

HL STANDARD 315 4010 FOR TRACING

EDI Message Implementation Guide

Version: 1.0

Author: Hapag-Lloyd AG
Trading Partner: all
Created: May 15, 2026

Table of Contents

- 1 Status Indicators
- 2 Usage Indicators
- 3 Message Structure
- 4 Description of used Message Segments

Status Indicators

Status Indicators (M, O and X) form part of the ANSI ASC X12 standard and indicate a minimum requirement to fulfil the needs of the message structure.

The Status Indicators are:

Indicator	Value	Description
M	Mandatory	This entity must appear in all messages. Shown as usage indicator "M" in Implementation Guidelines.
O	Optional	This entity is used by agreement between the parties to the transaction.
X	Relational	This entity depends upon a well-defined condition or set of conditions. These conditions must be clearly specified in the relevant implementation guideline.

A Status Indicator may be represented by a supporting Usage Indicator which is either M, O, D or X.

Usage Indicators

Throughout this document reference is made to indicators (M, D, O and X) which are shown adjacent to data items and which dictate for the particular message or set thereof the agreed usage of the data items or entities.

Set out below are the indicators and their respective uses:

Indicator	Value	Description
M	Mandatory	Indicates that this entity is mandatory and must be sent in this implementation.
O	Optional	Indicates that this entity is at the need or discretion of the sender of the message.
D	Dependent	Indicates that the use of the entity depends upon a well-defined condition or set of conditions. These conditions must be clearly specified in the relevant implementation guideline.
X	Not Used	Indicates that the entity is not to be used in this message implementation.

Please be aware that each usage indicator describes the usage of an entity within it's parent entity. For example, a segment that is marked to be (M)andatory within an optional segment group must only be sent when the segment group is used.

Message Structure

Tag	Name	Status	Max. Use	Usage
ISA	Interchange Control Header	M	1	M
GS	Functional Group Header	O	1	O
ST	Transaction Set Header	M	1	M
B4	Beginning Segment for Inquiry or Reply	M	1	M
N9	Reference Identification	O	30	O
Q2	Status Details (Ocean)	O	1	O
SG	Shipment Status	O	15	X
LoopR4		M	20	M
R4	Port or Terminal	M	1	M
DTM	Date/Time Reference	O	15	O
V9	Event Detail	O	10	X
SE	Transaction Set Trailer	M	1	M
GE	Functional Group Trailer	O	1	O
IEA	Interchange Control Trailer	M	1	M

Description of used Message Segments

ISA Interchange Control Header

Status: M	Usage: M	Min/Max: 1/1
Group: N/A		

up

Description:

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

Example:

```
ISA*00**00**ZZ*HLCUPROD*ZZ*Receiverid*131202*0105*U*00401*000001395*0*P*^
```

Tag	Element Name	Status	Type	Usage
I01	AUTHORIZATION INFORMATION QUALIFIER	M	id2	M
Description: Code identifying the type of information in the Authorization Information Note: 00				
I02	AUTHORIZATION INFORMATION	M	an10	M
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)				
I03	SECURITY INFORMATION QUALIFIER	M	id2	M
Description: Code identifying the type of information in the Security Information Note: 00				
I04	SECURITY INFORMATION	M	an10	M
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)				
I05	INTERCHANGE ID QUALIFIER	M	id2	M
Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified Note: ZZ				
I06	INTERCHANGE SENDER ID	M	an15	M
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 Example: HLCUPROD				
I05	INTERCHANGE ID QUALIFIER	M	id2	M

Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified				
I07	INTERCHANGE RECEIVER ID	M	an15	M
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 Example: Receiverid				
I08	INTERCHANGE DATE	M	dt6	M
Description: Date of the interchange Example: 131202				
I09	INTERCHANGE TIME	M	tm4	M
Description: Time of the interchange Example: 0105				
I10	INTERCHANGE CONTROL STANDARDS IDENTIFIER	M	id1	M
Note: U				
I11	INTERCHANGE CONTROL VERSION NUMBER	M	id5	M
Description: Code specifying the version number of the interchange control segments Note: 00401				
I12	INTERCHANGE CONTROL NUMBER	M	n09	M
Description: A control number assigned by the interchange sender Example: 1395				
I13	ACKNOWLEDGMENT REQUESTED	M	id1	M
Description: Code indicating sender's request for an interchange acknowledgment Note: 0 = without Acknowledgment				
I14	USAGE INDICATOR	M	id1	M
Description: Code indicating whether data enclosed by this interchange envelope is test, production or information Note: P = Production, T = Test				
I15	COMPONENT ELEMENT SEPARATOR	M	an1	M

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

Note:

^

GS Functional Group Header

Status: O	Usage: O	Min/Max: 0/1
Group: N/A		

up

Description:

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

Example:

```
GS*Q0*HLCUPROD*Receiverid*20131202*0105*1*X*004010
```

Tag	Element Name	Status	Type	Usage
479	FUNCTIONAL IDENTIFIER CODE	M	id2	M
Description: Code identifying a group of application related transaction sets Note: Q0				
142	APPLICATION SENDER'S CODE	M	an..15	M
Description: Code identifying party sending transmission; codes agreed to by trading partners Example: HLCUPROD				
124	APPLICATION RECEIVER'S CODE	M	an..15	M
Description: Code identifying party receiving transmission; codes agreed to by trading partners Example: Receiverid				
373	DATE	M	dt8	M
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year Example: 20131202				
337	TIME	M	tm..8	M
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) Example: 0105				
28	GROUP CONTROL NUMBER	M	n0..9	M
Description: Assigned number originated and maintained by the sender Note: 1				
455	RESPONSIBLE AGENCY CODE	M	id..2	M

Description:

Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

Note:

X

480

VERSION / RELEASE / INDUSTRY IDENTIFIER CODE M an..12 M

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

Note:

004010

ST Transaction Set Header

Status: M	Usage: M	Min/Max: 1/1
Group: N/A		

up

Description:

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

Example:

```
ST*315*0001
```

Tag	Element Name	Status	Type	Usage
143	TRANSACTION SET IDENTIFIER CODE	M	id3	M
Description: Code uniquely identifying a Transaction Set				
Note: 315 Status Details (Ocean)				
329	TRANSACTION SET CONTROL NUMBER	M	an..9	M
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
Example: 1				

B4 Beginning Segment for Inquiry or Reply

Status: M Usage: M Min/Max: 1/1
Group: N/A

up

Description:

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

Example:

B4***0A*20131201*1555*3001*HLCU*111111*L*2210*3001*D*8

Tag	Element Name	Status	Type	Usage
152	SPECIAL HANDLING CODE	O	id..3	X
Description: Code specifying special transportation handling instructions				
71	INQUIRY REQUEST NUMBER	O	n0..3	X
Description: Identifying number assigned by inquirer				
157	SHIPMENT STATUS CODE	O	id..2	O
Description: Code indicating the status of a shipment Note: BF Booking Confirmation EE Picked up from empty depot I Delivered to inland terminal OA Departed from inland terminal I Received at port of loading/transshipment AE Loaded on vessel at port of loading/transshipment C Departure Deviation VD Departed from port of loading/transshipment E Arrival Deviation VA Arrived at port of discharge/transshipment UV Discharged from vessel at port of discharge/transshipment OA Delivered at port of discharge/transshipment AL Loaded on Rail RL Rail Departure AR Rail Arrival I Received at inland terminal if not Railterminal CR Freight Release A Customs Clearance Point Arrival CT Customs Release AV Available NT Demurrage Freetime Start FT Demurrage Freetime End NF Detention Freetime End RD Delivered to empty depot X3 Empty delivered to Customer Place AD Appointment for Delivery AG Estimated Time of Vessel Arrival D Full delivered to Customer Place UR Unloaded from Rail Special events: 1W US Customs Release for Port Transfer				
373	DATE	O	dt8	O
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
161	STATUS TIME	O	tm4	O
159	STATUS LOCATION	O	an..5	O

Description: Air shipment: Airport code for last reported status for a shipment; (Note: If the shipment is in-flight, the status location is the origin airport for this flight) Ground transportation: Code of carrier's terminal Note: D Census Schedule D Schedule D, Customs District Classification K Census Schedule K Schedule K, Classification of Foreign Ports and Geographic Trade Area or UN UN-Locode				
206	EQUIPMENT INITIAL	O	an..4	O
Description: Prefix or alphabetic part of an equipment unit's identifying number Example: HLCU				
207	EQUIPMENT NUMBER	O	an..10	O
Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) Example: 1111118				
578	EQUIPMENT STATUS CODE	O	id..2	O
Description: Code indicating status of equipment Example: L Load E Empty				
24	EQUIPMENT TYPE	O	id4	O
Description: Code identifying equipment type				
310	LOCATION IDENTIFIER	O	an..30	O
Description: Code which identifies a specific location Note: D Census Schedule D Schedule D, Customs District Classification K Census Schedule K Schedule K, Classification of Foreign Ports and Geographic Trade Area or UN UN Locode Example: 3001 (Census Schedule D)				
309	LOCATION QUALIFIER	O	id..2	O
Description: Code identifying type of location				
761	EQUIPMENT NUMBER CHECK DIGIT	O	n01	O

Description:

Number which designates the check digit applied to a piece of equipment

Example:

8

N9 Reference Identification

Status: O	Usage: O	Min/Max: 0/30
Group: N/A		

up

Description:

To transmit identifying information as specified by the Reference Identification Qualifier

Example:

```
N9*BM*HLCUXXX111111111
N9*BN*12345678
N9*EQ*HLCU11111118
N9*4F*0815
N9*SN*Sealnumber
N9*SCA*HLCU
```

Tag	Element Name	Status	Type	Usage
128	REFERENCE IDENTIFICATION QUALIFIER	M	id..3	M
	Description: Code qualifying the Reference Identification			
127	REFERENCE IDENTIFICATION	O	an..30	O
	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
369	FREE-FORM DESCRIPTION	O	an..45	X
	Description: Free-form descriptive text			
373	DATE	O	dt8	X
	Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			
337	TIME	O	tm..8	X
	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)			
623	TIME CODE	O	id2	X
	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			

C040	REFERENCE IDENTIFIER	O		X
	Description: To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier			
128	Reference Identification Qualifier	M	id..3	X
	Description: Code qualifying the Reference Identification			
127	Reference Identification	M	an..30	X
	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
128	Reference Identification Qualifier	O	id..3	X
	Description: Code qualifying the Reference Identification			
127	Reference Identification	O	an..30	X
	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
128	Reference Identification Qualifier	O	id..3	X
	Description: Code qualifying the Reference Identification			
127	Reference Identification	O	an..30	X
	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			

Q2 Status Details (Ocean)

Status: O Usage: O Min/Max: 0/1
Group: N/A

up

Description:

To transmit identifying information relative to identification of vessel, transportation dates, lading quantity, weight, and cube

Note:

The information belongs to the vessel currently used for the reported event.
If the event belongs to a precarriage land move, the first vessel is reported.
If the event belongs to an oncarriage land move, the last vessel is reported.

Example:

Q2*9252553*DE*****3356*G*37E45***L*BANGKOK EXPRESS***K

Tag	Element Name	Status	Type	Usage
597	VESSEL CODE	O	id..8	O
Description: Code identifying vessel Example: 9252553				
26	COUNTRY CODE	O	id..3	O
Description: Code identifying the country Example: DE				
373	DATE	O	dt8	X
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
373	DATE	O	dt8	X
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
373	DATE	O	dt8	X
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
80	LADING QUANTITY	O	n0..7	X
Description: Number of units (pieces) of the lading commodity				
81	WEIGHT	O	r..10	O
Description: Numeric value of weight Example: 3356				
187	WEIGHT QUALIFIER	O	id..2	O

Description: Code defining the type of weight Note: G Gross Weight				
55	FLIGHT/VOYAGE NUMBER	O	an..10	O
Description: Identifying designator for the particular flight or voyage on which the cargo travels Example: 37E45				
128	REFERENCE IDENTIFICATION QUALIFIER	O	id..3	O
Description: Code qualifying the Reference Identification Note: SCA Standard Carrier Alpha Code				
127	REFERENCE IDENTIFICATION	O	an..30	O
Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
897	VESSEL CODE QUALIFIER	O	id1	O
Description: Code specifying vessel code source Note: L Lloyd's Register of Shipping				
182	VESSEL NAME	O	an..28	O
Description: Name of ship as documented in "Lloyd's Register of Ships" Example: BANGKOK EXPRESS				
183	VOLUME	O	r..8	X
Description: Value of volumetric measure				
184	VOLUME UNIT QUALIFIER	O	id1	X
Description: Code identifying the volume unit				
188	WEIGHT UNIT CODE	O	id1	O
Description: Code specifying the weight unit Note: K Kilograms				

R4 Port or Terminal

Status: M	Usage: M	Min/Max: 1/1
Group: LoopR4		

up

Description:

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

Tag	Element Name	Status	Type	Usage
115	PORT OR TERMINAL FUNCTION CODE	M	id1	M
Description: Code defining function performed at the port or terminal with respect to a shipment Note: 5 Activity Location (Operational) Place at which the activity being reported is occurring R Place of Receipt (Contractual) Place at which cargo enters the care and custody of carrier L Port of Loading (Operational) Port at which cargo is loaded on vessel Y Relay Port (Operational) Port at which cargo is transferred from one vessel to another D Port of Discharge (Operational) Port at which cargo is unloaded from vessel E Place of Delivery (Contractual) Place at which cargo leaves its care and custody of carrier				
309	LOCATION QUALIFIER	O	id..2	O
Description: Code identifying type of location Note: D Census Schedule D Schedule D, Customs District Classification K Census Schedule K Schedule K, Classification of Foreign Ports and Geographic Trade Area UN UN-Locode				
310	LOCATION IDENTIFIER	O	an..30	O
Description: Code which identifies a specific location				
114	PORT NAME	O	an..24	O
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				
26	COUNTRY CODE	O	id..3	O
Description: Code identifying the country				
174	TERMINAL NAME	O	an..30	X
Description: Free-form field for terminal name				
113	PIER NUMBER	O	an..4	X
Description: Identifying number for the pier				
156	STATE OR PROVINCE CODE	O	id2	O
Description: Code (Standard State/Province) as defined by appropriate government agency				

DTM Date/Time Reference

Status: O Usage: O Min/Max: 0/15
Group: LoopR4

up

Description:

To specify pertinent dates and times

Note:

For Transshipment Port (=R4*Y) the departue date is mentioned.

Tag	Element Name	Status	Type	Usage
374	DATE/TIME QUALIFIER	M	id3	M
Description: Code specifying type of date or time, or both date and time Note: 139 Estimated 140 Actual				
373	DATE	O	dt8	O
Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				
337	TIME	O	tm..8	O
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)				
623	TIME CODE	O	id2	O
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 Note: LT = Local Time				
1250	DATE TIME PERIOD FORMAT QUALIFIER	O	id..3	X
Description: Code indicating the date format, time format, or date and time format				
1251	DATE TIME PERIOD	O	an..35	X
Description: Expression of a date, a time, or range of dates, times or dates and times				

SE Transaction Set Trailer

Status: M Usage: M Min/Max: 1/1
Group: N/A

up

Description:

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Tag	Element Name	Status	Type	Usage
96	NUMBER OF INCLUDED SEGMENTS	M	n0..10	M
Description: Total number of segments included in a transaction set including ST and SE segments				
329	TRANSACTION SET CONTROL NUMBER	M	an..9	M
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

GE Functional Group Trailer

Status: O	Usage: O	Min/Max: 0/1
Group: N/A		

up

Description:

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

Tag	Element Name	Status	Type	Usage
97	NUMBER OF TRANSACTION SETS INCLUDED	M	n0..6	M
Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
28	GROUP CONTROL NUMBER	M	n0..9	M
Description: Assigned number originated and maintained by the sender				

IEA Interchange Control Trailer

Status: M	Usage: M	Min/Max: 1/1
Group: N/A		

up

Description:

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

Example:

Example:

```
ISA*00**00**ZZ*HLCUPROD*ZZ*Receiverid*130613*1605*U*00401*000001395*0*P*^
GS*Q0*HLCUPROD*Receiverid*20130613*1605*1*X*004010
ST*315*0001
B4***AE*20130613*1521*SGSIN*HLCU*1311118*L*22G1*SGSIN*UN*8
N9*BN*12345678
N9*SI*XXX
N9*EQ*HLCU1311118
N9*SN*Sealnumber
N9*BM*HLCUXXX111111111
Q2*0252553*DE*****3356*G*37E45***L*BANGKOK EXPRESS***K
R4*R*UN*DECGN*COLOGNE*DE
DTM*140*20130509*0000*LT
R4*L*UN*BEANR*ANTWERP*BE
DTM*140*20130513*1336*LT
R4*Y*UN*SGSIN*SINGAPORE*SG
DTM*139*20130613*2230*LT
R4*D*UN*BDCGP*CHITTAGONG*BD
DTM*139*20130620*0030*LT
R4*E*UN*BDCGP*CHITTAGONG*BD
DTM*139*20130620*0030*LT
SE*19*0001
GE*1*1
IEA*1*000001395
```

Tag	Element Name	Status	Type	Usage
I16	NUMBER OF INCLUDED FUNCTIONAL GROUPS	M	n0..5	M
	Description: A count of the number of functional groups included in an interchange			
I12	INTERCHANGE CONTROL NUMBER	M	n09	M
	Description: A control number assigned by the interchange sender			

