

**KBX Technology Solutions, LLC Electronic Data Interchange**

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

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**Advantage Delivered**

**KBX Technology Solutions, LLC  
Electronic Data Interchange**

**ASC X12 4010 EDI Implementation Guidelines  
410 Rail Carrier Freight Details and Invoice**



## **KBX Technology Solutions, LLC Electronic Data Interchange**

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# **Electronic Commerce Help Desk – Contact List**

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<b>KBX Technology Solutions</b>	<b>General Onboarding, Completeness and Compliance questions</b>		<a href="mailto:VisibilityOperations@kbxlogistics.com">VisibilityOperations@kbxlogistics.com</a> <a href="mailto:KBXTECHB2Bsupport@kbx.global">KBXTECHB2Bsupport@kbx.global</a>

# KBX Technology Solutions, LLC Electronic Data Interchange

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## 410 Rail Carrier Freight Details and Invoice

Functional Group ID=**IR**

### Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Rail Carrier Freight Details and Invoice Transaction Set (410) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide detailed information of charges associated with a rail movement. The information is provided by a rail carrier and is sent to the freight payer.

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M		ISA	Interchange Control Header	M	1		
M		GS	Functional Group Header	M	1		
M	010	ST	Transaction Set Header	M	1		
	020	B3B	Beginning Segment for Carrier's Invoice	M	1		
	040	N9	Reference Identification	O	30		
						500	
M	050	N7	Equipment Details	M	1		
	080	M7	Seal Numbers	O	5		
M	130	N8	Waybill Reference	M	499		
M	140	F9	Origin Station	M	1		
M	150	D9	Destination Station	M	1		
						10	
	160	N1	Name	O	1		
	165	N2	Additional Name Information	O	2		
	170	N3	Address Information	O	2		
	180	N4	Geographic Location	O	1		
	185	PER	Administrative Communications Contact	O	2		
						12	
	370	S1	Stop-off Name	O	1		
	400	R2	Route Information	O	13		
						25	
M	430	LX	Assigned Number	M	1		
M	440	L5	Description, Marks and Numbers	M	15		
						25	
M	460	L0	Line Item – Quantity and Weight	M	1		
M	470	L1	Rate and Charges	M	10		
	480	PI	Price Authority Identification	O	30		
						64	
M	540	L3	Total Weight and Charges	M	1		
M	570	SE	Transaction Set Trailer	M	1		
		GE	Functional Group Trailer	M	1		
		IEA	Interchange Control Trailer	M	1		

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## Segment: **ISA** Interchange Control Header

**Position:** 001  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

### Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ISA01	I01	<b>Authorization Information Qualifier</b> Code to identify the type of information in the Authorization Information 00 No Authorization Information Present (No Meaningful Information in I02)	M ID 2/2
M	ISA02	I02	<b>Authorization Information</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) Spaces	M AN 10/10
M	ISA03	I03	<b>Security Information Qualifier</b> Code to identify the type of information in the Security Information 00 No Security Information Present (No Meaningful Information in I04)	M ID 2/2
M	ISA04	I04	<b>Security Information</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) Spaces	M AN 10/10
M	ISA05	I05	<b>Interchange ID Qualifier</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Carrier Interchange ID Qualifier	M ID 2/2
M	ISA06	I06	<b>Interchange Sender ID</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 Carrier Interchange ID	M AN 15/15
M	ISA07	I05	<b>Interchange ID Qualifier</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified ZZ Mutually Defined	M ID 2/2
M	ISA08	I07	<b>Interchange Receiver ID</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 KBXTECH for test and production	M AN 15/15

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M	ISA09	I08	<b>Interchange Date</b> Date of the interchange YYMMDD	M DT 6/6
M	ISA10	I09	<b>Interchange Time</b> Time of the interchange HHMM	M TM 4/4
M	ISA11	I10	<b>Interchange Control Standards Identifier</b>  Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	ISA12	I11	<b>Interchange Control Version Number</b> This version number covers the interchange control segments 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M ID 5/5
M	ISA13	I12	<b>Interchange Control Number</b> A control number assigned by the interchange sender	M N0 9/9
M	ISA14	I13	<b>Acknowledgment Requested</b> Code sent by the sender to request an interchange acknowledgment (TA1) <i>Note: This is an informational only field. The value sent in this element alone does not drive the generation of an acknowledgment 997 for any 210 sent. Within Orderful's platform 997s can be turned on or off within the Trading Partner Relationships setting page.</i>	M ID 1/1
M	ISA15	I14	<b>Usage Indicator</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information  P Production Data shows "Live" Environment in Orderful T Test Data shows "Test" Environment in Orderful <i>NOTE: An indicator of T will not be passed into our production "Live" environment.</i>	M ID 1/1
M	ISA16	I15	<b>Component Element Separator</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 AN 1/1

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**Segment:** **GS** Functional Group Header  
**Position:** 002  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a functional group and to provide control information  
**Syntax Notes:**  
**Semantic Notes:**

- GS04 is the group date.
- GS05 is the group time.
- 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.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
M	GS01	479	<b>Functional Identifier Code</b> Code identifying a group of application related transaction sets IM Motor Carrier Freight Details and Invoice (210, 980)	M ID 2/2
M	GS02	142	<b>Application Sender's Code</b> Code identifying party sending transmission; codes agreed to by trading partners Carrier Application ID	M AN 2/15
M	GS03	124	<b>Application Receiver's Code</b> Code identifying party receiving transmission. Codes agreed to by trading partners KBXTECH for test and production	M AN 2/15
M	GS04	373	<b>Date</b> Date expressed as CCYYMMDD CCYYMMDD	M DT 8/8
M	GS05	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) HHMM	M TM 4/8
M	GS06	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M N0 1/9
M	GS07	455	<b>Responsible Agency Code</b> Code used in conjunction with Data Element 480 to identify the issuer of the standard X Accredited Standards Committee X12	M ID 1/2
M	GS08	480	<b>Version / Release / Industry Identifier Code</b> Code indicating the version, release, sub release, 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 sub release, 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 <u>Code</u> 4010	M AN 1/12

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Procedures Review Board through October 1997

## **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.



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**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>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
M	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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**Segment:** **B3B** Beginning Segment for Carrier's Invoice  
**Position:** 020  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To transmit identifying numbers, dates, and other basic data relating to the transaction set  
**Syntax Notes:**  
**Semantic Notes:**

- 1 B3B03 is the billing date.
- 2 B3B05 is the payment due date.
- 3 B3B11 defines the currency used in the transaction.

**Comments:**

- 1 The B3B09 default value is pounds.

## Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	B3B01	76	<b>Invoice Number</b> Identifying number assigned by issuer	M AN 1/22
M	B3B02	146	<b>Shipment Method of Payment</b> Code identifying payment terms for transportation charges PP = Prepaid	M ID 2/2
M	B3B03	373	<b>Date</b> Invoice date expressed as CCYYMMDD	M DT 8/8
M	B3B04	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	M N2 1/12
	B3B05	373	<b>Date</b> Due date expressed as CCYYMMDD	O DT 8/8
M	B3B06	140	<b>Standard Carrier Alpha Code</b> Standard Carrier Alpha Code	M ID 2/4
M	B3B07	91	<b>Transportation Method/Type Code</b> Code specifying the method or type of transportation for the shipment Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/2
M	B3B08	145	<b>Shipment Identification Number</b> This field will contain the KBX shipment id	O AN 1/30
	B3B11	100	<b>Currency Code</b> Code (Standard ISO) for country in whose currency the charges are specified	O ID 3/3

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**Segment:** **N9** Reference Identification  
**Position:** 040  
**Loop:**  
**Level:**  
**Usage:** Optional  
**Max Use:** 30  
**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>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	N901	128 Reference Identification Qualifier	M ID 2/3
		BM = Bill of lading number PR = Price Quote Number	
M	N902	127 Reference Identification	X AN 1/30
		For qualifier BM it will be the KBX bill of lading number For qualifier PR it will be the price quote number.	
	N903	369 Free-form Description	X AN 1/45
		Free-form descriptive text	
	N904	373 Date	O DT 8/8
		Bill of lading date expressed as CCYYMMDD	

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- Segment:** **N7** **Equipment Details**
- Position:** 050
- Loop:** N7 Mandatory
- Level:**
- Usage:** Mandatory
- Max Use:** 1
- Purpose:** To identify the equipment
- Syntax Notes:**
- 1 If either N703 or N704 is present, then the other is required.
  - 2 If either N705 or N716 is present, then the other is required.
  - 3 If either N708 or N709 is present, then the other is required.
- Semantic Notes:**
- 1 N712 is the owner of the equipment.
  - 2 N723 is the operator or carrier of the rights of the equipment.
- Comments:**
- 1 N701 is mandatory for rail transactions.
  - 2 N720 and N721 are expressed in inches.

## Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
N701	206	<b>Equipment Initial</b>	O AN 1/4
		Prefix or alphabetic part of an equipment unit's identifying number	
M	N702	<b>Equipment Number</b>	M AN 1/10
		Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	
N711	40	<b>Equipment Description Code</b>	O ID 2/2
		Code identifying type of equipment used for shipment	
N712	140	<b>Standard Carrier Alpha Code</b>	O ID 2/4
		Standard Carrier Alpha Code	
N715	567	<b>Equipment Length</b>	O N0 4/5
		Length (in feet and inches) of equipment ordered or used to transport shipment (The format is FFFII where FFF is feet and II is inches; the range for II is 00 through 11)	

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**Segment:** **M7** Seal Numbers  
**Position:** 080  
**Loop:** N7 Mandatory  
**Level:**  
**Usage:** Optional  
**Max Use:** 5  
**Purpose:** To record seal numbers used and the organization that applied the seals  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** 1 M705 indicates the name of the organization which applied the seal(s).

## Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	M701	225	Seal Number Unique number on seal used to close a shipment	M AN 2/15

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**Segment:** **N8** Waybill Reference  
**Position:** 130  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 499  
**Purpose:** To identify the waybill and to specify the equipment used and the destination details  
**Syntax Notes:**

- 1 If any of N803 N804 or N805 is present, then all are required.
- 2 If either N806 or N807 is present, then the other is required.
- 3 If either N808 or N809 is present, then the other is required.
- 4 If either N810 or N811 is present, then the other is required.

**Semantic Notes:**

- 1 N802 is the waybill date.
- 2 N808 is the destination station of movement.
- 3 N810 will contain destination railroad initial Standard Carrier Alpha Code (SCAC).
- 4 N811 will contain railroad destination Freight Station Accounting Code (FSAC).

**Comments:**

- 1 Waybill type should be transmitted only when the transaction set involves a multiple Car/TOFC/COFC shipment or a conveying flat car. Waybill type should not be sent on a single Car/TOFC/COFC.
- 2 N807 is the waybill date.

### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	N801	186 <b>Waybill Number</b>	M N0 1/6
		Carrier accounting number of the waybill for the inbound movement	
M	N802	373 <b>Date</b>	M DT 8/8
		Date expressed as CCYYMMDD	

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**Segment:** **F9** Origin Station  
**Position:** 140  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify the rail origin of the shipment  
**Syntax Notes:**  
**Semantic Notes:**

- 1 F902 is the origin station for movement.
- 2 F904 is the country code for the city named in the F902.
- 3 F905 is the freight station accounting code of the origin junction settlement carrier.
- 4 F908 is the Standard Point Location Code (SPLC) for the city named in the F902.
- 5 F909 is the postal code for the city named in the F902.
- 6 F910 is the Standard Point Location Code (SPLC) for the city named in the F906.
- 7 F911 is the postal code for the city named in the F906.
- 8 F912 is the country code for the city named in the F906.

**Comments:**

- 1 F905 is the freight station accounting code of the city named in F906.

## Data Element Summary

	<b>Ref.</b>	<b>Data</b>		<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>	<b>Name</b>	
M	F902	19	City Name	M AN 2/30
			Free-form text for city name	
M	F903	156	State or Province Code	M ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	

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**Segment:** **D9** Destination Station  
**Position:** 150  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify the rail destination of the shipment  
**Syntax Notes:**  
**Semantic Notes:**

- 1 D902 is the destination station of movement.
- 2 D904 is the country code for the city named in the D902.
- 3 D905 is the freight station accounting code of the destination junction settlement carrier.
- 4 D908 is the Standard Point Location Code (SPLC) for the city named in the D902.
- 5 D909 is the postal code for the city names in the D902.
- 6 D910 is the Standard Point Location Code (SPLC) for the city named in the D906.
- 7 D911 is the postal code for the city named in the D906.
- 8 D912 is the country code for the city named in the D906.

**Comments:**

- 1 D905 is the freight station accounting code of the city name in D906.

## Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	D902	19	City Name Free-form text for city name	M AN 2/30
M	D903	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	M ID 2/2



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- Segment:** **N1** Name
- Position:** 160
- Loop:** N1 Optional
- Level:**
- 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>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	N101	98 <b>Entity Identifier Code</b> CN = Consignee PF = Party to receive freight bill SH = Shipper	M ID 2/3
M	N102	93 <b>Name</b> Free-form name	X AN 1/60
	N103	66 <b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67)	X ID 1/2
	N104	67 <b>Identification Code</b> Code identifying a party or other code	X AN 2/80

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**Segment:** **N2** Additional Name Information  
**Position:** 165  
**Loop:** N1 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify additional names or those longer than 35 characters in length  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

## Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N201	93	Name Free-form name	M AN 1/60
	N202	93	Name Free-form name	O AN 1/60

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**Segment:** **N3** Address Information  
**Position:** 170  
**Loop:** N1 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

## Data Element Summary

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

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**Segment:** **N4** Geographic Location  
**Position:** 180  
**Loop:** N1 Optional  
**Level:**  
**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>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
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	
N405	309	Location Qualifier	X ID 1/2
		Code identifying type of location	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
N406	310	Location Identifier	O AN 1/30
		Code which identifies a specific location	

# KBX Technology Solutions, LLC Electronic Data Interchange

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**Segment:** **PER** Administrative Communications Contact  
**Position:** 185  
**Loop:** N1 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To identify a person or office to whom administrative communications should be directed  
**Syntax Notes:**

- 1 If either PER03 or PER04 is present, then the other is required.
- 2 If either PER05 or PER06 is present, then the other is required.
- 3 If either PER07 or PER08 is present, then the other is required.

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

## Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PER01	366	<b>Contact Function Code</b> IC = Information contact	M ID 2/2
	PER02	93	<b>Name</b> Free-form name	O AN 1/60
	PER03	365	<b>Communication Number Qualifier</b> TE = Telephone FX = Fax	X ID 2/2
	PER04	364	<b>Communication Number</b> Complete communications number including country or area code when applicable	X AN 1/80

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **S1** Stop-off Name  
**Position:** 370  
**Loop:** S1 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a stop-off party  
**Syntax Notes:** 1 If either S103 or S104 is present, then the other is required.  
**Semantic Notes:** 1 S105 will contain the railroad initial responsible for this stop.  
**Comments:**

## Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	S101	165	<b>Stop Sequence Number</b> Identifying number for the specific stop and the sequence in which the stop is to be performed	M N0 1/3
M	S102	459	<b>Name (30 Character Format)</b> Free-form organization name or official title as it should appear for mailing address	M AN 2/30
	S103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
	S104	67	<b>Identification Code</b> Code identifying a party or other code	X AN 2/80
	S105	140	<b>Standard Carrier Alpha Code</b> Standard Carrier Alpha Code	O ID 2/4
M	S106	190	<b>Accomplish Code</b> A = accomplished P = pending	M ID 1/1

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **R2** Route Information  
**Position:** 400  
**Loop:**  
**Level:**  
**Usage:** Optional  
**Max Use:** 13  
**Purpose:** To specify carrier and routing sequences and details  
**Syntax Notes:** 1 If R208 is present, then R207 is required.  
**Semantic Notes:** 1 R203 is the station or city name at which carriers interchange shipments.  
 2 R210 is the billing date.  
**Comments:**

## Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	R201	140 <b>Standard Carrier Alpha Code</b> Standard Carrier Alpha Code	M ID 2/4
M	R202	133 <b>Routing Sequence Code</b> S = Origin carrier, Shipper's routing (rail)	M ID 1/2
	R203	19 <b>City Name</b> Free-form text for city name	O AN 2/30
	R206	91 <b>Transportation Method/Type Code</b> Code specifying the method or type of transportation for the shipment	O ID 1/2

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **LX** Assigned Number  
**Position:** 430  
**Loop:** LX Mandatory  
**Level:**  
**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>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	LX01	554	Assigned Number Number assigned for differentiation within a transaction set	M N0 1/6



# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **L5** Description, Marks and Numbers  
**Position:** 440  
**Loop:** LX Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 15  
**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.

### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>L501</b>	<b>213</b>	<b>Lading Line Item Number</b> Sequential line number for a lading item	<b>O N0 1/3</b>
<b>L502</b>	<b>79</b>	<b>Lading Description</b> Description of an item as required for rating and billing purposes	<b>O AN 1/50</b>

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

- Segment:** **L0** Line Item - Quantity and Weight
- Position:** 460
- Loop:** L0 Mandatory
- Level:**
- Usage:** Mandatory
- Max Use:** 1
- 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.

## 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	
L002	220	Billed/Rated-as Quantity	X R 1/11
		Basis for rating (miles, value, volume, etc.); Note: Weight may be defined by either data element 220 or 81	
L003	221	Billed/Rated-as Qualifier	X ID 2/2
		Code identifying the type of quantity or value on which the rate or item pricing is based	
L004	81	Weight	X R 1/10
		Numeric value of weight	
L005	187	Weight Qualifier	X ID 1/2
		Code defining the type of weight	
L006	183	Volume	X R 1/8
		Value of volumetric measure	
L007	184	Volume Unit Qualifier	X ID 1/1
		Code identifying the volume unit	
L008	80	Lading Quantity	X N0 1/7
		Number of units (pieces) of the lading commodity	
L009	211	Packaging Form Code	X ID 3/3
		Code for packaging form of the lading quantity	

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

- Segment:** **L1** Rate and Charges
- Position:** 470
- Loop:** L0 Mandatory
- Level:**
- 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:**

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
L101	213	<b>Lading Line Item Number</b> Sequential line number for a lading item	O N0 1/3
L102	60	<b>Freight Rate</b> Rate that applies to the specific commodity	X R 1/9
L103	122	<b>Rate/Value Qualifier</b> Code qualifying how to extend charges or interpret value	X ID 2/2
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	X N2 1/12
L105	191	<b>Advances</b> Incidental charges occurring during transportation which are not generally considered to be freight charges (examples - stop charges, diversion and reconsignment, icing) expressed in the standard monetary denomination for the currency specified	X N2 1/9
L106	117	<b>Prepaid Amount</b> Money paid at point of origin (usually by shipper) expressed in the standard monetary denomination for the currency specified Refer to 004010 Data Element Dictionary for acceptable code values.	X N2 1/9
L108	150	<b>Special Charge or Allowance Code</b> Code identifying type of special charge or allowance Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 3/3
L109	121	<b>Rate Class Code</b> Code identifying specifically designated class of goods; Note: For international air shipments, see IATA Resolution 600k	O ID 1/3
L111	16	<b>Charge Method of Payment</b> Code defining method of payment	O ID 1/1
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

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **PI** Price Authority Identification  
**Position:** 480  
**Loop:** L0 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 30  
**Purpose:** To communicate basis of pricing, such as contract number, quote number, or tariff number

**Syntax Notes:**  
**1** If PI14 is present, then PI12 is required.  
**2** If PI15 is present, then PI13 is required.

**Semantic Notes:**  
**1** PI07 is the price authority suffix for the contract.  
**2** PI08 is the price authority item number.  
**3** PI09 is the price authority supplement.  
**4** PI10 is the price authority section number.  
**5** PI11 is the price authority suffix for tariff.  
**6** PI12 is the effective date.  
**7** PI13 is the expiration date.

**Comments:**

## Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
O	PI01	128 Reference Identification Qualifier	M ID 2/3
		PR = Price quote number	
O	PI02	127 Reference Identification	M AN 1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
	PI03	436 Primary Publication Authority Code	O ID 2/2
		Code indicating type of external reference	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
	PI04	930 Regulatory Agency Code	O ID 3/5
		Code relating to the regulatory agency governing the price reference	
	PI05	168 Tariff Agency Code	O ID 1/4
		Code defining the tariff bureau or tariff publishing agent that governs the rates applied to this shipment	

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **L3** Total Weight and Charges  
**Position:** 540  
**Loop:**  
**Level:**  
**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:**

## Data Element Summary

Ref.	Data		Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	
L301	81	<b>Weight</b>	X R 1/10
		Numeric value of weight	
L302	187	<b>Weight Qualifier</b>	X ID 1/2
		Code defining the type of weight	
L311	80	<b>Lading Quantity</b>	O N0 1/7
		Number of units (pieces) of the lading commodity	

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

**Segment:** **SE** Transaction Set Trailer  
**Position:** 570  
**Loop:**  
**Level:**  
**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. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
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

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

## GE Functional Group Trailer

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.

# KBX Technology Solutions, LLC Electronic Data Interchange

Transportation EDI Implementation Standards

ASC X12 4010 410: Transportation Rail Carrier Freight Details & Invoice

## IEA Interchange Control Trailer

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