

EDI Specifications

Version 4010 / Transaction Set 410 Freight Details and Invoice

VERSION: 1.01 DRAFT

Date Last Updated: 02/06/2003 Author: TSi Logistics

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.

	Pos. No.	Seg.	<u>Name</u>	Req. <u>Des.</u>	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	ВЗВ	Beginning Segment for Carrier's Invoice	M	1		
	030	C4	Alternate Amount Due	O	1		
	040	N9	Reference Identification	O	30		
			LOOP ID - N7			500	
M	050	N7	Equipment Details	M	1		
	070	G4	Scale Identification	O	1		
M	130	N8	Waybill Reference	M	499		
M	140	F9	Origin Station	M	1		
M	150	D9	Destination Station	M	1		
			LOOP ID - N1			10	
	160	N1	Name	0	1		
	170	N3	Address Information	O	2		
	180	N4	Geographic Location	O	1		
			LOOP ID - SI			12	
	370	S1	Stop-off Name	0	1		
	390	S9	Stop-off Station	O	1		
	400	R2	Route Information	0	13		
			LOOP ID - LX			25	
M	430	LX	Assigned Number	M	1		
M	440	L5	Description, Marks and Numbers	M	15		
			LOOP ID - LO			25	
M	460	L0	Line Item - Quantity and Weight	M	1		
M	470	L1	Rate and Charges	M	10		
	480	ΡI	Price Authority Identification	O	30		
M	540	L3	Total Weight and Charges	M	1		
M	570	SE	Transaction Set Trailer	M	1		

4010-410.RTF 2 Version 1.0

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

Ref_	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	Usage
ISA01	I 01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information Code NAME No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	Must use
ISA02	102	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	103	Security Information Qualifier Description: Code to identify the type of information in the Security Information Code NAME No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	Must use
ISA04	104	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	105	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Code NAME 1 Duns (Dun & Bradstreet) 2 SCAC (Standard Carrier Alpha Code)	M	ID	2/2	Must use
ISA06	106	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use
ISA07	105	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Code NAME O1 Duns (Dun & Bradstreet) ZZ Mutually Defined	M	ID	2/2	Must use
ISA08	107	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	M	AN	15/15	Must use
ISA09	108	Interchange Date Description: Date of the interchange	M	DT	6/6	Must use

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<u>Ref</u>	<u>Id</u> _	Element Name	Req	<u>Type</u>	Min/Max	Usage
ISA10	109	Interchange Time Description: Time of the interchange	M	TM	4/4	Must use
ISA11	I10	Interchange Control Standards Identifier Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer Code NAME U.S. EDI Community of ASC X12	M	ID	1/1	Must use
ISA12	I11	Interchange Control Version Number Description: This version number covers the interchange control segments Code NAME 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	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	113	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) Code NAME No Acknowledgment Requested	M	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information Code NAME P Production Data	M	ID	1/1	Must use
ISA16	I15	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

4010-410.RTF 4 Version 1.0

GS **Functional Group Header**

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

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

Element Summary:

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use
		Description: Code identifying a group of application related transaction sets Code NAME				
		IR Rail Carrier Freight Details and Invoice (410)				
GS02	142	Application Sender's Code	M	AN	2/15	Must use
		Description: Code identifying party sending transmission; codes agreed to by trading partners Carrier SCAC				
GS03	124	Application Receiver's Code	M	AN	2/15	Must use
		Description: Code identifying party receiving transmission. Codes agreed to by trading partners				
GS04	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
GS05	337	Time	M	TM	4/8	Must use
		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)				
GS06	28	Group Control Number	M	N0	1/9	Must use
		Description: Assigned number originated and maintained by the sender				
GS07	455	Responsible Agency Code	M	ID	1/2	Must use
		Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard Code NAME				
		X Accredited Standards Committee X12				
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use
		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). Code NAME				
		004010 Dueft Standards Americand for Dublication by ASC V12				

004010 Draft Standards Approved for Publication by ASC X12 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, GF02

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:

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

Ref _	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	Usage
ST01	143	Transaction Set Identifier Code	\mathbf{M}	ID	3/3	Must use
		Description: Code uniquely identifying a Transaction Set				
		Code NAME				
		410 Rail Carrier Freight Details and Invoice				
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction				
		set				

4010-410.RTF 7 Version 1.0

Segment: ${\bf B3B}$ 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.

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
B3B01	76	Invoice Number	M	AN	1/22	Must use
		Identifying number assigned by issuer				
		Pro Number/Freight Bill Invoice Number				
B3B02	146	Shipment Method of Payment	M	ID	2/2	Must use
		Code identifying payment terms for transportation charges Code NAME				
		CC Collect	•			
		PP Prepaid				
D2D02	272	Dete	М	рт	0/0	M4
B3B03	373	Date Date overrassed as CCVVMMDD	M	DT	8/8	Must use
		Date expressed as CCYYMMDD Pro Date/Freight Bill Invoice Date				
B3B04	193	Net Amount Due	M	N2	1/12	Must use
D3D04	193	Total charges to be paid by the receiver of this transaction set expre				Must use
		monetary denomination for the currency specified	20004 11	r the st	indurd	
		Billed Amount				
B3B05	373	Date	O	DT	8/8	Used
		Date expressed as CCYYMMDD				
		Freight Bill Invoice Due Date				
B3B06	140	Standard Carrier Alpha Code	M	ID	2/4	Must use
		Standard Carrier Alpha Code				
B3B07	91	Carrier SCAC Transportation Method/Type Code	M	ID	1/2	Must use
DSDU7	71	Code specifying the method or type of transportation for the shipme		ш	1/2	Must use
		Code NAME				
		R Rail				
B3B08	145	Shipment Identification Number	0	AN	1/30	Must use
20200		Identification number assigned to the shipment by the shipper that	_			1.2450 450
		shipment from origin to ultimate destination and is not subject to m				
		contain blanks or special characters)				
		Waybill Number/BOL Number				
B3B09	188	Weight Unit Code	O	ID	1/1	Used
		Code NAME				
		Code NAME L Pounds	•			
B3B10	202	Correction Indicator	O	ID	2/2	Used
		Code used to indicate that the transaction set contains information	which o	corrects	previous	
		information				

Element Name Ref <u>Id_</u> Req Type Min/Max **Usage** Original Freight Bill or Code NAME Adjusted Bill AD Balance Due Bill BD B3B11 100 **Currency Code** ID 3/3 \mathbf{M} Used Code (Standard ISO) for country in whose currency the charges are specified

> **Currency Code** Country AFA Afghanistan Australia **AUD** EUR Belgium BRL Brazil CAD Canada **CNY** China Cuba CUP EGP Egypt **EUR** France **EUR** Germany EUR Greece HKD Hong Kong INR India **EUR** Ireland **EUR** Italy JPY Japan MXN Mexico Netherlands **EUR** PHP Philippines USD Puerto Rico **EUR** Spain United States **USD**

Segment: C4 Alternate Amount Due

Position: 030

Loop: Level:

Usage: Optional

Max Use: 1

Purpose: To specify alternate payment

Syntax Notes: Semantic Notes: Comments:

Ref _	<u>Id</u> _	Element Name	Req	Type	Min/Max	<u>Usage</u>		
C401	100	Currency Code	\mathbf{M}	ID	3/3	Used		
		Code (Standard ISO) for country in whose currency the charges are specified						
C402	193	Net Amount Due	M	N2	1/12	Used		
		Total charges to be paid by the receiver of this transaction set expressed in the standard						
		monetary denomination for the currency specified						

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:

Ref _	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
N901	128	Reference Identification Qualifier	M	ID	2/3	Must use
		Code qualifying the Reference Identification				
		Code NAME				
		BM Bill of Lading Number				
		CG Consignee Order Number				
		CT Contract Number				
		PO Purchase Order Number				
		SF Mine Number				
		SO Shipper Order Number				
		TN Draft Statement Number				
		DO Delivery Order Number – V Number				
		11 Account Number				
N902	127	Reference Identification	C	AN	1/30	Used
		Reference information as defined for a particular Transaction Set or	r as spe	cified b	v the	
		Reference Identification Qualifier	т. Т.		<i>y</i>	
N903	369	Free-form Description	C	AN	1/45	Not used
- 1.5		Free-form descriptive text			_,	_ , , , , , , , , , , , , , , , , , , ,
N904	373	Date	0	DT	8/8	Must use
- 1,7 - 7 -		Date expressed as CCYYMMDD				
		BOL Date/Shipped Date (where N901 = 'BM')				
N905	337	Time	C	TM	4/8	Not used
11905	331		_			Not useu
		Time expressed in 24-hour clock time as follows: HHMM, or HHM				
		or HHMMSSDD, where $H = \text{hours}$ (00-23), $M = \text{minutes}$ (00-59), $S = \frac{1}{2} \left(\frac{1}{2} \right)^{\frac{1}{2}} \left(\frac{1}{2} \right)^{\frac{1}$				
		59) and DD = decimal seconds; decimal seconds are expressed as for	onows	D = ter	itns (0-9)	
		and $DD = \text{hundredths} (00-99)$				

Segment: N7 Equipment Details

Position: 050

Loop: N7 Mandatory

Level:

Usage: Mandatory

Max Use:

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.

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
N701	206	Equipment Initial	\mathbf{M}	AN	1/4	Used
		Prefix or alphabetic part of an equipment unit's identifying number				
N702	207	Equipment Number	\mathbf{M}	$\mathbf{A}\mathbf{N}$	1/10	Used
		Sequencing or serial part of an equipment unit's identifying number	(pure i	numerio	form for	
NI=02	0.1	equipment number is preferred)	a		4.40	** *
N703	81	Weight	C	R	1/10	Used
NAOA	107	Numeric value of weight	C	ID	1/2	IIJ
N704	187	Weight Qualifier Code defining the type of weight	C	ID	1/2	Used
		Code NAME				
		N Actual Net Weight				
N705	167	Tare Weight	C	N0	3/8	Used
		Weight of the equipment				
N706	232	Weight Allowance	O	N0	2/6	Used
		Allowance made for increased weight due to such factors as snow	_			
N707	205	Dunnage	0	N0	1/6	Used
NEGO	102	Weight of material used to protect lading (even bracings, false floors		ъ	1 /0	TT 3
N708	183	Volume Value of volumetric measure	C	R	1/8	Used
N709	184	Volume Unit Qualifier	C	ID	1/1	Used
11703	104	Code identifying the volume unit	C	Ш	1/1	Oseu
		Refer to 0401010 Data Element Dictionary for acceptable code value	es			
N711	40	Equipment Description Code	0	ID	2/2	Used
		Code identifying type of equipment used for shipment			_,_	
		Code NAME				
		CN Container				
		TL Trailer				
		RR Railroad Car				
N712	140	Standard Carrier Alpha Code	O	ID	2/4	Used
		Standard Carrier Alpha Code				
N715	567	Equipment Length	O	N0	4/5	Used
		Length (in feet and inches) of equipment ordered or used to transpor			he format	
	400	is FFFII where FFF is feet and II is inches; the range for II is 00 thro	_			
N717	188	Weight Unit Code	O	ID	1/1	Used
		Code specifying the weight unit				
		Refer to 0401010 Data Element Dictionary for acceptable code value	es.			

Ref _	<u>Id</u> _	Element Name	Req	Type	Min/Max	<u>Usage</u>
N719	56	Type of Service Code	0	ID	2/2	Used
		Code specifying extent of transportation service requested Refer to 0401010 Data Element Dictionary for acceptable code value	ies			
N722	24	Equipment Type Code identifying equipment type	0	ID	4/4	Used

Segment: G4 Scale Identification

Position: 070

Loop: N7 Mandatory

Level:

Usage: Optional

Max Use:

Purpose: To identify the scale type and the location and time a shipment is weighed

Syntax Notes:

Semantic Notes: 1 G404 is the event date.

2 G405 is the event time.

Comments:

Ref_	<u>Id_</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>				
G401	19	City Name	\mathbf{M}	$\mathbf{A}\mathbf{N}$	2/30	Used				
		Free-form text for city name								
G402	156	State or Province Code	\mathbf{M}	ID	2/2	Used				
		Code (Standard State/Province) as defined by appropriate government	ent age	ency						
G403	459	Name (30 Character Format)	O	$\mathbf{A}\mathbf{N}$	2/30	Used				
		Free-form organization name or official title as it should appear for mailing address								
G404	373	Date	\mathbf{M}	\mathbf{DT}	8/8	Used				
		Date expressed as CCYYMMDD								
G405	337	Time	0	TM	4/8	Used				
		Time expressed in 24-hour clock time as follows: HHMM, or HHM								
		or HHMMSSDD, where $H = hours$ (00-23), $M = minutes$ (00-59), $S = minutes$								
		59) and DD = decimal seconds; decimal seconds are expressed as for	ollows	D = te	nths (0-9)					
		and $DD = \text{hundredths} (00-99)$								
G406	570	Scale Type Code	0	ID	1/1	Used				
		Code identifying the type of scale								
		Code NAME								
		R Rail								

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.

If either N806 or N807 is present, then the other is required.
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.

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage _
N801	186	Waybill Number	M	N0	1/6	Used
		Carrier accounting number of the waybill for the inbound movement	,			
N802	373	Date	\mathbf{M}	DT	8/8	Used
		Date expressed as CCYYMMDD				
N803	231	Cross Reference Type Code	\mathbf{C}	ID	1/1	Used
		Code defining relationship of equipment to equipment cross-reference	ced			
		Refer to 0401010 Data Element Dictionary for acceptable code value	es.			
N804	206	Equipment Initial	C	$\mathbf{A}\mathbf{N}$	1/4	Used
		Prefix or alphabetic part of an equipment unit's identifying number				
N805	207	Equipment Number	C	$\mathbf{A}\mathbf{N}$	1/10	Used
		Sequencing or serial part of an equipment unit's identifying number	(pure	numerio	c form for	
		equipment number is preferred)				
N806	186	Waybill Number	\mathbf{C}	N0	1/6	Used
		Carrier accounting number of the waybill for the inbound movement				
N807	373	Date	C	DT	8/8	Used
		Date expressed as CCYYMMDD				
N808	19	City Name	C	AN	2/30	Used
		Free-form text for city name				
N809	156	State or Province Code	C	ID	2/2	Used
		Code (Standard State/Province) as defined by appropriate governme	_	-		
N810	140	Standard Carrier Alpha Code	C	ID	2/4	Used
*****		Standard Carrier Alpha Code	~			
N811	573	Freight Station Accounting Code	C	ID	1/5	Used
		Code (Freight Station Accounting) (AAR Managed Code for Location	ons)			

Segment: F9 Origin Station

Position: 140

Loop:

Level:

Usage: Mandatory

Max Use:

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.

Ref _	<u>Id</u> _	Element Name	Req	Type	Min/Max	Usage _
F901	573	Freight Station Accounting Code	0	ID	1/5	Used
		Code (Freight Station Accounting) (AAR Managed Code for Locati	ons)			
F902	19	City Name	M	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form text for city name				
F903	156	State or Province Code	\mathbf{M}	ID	2/2	Used
		Code (Standard State/Province) as defined by appropriate governme	nt age	ncy		
F904	26	Country Code	O	ID	2/3	Used
		Code identifying the country				
F905	573	Freight Station Accounting Code	O	ID	1/5	Used
		Code (Freight Station Accounting) (AAR Managed Code for Locati	ons)			
F906	19	City Name	O	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form text for city name				
F907	156	State or Province Code	O	ID	2/2	Used
		Code (Standard State/Province) as defined by appropriate governme	nt age	ncy		
F908	154	Standard Point Location Code	O	ID	6/9	Used
		Code (Standard Point Location) defined by NMFTA point developm	nent gr	oup as	the	
		official code assigned to a city or point (for ratemaking purposes) with	ithin a	city		

Segment: **D9** Destination Station

Position: 150

Loop:

Level:

Usage: Mandatory

Max Use:

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.

Ref _	<u>Id</u> _	Element Name	Req	<u>Type</u>	Min/Max	Usage _
D901	573	Freight Station Accounting Code	O	ID	1/5	Used
		Code (Freight Station Accounting) (AAR Managed Code for Location	ons)			
D902	19	City Name	M	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form text for city name				
D903	156	State or Province Code	\mathbf{M}	ID	2/2	Used
		Code (Standard State/Province) as defined by appropriate governme	nt age	ncy		
D904	26	Country Code	\mathbf{o}	ID	2/3	Used
		Code identifying the country				
D905	573	Freight Station Accounting Code	\mathbf{o}	ID	1/5	Used
		Code (Freight Station Accounting) (AAR Managed Code for Location	ons)			
D906	19	City Name	O	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form text for city name				
D907	156	State or Province Code	0	ID	2/2	Used
		Code (Standard State/Province) as defined by appropriate governme	nt age	ncy		
D908	154	Standard Point Location Code	0	ÍD	6/9	Used
		Code (Standard Point Location) defined by NMFTA point developm	nent gr	oup as	the	
		official code assigned to a city or point (for ratemaking purposes) with	ithin a	city		

Segment: N1 Name

Position: 160

Loop: N1 Optional

Level:

Usage: Optional

Max Use:

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.

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

9/16/2004

TSi Logistics

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

RefIdElement NameReqTypeMin/MaxUsageN301166Address InformationMAN1/55Must useDescription: Address information

N4 Geographic Location **Segment:**

Position: 180

> Loop: N1 Mandatory

Level:

Usage: Mandatory

Max Use:

Purpose: To specify the geographic place of the named party **Syntax Notes:** If N406 is present, then N405 is required.

Semantic Notes:

Comments:

A combination of either N401 through N404, or N405 and N406 may be adequate to specify a

2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

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

Description: Code identifying the country

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

Segment: S1 Stop-off Name

Position: 370

Loop: S1 Optional

Level:

Usage: Optional

Max Use:

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

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage _
S101	165	Stop Sequence Number	M	N0	1/3	Used
		Identifying number for the specific stop and the sequence in which performed	the sto	p is to b	e	
S102	459	Name (30 Character Format)	\mathbf{M}	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form organization name or official title as it should appear for	mailin	g addre	SS	
S103	66	Identification Code Qualifier	\mathbf{C}	ID	1/2	Used
		Code designating the system/method of code structure used for Ider	tificati	ion Cod	le (67)	
		Refer to 0401010 Data Element Dictionary for acceptable code value	ies.			
S104	67	Identification Code	\mathbf{C}	$\mathbf{A}\mathbf{N}$	2/80	Used
		Code identifying a party or other code				
S105	140	Standard Carrier Alpha Code	O	ID	2/4	Used
		Standard Carrier Alpha Code				
S106	190	Accomplish Code	\mathbf{M}	ID	1/1	Used
		Code indicating the status of a specified stop				
		Code NAME				
		A A 1: -1 J				

A Accomplished

Segment: S9 Stop-off Station

Position: 390

Loop: S1 Optional

Level:

Usage: Optional

Max Use:

Purpose: To specify location details for a stop-off

Syntax Notes: 1 If either S907 or S908 is present, then the other is required.

Semantic Notes:

Comments: 1 S901 contains the same number used on a corresponding S1 Segment.

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage _
S901	165	Stop Sequence Number	\mathbf{M}	N0	1/3	Used
		Identifying number for the specific stop and the sequence in which	the stop	is to b	e	
		performed				
S902	154	Standard Point Location Code	O	ID	6/9	Used
		Code (Standard Point Location) defined by NMFTA point development			the	
0000	40	official code assigned to a city or point (for ratemaking purposes) w		•	2/20	** 1
S903	19	City Name	M	AN	2/30	Used
5004	150	Free-form text for city name	3.4	ID	2/2	TT
S904	156	State or Province Code Code (Standard State (Province) as defined by appropriate accommon	M	ID	2/2	Used
5005	26	Code (Standard State/Province) as defined by appropriate governme	_	•	2/2	Hand
S905	26	Country Code Code identifying the country	O	ID	2/3	Used
S906	163	Stop Reason Code	M	ID	2/2	Used
5700	103	Code specifying the reason for the stop	141	ш	212	Cscu
		Code NAME				
		CL Complete				
		CN Consolidate				
		CU Complete Unload				
		HT Heat the Shipment PL Part Load				
		PU Part Unload				
		TL Transload				
		WL Weigh Loaded				
S907	309	Location Qualifier	C	ID	1/2	Not used
3707	309	Code identifying type of location	C	ш	1/2	Not useu
		Refer to 0401010 Data Element Dictionary for acceptable code value	ies			
S908	310	Location Identifier	C C	AN	1/30	Not used
2200	210	Code which identifies a specific location	J		2,20	1,00 4504

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:

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage
R201	140	Standard Carrier Alpha Code	\mathbf{M}	ID	2/4	Used
		Standard Carrier Alpha Code				
R202	133	Routing Sequence Code	\mathbf{M}	ID	1/2	Used
		Code describing the relationship of a carrier to a specific shipment Code NAME	movem -	ent		
		R Origin Carrier, Rule 11 Shipment				
		D DELY (Delivery Switch Carrier)				
		Refer to 0401010 Data Element Dictionary for acceptable code val	ues.			
R203	19	City Name	O	$\mathbf{A}\mathbf{N}$	2/30	Used
		Free-form text for city name				
R204	154	Standard Point Location Code	O	ID	6/9	Used
		Code (Standard Point Location) defined by NMFTA point develop	ment gr	oup as	the	
		official code assigned to a city or point (for ratemaking purposes) w	vithin a	city		
R205	177	Intermodal Service Code	O	ID	1/2	Used
		Code identifying the Intermodal Service Plan				
R206	91	Transportation Method/Type Code	O	ID	1/2	Used
		Code specifying the method or type of transportation for the shipme				
		Refer to 0401010 Data Element Dictionary for acceptable code val				
R207	296	Intermediate Switch Carrier	\mathbf{C}	ID	2/4	Not used
		Code defining a road which neither originates nor terminates the sh				
		switching service between two roadhaul rail carriers (SCAC code for	or rail s	witch c	arrier)	
R208	296	Intermediate Switch Carrier	O	ID	2/4	Not used
		Code defining a road which neither originates nor terminates the sh switching service between two roadhaul rail carriers (SCAC code for				
R213	742	Route Description	0	AN	1/35	Not used
11215	172	Point to point routing description	O	7 11 1	1/35	110t useu
		i onit to point fouting description				

9/16/2004

Rail Carrier Freight Details and Invoice - 410

Segment: LX Assigned Number

Position: 430

Loop: LX Mandatory

Level:

Usage: Mandatory

Max Use:

Purpose: To reference a line number in a transaction set

Syntax Notes: Semantic Notes: Comments:

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

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.

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
L501	213	Lading Line Item Number	O	N0	1/3	Must use
		Sequential line number for a lading item				
L502	79	Lading Description	O	$\mathbf{A}\mathbf{N}$	1/50	Must use
		Description of an item as required for rating and billing purposes				
L503	22	Commodity Code	\mathbf{C}	AN	1/30	Used
		Code describing a commodity or group of commodities				
L504	23	Commodity Code Qualifier	\mathbf{C}	ID	1/1	Used
		Code identifying the commodity coding system used for Commodit	ty Code	;		
		Code NAME				

T Standard Transportation Commodity Code (STCC)

Segment: L0 Line Item - Quantity and Weight

Position: 460

Loop: L0 Mandatory

Level:

Usage: Mandatory

Max Use:

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.

Ref_	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	Usage
L001	213	Lading Line Item Number	O	N0	1/3	Used
		Sequential line number for a lading item				
L002	220	Billed/Rated-as Quantity	\mathbf{C}	R	1/11	Used
		Basis for rating (miles, value, volume, etc.); Note: Weight may be de	fined	by eith	er data	
		element 220 or 81				
L003	221	Billed/Rated-as Qualifier	C	ID	2/2	Used
		Code identifying the type of quantity or value on which the rate or ite	-	cing is	based	
		Refer to 0401010 Data Element Dictionary for acceptable code value		_		
L004	81	Weight	C	R	1/10	Used
T 00=	40=	Numeric value of weight	~	-	1/0	
L005	187	Weight Qualifier	C	ID	1/2	Used
		Code defining the type of weight				
L006	183	Refer to 0401010 Data Element Dictionary for acceptable code value Volume	es. C	R	1/8	TIJ
LUUU	103	Value of volumetric measure	C	K	1/8	Used
L007	184	Volume Unit Qualifier	C	ID	1/1	Used
LUU/	104	Code identifying the volume unit	C	ID	1/1	Useu
		Refer to 0401010 Data Element Dictionary for acceptable code value	4C			
L008	80	Lading Quantity	M	N0	1/7	Used
2000	0.0	Number of units (pieces) of the lading commodity	1.1	110	2, .	0.504
L009	211	Packaging Form Code	M	ID	3/3	Used
		Code for packaging form of the lading quantity				
		Refer to 0401010 Data Element Dictionary for acceptable code value	es.			
L010	458	Dunnage Description	O	AN	2/25	Used
		Material used to protect lading				
L011	188	Weight Unit Code	O	ID	ID 1/1	Used
		Code specifying the weight unit				
		Code NAME				
		L Pounds				

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:

Ref_	<u>Id</u> _	Element Name	Req	Type	Min/Max	Usage _
L101	213	Lading Line Item Number	O	N0	1/3	Used
		Sequential line number for a lading item				
L102	60	Freight Rate	C	R	1/9	Used
		Rate that applies to the specific commodity				
L103	122	Rate/Value Qualifier	C	ID	2/2	Used
		Code qualifying how to extend charges or interpret value				
		Refer to 0401010 Data Element Dictionary for acceptable code value				
L104	58	Charge	C	N2	1/12	Used
		For a line item: freight or special charge; for the total invoice: the to		-		
		expressed in the standard monetary denomination for the currency space.	pecifie	d		
		* Required when sending accessorial charges for a line item.				
L105	191	Advances	C	N2	1/9	Used
		Incidental charges occurring during transportation which are not get				
		freight charges (examples - stop charges, diversion and reconsignment	ent, ici	ng) exp	ressed in	
T 106	115	the standard monetary denomination for the currency specified	a	NO	1.0	
L106	117	Prepaid Amount	C	N2	1/9	Used
		Money paid at point of origin (usually by shipper) expressed in the	standai	ra mone	etary	
T 107	120	denomination for the currency specified	0	A INT	2/0	TT 3
L107	120	Rate Combination Point Code	_	AN	3/9	Used
		The code denoting the connecting station for a joint rate obtained by more published rates which are used for the calculation of transporta			vo or	
		Refer to 0401010 Data Element Dictionary for acceptable code value		larges		
L108	150	Special Charge or Allowance Code	0	ID	3/3	Used
LIVO	150	Code identifying type of special charge or allowance	O	ш	5/5	Cscu
		* Required when sending accessorial charges for a line item.				
		Refer to 0401010 Data Element Dictionary for acceptable code value	ies.			
L109	121	Rate Class Code	0	ID	1/3	Used
		Code identifying specifically designated class of goods; Note: For in	nternati	ional ai	r	
		shipments, see IATA Resolution 600k				
		Refer to 0401010 Data Element Dictionary for acceptable code value	ies.			
L110	39	Entitlement Code	O	ID	1/1	Used
		Code identifying entitlement party				
		Refer to 0401010 Data Element Dictionary for acceptable code value	ies.			
L111	16	Charge Method of Payment	O	ID	1/1	Used
		Code defining method of payment				

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage _
		Refer to 0401010 Data Element Dictionary for acceptable code valu	es.			
L112	276	Special Charge Description	O	$\mathbf{A}\mathbf{N}$	2/25	Used
		Identification of special charge; this data element is used whenever cannot be found in data element 150	an app	licable	code	
L113	257	Tariff Application Code	O	ID	1/1	Used
		Code indicating to which traffic a tariff applies				
		Refer to 0401010 Data Element Dictionary for acceptable code valu	ies.			
L114	74	Declared Value	C	N2	2/12	Used
		Monetary assigned value expressed in the standard monetary denom currency specified	inatio	n for the	e	
L115	122	Rate/Value Qualifier	C	ID	2/2	Used
		Code qualifying how to extend charges or interpret value				
		Refer to 0401010 Data Element Dictionary for acceptable code value	es.			

Segment: PI Price Authority Identification

Position: 480

Loop: L0 Mandatory

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.

PI08 is the price authority item number.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:

Ref _	<u>Id</u> _	Element Name	Req	Type	Min/Max	Usage
PI01	128	Reference Identification Qualifier	M	ID	2/3	Used
		Code qualifying the Reference Identification				
		Refer to 0401010 Data Element Dictionary for acceptable code value	es.			
PI02	127	Reference Identification	M	$\mathbf{A}\mathbf{N}$	1/30	Used
		Reference information as defined for a particular Transaction Set or	as spe	cified b	y the	
		Reference Identification Qualifier				
PI03	436	Primary Publication Authority Code	O	ID	2/2	Used
		Code indicating type of external reference				
		Code NAME				
		TP Tariff Publication				
PI04	930	Regulatory Agency Code	o	ID	3/5	Used
		Code relating to the regulatory agency governing the price reference				
PI05	168	Tariff Agency Code	O	ID	1/4	Used
		Code defining the tariff bureau or tariff publishing agent that govern	s the r	ates ap	plied to	
		this shipment		·····	L	
PI06	965	Issuing Carrier Identifier	O	$\mathbf{A}\mathbf{N}$	1/10	Used
		Identification assigned by issuing carrier				
PI08	169	Tariff Item Number	O	$\mathbf{A}\mathbf{N}$	1/16	Used
		Number assigned in the tariff to specific rate or group of rates that ap	plies	to one o	or more	
		items in the shipment	-			

Segment: L3 Total Weight and Charges

Position: 540

Loop: Level:

Usage: Mandatory

Max Use:

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: Comments:

1 L305 is the total charges.

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage _
L301	81	Weight	\mathbf{C}	R	1/10	Used
		Numeric value of weight				
L302	187	Weight Qualifier	C	ID	1/2	Used
		Code defining the type of weight				
		Code NAME N Actual Net Weight				
		N Actual Net Weight				
L303	60	Freight Rate	\mathbf{C}	R	1/9	Used
		Rate that applies to the specific commodity				
L304	122	Rate/Value Qualifier	C	ID	2/2	Used
		Code qualifying how to extend charges or interpret value				
		Refer to 0401010 Data Element Dictionary for acceptable code value				
L305	58	Charge	O	N2	1/12	Used
		For a line item: freight or special charge; for the total invoice: the total		-		
T 20.6	101	expressed in the standard monetary denomination for the currency sp			1.0	** *
L306	191	Advances	0	N2	1/9	Used
		Incidental charges occurring during transportation which are not gen freight charges (examples - stop charges, diversion and reconsignme				
		the standard monetary denomination for the currency specified	iit, icii	ig) exp	resseu III	
L307	117	Prepaid Amount	0	N2	1/9	Used
1207	11,	Money paid at point of origin (usually by shipper) expressed in the s	•			Osca
		denomination for the currency specified				
L311	80	Lading Quantity	O	N0	1/7	Used
		Number of units (pieces) of the lading commodity				

Segment: ${\bf SE}$ 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.

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	_Usage _
SE01	96	Number of Included Segments	M	N0	1/10	Must use
GT04		Description: Total number of segments included in a transaction set including ST and SE segments			440	
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
		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

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

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

Element Summary:

Ref _	<u>Id</u> _	Element Name	Req	Type	Min/Max	Usage
GE01	97	Number of Transaction Sets Included	M	N0	1/6	Must use
		Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA

Interchange Control Trailer

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

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

Element Summary:

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