Refer to 004010 Data Element Dictionary for acceptable code values.	**M ID 2/3**
X	**EA02**	**C001**	**Composite Unit of Measure** To identify a composite unit of measure (See Figures Appendix for examples of use)	**X**
X	**C00101**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	**M ID 2/2**
X	**C00102**	**1018**	**Exponent** Power to which a unit is raised	**O R 1/15**
X	**C00103**	**649**	**Multiplier** Value to be used as a multiplier to obtain a new value	**O R 1/10**
X	**C00104**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	**O ID 2/2**
X	**C00105**	**1018**	**Exponent** Power to which a unit is raised	**O R 1/15**
X	**C00106**	**649**	**Multiplier** Value to be used as a multiplier to obtain a new value	**O R 1/10**
X	**C00107**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	**O ID 2/2**
X	**C00108**	**1018**	**Exponent** Power to which a unit is raised	**O R 1/15**
X	**C00109**	**649**	**Multiplier** Value to be used as a multiplier to obtain a new value	**O R 1/10**
X	**C00110**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	**O ID 2/2**
X	**C00111**	**1018**	**Exponent** Power to which a unit is raised	**O R 1/15**

X	**C00112**	**649**	**Multiplier** Value to be used as a multiplier to obtain a new value	**O**	**R 1/10**
X	**C00113**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
X	**C00114**	**1018**	**Exponent** Power to which a unit is raised	**O**	**R 1/15**
X	**C00115**	**649**	**Multiplier** Value to be used as a multiplier to obtain a new value	**O**	**R 1/10**
X	**EA03**	**380**	**Quantity**	**X**	**R 1/15**

Segment: **LX** **Assigned Number**
Position: 010
Loop: LX Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To reference a line number in a transaction set
Comments:
Notes: HSDG reports one LX per container

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**LX01**	**554**	**Assigned Number** Number assigned for differentiation within a transaction set Item number (counter)	**M**	**N0 1/6**

Segment: **L0** **Line Item - Quantity and Weight**
Position: 040
Loop: LX Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify quantity, weight, volume, and type of service for a line item including applicable "quantity/rate-as" data
Comments: **1** L013 is used to convey the total number of boxes, cartons, or pieces contained on a pallet, skid, or slip sheet for the line item.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	L001	**213**	**Lading Line Item Number**	**O**	**N0 1/3**
			Sequential line number for a lading item		
			Item number (same as in LX)		
X	**L002**	**220**	**Billed/Rated-as Quantity**	**X**	**R 1/11**
X	**L003**	**221**	**Billed/Rated-as Qualifier**	**X**	**ID 2/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	L004	**81**	**Weight**	**X**	**R 1/10**
			Numeric value of weight		
			Total gross weight (in kilogram)		
	L005	**187**	**Weight Qualifier**	**X**	**ID 1/2**
			Code defining the type of weight		
			always G (gross weight)		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	L006	**183**	**Volume**	**X**	**R 1/8**
			Value of volumetric measure		
			Measurement		
	L007	**184**	**Volume Unit Qualifier**	**X**	**ID 1/1**
			Code identifying the volume unit		
			Default X (cubic meter)		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	L008	**80**	**Lading Quantity**	**X**	**N0 1/7**
			Number of units (pieces) of the lading commodity		
			Always 1		
	L009	**211**	**Packaging Form Code**	**X**	**ID 3/3**
			Code for packaging form of the lading quantity		
			Always CNT		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**L010**	**458**	**Dunnage Description**	**O**	**AN 2/25**
	L011	**188**	**Weight Unit Code**	**O**	**ID 1/1**
			Code specifying the weight unit		
			always K for kilogram		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
	L012	**56**	**Type of Service Code**	**O**	**ID 2/2**
			Code specifying extent of transportation service requested		

			used values: PP for port to port DD for door to door PD for port to door DP for door to port		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**L013**	**380**	**Quantity**	**X**	**R 1/15**
X	**L014**	**211**	**Packaging Form Code**	**O**	**ID 3/3**
			Refer to 004010 Data Element Dictionary for acceptable code values.		
X	**L015**	**1073**	**Yes/No Condition or Response Code**	**X**	**ID 1/1**
			Refer to 004010 Data Element Dictionary for acceptable code values.		

Segment: **L5** **Description, Marks and Numbers**
Position: 050
Loop: LX Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the line item in terms of description, quantity, packaging, and marks and numbers
Comments: **1** L502 may be used to send quantity information as part of the product description.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
	L501	**213**	**Lading Line Item Number**	**O N0 1/3**
			Sequential line number for a lading item	
			Item number (same as in LX)	
	L502	**79**	**Lading Description**	**O AN 1/50**
			Description of an item as required for rating and billing purposes	
			Commodity	
X	**L503**	**22**	**Commodity Code**	**X AN 1/30**
X	**L504**	**23**	**Commodity Code Qualifier**	**X ID 1/1**
			Refer to 004010 Data Element Dictionary for acceptable code values.	
X	**L505**	**103**	**Packaging Code**	**O AN 3/5**
			Refer to 004010 Data Element Dictionary for acceptable code values.	
X	**L506**	**87**	**Marks and Numbers**	**X AN 1/48**
X	**L507**	**88**	**Marks and Numbers Qualifier**	**O ID 1/2**
			Refer to 004010 Data Element Dictionary for acceptable code values.	
X	**L508**	**23**	**Commodity Code Qualifier**	**X ID 1/1**
			Refer to 004010 Data Element Dictionary for acceptable code values.	
X	**L509**	**22**	**Commodity Code**	**X AN 1/30**
X	**L510**	**595**	**Compartment ID Code**	**O ID 1/1**
			Refer to 004010 Data Element Dictionary for acceptable code values.	

Segment: **H1** **Hazardous Material**
Position: 060
Loop: H1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify information relative to hazardous material
Comments: **1** This segment is required when the shipment contains hazardous material.
2 H107 is the lowest temperature for hazardous materials.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**H101**	**62**	**Hazardous Material Code** Code relating to hazardous material code qualifier for regulated hazardous materials UN Number	**M**	**AN 4/10**
	H102	**209**	**Hazardous Material Class Code** Code specifying the kind of hazard for a material IMDG Class Code	**O**	**AN 1/4**
	H103	**208**	**Hazardous Material Code Qualifier** Code which qualifies the Hazardous Material Class Code (209) Always I for IMO Code Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**
	H104	**64**	**Hazardous Material Description** Material name, special instructions, and phone number if any Description, cut to first 30 characters	**O**	**AN 2/30**
	H105	**63**	**Hazardous Material Contact** Phone number and name of person or department to contact in case of emergency Contact and phone (13 characters name, 10 digits phone)	**O**	**AN 1/24**
	H106	**200**	**Hazardous Materials Page** The United Nations page number as required for the international transport of hazardous materials Page	**O**	**AN 1/6**
	H107	**77**	**Flashpoint Temperature** The flashpoint temperature for hazardous material Flashpoint temperature in Celsius	**X**	**N 1/3**
	H108	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Always CE for Celsius Refer to 004010 Data Element Dictionary for acceptable code values.	**X**	**ID 2/2**
	H109	**254**	**Packing Group Code** Code indicating degree of danger in terms of Roman number I, II or III Package group	**O**	**ID 1/3**

Segment: **V1** **Vessel Identification**
Position: 080
Loop:
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To provide vessel details and voyage number
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	V101	**597**	**Vessel Code** Code identifying vessel Lloyd's / IMO	**X**	**ID 1/8**
	V102	**182**	**Vessel Name** Name of ship as documented in "Lloyd's Register of Ships"	**X**	**AN 2/28**
	V103	**26**	**Country Code** Code identifying the country	**O**	**ID 2/3**
	V104	**55**	**Flight/Voyage Number** Identifying designator for the particular flight or voyage on which the cargo travels Voyage Number (HSDG or partner number)	**O**	**AN 2/10**
X	**V105**	**140**	**Standard Carrier Alpha Code**	**O**	**ID 2/4**
X	**V106**	**249**	**Vessel Requirement Code** Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**
X	**V107**	**854**	**Vessel Type Code** Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	V108	**897**	**Vessel Code Qualifier** Code specifying vessel code source always L (Lloyd's / IMO) Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**
X	**V109**	**91**	**Transportation Method/Type Code** Refer to 004010 Data Element Dictionary for acceptable code values.	**O**	**ID 1/2**

Segment: **SE** **Transaction Set Trailer**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
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)
Comments: **1** SE is the last segment of each transaction set.
Notes: Example Syntax

SE*7*0001~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**SE01**	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
M	**SE02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

Segment: **GE** **Functional Group Trailer**
Position: 015
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of a functional group and to provide control information
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.
Notes: Example Syntax

GE*1*1000~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**GE01**	**97**	**Number of Transaction Sets Included** 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**
M	**GE02**	**28**	**Group Control Number** Assigned number originated and maintained by the sender	**M**	**N0 1/9**

Segment: **IEA** **Interchange Control Trailer**
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments
Comments:
Notes: Example Syntax

IEA*1*053849086~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**IEA01**	**I16**	**Number of Included Functional Groups** A count of the number of functional groups included in an interchange	**M**	**N0 1/5**
M	**IEA02**	**I12**	**Interchange Control Number** A control number assigned by the interchange sender	**M**	**N0 9/9**