



# **EDI Specifications**

## **Version 4010 / Transaction Set 110**

### **Air Freight Details and Invoice**

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# 110 Air Freight Details and Invoice

Functional Group ID=**IA**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Air Freight Details and Invoice Transaction Set (110) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide a customer with an air invoice for transportation and other charges related to shipments, including Original Invoices, Past Due Billings, Balance Due Bills and Revisions.

## Heading:

<u>TSi Required</u>	<u>Ref</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	B3	Beginning Segment for Carrier's Invoice	M	1		
	030	B3A	Invoice Type	O	1		
LOOP ID - N1						3	
M	075	N1	Name	M	1		n1
M	090	N3	Address Information	M	2		
M	100	N4	Geographic Location	M	1		
	110	N9	Reference Identification	O	10		

## Detail:

<u>TSi Required</u>	<u>Ref</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - LX						9999	
M	010	LX	Assigned Number	M	1		
LOOP ID - N1						2	
	020	N1	Name	O	1		n2
	040	N3	Address Information	O	2		
	050	N4	Geographic Location	O	1		
	060	N9	Reference Identification	O	10		
M	085	P1	Pick-up	M	1		
	090	R1	Route Information (Air)	O	1		
M	100	POD	Proof of Delivery	M	1		
	110	V9	Event Detail	O	1		
LOOP ID - L5						4	
M	150	L5	Description, Marks and Numbers	M	1		
	160	L0	Line Item - Quantity and Weight	O	1		
	163	L4	Measurement	O	4		
	165	L10	Weight	O	4		
LOOP ID - L1						30	
M	175	L1	Rate and Charges	M	1		
	180	C3	Currency	M	1		

**Summary:**

<u>TSi Required</u>	<u>Ref</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	015	L3	Total Weight and Charges	M	1		
M	045	SE	Transaction Set Trailer	M	1		

**Transaction Set Notes**

1. The N1 Loop is used only to convey entity information relevant to the debtor or for a party other than the shipper or consignee.
2. The N1 loop is used to convey entity information relevant to the shipper and consignee.

**ISA****Interchange Control Header**

**Pos:** **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

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	<b>Authorization Information Qualifier</b> <b>Description:</b> Code to identify the type of information in the Authorization Information <u>Code NAME</u> 00 No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	Must use
ISA02	I02	<b>Authorization Information</b> <b>Description:</b> 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	I03	<b>Security Information Qualifier</b> <b>Description:</b> Code to identify the type of information in the Security Information <u>Code NAME</u> 00 No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	Must use
ISA04	I04	<b>Security Information</b> <b>Description:</b> 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	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <u>Code NAME</u> 01 Duns (Dun & Bradstreet) 02 SCAC (Standard Carrier Alpha Code)	M	ID	2/2	Must use
ISA06	I06	<b>Interchange Sender ID</b> <b>Description:</b> 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	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <u>Code NAME</u> 01 Duns (Dun & Bradstreet) ZZ Mutually Defined	M	ID	2/2	Must use
ISA08	I07	<b>Interchange Receiver ID</b> <b>Description:</b> 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	I08	<b>Interchange Date</b> <b>Description:</b> Date of the interchange	M	DT	6/6	Must use
ISA10	I09	<b>Interchange Time</b>	M	TM	4/4	Must use

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<b>Description:</b> Time of the interchange				
ISA11	I10	<b>Interchange Control Standards Identifier</b> <b>Description:</b> Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer <u>Code NAME</u> U U.S. EDI Community of ASC X12	M	ID	1/1	Must use
ISA12	I11	<b>Interchange Control Version Number</b> <b>Description:</b> This version number covers the interchange control segments <u>Code NAME</u> 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M	ID	5/5	Must use
ISA13	I12	<b>Interchange Control Number</b> <b>Description:</b> A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	<b>Acknowledgment Requested</b> <b>Description:</b> Code sent by the sender to request an interchange acknowledgment (TA1) <u>Code NAME</u> 0 No Acknowledgment Requested	M	ID	1/1	Must use
ISA15	I14	<b>Usage Indicator</b> <b>Description:</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information <u>Code NAME</u> P Production Data	M	ID	1/1	Must use
ISA16	I15	<b>Component Element Separator</b> <b>Description:</b> 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**

<b>Pos:</b>	<b>Max: 1</b>
<b>- Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 8</b>

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

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	<b>Functional Identifier Code</b> <b>Description:</b> Code identifying a group of application related transaction sets <u>Code NAME</u> IA Transportation Air Freight Details and Invoice (110)	M	ID	2/2	Must use
GS02	142	<b>Application Sender's Code</b> <b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners Carrier SCAC	M	AN	2/15	Must use
GS03	124	<b>Application Receiver's Code</b> <b>Description:</b> Code identifying party receiving transmission. Codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	<b>Time</b> <b>Description:</b> 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	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	<b>Responsible Agency Code</b> <b>Description:</b> Code used in conjunction with Data Element 480 to identify the issuer of the standard <u>Code NAME</u> X Accredited Standards Committee X12	M	ID	1/2	Must use
GS08	480	<b>Version / Release / Industry Identifier Code</b> <b>Description:</b> 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). <u>Code NAME</u> 004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997	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.

**Segment:** **ST** Transaction Set Header  
**Position:** 010  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of a transaction set and to assign a control number  
**Syntax Notes:**  
**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).  
**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set <u>Code NAME</u> 110 Transportation Air Freight Details and Invoice	M	ID	3/3	Must use
ST02	329	<b>Transaction Set Control Number</b> <b>Description:</b> 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



**Segment:** **B3 Beginning Segment for Carrier's Invoice**  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To transmit basic data relating to the carrier's invoice  
**Syntax Notes:** 1 If either B309 or B310 is present, then the other is required.  
**Semantic Notes:** 1 B306 is the billing date.  
 2 On collect freight bills the data in B309 will be the actual delivery date. For the shipments invoiced prior to delivery, the B309 will be the estimated date of delivery.  
 3 If B314 is used, B304 will indicate the party or parties responsible for payment of the transportation terms identified in B314.

Comments:

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
B301	147	<b>Shipment Qualifier</b> Code defining relationship of this shipment with respect to other shipments given to the carrier at the same time Refer to 0401010 Data Element Dictionary for acceptable code values.	O	ID	1/1	Used
B302	76	<b>Invoice Number</b> Identifying number assigned by issuer	M	AN	1/22	Must use
B303	145	<b>Shipment Identification Number</b> 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) Airbill Number	O	AN	1/30	Used
B304	146	<b>Shipment Method of Payment</b> Code identifying payment terms for transportation charges <u>Code NAME</u> CC Collect PP Prepaid	M	ID	2/2	Must use
B305	188	<b>Weight Unit Code</b> Code specifying the weight unit Refer to 0401010 Data Element Dictionary for acceptable code values.	O	ID	1/1	Used
B306	373	<b>Date</b> Date expressed as CCYYMMDD Invoice Date	M	DT	8/8	Must use
B307	193	<b>Net Amount Due</b> Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified Billed Amount	M	N2	1/12	Must use
B308	202	<b>Correction Indicator</b> Code used to indicate that the transaction set contains information which corrects previous information Refer to 0401010 Data Element Dictionary for acceptable code values.	O	ID	2/2	Not used
B309	32	<b>Delivery Date</b> Date for delivery of cargo to final consignee or to next mode expressed in format CCYYMMDD	C	DT	8/8	Used
B310	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 0401010 Data Element Dictionary for acceptable code values.	C	ID	3/3	Used
B311	140	<b>Standard Carrier Alpha Code</b> Standard Carrier Alpha Code Carrier SCAC	M	ID	2/4	Used
B312	373	<b>Date</b> Date expressed as CCYYMMDD	O	DT	8/8	Used

**Segment:** **B3A** Invoice Type  
**Position:** 030  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To indicate type of invoice and number of shipments  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** 1 B3A02 is the number of shipments invoiced.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
B3A01	640	Transaction Type Code	M	ID	2/2	Must use
		Code specifying the type of transaction				
		<u>Code</u> <u>NAME</u>				
		SS Single Shipper, Single Consignee				

**Segment:** **N1** Name  
**Position:** 075  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:** 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.  
**Semantic Notes:**  
**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.  
 \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	<b>Entity Identifier Code</b> <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <u>Code NAME</u> BT Bill-to-Party CN Consignee SH Shipper	M	ID	2/3	Must use
N102	93	<b>Name</b> <b>Description:</b> Free-form name	M	AN	1/60	Must use

**Segment:** **N3 Address Information**  
**Position:** 090  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** \* This segment is required by TSi Logistics.

**Data Element Summary**

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

**Segment:** **N4 Geographic Location**  
**Position:** 100  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**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.  
 \* This segment is required by TSi Logistics.

#### Data Element Summary

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	<b>City Name</b> <b>Description:</b> Free-form text for city name	M	AN	2/30	Must use
N402	156	<b>State or Province Code</b> <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency	M	ID	2/2	Must use
N403	116	<b>Postal Code</b> <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	M	ID	3/15	Must use
N404	26	<b>Country Code</b> <b>Description:</b> Code identifying the country	M	ID	2/3	Must use
		<b>Country Code</b>		<b>Country</b>		
		CA		Canada		
		CN		China		
		DE		Germany		
		GR		Greece		
		HK		Hong Kong		
		JP		Japan		
		MX		Mexico		
		PH		Philippines		
		PR		Puerto Rico		
		US		United States		

**Segment:** **N9 Reference Identification**  
**Position:** 110  
**Loop:** N1  
**Level:** Header  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier  
**Syntax Notes:**

- 1 At least one of N902 or N903 is required.
- 2 If N906 is present, then N905 is required.
- 3 If either C04003 or C04004 is present, then the other is required.
- 4 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:**

- 1 N906 reflects the time zone which the time reflects.
- 2 N907 contains data relating to the value cited in N902.

**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	Reference Identification Qualifier Code qualifying the Reference Identification	M	ID	2/3	Must use
		<u>Code</u> <u>NAME</u>				
		PO PO Number				
		BM BOL Number				
N902	127	Reference Identification	M	AN	1/30	Must use
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

**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  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LX01	554	Assigned Number <b>Description:</b> Number assigned for differentiation within a transaction set	M	N0	1/6	Must use

**Segment:** **N1** Name  
**Position:** 020  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:** 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.  
**Semantic Notes:**  
**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.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	<b>Entity Identifier Code</b> <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <u>Code NAME</u> BT Bill-to-Party CN Consignee SH Shipper	M	ID	2/3	Must use
N102	93	<b>Name</b> <b>Description:</b> Free-form name	M	AN	1/60	Must use



**Segment:** **N3 Address Information**  
**Position:** 040  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

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

**Segment:** **N4 Geographic Location**  
**Position:** 050  
**Loop:** N1 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**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**

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

<b>Country Code</b>	<b>Country</b>
CA	Canada
CN	China
DE	Germany
GR	Greece
HK	Hong Kong
JP	Japan
MX	Mexico
PH	Philippines
PR	Puerto Rico
US	United States

**Segment:** **N9 Reference Identification**  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier  
**Syntax Notes:**

- 1 At least one of N902 or N903 is required.
- 2 If N906 is present, then N905 is required.
- 3 If either C04003 or C04004 is present, then the other is required.
- 4 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:**

- 1 N906 reflects the time zone which the time reflects.
- 2 N907 contains data relating to the value cited in N902.

**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	M	ID	2/3	Must use
		<u>Code</u> <u>NAME</u>				
		PO PO Number				
		BM BOL Number				
N902	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN	1/30	Must use

**Segment:** **P1** Pick-up  
**Position:** 085  
**Loop:** LX Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the pick-up details including time, date, and equipment  
**Syntax Notes:**  
**Semantic Notes:** 1 P107 is the number of shipments tendered.  
**Comments:** 1 P103 is the pick-up date qualifier.  
 \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
<b>P101</b>	<b>108</b>	<b>Pick-up or Delivery Code</b> Specifies the location or type of pickup or delivery <u>Code NAME</u> SD Shippers Door	<b>O</b>	<b>ID</b>	<b>1/2</b>	<b>Must use</b>
<b>P102</b>	<b>109</b>	<b>Pick-up Date</b> Date the carrier picks up the shipment from the shipper or supplier expressed in format CCYYMMDD	<b>M</b>	<b>DT</b>	<b>8/8</b>	<b>Must use</b>
<b>P103</b>	<b>374</b>	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time <u>Code NAME</u> 011 Shipped	<b>M</b>	<b>ID</b>	<b>3/3</b>	<b>Must use</b>

**Segment:** **R1** **Route Information (Air)**  
**Position:** 090  
**Loop:** LX Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify airline and airport routing sequences  
**Syntax Notes:**

- 1 If either R106 or R107 is present, then the other is required.
- 2 If either R108 or R109 is present, then the other is required.
- 3 If either R110 or R111 is present, then the other is required.
- 4 If either R112 or R113 is present, then the other is required.

**Semantic Notes:**  
**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
R101	140	<b>Standard Carrier Alpha Code</b> Standard Carrier Alpha Code	M	ID	2/4	Must use
R103	5	<b>Airport Code</b> Code (IATA) for airport	M	ID	3/5	Must use
R104	4	<b>Air Carrier Code</b> Code (IATA) for the air carrier	M	ID	3/3	Must use
R105	5	<b>Airport Code</b> Code (IATA) for airport	M	ID	3/5	Must use

**Segment:** **POD** Proof of Delivery  
**Position:** 100  
**Loop:** LX Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To provide proof of delivery  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
POD01	373	<b>Date</b> Date expressed as CCYYMMDD Delivery Date	M	DT	8/8	Must use
POD02	337	<b>Time</b> 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) Delivery Time	M	TM	4/8	Must use
POD03	93	<b>Name</b> Free-form name Name of the Person Who Signed for Delivery	M	AN	1/60	Must use

**Segment:** **V9 Event Detail**  
**Position:** 110  
**Loop:** LX Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify information about a specific event  
**Syntax Notes:**

- 1 If either V910 or V911 is present, then the other is required.
- 2 If V913 is present, then V904 is required.
- 3 If V915 is present, then V909 is required.

**Semantic Notes:**

- 1 V903 is the event date.
- 2 V904 is the event time.
- 3 V909 is the Standard Point Location Code (SPLC) of the event shown in the V901.
- 4 V910 is the length of the time delay expressed in hours.
- 5 V913 reflects the time zone which the event time reflects.
- 6 V914 is the quantity of the fuel in gallons.
- 7 V915 is the Standard Point Location Code (SPLC) of the secondary point of the delay indicated in the V911.
- 8 V916 is the total number of rail cars associated with the event code in V901.
- 9 V917 is the total number of loaded cars associated with the event code in V901.
- 10 V918 is the total number of empty cars associated with the event code in V901.
- 11 V919 is the total Gross Tons of the cars identified in V916. Includes the gross weight of the loads and the tare weight of the empties.
- 12 V920 is the total outside foot length of the cars identified in V916, rounded off to the nearest foot.

**Comments:** \* This segment is required by TSi Logistics for Delay Codes.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
V901	304	Event Code Code identifying the event about which a report is made <u>Code NAME</u> DEP Delivery Pending	M	ID	3/3	Must use
V902	106	Event Free-form description of event Delay Code	M	AN	1/25	Must use

**Segment:** **L5** Description, Marks and Numbers

**Position:** 140  
**Loop:** 0400 Mandatory  
**Level:** Detail  
**Usage:** Mandatory

**Max Use:** 30

**Purpose:** To specify the line item in terms of description, quantity, packaging, and marks and numbers

- Syntax Notes:**
- 1 If either L503 or L504 is present, then the other is required.
  - 2 If L507 is present, then L506 is required.
  - 3 If either L508 or L509 is present, then the other is required.

**Semantic Notes:**

- Comments:**
- 1 L502 may be used to send quantity information as part of the product description.
  - \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L501	213	<b>Lading Line Item Number</b> Sequential line number for a lading item	O	N0	1/3	Used
L502	79	<b>Lading Description</b> Description of an item as required for rating and billing purposes Product Description	M	AN	1/50	Must use



- Segment:** **L0** **Line Item - Quantity and Weight**
- Position:** 170
- Loop:** 0400 Mandatory
- Level:** Detail
- Usage:** Mandatory
- Max Use:** 10
- Purpose:** To specify quantity, weight, volume, and type of service for a line item including applicable "quantity/rate-as" data
- Syntax Notes:**
- 1 If either L002 or L003 is present, then the other is required.
  - 2 If either L004 or L005 is present, then the other is required.
  - 3 If either L006 or L007 is present, then the other is required.
  - 4 If either L008 or L009 is present, then the other is required.
  - 5 If L011 is present, then L004 is required.
  - 6 If either L013 or L015 is present, then the other is required.
- Semantic Notes:**
- 1 L008 is the number of handling units of the line item tendered to the carrier.
  - 2 L013 can only be used if the code in L009 is PLT, SKD, or SLP.
  - 3 L015 designates whether the carrier will be required to verify the number of units contained on a pallet, slip sheet or skid. Code "Y" indicates that the carrier will be required to verify. Code "N" indicates that the carrier will not be required to verify.
- 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.
  - 2 **Do not send this segment for accessorial charges.**
- \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L001	213	<b>Lading Line Item Number</b> Sequential line number for a lading item	O	N0	1/3	Used
L004	81	<b>Weight</b> Numeric value of weight	C	R	1/10	Used
L005	187	<b>Weight Qualifier</b> Code defining the type of weight Refer to 0401010 Data Element Dictionary for acceptable code values.	C	ID	1/2	Used
L008	80	<b>Lading Quantity</b> Number of units (pieces) of the lading commodity	M	N0	1/7	Must use
L009	211	<b>Packaging Form Code</b> Code for packaging form of the lading quantity	M	ID	3/3	Must use
		<u>Code NAME</u>				
		PCS Pieces				
L011	188	<b>Weight Unit Code</b> Code specifying the weight unit	O	ID	1/1	Used
		<u>Code NAME</u>				
		L Pounds				

**Segment:** **L4** Measurement  
**Position:** 163  
**Loop:** L5 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 4  
**Purpose:** To describe physical dimensions and quantities  
**Syntax Notes:**  
**Semantic Notes:** 1 L406 is the Rounding in Pattern for dimensional shipments.  
**Comments:**

#### Data Element Summary

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L401	82	<b>Length</b> Largest horizontal dimension of an object measured when the object is in the upright position	M	R	1/8	Must use
L402	189	<b>Width</b> Shorter measurement of the two horizontal dimensions measured with the object in the upright position	M	R	1/8	Must use
L403	65	<b>Height</b> Vertical dimension of an object measured when the object is in the upright position	M	R	1/8	Must use
L404	90	<b>Measurement Unit Qualifier</b> Code specifying the linear dimensional unit Refer to 004010 Data Element Dictionary for acceptable code values.	M	ID	1/1	Must use
L405	380	<b>Quantity</b> Numeric value of quantity	O	R	1/15	Used
L406	1271	<b>Industry Code</b> Code indicating a code from a specific industry code list	O	AN	1/30	Used

**Segment:** **L10** Weight  
**Position:** 165  
**Loop:** L5 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 4  
**Purpose:** To transmit weight information  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L1001	81	<b>Weight</b> Numeric value of weight	M	R	1/10	Must use
L1002	187	<b>Weight Qualifier</b> Code defining the type of weight <u>Code</u> <u>NAME</u> B Billed Weight G Gross Weight	M	ID	1/2	Must use
L1003	188	Refer to 004010 Data Element Dictionary for acceptable code values. <b>Weight Unit Code</b> Code specifying the weight unit <u>Code</u> <u>NAME</u> L Pounds	O	ID	1/1	Must use

**Segment:** **L1 Rate and Charges**  
**Position:** 180  
**Loop:** 0400 Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 10  
**Purpose:** To specify rate and charges detail relative to a line item including freight charges, advances, special charges, and entitlements

**Syntax Notes:**

- 1 If either L102 or L103 is present, then the other is required.
- 2 At least one of L104 L105 or L106 is required.
- 3 If either L114 or L115 is present, then the other is required.
- 4 If either L117 or L118 is present, then the other is required.

**Semantic Notes:**

- 1 L119 is the percent used to determine the charge in L104.
- 2 L120, if used, indicates the currency for all monetary amounts in this L1 segment.
- 3 L121 is the origin rated as charge amount.

**Comments:**

- \* This segment is required by TSi Logistics for accessorial charges.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L101	213	<b>Lading Line Item Number</b> Sequential line number for a lading item	O	N0	1/3	Used
L103	122	<b>Rate/Value Qualifier</b> Code qualifying how to extend charges or interpret value <u>Code NAME</u> PS Per Shipment	C	ID	2/2	Used
L104	58	<b>Charge</b> For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified * Required when sending accessorial charges for a line item.	M	N2	1/12	Must use
L108	150	<b>Special Charge or Allowance Code</b> Code identifying type of special charge or allowance * Required when sending accessorial charges for a line item. Refer to 0401010 Data Element Dictionary for acceptable code values.	M	ID	3/3	Must use
L112	276	<b>Special Charge Description</b> Identification of special charge; this data element is used whenever an applicable code cannot be found in data element 150	O	AN	2/25	Used

**Segment:** **C3** Currency  
**Position:** 180  
**Loop:** L1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the currency being used in the transaction set  
**Syntax Notes:**  
**Semantic Notes:** 1 C301 is the billing currency.  
 2 C303 is the payment currency.  
 3 C304 is the rated currency.  
**Comments:** 1 Currency is implied by the code for the country in whose currency the monetary amounts are specified.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
C301	100	Currency Code Code (Standard ISO) for country in whose currency the charges are specified	O	ID	3/3	Used
		<b>Currency Code</b>				
		<b>Country</b>				
		AFA				Afghanistan
		AUD				Australia
		EUR				Belgium
		BRL				Brazil
		CAD				Canada
		CNY				China
		CUP				Cuba
		EGP				Egypt
		EUR				France
		EUR				Germany
		EUR				Greece
		HKD				Hong Kong
		INR				India
		EUR				Ireland
		EUR				Italy
		JPY				Japan
		MXN				Mexico
		EUR				Netherlands
		PHP				Philippines
		USD				Puerto Rico
		EUR				Spain
		USD				United States

**Segment:** **L3 Total Weight and Charges**  
**Position:** 010  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify the total shipment in terms of weight, volume, rates, charges, advances, and prepaid amounts applicable to one or more line items  
**Syntax Notes:**

- 1 If either L301 or L302 is present, then the other is required.
- 2 If either L303 or L304 is present, then the other is required.
- 3 If either L309 or L310 is present, then the other is required.
- 4 If L312 is present, then L301 is required.
- 5 If either L314 or L315 is present, then the other is required.

**Semantic Notes:**

- 1 L305 is the total charges.

**Comments:**

- \* This segment is required by TSi Logistics.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L301	81	<b>Weight</b> Numeric value of weight	M	R	1/10	Must use
L302	187	<b>Weight Qualifier</b> Code defining the type of weight <u>Code NAME</u> B Billed Weight	M	ID	1/2	Must use
L305	58	<b>Charge</b> For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified	O	N2	1/12	Used
L311	80	<b>Lading Quantity</b> Number of units (pieces) of the lading commodity	O	N0	1/7	Used

**Segment:** **SE** Transaction Set Trailer  
**Position:** 020  
**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)  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** 1 SE is the last segment of each transaction set.

**Data Element Summary**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	<b>Transaction Set Control Number</b> <b>Description:</b> 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

**GE****Functional Group Trailer**

<b>Pos:</b>	<b>Max: 1</b>
<b>- Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 2</b>

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

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	<b>Number of Transaction Sets Included</b> <b>Description:</b> 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	28	<b>Group Control Number</b> <b>Description:</b> 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

<b>Pos:</b>	<b>Max: 1</b>
	<b>- Mandatory</b>
<b>Loop: N/A</b>	<b>Elements: 2</b>

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

**Element Summary:**

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