

**BNSF 322 Implementation Guideline**



**ELECTRONIC DATA INTERCHANGE (EDI)**

**322**  
**TERMINAL OPERATIONS AND INTERMODAL**  
**RAMP ACTIVITY**

**USING**  
**ASC X12 TRANSACTION SET 322**  
**VERSION 004010**

**07/01/04**

## BNSF 322 Implementation Guideline

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## BNSF 322 Implementation Guideline

***Introduction***

Transaction Set 322: Terminal Operations and Intermodal Ramp Activity  
Functional Group: SO

This transaction set contains the format and establishes the data contents of the Terminal Operations and Intermodal Ramp Activity Transaction Set (322) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide all the information necessary for a railroad, terminal operation, port authority, or Intermodal ramp to communicate rail events (e.g. arrivals, departures), as well as terminal and Intermodal ramp activities (e.g., “ingates” or “outgates”), to authorized parties to a shipment.

Burlington Northern Santa Fe will transmit and accept the Terminal Operations and Intermodal Ramp Activity transaction published by Data Interchange Standards Association (DISA) for ASC X12. The following guidelines are all-inclusive and identify unique requirements for use of the ASC X12 322 transaction set when transmitting data to, and receiving data from, Burlington Northern Santa Fe.

To obtain X12 standards and documentation, contact:

Data Interchange Standards Association, Inc.  
7600 Leesburg Pike, Suite 430  
Falls Church, VA 22043  
Phone: 703-970-4480  
Fax: 703-970-4488  
Web: <http://www.disa.org/>

Or:

Washington Publishing Co.  
5740 Industry Lane – 2<sup>nd</sup> Floor  
Frederick, MD 21704  
Phone: 301-696-0050  
Fax: 301-696-0024  
Web: <http://www.wpc-edi.com/>

## BNSF 322 Implementation Guideline

***Sample 322***

ST\*322\*1001  
Q5\*I\*20040101\*1200\*PT\*\*OAKINTGAT\*CA  
N7\*ABCD\*123456\*37071\*G\*\*\*\*\*CC\*ABCD\*\*\*4000\*\*\*6\*\*\*U201\*ABCD  
M7\*1760553  
W2\*ABCD\*123456\*\*CC\*L\*\*\*\*\*NONZ\*654321  
R4\*5\*SL\*876411\*OAKINTGAT\*\*\*\*CA  
R4\*6\*SL\*876411\*OAKINTGAT\*\*\*\*CA  
R4\*7\*SL\*261000\*NORFOLK\*\*\*\*VA  
R4\*D\*\*\*OAKLAND  
R4\*L\*\*\*NAGOYA  
H3\*IP  
N1\*SH\*SHIPPER  
N1\*CN\*CONSIGNEE  
N1\*MC\*CARRIER\*2\*XYZI  
N9\*WY\*805700  
N9\*TN\*4321  
N9\*BN\*ABC1234  
SE\*18\*1001

## BNSF 322 Implementation Guideline

***The Transaction***

The transaction set is used to describe the electronic transmission of a single document between one company's computer and another company's computer.

EDI transactions are defined by segments, and each item within the segment becomes a data element. Data element type, requirement designator, and length are described below. These identifiers are listed for each data element throughout the remainder of this guide.

***Data Element Type***

Specifies the characters that may be used.

Nn	Numeric	N indicates that it is numeric; <i>n</i> indicates a decimal place.
R	Decimal	R indicates an optional decimal point for integer values or a required decimal for decimal values. BNSF can accept positive and decimal values.
ID	Identifier	A specific code taken from a table defined in the Data Element Dictionary, such as unit of measure.
AN	String	A series of alpha/numeric characters.
DT	Date	YYMMDD (ISO standard date).
TM	Time	HHMM expressed in a 24-hr clock format.

***Data Element Requirement Designator***

Indicates when this element must be included in an electronic document.

M	Mandatory	The data element must be used in the segment.
C	Conditional	The data element may be required in the segment, based on whether another element is used.
O	Optional	The data element may or may not be used in the segment at the option of the user.

***Data Element Length***

The minimum and maximum length of the characters in the data element.

1/15	Indicates the "1" is the minimum acceptable value and "15" is the maximum acceptable value.
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## BNSF 322 Implementation Guideline

**SEGMENT ISA – Interchange Control Header****MANDATORY**

Maximum User: 1

Example:

ISA\*00\*.....\*00\*.....\*02\*BNSF.....\*ZZ\*CUSTOMERID.....\*981231\*0034\*U\*00401\*123456789\*1\*P\*~

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Authorization Information Qualifier	I01 / ID	02 / 02	M	00
2	Authorization Information	I02 / AN	10 / 10	M	
3	Security Information Qualifier	I03 / ID	02 / 02	M	00
4	Security Information	I04 / AN	10 / 10	M	
5	Interchange Sender ID Qualifier	I05 / ID	02 / 02	M	Sender's ID qualifier
6	Interchange Sender ID	I06 / AN	15 / 15	M	Sender's ID
7	Interchange Receiver ID Qualifier	I05 / ID	02 / 02	M	Receiver's ID qualifier
8	Interchange Receiver ID	I07 / AN	15 / 15	M	Receiver's ID
9	Interchange Date	I08 / DT	06 / 06	M	YYMMDD
10	Interchange Time	I09 / TM	04 / 04	M	HHMM
11	Interchange Control Standards Identifier	I10 / ID	01 / 01	M	U = US EDI Community of ASC X12, TDCC, and UCS
12	Interchange Control Version Number	I11 / ID	05 / 05	M	00401 = X12 version 4010
13	Interchange Control Number	I12 / N0	09 / 09	M	Sender's interchange control number
14	Acknowledgement Requested	I13 / ID	01 / 01	M	0 = No acknowledgement needed 1 = Acknowledgement requested
15	Usage Indicator	I14 / ID	01 / 01	M	P = Production T = Test
16	Component Element Separator	I15 /	01 / 01	M	BNSF uses a tilde " ~ "

**NOTE:** Spaces must be used when the maximum length requirement is not met by the contents of the data element. Spaces are shown above in the example ISA by periods ( . ). These are not part of the ISA, but used here to illustrate that spaces are required even if no data is supplied within the position. The ISA segment must be exactly 106 positions long, including the ISA, all delimiters and mandatory fields, plus a Hex 15 immediately following the ISA16 to indicate a carriage return/line feed.

## BNSF 322 Implementation Guideline

***SEGMENT GS – Functional Group Header*****MANDATORY**

Maximum Use: 1

Example:

GS\*SO\*SENDERID\*RECEIVERID\*20040101\*1200\*1001\*X\*004010

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Functional Identifier Code	479 / ID	02 / 02	M	SO = 322
2	Application Sender ID	142 / AN	02 / 15	M	Sender's ID
3	Application Receiver ID	124 / AN	02 / 15	M	Receiver's ID
4	Group Date	373 / DT	08 / 08	M	YYYYMMDD of transmission
5	Group Time	337 / TM	04 / 04	M	HHMM of transmission
6	Group Control Number	28 / N0	01 / 09	M	Sender's message control number
7	Agency Code	455 / ID	01 / 02	M	X = ASC X12
8	Version	480 / AN	01 / 12	M	004010 = Sender's transmission standard version.

## BNSF 322 Implementation Guideline

***SEGMENT ST – Transaction Set Header*****MANDATORY**

Maximum Use: 1 per transaction set

Example:

ST\*322\*10010001

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Transaction Set Identifier Code	143 / ID	03 / 03	M	322
2	Transaction Set Control Number	329 / AN	04 / 09	M	Sender's message control number



## BNSF 322 Implementation Guideline

***SEGMENT ZC1 – Beginning Segment For Data Correction Or Change*****OPTIONAL**

Maximum Use: 1 per transaction set

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Shipment ID Number	145 / AN	01 / 30	O	
2	Equipment Initial	206 / AN	01 / 04	O	
3	Equipment Number	207 / AN	01 / 10	M	
4	Transaction Reference Number	244 / AN	01 / 15	M	
5	Transaction Reference Date	243 / DT	08 / 08	M	
6	Correction Indicator	202 / ID	02 / 02	M	
7	Standard Carrier Alpha Code	140 / ID	02 / 04	M	
8	Transport Type Code	91 / ID	01 / 02	M	

## BNSF 322 Implementation Guideline

**SEGMENT Q5 – Status Details****MANDATORY**

Maximum Use: 1 per transaction set

Example:

Q5\*AR\*20040101\*1200\*CT\*\*FTMADISON\*IA

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Status Code	157 / ID	01 / 02	O	A = Arrived B = Bad order G = Released from bad order I = In gate J = Delivered to connecting line P = Departed terminal location R = Received from prior carrier AL = Loaded on rail AR = Rail arrival at destination NF = Free time to expire NT = Notification OA = Out gate RL = Rail departure from origin UR = Unloaded from rail
2	Date	373 / DT	08 / 08	O	YYYYMMDD of status
3	Time	337 / TM	04 / 04	C	HHMM of status
4	Time Code	623 / ID	02 / 02	C	AT = Alaskan CT = Central ET = Eastern LT = Local MT = Mountain NT = Newfoundland PT = Pacific TT = Atlantic
5	Status Reason Code	641 / ID	03 / 03	O	Not used
6	City Name	19 / AN	02 / 30	C	Rail location for status update
7	State or Province Code	156 / ID	02 / 02	O	State or Province for status update
8	Country Code	26 / ID	02 / 03	O	Not used
9	Equipment Initial	206 / AN	01 / 04	O	Not used
10	Equipment Number	207 / AN	01 / 10	O	Not used
11	Reference Number Qualifier	128 / ID	02 / 03	C	Not used
12	Reference Number	127 / AN	01 / 30	C	Not used
13	Direction ID Code	1280 / ID	01 / 01	O	Not used
14	Reference Number Qualifier	128 / ID	02 / 03	C	Not used
15	Reference Number	127 / AN	01 / 30	C	Not used
16	Direction ID Code	1280 / ID	01 / 01	O	Not used

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17	Percent	954 / R	01 / 10	O	Not used
18	Pick-up Delivery Code	108 / ID	01 / 02	O	Not used

## BNSF 322 Implementation Guideline

**SEGMENT N7 – Equipment Details****MANDATORY**

Maximum Use: 1 loop per transaction set

Example:

N7\*BNSF\*123456\*43459\*G\*\*\*\*\*CN\*BNSF\*\*\*4000\*\*\*7\*\*\*\*\*U203\*BNSF

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Equipment Initial	206 / AN	01 / 04	M	Equipment's identifying initial
2	Equipment Number	207 / AN	01 / 06	M	Equipment's identifying number
3	Weight	81 / R	01 / 10	O	Numeric value of the weight
4	Weight Qualifier	187 / ID	01 / 02	C	E = Estimated weight G = Gross weight N = Net weight CE = Certified weight
5	Tare Weight	167 / N0	03 / 08	C	Not used
6	Weight Allowance	232 / N0	02 / 06	O	Not used
7	Dunnage	205 / N0	01 / 06	O	Not used
8	Volume	183 / R	01 / 08	C	Not used
9	Volume Unit Qualifier	184 / ID	01 / 01	C	Not used
10	Ownership Code	102 / ID	01 / 01	O	Not used
11	Equipment Description Code	40 / ID	02 / 02	O	CC = Container on chassis CH = Chassis CN = Container RR = Railcar TL = Trailer
12	Standard Carrier Alpha Code	140 / ID	02 / 04	O	SCAC
13	Temperature Control	319 / AN	03 / 06	O	Not used
14	Position	219 / AN	01 / 03	O	Not used
15	Equipment Length	567 / N0	04 / 05	O	Format is feet/inches: 40 ft. = 4000
16	Tare Qualifier Code	571 / ID	01 / 01	C	Not used
17	Weight Unit Code	188 / ID	01 / 01	O	L = Pounds
18	Equipment Check Digit	761 / N0	01 / 01	O	Check digit for equipment
19	Type of Service Code	56 / ID	02 / 02	O	Not used
20	Height	65 / R	01 / 08	O	Not used
21	Width	189 / R	01 / 08	O	Not used
22	Equipment Type	24 / ID	04 / 04	O	Code identifying equipment's ISO size & type
23	Standard Carrier Alpha Code	140 / ID	02 / 04	O	SCAC
24	Car Type Code	301 / ID	01 / 04	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT V4 – Cargo Location Reference*****OPTIONAL**

Maximum Use: 1 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Vessel Stowage Location	877 / AN	01 / 12	M	

## BNSF 322 Implementation Guideline

***SEGMENT DTM – Date/Time Reference*****OPTIONAL**

Maximum Use: 2 per N7 loop

Example:

DTM\*017\*20040101\*1200\*LT

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Date/Time Qualifier	374 / ID	03 / 03	M	017 = Estimated delivery 069 = Promised for delivery
2	Date	373 / DT	08 / 08	C	YYYYMMDD
3	Time	337 / TM	04 / 04	C	HHMM
4	Time Code	623 / ID	02 / 02	C	AT = Alaskan CT = Central ET = Eastern LT = Local MT = Mountain NT = Newfoundland PT = Pacific TT = Atlantic
5	Date/Time Format Qualifier	1250 / ID	02 / 02	O	Not used
6	Date/Time Period	1251 / AN	01 / 35	C	Not used

## BNSF 322 Implementation Guideline

***SEGMENT M7 – Seal Numbers*****OPTIONAL**

Maximum Use: 1 per N7 loop

Example:

M7\*SN1234567\*SN1234568

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Seal Number	225 / AN	02 / 15	M	Unique number on seal used to close a shipment
2	Seal Number	225 / AN	02 / 15	O	Unique number on seal used to close a shipment
3	Seal Number	225 / AN	02 / 15	O	Not used
4	Seal Number	225 / AN	02 / 15	O	Not used
5	Entity ID Code	98 / ID	02 / 03	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT W09 – Equipment and Temperature*****OPTIONAL**

Maximum Use: 1 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Equipment Description Code	40 / ID	02 / 02	M	
2	Temperature	408 / R	01 / 04	C	
3	Unit/Basis For Measurement Code	355 / ID	02 / 02	C	
4	Temperature	408 / R	01 / 04	C	
5	Unit/Basis For Measurement Code	355 / ID	02 / 02	C	
6	Free-Form Message	3 / AN	01 / 60	O	
7	Vent Set Code	1122 / ID	01 / 01	O	
8	Percent	488 / N0	01 / 03	O	
9	Quantity	380 / R	01 / 15	O	



## BNSF 322 Implementation Guideline

**SEGMENT W2 – Equipment Identification****OPTIONAL**

Maximum Use: 1 per N7 loop

Example:

W2\*BNSF\*123456\*\*CN\*L

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Equipment Initial	206 / AN	01 / 04	M	Equipment's identifying initial
2	Equipment Number	207 / AN	01 / 06	M	Equipment's identifying number
3	Commodity Code	22 / AN	01 / 30	O	Not used
4	Equipment Description Code	40 / ID	02 / 02	M	CC = Container on chassis CH = Chassis CN = Container RR = Railcar TL = Trailer
5	Equipment Status Code	578 / ID	01 / 02	M	E = Empty L = Load
6	Net Tons	577 / N0	01 / 03	O	Not used
7	Intermodal Service Code	177 / ID	01 / 02	O	Not used
8	Car Service Order Code	240 / ID	03 / 05	O	Not used
9	Date	373 / DT	08 / 08	C	Not used
10	Type of Locomotive Maintenance Code	502 / AN	02 / 02	C	Not used
11	Equipment Initial	206 / AN	01 / 04	C	Used when W204 = "CC". This will be the chassis initial, "NONZ" will be used when initial is unknown
12	Equipment Number	207 / AN	01 / 06	C	Used when W204 = CC. This will be the chassis number
13	Equipment Check Digit	761 / N0	01 / 01	O	Not used
14	Position	219 / AN	01 / 03	O	Not used
15	Car Type Code	301 / ID	01 / 04	O	Not used
16	Yes/No Condition or Response Code	1073 / ID	01 / 01	O	Not used
17	AEI Tag Status Code	1554 / ID	01 / 01	O	Not used
18	Equipment Orientation	1543 / ID	01 / 01	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT NA – Cross-Reference Equipment*****OPTIONAL**

Maximum Use: 1 per N7 loop

Example:

NA\*\*\*BNSF\*123456\*F

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Reference Number Qualifier	128 / ID	02 / 03	O	Not used
2	Reference Number	127 / AN	01 / 30	C	Not used
3	Equipment Initial	206 / AN	01 / 04	M	Equipment's identifying initial
4	Equipment Number	207 / AN	01 / 06	M	Equipment's identifying number
5	Cross Reference Type Code	231 / ID	01 / 01	O	F = Conveying flat car
6	Position	219 / AN	01 / 03	O	Not used
7	Standard Carrier Alpha Code	140 / ID	02 / 04	O	Not used
8	Equipment Length	567 / N0	04 / 05	O	Not used
9	Standard Carrier Alpha Code	140 / ID	02 / 04	O	Not used
10	Chassis Type	845 / ID	02 / 02	O	Not used
11	Yes/No Condition or Response Code	1073 / ID	01 / 01	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT GR5 – Loading Details*****OPTIONAL**

Maximum Use: 10 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Special Handling Code	152 / ID	02 / 03	M	
2	Surface/Layer or Position Code	752 / ID	02 / 02	C	
3	Measurement Value	739 / R	01 / 20	C	
4	Unit/Basis For Measurement Code	355 / ID	02 / 02	C	
5	Status Reason Code	641 / ID	03 / 03	O	

## BNSF 322 Implementation Guideline

***SEGMENT Y7 – Priority*****OPTIONAL**

Maximum Use: 1 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Priority	467 / N0	01 / 01	O	
2	Priority Code	470 / N0	01 / 01	C	
3	Priority Code Qualifier	471 / AN	01 / 01	C	
4	Port Call File Number	468 / N0	04 / 04	O	
5	Date	373 / DT	08 / 08	O	

## BNSF 322 Implementation Guideline

***SEGMENT V1 – Vessel Information*****OPTIONAL**

Maximum Use: 1 per N7 loop

Example:

V1\*\*VESSELNAME\*\*12345

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Vessel Code	597 / ID	01 / 08	C	Not used
2	Vessel Name	182 / AN	02 / 28	C	Name of ship as documented in Lloyd's Register of Ships
3	Country Code	26 / ID	02 / 03	O	Not used
4	Flight / Voyage Number	55 / AN	02 / 10	O	Identifying designator for the voyage on which the cargo travels
5	Standard Carrier Alpha Code	140 / ID	02 / 04	O	Not used
6	Vessel Requirement Code	249 / ID	01 / 01	O	Not used
7	Vessel Type Code	854 / ID	02 / 02	O	Not used
8	Vessel Code Qualifier	897 / ID	01 / 01	O	Not used
9	Transport Type Code	91 / ID	01 / 02	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT R4 – Port or Terminal*****MANDATORY**

Maximum Use: 6 loops per N7 loop (N7/R4 loop)

Example:

R4\*5\*SL\*537940\*FTMADISON\*\*\*\*IA

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Port or Terminal Function Code	115 / ID	01 / 01	M	1 = Final port of discharge 5 = Activity location 6 = Origin rail terminal 7 = Destination rail terminal D = Port of discharge L = Port of loading
2	Location Qualifier	309 / ID	01 / 02	C	SL = U.S. SPLC
3	Location Identifier	310 / AN	01 / 30	C	Code which identifies location
4	Port Name	114 / AN	02 / 24	O	Port name where ocean carrier originates or terminates its shipments
5	Country Code	26 / ID	02 / 03	O	Not used
6	Terminal Name	174 / AN	02 / 30	O	Not used
7	Pier Number	113 / AN	01 / 04	O	Not used
8	State or Province Code	156 / ID	02 / 02	O	State or Province

## BNSF 322 Implementation Guideline

***SEGMENT DTM – Date/Time Reference*****OPTIONAL**

Maximum Use: 15 per N7/R4 loop

NOTE: *THIS SEGMENT IS NOT USED IN THE R4 LOOP BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Date/Time Qualifier	374 / ID	03 / 03	M	
2	Date	373 / DT	08 / 08	C	
3	Time	337 / TM	04 / 04	C	
4	Time Code	623 / ID	02 / 02	C	
5	Date/Time Format Qualifier	1250 / ID	02 / 02	O	
6	Date/Time Period	1251 / AN	01 / 35	C	

## BNSF 322 Implementation Guideline

***SEGMENT H3 – Special Handling Instructions*****OPTIONAL**

Maximum Use: 2 per N7 loop

Example:

H3\*IP

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Special Handling Code	152 / ID	02 / 03	C	HM = Hazardous material HW = High/Wide load IP = Import XP = Export
2	Special Handling Description	153 / AN	02 / 30	C	Not used
3	Protective Service Code	241 / ID	01 / 04	O	Not used
4	Vent Instruction Code	242 / ID	01 / 07	O	Not used
5	Tariff Application Code	257 / ID	01 / 01	O	Not used



## BNSF 322 Implementation Guideline

***SEGMENT N1 – Name*****OPTIONAL**

Maximum Use: 6 loops per N7 loop (N7/N1 loop)

Example:

N1\*CN\*ABCCOMPANY

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Entity ID Code	98 / ID	02 / 03	M	CN = Consignee MC = Motor carrier SH = Shipper
2	Name	93 / AN	01 / 30	C	Free-form name of party
3	ID Code Qualifier	66 / ID	01 / 02	C	Not used
4	ID Code	67 / AN	02 / 80	O	Not used
5	Entity Relationship Code	706 / ID	02 / 02	O	Not used
6	Entity ID Code	98 / ID	02 / 03	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT N3 – Address*****OPTIONAL**

Maximum Use: 2 per N7/N1 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Address Information	166 / AN	01 / 55	M	
2	Address Information	166 / AN	01 / 55	O	

## BNSF 322 Implementation Guideline

***SEGMENT N4 – Geographic Location*****OPTIONAL**

Maximum Use: 1 per N7/N1 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	City Name	19 / AN	02 / 30	O	
2	State or Province Code	156 / ID	02 / 02	O	
3	Postal Code	116 / ID	03 / 15	O	
4	Country Code	26 / ID	02 / 03	O	
5	Location Qualifier	309 / ID	01 / 02	C	
6	Location Identifier	310 / AN	01 / 30	O	

## BNSF 322 Implementation Guideline

***SEGMENT K1 – Remarks*****OPTIONAL**

Maximum Use: 2 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Free-Form Message	61 / AN	01 / 30	M	
2	Free-Form Message	61 / AN	01 / 30	O	

## BNSF 322 Implementation Guideline

***SEGMENT N9 – Reference Information*****OPTIONAL**

Maximum Use: 6 per N7 loop

Example:

N9\*WY\*12345678

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Reference Number Qualifier	128 / ID	02 / 03	M	BN = Booking number BM = Bill of lading number RE = Pick up number TN = Transaction reference number UT = Unit train ID WY = Waybill number
2	Reference Number	127 / AN	01 / 30	C	Reference number associated with qualifier sent
3	Free-Form Description	369 / AN	01 / 45	C	Not used
4	Date	373 / DT	08 / 08	O	Not used
5	Time	337 / TM	04 / 04	O	Not used
6	Time Code	623 / ID	02 / 02	O	Not used
7	Reference Number Qualifier	128 / ID	02 / 03	O	Not used

## BNSF 322 Implementation Guideline

***SEGMENT L0 – Line Item, Quantity, and Weight*****OPTIONAL**

Maximum Use: 1 loop per N7 loop (N7/L0 loop)

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Lading Line Item Number	213 / N0	01 / 03	O	
2	Billed/Rated-As Quantity	220 / R	01 / 11	C	
3	Billed/Rated-As Qualifier	221 / ID	02 / 02	C	
4	Weight	81 / R	01 / 10	C	
5	Weight Qualifier	187 / ID	01 / 02	C	
6	Volume	183 / R	01 / 08	C	
7	Volume Unit Qualifier	184 / ID	01 / 01	C	
8	Lading Quantity	80 / N0	01 / 07	C	
9	Packaging Form Code	211 / ID	03 / 03	C	
10	Dunnage Description	458 / AN	02 / 25	O	
11	Weight Unit Code	188 / ID	01 / 01	O	
12	Type of Service Code	56 / ID	02 / 02	O	
13	Quantity	380 / R	01 / 15	C	
14	Packaging Form Code	211 / ID	03 / 03	O	
15	Yes/No Condition or Response Code	1073 / ID	01 / 01	C	

## BNSF 322 Implementation Guideline

***SEGMENT L5 – Description, Marks, and Numbers*****OPTIONAL**

Maximum Use: 1 per N7/L0 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Lading Line Item Number	213 / N0	01 / 03	O	
2	Lading Description	79 / AN	01 / 50	O	
3	Commodity Code	22 / AN	01 / 30	C	
4	Commodity Code Qualifier	23 / ID	01 / 01	C	
5	Packaging Code	103 / AN	03 / 35	O	
6	Marks and Numbers	87 / AN	01 / 48	C	
7	Marks and Number Qualifier	88 / ID	01 / 02	O	
8	Commodity Code Qualifier	23 / ID	01 / 01	C	
9	Commodity Code	22 / AN	01 / 30	C	
10	Compartment ID Code	595 / ID	01 / 01	O	

## BNSF 322 Implementation Guideline

***SEGMENT H1 – Hazardous Material*****OPTIONAL**

Maximum Use: 3 per N7/L0 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Hazardous Material Code	62 / AN	04 / 10	M	
2	Hazardous Material Class Code	209 / AN	01 / 04	O	
3	Hazardous Material Code Qualifier	208 / ID	01 / 01	O	
4	Hazardous Material Description	64 / AN	02 / 30	O	
5	Hazardous Material Contact	63 / AN	01 / 24	O	
6	Hazardous Material Page	200 / AN	01 / 06	O	
7	Flashpoint Temperature	77 / N	01 / 03	C	
8	Unit/Basis For Measurement Code	355 / ID	02 / 02	C	
9	Packing Group Code	254 / ID	01 / 03	O	



## BNSF 322 Implementation Guideline

***SEGMENT L3 – Total Weight and Charges*****OPTIONAL**

Maximum Use: 2 per N7 loop

NOTE: *THIS SEGMENT IS NOT USED BY BNSF*

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Weight	81 / R	01 / 10	C	
2	Weight Qualifier	187 / ID	01 / 02	C	
3	Freight Rate	60 / R	01 / 09	C	
4	Rate/Value Qualifier	122 / ID	02 / 02	C	
5	Charge	58 / N2	01 / 12	O	
6	Advances	191 / N2	01 / 09	O	
7	Prepaid Amount	117 / N2	01 / 09	O	
8	Special Charge or Allowance Code	150 / ID	03 / 03	O	
9	Volume	183 / R	01 / 08	C	
10	Volume Unit Qualifier	184 / ID	01 / 01	C	
11	Lading Quantity	80 / N0	01 / 07	O	
12	Weight Unit Code	188 / ID	01 / 01	O	
13	Tariff Number	171 / AN	01 / 07	O	
14	Declared Value	74 / N2	02 / 12	C	
15	Rate/Value Qualifier	122 / ID	02 / 02	C	

## BNSF 322 Implementation Guideline

***SEGMENT SE – Transaction Set Trailer*****MANDATORY**

Maximum Use: 1 per transaction set

Example:

SE\*21\*10010001

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Number of Included Segments	96 / ID	01 / 10	M	The number of segments sent in the transaction set, including both the ST and SE segments
2	Transaction Set Control Number	329 / AN	01 / 09	M	Sender's message control number, this number must match the number sent in the ST segment

## BNSF 322 Implementation Guideline

***SEGMENT GE – Functional Group Trailer*****MANDATORY**

Maximum Use: 1

Example:

GE\*1\*1001

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Number of Included Transaction Sets	97 / N0	01 / 06	M	This reflects the number of sets transmitted
2	Group Control Number	28 / N0	01 / 09	M	Sender's group control number, this number must match the number sent in the GS segment

## BNSF 322 Implementation Guideline

***SEGMENT IEA – Interchange Control Trailer*****MANDATORY**

Maximum Use: 1

Example:

IEA\*1\*123456789

#	Name	Data Element # / Type	Min/Max	REQ	Contents
1	Number of Included Functional Groups	I16 / N0	01 / 05	M	This reflects the number of functional groups sent
2	Interchange Control Number	I12 / N0	01 / 09	M	Sender's interchange control number, this number must match the number sent in the ISA segment