

EDI

ELECTRONIC DATA INTERCHANGE

820 PAYMENT ORDER / REMITTANCE ADVICE

IMPLEMENTATION GUIDELINE

USING ASC X12 TRANSACTION SET 820 VERSION 004010 MAY 1999

Version 4010 May 1999

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Introduction

Transaction Set 820: Payment Order/Remittance Advice

The 820 standard provides the format and establishes the data content of the Payment Order/Remittance advice transaction set within the context of an Electronic Data Interchange (EDI) environment. This transaction set is used to transmit remittance and/or payment information to a bank with instructions to begin funds transfer. The bank subsequently passes the funds transfer request to BNSF's bank along with the 820 detail. At settlement, the Railroad's bank passes the 820 to Burlington Northern Santa Fe Railroad.

Using the ASC X12 820 transaction set to electronically transmit data between business partners allows for consistent interpretation of payment information and reduces the chances of interpretive and data entry errors.

Burlington Northern Santa Fe will accept the Payment Order/Remittance Advice information published by DISA for ASC X12. The following guidelines are all-inclusive and identify unique accounting requirements for use of the ASC X12 820 transaction set when transmitting data to Burlington Northern Santa Fe.

To obtain X12 standards and documentation, contact:

Data Interchange Standards Association, Inc. 1800 Diagonal Road, Suite 200 Alexandria, VA 22314-2840 703-548-7005

or

Washington Publishing Company

Orders: 800-972-4334 *Phone:* 301-590-9337

www.wpc-edi.com

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Payment Order/Remittance Advice Processing

The general steps in processing 820s electronically are initiated when the customer enters or creates payment order/remittance advice in their computer. This information, or data, is then formatted into the ASC X12 820 transaction set. This formatting may be performed by you, the customer, or your agent. After formatting, the transaction is delivered to your bank. Your bank will initiate funds transfer and pass the 820 to BNSF's bank. Once funds have transferred, BNSF's bank will send the 820 detail. This detail will be used to perform cash application of the identified records to BNSF's accounts receivable system.

EDI Functional Acknowledgments

BNSF will generate a 997 Functional Acknowledgment to our bank in response to the 820 that is received. Depending on your bank's EDI capabilities, you may receive your bank's 997 when you deliver the 820 to them.

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The Transaction

A transaction set is used to describe the electronic transmission of a single document (Payment Order/Remittance Advice, Bill of Lading, etc.) 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. Segment ID Name, Data Element Type, Requirement Designator, and Length are described below. These identifiers are listed for each Data Element throughout the remainder of this guide.

Segment ID Name

(Header)

ST	Transaction Set Header
GS	Function Group Header

BPR Beginning Segment for Payment Order/Remittance Advice

NTE Note/Special Instruction

TRN Trace CUR Currency

REF Reference Identification
DTM Date/Time Reference

N1 Name

N2 Additional Name Information

N3 Address Information N4 Geographic Location

PER Administrative Communications Contact

RDM Remittance delivery Method

(Detail)

ENT Entity

NM1 Individual or Organization Name

REF Reference Identification

PER Administrative Communications Contact

DTM Date/Time Reference

IT1 Baseline Item Data (Invoice)

RMR Remittance Advice Accounts Receivable Open Item Reference

NTE Note/Special Instruction

(Summary)

SE Transaction Set Trailer

Data Element Type

Specifies the characters that may be used.

Nn	Numeric	N indicates that it is numeric; n indicates 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. Do not send fractions or negative 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, such as a company name.
DT	Date	Date expressed as CCYYMMDD
TM	Time	HHMM expressed in 24-hour clock format.

Data Element Requirement Designator

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

M	Mandatory	The Data Element is required 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 length and maximum length of the characters in the data element.

1/15 Indicates that "1" is the minimum acceptable value and "15" is the maximum.

Sample 820

[SAMPLE: WAYBILL NUMBER IN RMR SEGMENT]

GS*RA*CUSTID0001*BNSF*19990101*1530*9102*X*004010

ST*820*000000001

BPR*C*10000*C*ACH*CTX*01*1234*DA*555*CUSTID0001**01*987*DA*345123*19990101

TRN*1*1001983525

REF*CD*1234564114

REF*TN*1001983525 (Mandatory if TRN segment is not used)

DTM*007*19990101

N1*PE*BURLINGTON NORTHERN SANTA FE

N1*PR*CUSTOMER NAME

ENT*1

RMR*WY*123456**2000

REF*D0*RATE AUTHORITY*PER ITEM 12121 RATE SHOULD BE \$2000 PER CAR

REF*BM*1001

REF*EO*BNSF456002

DTM*095*19990101

RMR*WY*999999**5000

REF*BM*1002

REF*EQ*BNSF458869

DTM*095*19990101

RMR*WY*999787**3000

REF*BM*1003

REF*EO*BNSF458870

DTM*095*19990101

SE*23*0000000001

GE*1*9102

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Sample 820

[SAMPLE: FREIGHT BILL NUMBER IN RMR SEGMENT]

GS*RA*CUSTID0001*BNSF*19990101*1530*9102*X*004010

ST*820*000000001

BPR*C*10000*C*ACH*CTX*01*1234*DA*555*CUSTID0001**01*987*DA*345123*19990101

TRN*1*1001983525

REF*CD*1234564114

REF*TN*1001983525 (Mandatory if TRN segment is not used)

DTM*007*19990101

N1*PE*BURLINGTON NORTHERN SANTA FE

N1*PR*CUSTOMER NAME

ENT*1

RMR*FR*018923888**5000

REF*BM*1003

DTM*022*19990101

RMR*FR*018923889**5000

REF*BM*1004

DTM*022*19990101

SE*16*0000000001

GE*1*9102

[SAMPLE: FREIGHT BILL NUMBER IN RMR SEGMENT WITH DISPUTED PAYMENT]

GS*RA*CUSTID0001*BNSF*19990101*1530*9102*X*004010

ST*820*000000001

BPR*C*9500*C*ACH*CTX*01*1234*DA*555*CUSTID0001**01*987*DA*345123*19990101

TRN*1*1001983525

REF*CD*1234564114

REF*TN*1001983525 (Mandatory if TRN segment is not used)

DTM*007*19990101

N1*PE*BURLINGTON NORTHERN SANTA FE

N1*PR*CUSTOMER NAME

ENT*1

RMR*FR*018923888**4500

REF*D0*OTHER*DIVERSION TO DENVER

REF*BM*1003

DTM*022*19990101

RMR*FR*018923889**5000

REF*BM*1004

DTM*022*19990101

SE*17*0000000001

GE*1*9102

GS - Functional Group Header Segment Loop

Functional Group Mandatory Level

Usage

Max Use Max Length

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

Example

GS*RA*CUSTID0001*BNSF*19990101*1530*9102*X*004010

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
GS01	479	Functional ID Code	2/2	M	ID	Code identifying a group of application related transaction sets RA=Payment Order/Remittance Advice (820)
GS02	142	Application Sender's Code	2/15	M	AN	Code identifying party sending transmission; codes agreed to by trading partners
GS03	124	Application Receiver's Code	2/15	M	AN	Code identifying receiving transmission; Codes agreed to by trading partners "BNSF"
GS04	373	Date	8/8	M	DT	Date of transmission; expressed as YYYYMMDD
GS05	337	Time	4/8	M	TM	Time of transmission; expressed as HHMM; expressed in 24-hr clock time (00-23)

GS Segment continued on next page

GS Segment Continued

	1	1				1
SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
GS06	28	Group Control Number	1/9	M	N0	Assigned number originated & maintained by the sender. The number in this header must be Identical to the same data element in the associated functional group trailer, GE02.
GS07	455	Responsible Agency Code	1/2	M	ID	"X" only for ASC X12
GS08	480	Version/Release Industry Identifier Code	1/12	M	AN	Sender's transmission standard version 004010.

ST - Transaction Set Header Segment Loop

Level Header Mandatory Usage

Max Use 1 17 Max Length

To indicate the start of a transaction set and to assign a control number. Purpose

Example ST*820*000000001

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
ST01	143	TS ID CODE	3/3	M	ID	"820" Definition:
						Payment Order /
						Remittance Advice
ST02	329	TS CONTROL	4/9	M	AN	Sender's message
		NUMBER				control number

BPR - Beginning Segment for Payment Order/ Remittance Advice Segment

Loop

Level Header Mandatory Usage

Max Use 1 245 Max Length

Purpose To indicate the beginning of a Payment Order/Remittance

Advice Transaction Set and total payment amount, or to enable related transfer of funds and/or information from

payer to payee to occur

Example BPR*C*10000*C*ACH*CTX*01*1234*DA*555*

CUSTID0001**01*987*DA*345123*19990101

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
BPR01	305	Transaction Handling Code	1/1	M	ID	C=Payment accompanies remittance advice
BPR02	782	Monetary Amount	1/18	M	R	Total payment amount for all items
BPR03	478	Credit/Debit Flag Code	1/1	M	ID	C=Credit D=Debit
BPR04	591	Payment Method Code	3/3	M	ID	Instruction to the origin bank on the method of pmt order being transmitted. ACH=Automated Clearing House
BPR05	812	Payment Format Code	1/10	0	ID	1.CTX=Corporate Trade Exchange (CTX)(ACH) 2.CCP=(CCD+)(ACH) Optional - helpful if used
BPR06	506	DFI ID Number Qualifier	2/2	М	ID	01=ABA Transit Routing Number.

BPR Segment Continued on next page

BPR Segment Continued

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
BPR07	507	DFI ID Number	3/12	M	AN	Depository Financial Institution (DFI) ID Number.
BPR08	569	Account Number Qualifier Code	1/3	О	ID	Type of Account. DA=Demand Deposit
BPR09	508	Account Number	1/35	С	AN	Acct Number of Company originating payment If BPR08 is present, then BPR09 is required.
BPR10	509	Originating Company ID	10/10	0	AN	Unique identifier designating the company initiating the funds transfer instructions. First character is one-digit ANSI ID code followed by 9-digit ID Number
BPR11	510	Originating Company Supplemental Code	9/9	0	AN	Code defined between the Originating Company & Originating Depository Financial Institution that identifies the Company initiating the transfer.
BPR12	506	DFI ID Number Qualifier	2/2	M	ID	01=ABA Transit Routing Number.
BPR13	507	DFI ID Number	3/12	M	AN	Depository Financial Institution (DFI) ID Number.
BPR14	569	Account Number Qualifier Code	1/3	O	ID	Type of Account. DA=Demand Deposit If BPR14 is present, then BPR15 is required.
BPR15	508	Account Number	1/35	С	AN	Payee's Account Number
BPR16	373	Payment Effective Date	8/8	M	DT	Date expressed as CCYYMMDD

TRN - Trace Segment

Loop Level Header Mandatory Usage

Max Use

Max Length

To uniquely identify a transaction to an application. The Purpose

Trace Number identifies the payment.

Example TRN*1*1001983525

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
TRN01	481	Trace Type Code	1/2	M	ID	1=Current Transaction Trace
						Numbers
TRN02	127	Reference	1/10	M	AN	Trace Number (with no
		Number				spaces or punctuation) -
						provides unique identification
						for the transaction
TRN03	509	Originating	10/10	O	AN	Identifies an organization
		Company ID				
TRN04	127	Reference	1/30	O	AN	Not used by BNSF
		Number				

Note: If Software does not provide for a TRN Segment, then REF01*TN and REF02 as indicated on following page is required.

Segment : **REF - Reference Identification**

Segment : Loop :

Level : Header

Usage : Optional - May be required on certain BNSF Programs

Max Use : >1 Max Length : 120

Purpose : To specify identifying information

Example : REF*CD*1234564114

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
REF01	128	Ref ID Qualifier	2/3	M	ID	CD=BNSF Patron Code CK=Check Number TN=Trace Number
REF02	127	Reference ID	1/10	С	AN	As defined by the Ref ID Qualifier. (Required if REF01 is used)
REF03	352	Description	1/80	С	AN	Free form description

Note: If TRN Segment is not used, then REF01 TN or CK is required.

DTM - Date/Time Reference Segment

Loop

Level Usage Max Use Header Mandatory

>1 69 Max Length

Purpose To specify pertinent dates and times

Example DTM*007*19990101

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
DTM01	374	Date/Time	3/3	M	ID	007=Effective
		Qualifier				
DTM02	373	Date	8/8	C	DT	CCYYMMDD
DTM03	337	Time	4/8	С	TM	HHMM, Time expressed in
						24-hr clock time
DTM04	623	Time Code	2/2	О	ID	CT=Central Time
						ET=Eastern Time
						MT=Mountain Time
						PT=Pacific Time

Level : Header Usage : Mandatory

Max Use : >1 Max Length : 159

Purpose : To identify a party by type of organization, name and code

Example : N1*PR*CUSTOMER NAME

N1*PE*BURLINGTON NORTHERN SANTA FE

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
N101	98	Entity Identifier	2/3	M	ID	PE=Payee
		Code				PR=Payer
N102	93	Name	1/60	С	AN	Free Form Name
						(Required if N101 is used)
N103	66	ID Code	1/2	С	ID	Not used by BNSF
		Qualifier				•
N104	67	ID Code	2/80	C	AN	Not used by BNSF
N105	706	Entity	2/2	О	ID	Not used by BNSF
		Relationship				
		Code				
N106	98	Entity ID Code	2/3	О	ID	Not used by BNSF

ENT - Entity ENT Repeat: >1 Segment Loop

Level Detail Mandatory Usage

Max Use 1 222 Max Length

Purpose

To designate the entities which are parties to a transaction and specify a reference meaningful to

those entities

Example ENT*1

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
ENT01	554	Assigned Number	1/6	0	N0	Only ENT01 is necessary because there is a single entity communicating with a single entity (sender to receiver)
ENT02	98	Entity ID Code	2/3	С	ID	Not used by BNSF
ENT03	66	ID Code Qualifier	1/2	С	ID	Not used by BNSF
ENT04	67	ID Code	2/80	С	AN	Not used by BNSF
ENT05	98	Entity ID Code	2/3	С	ID	Not used by BNSF
ENT06	66	ID Code Qualifier	1/2	С	ID	Not used by BNSF
ENT07	67	ID Code	2/80	C	AN	Not used by BNSF
ENT08	128	Ref ID Qualifier	2/3	C	ID	Not used by BNSF
ENT09	127	Reference ID	1/30	C	AN	Not used by BNSF

Segment : **RMR - Remittance Advice Accounts**

Receivable Open Item

Loop : ENT/RMR Repeat: >1

Level : Detail Usage : Mandatory

Max Use : 1 Max Length : 121

Purpose : To specify the accounts receivable open item(s) to be

included in the cash application and to convey the

appropriate detail

Example : RMR*WY*123456**5000

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
RMR01	128	Reference Identification Qualifier	2/3	M	ID	WY=Waybill Number BM=Bill of Lading Number FR=Freight Bill Number or Miscellaneous Bill Number (See Note Below)
RMR02	127	Reference ID	1/30	С	AN	Reference information as defined by the Reference ID Qualifier in RMR01 WY=123456
RMR03	482	Payment Action Code	2/2	0	ID	PO=Payment on Account Specifies how the cash is to be applied
RMR04	782.00	Monetary Amount	1/18	M	R	Amount Paid

Note: The preferred qualifier in RMR01 is WY or FR. If WY or FR is not

available, then BM should be used. IF RMR*WY or RMR*BM is used, then

REF*EQ is mandatory.

DTM Segment is required in conjunction with RMR01*WY and

RMR01*BM.

Segment : **REF – Reference Numbers**

Loop : ENT/RMR
Level : Detail
Usage : Optional
Max Use : >1
Max Length : 120

Purpose : To specify identifying information

Example : REF*BM*1001

REF*EQ*BNSF456002

REF*D0*RATE AUTHORITY*RATE SHOULD BE \$2000 PER CAR

SEG	DATA ELEMENT	NAME	MIN - MAX	REQ	TYPE	CONTENTS
REF01	128	Reference Identification Qualifier	2/3	М	ID	WY=Waybill Number BM=Bill of Lading Number EQ=Equipment Number FR=Freight Bill Number or Miscellaneous Bill Number (See Note 1 Below) D0=Dispute Reason Code (See Note 2 Below)
REF02	127	Reference ID	1/30	C	AN	Reference information as defined by the Reference ID Qualifier in REF01 BM=1001 IDs for D0 (Dispute Reason Code): Equipment Size Origin/Destination Other Rate Authority Service Level Through Rate vs Rule 11 Weight
REF03	352	Description	1/60	С	AN	A free form description to clarify the related data elements & their content

- Note 1. If Waybill Number or Bill of Lading Number or Freight Bill Number is used in the RMR Segment, then *same* Number is not needed in the REF Segment. If REF*WY or REF*BM is used, then REF*EQ is mandatory.
- Note 2. If payment is based on an amount that is different from the amount shown on BNSF's Freight Bill, use an REF Segment with a D0 qualifier. The REF02 should be one of the Reference IDs listed under Contents. The REF03 is used to provide additional information related to the amount being paid.

Segment : *DTM - Date/Time Reference*Loop : ENT/RMR
Level : Detail

Loop : ENT/RMI
Level : Detail
Usage : Optional
Max Use : >1
Max Length : 69

Purpose : To specify pertinent dates and times

Example : DTM*095*19990101

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
DTM01	374.	Date/Time Qualifier	3/3	M		095=Bill of Lading Date or Waybill Date 022=Freight Bill Date
DTM02	373	Date	8/8	С	DT	CCYYMMDD

Segment

SE - Transaction Set Trailer

Loop Level Summary Mandatory Usage

Max Use 1 Max Length 24

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)

An (SE) is the last segment of each transaction set Comment

Example SE*18*000000001 :

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
SE01	96	Number of	1/10	M	N0	Total number of Segments
		included				included in a transaction set
		Segments				including ST and SE
						Segments
SE02	329	Transaction Set	4/9	M	AN	Transaction Set Control
		Control Number				Number - must be identical to
						the Transaction Set Control
						Number in the ST Segment

GE - Functional Group Trailer Segment

Loop Level **Functional Group**

Usage Mandatory

Max Use 1 Max Length 24

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

GE*1*9102 Example

SEG	DATA	NAME	MIN -	REQ	TYPE	CONTENTS
	ELEMENT		MAX			
GE01	97	Number of Transaction Sets Included	1/6	M	N0	Total number of transaction sets included in the functional group terminated by the trailer containing this data element
GE02	28	Group Control Number	1/9	M	N0	Assigned number originated & maintained by the sender. This number must be identical to the same data element in the associated functional group header, GS06.