417 Rail Carrier Waybill Interchange

Functional Group ID=WB

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Rail Carrier Waybill Interchange Transaction Set (417) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide the rail carrier with detailed movement instructions pertinent to a rail carrier shipment and is used by all Class I rail carriers in the United States and Canada.

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	0100	ST	Transaction Set Header	M	1		
	0200	ZC1	Beginning Segment for Data Correction or Change	O	1		
	0300	BX	General Shipment Information	O	1		n1
	0400	BNX	Rail Shipment Information	O	1		
	0500	N9	Reference Identification	O	30		
			LOOP ID - N7			500	
M	0800	N7	Equipment Details	M	1		
	1300	G4	Scale Identification	O	1		
	1800	N8	Waybill Reference	O	499		
M	2000	F9	Origin Station	M	1		
M	2100	D9	Destination Station	M	1		
			LOOP ID - N1			15	
M	2200	N1	Name	M	1		
	2400	N4	Geographic Location	O	1		
M	4700	R2	Route Information	M	13		
			LOOP ID - LX			25	
M	5400	LX	Assigned Number	M	1		
M	5500	L5	Description, Marks and Numbers	M	15		
			LOOP ID - L0			25	
	5700	L0	Line Item - Quantity and Weight	O	1		
M	8100	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. BX05 contains the Standard Carrier Alpha Code (SCAC) of the original roadhaul carrier receiving the shipment.

Segment:		**ST** Transaction Set Header			
Position:		0100			
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).		
		2	The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition.		
Comments:					

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
M	**ST01**	**143**	**Transaction Set Identifier Code**	**M**	**1**	**ID 3/3**
			Code uniquely identifying a Transaction Set			
			417 Rail Carrier Waybill Interchange			
M	**ST02**	**329**	**Transaction Set Control Number**	**M**	**1**	**AN 4/9**
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			

Segment:	**ZC1** Beginning Segment for Data Correction or Change			

Segment: **ZC1** Beginning Segment for Data Correction or Change
Position: 0200
Loop:
Level:
Usage: Optional
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Syntax Notes:
Semantic Notes: 1 If ZC108 is "R" (Rail), then ZC102 is required.
 2 ZC109 is the equipment check digit for the equipment number in ZC103.
Comments: 1 For any rail shipment, ZC102 is required.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
	ZC101	145	**Shipment Identification Number**	O	1	AN 1/30
			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)			
	ZC102	206	**Equipment Initial**	O	1	AN 1/4
			Prefix or alphabetic part of an equipment unit's identifying number			
M	ZC103	207	**Equipment Number**	M	1	AN 1/10
			Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)			
M	ZC104	244	**Transaction Reference Number**	M	1	AN 1/15
			Sender's assigned number for referenced transaction set			
M	ZC105	243	**Transaction Reference Date**	M	1	DT 8/8
			Date of referenced transaction set expressed in format CCYYMMDD where CC represents the first two digits of the calendar year			
M	ZC106	202	**Correction Indicator**	M	1	ID 2/2
			Code used to indicate that the transaction set contains information which corrects previous information			
			CO Correction			
M	ZC107	140	**Standard Carrier Alpha Code**	M	1	ID 2/4
			Standard Carrier Alpha Code			
M	ZC108	91	**Transportation Method/Type Code**	M	1	ID 1/2
			Code specifying the method or type of transportation for the shipment			
			R Rail			

Segment: **BX** General Shipment Information
Position: 0300
Loop:
Level:
Usage: Optional
Max Use: 1
Purpose: To transmit identification numbers and other basic shipment data
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name			Attributes	
M	BX01	353	**Transaction Set Purpose Code**	M	1	ID 2/2	
			Code identifying purpose of transaction set				
			04	Change			
M	BX02	91	**Transportation Method/Type Code**	M	1	ID 1/2	
			Code specifying the method or type of transportation for the shipment				
			R	Rail			
M	BX03	146	**Shipment Method of Payment**	M	1	ID 2/2	
			Code identifying payment terms for transportation charges				
			CC	Collect			
	BX04	145	**Shipment Identification Number**	O	1	AN 1/30	
			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)				
	BX05	140	**Standard Carrier Alpha Code**	O	1	ID 2/4	
			Standard Carrier Alpha Code				
	BX06	188	**Weight Unit Code**	O	1	ID 1/1	
			Code specifying the weight unit				
			L	Pounds			
	BX07	147	**Shipment Qualifier**	O	1	ID 1/1	
			Code defining relationship of this shipment with respect to other shipments given to the carrier at the same time				
			M	Master Bill of Lading for Assembly, Distribution and Volume Shipment			
				A bill of lading with multiple delivery locations			
	BX08	226	**Section Seven Code**	O	1	ID 1/1	
			Code indicating applicability of section seven option (if not transmitted assume not in effect)				
			N	Not in Effect			
	BX12	199	**Confidential Billing Request Code**	O	1	ID 1/1	
			Code used by the shipper to request that the carrier inhibit origin identification information from the invoice transaction sets and/or rate and charges from waybill documents and transaction sets when shipment moves under confidential contract rates				
			N	Not Applicable			
	BX13	714	**Goods and Services Tax Reason Code**	O	1	ID 1/1	
			Code required to identify the reason for a 0% rated goods and services tax				
			2	Outbound Goods and Services Tax Declaration			

Segment: **BNX** **Rail Shipment Information**
Position: 0400
Loop:
Level:
Usage: Optional
Max Use: 1
Purpose: To transmit rail-specific shipment data
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name		Attributes	
BNX01	**460**	**Shipment Weight Code**	**O**	**1**	**ID 1/1**
		Code indicating the way by which weights are obtained for a particular shipment			
		S Shipper Certified Scale Weights			
BNX03	**11**	**Billing Code**	**O**	**1**	**ID 1/1**
		Code indicating type of Bill			
		M Multiple Shipment Billing			

Segment:	**N9** Reference Identification					
Position:	0500					
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

	Ref. Des.	Data Element	Name	Attributes		
M	N901	128	**Reference Identification Qualifier**	M	1	**ID 2/3**
			Code qualifying the Reference Identification			
			BM Bill of Lading Number			
			CX Consignment Classification ID			
			ZE Coal Authority Number			
	N902	127	**Reference Identification**	X	1	**AN 1/50**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
	N904	373	**Date**	O	1	**DT 8/8**
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			
	N905	337	**Time**	X	1	**TM 4/8**
			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)			
	N906	623	**Time Code**	O	1	**ID 2/2**
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow			
			ET Eastern Time			

	Segment:	**N7**	Equipment Details

Position: 0800
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. Des.	Data Element	Name		Attributes	
	N701	206	Equipment Initial	O	1	AN 1/4
			Prefix or alphabetic part of an equipment unit's identifying number			
M	N702	207	Equipment Number	M	1	AN 1/10
			Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)			
	N703	81	Weight	X	1	R 1/10
			Numeric value of weight			
	N704	187	Weight Qualifier	X	1	ID 1/2
			Code defining the type of weight			
			N Actual Net Weight			
	N705	167	Tare Weight	X	1	N0 3/8
			Weight of the equipment			
	N711	40	Equipment Description Code	O	1	ID 2/2
			Code identifying type of equipment used for shipment			
			RR Rail Car			
	N715	567	Equipment Length	O	1	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)			
	N716	571	Tare Qualifier Code	X	1	ID 1/1
			Code identifying the type of tare			
			M Marked			
	N720	65	Height	O	1	R 1/8
			Vertical dimension of an object measured when the object is in the upright position			
	N721	189	Width	O	1	R 1/8
			Shorter measurement of the two horizontal dimensions measured with the object in the upright position			
	N724	301	Car Type Code	O	1	ID 1/4
			Code specifying type of rail car or intermodal equipment type and its general characteristics			

Segment: **G4** **Scale Identification**
Position: 1300
Loop: N7   Mandatory
Level:
Usage: Optional
Max Use: 1
Purpose: To identify the scale type and the location and time a shipment is weighed
Syntax Notes:
Semantic Notes: 1   G403 is the scaling company's name.
            2   G404 is the event date.
            3   G405 is the event time.

Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes		
M	G401	19	**City Name**	M	1	**AN 2/30**
			Free-form text for city name			
M	G402	156	**State or Province Code**	M	1	**ID 2/2**
			Code (Standard State/Province) as defined by appropriate government agency			
	G403	93	**Name**	O	1	**AN 1/60**
			Free-form name			
M	G404	373	**Date**	M	1	**DT 8/8**
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			
	G405	337	**Time**	O	1	**TM 4/8**
			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)			
	G406	570	**Scale Type Code**	O	1	**ID 1/1**
			Code identifying the type of scale			
			R Rail			

Segment:	**N8** Waybill Reference				

Segment: **N8** Waybill Reference
Position: 1800
Loop:
Level:
Usage: Optional
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

	Ref. Des.	Data Element	Name			Attributes
M	**N801**	**186**	**Waybill Number**	**M**	**1**	**N0 1/6**
			Carrier accounting number of the waybill for the inbound movement			
M	**N802**	**373**	**Date**	**M**	**1**	**DT 8/8**
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year			

		Segment:	**F9** Origin Station
	Position:	2000
	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

	Ref. Des.	Data Element	Name		Attributes	
	F901	573	**Freight Station Accounting Code**	O	1	**ID 1/5**
			Code (Freight Station Accounting) (AAR Managed Code for Locations)			
M	F902	19	**City Name**	M	1	**AN 2/30**
			Free-form text for city name			
M	F903	156	**State or Province Code**	M	1	**ID 2/2**
			Code (Standard State/Province) as defined by appropriate government agency			
	F908	154	**Standard Point Location Code**	O	1	**ID 6/9**
			Code (Standard Point Location) defined by National Motor Freight Tariff Association (NMFTA) or the National Transportation Agency of Canada (NTA) point development group as the official code assigned to a city or point (for ratemaking purposes) within a city			

	Segment:	**D9** Destination Station			
	Position:	2100			
	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

	Ref. Des.	Data Element	Name	Attributes		
	D901	**573**	**Freight Station Accounting Code**	O	1	ID 1/5
			Code (Freight Station Accounting) (AAR Managed Code for Locations)			
M	**D902**	**19**	**City Name**	M	1	AN 2/30
			Free-form text for city name			
M	**D903**	**156**	**State or Province Code**	M	1	ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency			
	D908	**154**	**Standard Point Location Code**	O	1	ID 6/9
			Code (Standard Point Location) defined by National Motor Freight Tariff Association (NMFTA) or the National Transportation Agency of Canada (NTA) point development group as the official code assigned to a city or point (for ratemaking purposes) within a city			

Segment:		**N1** Name				
Position:		2200				
Loop:		N1	Mandatory			
Level:						
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.

<p align="center">Data Element Summary</p>

	Ref. Des.	Data Element	Name		Attributes		
M	**N101**	**98**	**Entity Identifier Code**		**M**	**1**	**ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual				
			CN	Consignee			
			SH	Shipper			
	N102	**93**	**Name**		**X**	**1**	**AN 1/60**
			Free-form name				
	N103	**66**	**Identification Code Qualifier**		**X**	**1**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)				
			C5	Customer Identification File			
	N104	**67**	**Identification Code**		**X**	**1**	**AN 2/80**
			Code identifying a party or other code				

Segment: # N4 Geographic Location

Position: 2400
Loop: N1   Mandatory
Level:
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1   Only one of N402 or N407 may be present.
2   If N406 is present, then N405 is required.
3   If N407 is present, then N404 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

Ref. Des.	Data Element	Name	Attributes		
N401	**19**	**City Name**	O	1	AN 2/30
		Free-form text for city name			
N402	**156**	**State or Province Code**	X	1	ID 2/2
		Code (Standard State/Province) as defined by appropriate government agency			
N404	**26**	**Country Code**	X	1	ID 2/3
		Code identifying the country			

	Segment:		**R2** Route Information
	Position:	4700	
	Loop:		
	Level:		
	Usage:	Mandatory	
	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

	Ref. Des.	Data Element	Name	Attributes		
M	**R201**	**140**	**Standard Carrier Alpha Code**	**M**	**1**	**ID 2/4**
			Standard Carrier Alpha Code			
M	**R202**	**133**	**Routing Sequence Code**	**M**	**1**	**ID 1/2**
			Code describing the relationship of a carrier to a specific shipment movement			
			D DELY (Delivery Switch Carrier)			
			S Origin Carrier, Shipper's Routing (Rail)			
	R203	**19**	**City Name**	**O**	**1**	**AN 2/30**
			Free-form text for city name			
	R204	**154**	**Standard Point Location Code**	**O**	**1**	**ID 6/9**
			Code (Standard Point Location) defined by National Motor Freight Tariff Association (NMFTA) or the National Transportation Agency of Canada (NTA) point development group as the official code assigned to a city or point (for ratemaking purposes) within a city			

Segment: **LX** **Assigned Number**
Position: 5400
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

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

Segment:	**L5** Description, Marks and Numbers
Position:	5500
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

Ref. Des.	Data Element	Name	Attributes		
L501	**213**	**Lading Line Item Number**	O	1	N0 1/3
		Sequential line number for a lading item			
L502	**79**	**Lading Description**	O	1	AN 1/50
		Description of an item as required for rating and billing purposes			
L503	**22**	**Commodity Code**	X	1	AN 1/30
		Code describing a commodity or group of commodities			
L504	**23**	**Commodity Code Qualifier**	X	1	ID 1/1
		Code identifying the commodity coding system used for Commodity Code			
		T Standard Transportation Commodity Code (STCC)			

Segment:	**L0** Line Item - Quantity and Weight

Position: 5700
Loop: L0   Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To specify quantity, weight, volume, and type of service for a line item including applicable "quantity/rate-as" data

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	1	N0 1/3
		Sequential line number for a lading item			
L004	81	**Weight**	X	1	R 1/10
		Numeric value of weight			
L005	187	**Weight Qualifier**	X	1	ID 1/2
		Code defining the type of weight			
		N Actual Net Weight			
L008	80	**Lading Quantity**	X	1	N0 1/7
		Number of units (pieces) of the lading commodity			
L009	211	**Packaging Form Code**	X	1	ID 3/3
		Code for packaging form of the lading quantity			
		BLK Bulk			

Segment:	**SE** Transaction Set Trailer				

Segment: **SE** Transaction Set Trailer
Position: 8100
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

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