



Implementation Guide Rail Carrier Shipment Information

EDI 404

Price Reference Identification

Connection to CN

CN has a secure MFT server <https://mftedi.cn.ca/> or we can push to an FTP server if you require. CN also connects with all major VAN's (Value Added Networks) and interconnects can be made available.

CN Contact

The **EDI Onboarding team** email address is EDIMGR@cn.ca. You can also visit us at www.cn.ca.

Canadian National Railway - Electronic Commerce Basic EDI 404 (Rail Bill of Lading) Requirements

The enclosed documentation covers information required to include the Price Reference Identification within the EDI 404 message.
The placement of the PI segment differs based on the EDI Rail version being used.

Canadian National Railway - Electronic Commerce Basic EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI message with required data for the EDI 404 Transaction Set including the Price Reference Identification for Rail EDI version 3020 to 3040.

ISA*00* *00* *ZZ*GENERIC *02*CN *231212*0959*U*00304*000026095*0*P>
GS*SR*GENERIC*CN*20231212*0959*26095*X*003040
ST*404*260950001
BX*00*R*PP**CN*L*B
BNX*A**S
M3*R*20231212*0959
N9*BM*054119800*CN*20231212*0959
N9*CT*CN 823303AM*CN*20231212*0959
N9*KL*CN T0000822329001821
N7*ARMN*110001*98081*N*****RC
M7*028365 028366
F9**STORM LAKE*IA
D9**SEATTLE*WA
N1*SH*GENERIC CARLOAD INC
N3*123 MAIN STREET
N4*STORM LAKE*IA
N1*CN*GENERIC CONSIGNEE
N3*123 MAIN STREET
N4*SEATTLE*WA
PER*DC*SALLY*TE*2066224000
N1*PF*GENERIC PAYOR
N3*123 MAIN DRIVE
N4*VANCOUVER*BC
R2*CN*S*SXCTY***R
R2*UP*1
LX*1
L5*1*WALLBOARD*3275440*T
LS*LX
LX*1
L0*1***98081*N***1*CLD
LE*LX
SE*34*260950001
GE*1*26095
IEA*1*000026095

ISA Segment: Interchange Control Header

ISA*00* *00* *ZZ*GENERIC *02*CN *231212*0959*U*00200*000026095*0*P*>

Ref. Des.	Name	Data Element	Attributes
ISA01	Authorization Information Qualifier	I01	ID 2/2
ISA02	Authorization Information (Ten spaces)	I02	AN 10/10
ISA03	Security Information Qualifier	I03	ID 2/2
ISA04	Security Information (Ten spaces)	I04	AN 10/10
ISA05	Interchange ID Qualifier	I05	ID 2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN 15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID 2/2
ISA08	Interchange Receiver ID (CN- fill out field with spaces)	I07	AN 15/15
ISA09	Interchange Date (YYMMDD)	I08	DT 6/6
ISA10	Interchange Time (HHMM)	I09	TM 4/4
ISA11	Repetition Separator (Suggest “^”)	I65	1/1
ISA12	Interchange Control Version Number (Value 00304)	I11	ID 5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0 9/9
ISA14	Acknowledgment Requested (0 = none requested) (1= requested)	I13	ID 1/1
ISA15	Usage Indicator (P = Production) (T = Test)	I14	ID 1/1
ISA16	Component Element Separator (Suggest “.”)	I15	1/1

GS Segment: Functional Group Header

GS*SR*GENERIC*CN*20231212*0959*26095*X*003040

Ref. Des.	Name	Data Element	Attributes
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID 2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN 2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN 2/15
GS04	Date (CCYYMMDD)	373	DT 8/8
GS05	Time (HHMM)	337	TM 4/6
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0 1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID 1/2
GS08	Version / Release / Industry Identity	480	AN 1/12

ST Segment: Transaction Set Header

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

ST*404*260950001

Ref. Des.	Name	Data Element	Attributes
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID 3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN 4/9

BX Segment: General Shipment Information

BX*00*R*PPCN*L*B**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)}	91	ID 1/2
BX03	Shipment Method of Payment (PP = Prepaid)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (B = Bill of Lading for Individual Shipment)	147	ID 1/1

BNX Segment: Rail Shipment Information

BNX*AS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (A = Weight Agreement Number)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20231212*0959

Ref. Des.	Name	Data Element	Attributes
M301	Release Code (R = Release with Shipment Information)	132	ID 1/1
M302	Release Date (CCYYMMDD)	373	DT 8/8
M303	Release Time (HHMM, 24-hour clock 0001-2359)	337	TM 4/6

N9 Segment: Reference Number

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*054I19800*CN*20231212*0959
N9*CT*CN 823303AM*CN*20231212*0959
N9*KL*CN T000822329001821

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number) (CT = Contract Number) (KL = Price Reference Identification)	128	ID	2/2
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24-hour clock 0001-2359)	337	TM	4/6

N7 Segment: Equipment Details

N7*ARMN*110001*98081*N***RC**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/10
N703	Weight	81	R	1/8
N704	Weight Qualifier (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RC = refrigerated (reefer) Railcar)	40	ID	2/2

M7 Segment: Seal Numbers

M7*028365 028366

Ref. Des.	Name	Data Element	Attributes	
M701	Seal Number	225	AN	2/15

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9STORM LAKE*IA**

Ref. Des.	Name	Data Element	Attributes	
F902	Origin Station	101	AN	2/19
F903	State or Province Code	156	ID	2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9SEATTLE*WA**

Ref. Des.	Name	Data Element	Attributes	
D902	Destination Station	300	AN	2/19
D903	State or Province Code	156	ID	2/2

N1 Segment: Name

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
N3*123 MAIN STREET
N4*STORM LAKE*IA
N1*CN*GENERIC CONSIGNEE
N3*123 MAIN STREET
N4*SEATTLE*WA
N1*PF*GENERIC PAYOR
N3*123 MAIN DRIVE
N4*VANCOUVER*BC**

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (CN = Consignee) (SH = Shipper) (PF = payer of freight)	98	ID 2/2
N102	Name	93	AN 1/27

N3 Segment: Address Information

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2

PER Segment: Administrative Communications Contact

Specifies the contact particulars of the party named in the N1 segment.

PER*DC*SALLY*TE*2066224000

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (DC = direct contact)	366	ID 2/2
PER02	Name	93	AN 1/35
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S*SXCTY*R R2*UP*1**

Ref. Des.	Name	Data Element	Attributes
R201	Standard Carrier Alpha Code (SCAC) (CN = Canadian National)	140	ID 2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID 1/2
R206	Transportation Method/Type Code (R = Rail)	91	ID 1/2

LX Segment: Assigned Number

LX*1

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

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*WALLBOARD*3275440*T

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/3
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7-digit Standard Transportation Commodity Code (STCC))	22	AN	1/16
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*98081*N***1*CLD**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/3
L004	Weight	81	R	1/8
L005	Weight Qualifier (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

SE Segment: Transaction Set Trailer

SE*34*00920001

Ref. Des.	Name	Data Element	Attributes	
SE01	Number of Included Segments (Includes ST and SE segments)	96	N0	1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN	4/9

GE Segment: Functional Group Trailer

GE*1*26095

Ref. Des.	Name	Data Element	Attributes	
GE01	Number of Transaction Sets Included	97	N0	1/6
GE02	Group Control Number (Repeated from GS segment GS06)	28	N0	1/9

IEA Segment: Interchange Control Trailer

IEA*1*000026095

Ref. Des.	Name	Data Element	Attributes	
IEA01	Number of included Functional Groups	I16	N0	1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0	9/9

Canadian National Railway - Electronic Commerce Basic EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set including the Price Reference Identification for Rail EDI version 3050 to 5040.

ISA*00* 00* *ZZ*GENERIC *02*CN *231212*1213*U*00401*000007015*0*T*>
GS*SR*GENERIC*CN*20231212*1213*7015*X*004010
ST*404*86356
BX*00*R*CC**CN*L*B****30**2
BNX*E**S
M3*R*20231212*1213
N9*BM*784224**20231212*1213
N9*HS*8708.99.8080
N7*FTTX*925112*54994*N*****BX
F9**ST THOMAS*ON
D9**FLINT*MI
N1*SH*GENERIC CARLOAD
N3*123 MAIN STREET
N4*ST THOMAS*ON
PER*IC**TE*15196338400
N1*CN*GENERIC CONSIGNEE
N3*VAN 123 MAIN STREET
N4*FLINT*MI
N1*PF*GENERIC PAYOR
N3*123 MAIN STREET
N4*FORT MYERS*FL
R2*CN*S****R
LX*1
L5*1*WALLBOARD*3275440*T
L0*1***54994*N***72*PCS
PI*KL*CN Q000051911600002
X1***C*****72*91117***1265.52
XH*CDN*N*595
SE*31*86356
GE*1*7015
IEA*1*000007015

ISA Segment: Interchange Control Header

ISA*00* *00* *ZZ*GENERIC *02*CN *231212*1213*U*00401*000007015*0*T*>

Ref. Des.	Name	Data Element	Attributes
ISA01	Authorization Information Qualifier	I01	ID 2/2
ISA02	Authorization Information (Ten spaces)	I02	AN 10/10
ISA03	Security Information Qualifier	I03	ID 2/2
ISA04	Security Information (Ten spaces)	I04	AN 10/10
ISA05	Interchange ID Qualifier	I05	ID 2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN 15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID 2/2
ISA08	Interchange Receiver ID (CN- fill out field with spaces)	I07	AN 15/15
ISA09	Interchange Date (YYMMDD)	I08	DT 6/6
ISA10	Interchange Time (HHMM)	I09	TM 4/4
ISA11	Repetition Separator (Suggest “^”)	I65	1/1
ISA12	Interchange Control Version Number (Value 00401)	I11	ID 5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0 9/9
ISA14	Acknowledgment Requested (0 = none requested) (1= requested)	I13	ID 1/1
ISA15	Usage Indicator (P = Production) (T = Test)	I14	ID 1/1
ISA16	Component Element Separator (Suggest “:.”)	I15	1/1

GS Segment: Functional Group Header

GS*SR*GENERIC*CN*20231212*1213*7015*X*004010

Ref. Des.	Name	Data Element	Attributes	
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID	2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN	2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN	2/15
GS04	Date (CCYYMMDD)	373	DT	8/8
GS05	Time (HHMM)	337	TM	4/6
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0	1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID	1/2
GS08	Version / Release / Industry Identity (CN is using version 004010 of the X12 EDI Standards)	480	AN	1/12

ST Segment: Transaction Set Header

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

ST*404*86356

Ref. Des.	Name	Data Element	Attributes	
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID	3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN	4/9

BX Segment: General Shipment Information**BX*00*R*CC**CN*L*B****30**2**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)}	91	ID 1/2
BX03	Shipment Method of Payment (CC = Collect)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (B = Bill of Lading for Individual Shipment)	147	ID 1/1
BX11	Customs Documentation handling code (30 = Proforma with Broker, no B13 required)	501	ID 2/2
BX13	GST Declaration code (2 = No GST to apply)	714	ID 1/1

BNX Segment: Rail Shipment Information**BNX*A**S**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (A = Weight Agreement Number)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20231212*1213

Ref. Des.	Name	Data Element	Attributes	
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24-hour clock 0001-2359)	337	TM	4/6

N9 Segment: Reference Identification

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*78422420231212*1213**

N9*HS*8708.99.8080

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number) (HS = Harmonized Code System)	128	ID	2/2
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24-hour clock 0001-2359)	337	TM	4/6

N7 Segment: Equipment Details

N7*FTTX*925112*54994*N***BX**

Ref. Des.	Name	Data Element	Attributes
N701	Equipment Initial	206	AN 1/4
N702	Equipment Number	207	AN 1/10
N703	Weight	81	R 1/8
N704	Weight Qualifier (N = Net Weight)	187	ID 1/2
N711	Equipment Description Code (BX = boxcar)	40	ID 2/2

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9ST THOMAS*ON**

Ref. Des.	Name	Data Element	Attributes
F902	Origin Station	101	AN 2/19
F903	State or Province Code	156	ID 2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9FLINT*MI**

Ref. Des.	Name	Data Element	Attributes
D902	Destination Station	300	AN 2/19
D903	State or Province Code	156	ID 2/2

N1 Segment: Name

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD
N3*123 MAIN STREET
N4*ST THOMAS*ON
N1*CN*GENERIC CONSIGNEE
N3*VAN 123 MAIN STREET
N4*FLINT*MI
N1*PF*GENERIC PAYOR
N3*123 MAIN STREET
N4*FORT MYERS*FL**

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (CN = Consignee) (SH = Shipper) (PF = Payor of Freight)	98	ID 2/2
N102	Name	93	AN 1/27

N3 Segment: Address Information

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2

PER Segment: Administrative Communications Contact

Specifies the contact particulars of the party named in the N1 segment.

PER*ICTE*15196338400**

Ref. Des.	Name	Data Element	Attributes	
PER01	Contact function code (IC = Information contact)	366	ID	2/2
PER03	Communication number qualifier (TE=telephone)	365	ID	2/2
PER04	Communication number	364	AN	1/80

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S**R**

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC) (CN = Canadian National etc.)	140	ID	2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID	1/2
R206	Transportation Method/Type Code (R = Rail)	91	ID	1/2

LX Segment: Assigned Number

LX*1

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

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*WALLBOARD*3275440*T

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/3
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7-digit Standard Transportation Commodity Code (STCC))	22	AN	1/16
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*54994*N***72*PCS**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/3
L004	Weight	81	R	1/8
L005	Weight Qualifier (N = Net Weight)	187	ID	½
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

PI Segment: Price Authority Identification

PI*KL*CN Q000051911600002

Ref. Des.	Name	Data Element	Attributes	
PI01	Reference Number Qualifier (KL = Contract Reference)	128	ID	2/3
PI02	Reference Number ** note there are 2 blank spaces from CN to the start of the ID number	127	AN	1/30

X1 Segment: Export License

X1*C*****72*91117***1265.52**

Ref. Des.	Name	Data Element	Attributes
X103	Export License Status Code	51	ID 1/1
X110	Lading Quantity	80	N0 1/7
X111	Lading Value	148	R 2/9
X114	Unit Price	212	R 1/17

XH Segment: Pro Forma – B13 Information

XH*CDN*N*595

Ref. Des.	Name	Data Element	Attributes
XH01	Currency Code	100	ID 3/3
XH02	Related Company Indication Code	645	ID 1/1
XH03	Special Charge or Allowance Code	150	ID 3/3

SE Segment: Transaction Set Trailer

SE*38*86356

Ref. Des.	Name	Data Element	Attributes
SE01	Number of Included Segments (Includes ST and SE segments)	96	N0 1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN 4/9

GE Segment: Functional Group Trailer

GE*1*7015

Ref. Des.	Name	Data Element	Attributes
GE01	Number of Transaction Sets Included	97	N0 1/6
GE02	Group Control Number (Repeated from GS segment GS06)		

IEA Segment: Interchange Control Trailer

IEA*1*000007015

Ref. Des.	Name	Data Element	Attributes	
IEA01	Number of included Functional Groups	I16	N0	1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0	9/9

Canadian National Railway - Electronic Commerce Basic EDI 404 (Rail Bill of Lading) Requirements

CN is currently using the X12 Standard Version/Release 8030/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set including the Price Reference Identification for Rail EDI version 5050 to current.

On this version 8030, there is a new requirement in the R2 segment that when there are multiple R2 segments present, the R203 (junction) is required on each, except for the final R2 segment.

CN recommends EDI shippers to be within 2 versions of the current EDI Standard X12 Standard Version/Release 8030/RAIL

ISA*00* *00* *ZZ*GENERIC *02*CN *231212*1213*U*00803*000037663*0*P*>
GS*SR*GENERIC*CN*20231212*1513*37663*X*008030
ST*404*376630005
BX*00*R*PP**CN*L*B
BNX*S**S
M3*R*20231212*1513
N9*BM*564975*CN*20231212*1513
N7*UTLX*952106*147257*N*****RR
REF*KL*1
L0*1
PI*KL*CN T0000822329001821
F9**EAST MORRIS*IL
D9**LORENZO*IL
N1*SH*GENERIC CARLOAD INC
N3*123 MAIN STREET
N4*EAST MORRIS*IL*12345*US
PER*IC*CONTACT NAME*TE*123-123-1234*EM* JOHN.DOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE INC
N3*456 MAIN STREET
N4*LORENZO*IL*60000*US
N1*PF*GENERIC PAYOR LLC
N3*123 FIRST ROAD
N4*HOUSTON*TX*77079*US
R2*CN*S*EOLA
R2*BNSF*1
LX*1
L5*1*LIQUEFIED PETROLEUM GASES*4905421*T
L0*1***147257*N***1*CLD
LS*LH1
LH1*C4*1*UN1075**4905421*LB*147257
LH2*2.1*P
LH3*LIQUEFIED PETROLEUM GASES*D
LFH*NOD
PER*HM*offeror name or contract number*TE*8004249300
LE*LH1
LH6*JOHN Q SHIPPER
SE*38*376630005
GE*1*37663
IEA*1*000037663

ISA Segment: Interchange Control Header

ISA*00* *00* *ZZ*GENERIC *02*CN *231212*1513*U*00803*000037663*0*P*>

Ref. Des.	Name	Data Element	Attributes
ISA01	Authorization Information Qualifier	I01	ID 2/2
ISA02	Authorization Information (Ten spaces)	I02	AN 10/10
ISA03	Security Information Qualifier	I03	ID 2/2
ISA04	Security Information	I04	AN 10/10
ISA05	Interchange ID Qualifier	I05	ID 2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN 15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID 2/2
ISA08	Interchange Receiver ID (CN- fill out field with spaces)	I07	AN 15/15
ISA09	Interchange Date (YYMMDD)	I08	DT 6/6
ISA10	Interchange Time (HHMM)	I09	TM 4/4
ISA11	Repetition Separator (Suggest “^”)	I65	1/1
ISA12	Interchange Control Version Number (Value 008030)	I11	ID 5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0 9/9
ISA14	Acknowledgment Requested (0 = none requested) (1= requested)	I13	ID 1/1
ISA15	Usage Indicator (P = Production) (T = Test)	I14	ID 1/1
ISA16	Component Element Separator (Suggest “:.”)	I15	1/1

GS Segment: Functional Group Header

GS*SR*GENERIC*CN*20231212*1513*37663*X*008030

Ref. Des.	Name	Data Element	Attributes
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID 2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN 2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN 2/15
GS04	Date (CCYYMMDD)	373	DT 8/8
GS05	Time (HHMM)	337	TM 4/6
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0 1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID 1/2
GS08	Version / Release / Industry Identity	480	AN 1/12

ST Segment: Transaction Set Header

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

ST*404*376630005

Ref. Des.	Name	Data Element	Attributes
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID 3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN 4/9

BX Segment: General Shipment Information

BX*00*R*PPCN*L*B**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)}	91	ID 1/2
BX03	Shipment Method of Payment (PP = Prepaid)	146	ID 2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (L = Pounds)	188	ID 1/1
BX07	Shipment Qualifier (B = Bill of Lading for Individual Shipment)	147	ID 1/1

BNX Segment: Rail Shipment Information

BNX*SS**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper's Weight)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20231212*1513

Ref. Des.	Name	Data Element	Attributes	
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24-hour clock 0001-2359)	337	TM	4/6

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*564975*CN*20231212*1513

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/2
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24-hour clock 0001-2359)	337	TM	4/6

N7 Segment: Equipment Details

N7*UTLX*952106*147257*N***RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/10
N703	Weight	81	R	1/8
N704	Weight Qualifier (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar }	40	ID	2/2

REF Segment: Reference information

Within the N7/REF Loop.

REF*KL*1

Ref. Des.	Name	Data Element	Attributes	
REF01	Reference Identification Qualifier	128	ID	2/3
REF02	Reference Identification (KL= Contract Reference)	127	AN	1/30

L0 Segment: Line Item – Quantity and Weight

L0*1

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/6

PI Segment: Price Authority Identification

PI*KL*CN T0000822329001821

Ref. Des.	Name	Data Element	Attributes	
PI01	Reference Number Qualifier (KL = Contract Reference)	128	ID	2/3
PI02	Reference Number ** note there are 2 blank spaces from “CN” to the start of the ID number	127	AN	1/30

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9EAST MORRIS*IL**

Ref. Des.	Name	Data Element	Attributes
F902	Origin Station	101	AN 2/19
F903	State or Province Code	156	ID 2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. Spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9LORENZO*IL**

Ref. Des.	Name	Data Element	Attributes
D902	Destination Station	300	AN 2/19
D903	State or Province Code	156	ID 2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
N3*123 MAIN STREET
N4*MORRIS*IL*12345*US
N1*CN*GENERIC CONSIGNEE INC
N3*456 MAIN STREET
N4*LORENZO*IL*60000*US
N1*PF*GENERIC PAYOR LLC
N3*123 FIRST ROAD
N4*HOUSTON*TX*77079*US**

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (CN = Consignee) (SH = Shipper) (PF = Payor of Freight)	98	ID 2/2
N102	Name	93	AN 1/27

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/30
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/15
N404	Country Code	26	ID 2/3

***For North American countries, use the ISO-3166 Alpha-2 character code.*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHN.DOE@GENCAR.COM

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (IC = Information contact)	366	ID 2/2
PER02	Name	93	AN 1/35
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	AN 1/80
PER05	Communication number qualifier (EM=email address)	365	ID 2/2
PER06	Communication number	364	AN 1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

R2*CN*S*EOLA
R2*BNSF*1

Ref. Des.	Name	Data Element	Attributes
R201	Standard Carrier Alpha Code (SCAC)	140	ID 2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail)) (1 = 1 st carrier after origin carrier)	133	ID 1/2
R203	Junction Name (Contains R260 junction)	19	AN 2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

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

L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

L5*1*LIQUEFIED PETROLEUM GASES*4905421*T

Ref. Des.	Name	Data Element	Attributes	
L501	Line Number	213	N0	1/3
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7-digit Standard Transportation Commodity Code (STCC))	22	AN	1/16
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*147257*N***1*CLD**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line Item Number	213	N0	1/3
L004	Weight	81	R	1/8
L005	Weight Qualifier (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

LS Segment: Loop Header

Identifies the start of the Hazmat documentation loop.

LS*LH1

Ref. Des.	Name	Data Element	Attributes	
LS01	Loop Identifier Code	447	AN	1/4

LH1 Segment: Hazardous Identification Information

LH1*C4*1*UN10754905421*LB*147257**

Ref. Des.	Name	Data Element	Attributes
LH101	Unit or Basis for Measurement Code (TK = Tank)	355	ID 2/2
LH102	Lading Quantity	80	N0 1/7
LH103	UN or NA Identification Code	277	ID 6/6
LH105	Commodity Code (Standard Transportation Commodity Code (STCC))	22	AN 1/30
LH106	Unit or Basis for Measurement Code (LB = pound)	355	ID 2/2
LH107	Quantity	380	R 1/15

LH2 Segment: Hazardous Classification Information

Provides classification information.

LH2*2.1*P

Ref. Des.	Name	Data Element	Attributes
LH201	Hazardous Classification	215	ID 2/30
LH202	Hazardous Class Qualifier (P=Primary)	983	ID 1/1

LH3 Segment: Hazardous Material Shipping Name Information

Provides the Proper Shipping Name as required by the CFR49 or TDG regulations, and the regulations under which the shipment is being made.

LH3*LIQUEFIED PETROLEUM GASES*D

Ref. Des.	Name	Data Element	Attributes
LH301	Hazardous Material Shipping Name	224	AN 1/25
LH302	Hazardous Material Shipping Name Qualifier (D = USA Shipping Name)	984	ID 1/1

LFH Segment: Free-form Hazardous Material Information

Provides additional information related to the shipment of the regulated product.

LFH*NOD

Ref. Des.	Name	Data Element	Attributes
LFH01	Hazardous Material Information Qualifier (NOD = not odorized notation)	808	ID 3/3
LFH02	Hazardous Material Shipment Information	809	AN 1/25

PER Segment: Administrative Communications Contact

Provides contact information as required by regulations.

PER*HM*offeror name or contract number*TE*8004249300

Ref. Des.	Name	Data Element	Attributes
PER01	Contact Function Code (HM=primary 24-hour Hazardous Material Contact emergency phone number)	366	ID 2/2
PER02	Name If the emergency response telephone number shown in PER04 is an emergency provider, (e.g., Chemtrec), the PER02 must identify the company(offeror) by name or contract number.	93	AN 1/35
PER03	Communication Number Qualifier (TE=Telephone)	365	ID 2/2
PER04	Communication Number	364	AN 1/80

LE Segments: Loop Trailer

LE*LH1

Ref. Des.	Name	Data Element	Attributes
LE01	Loop Identifier Code	447	AN 1/6

LH6 Segment: Hazardous Certification

Provides the name of the person who prepared, and certifies to its accuracy, the documentation of the regulated commodity.

LH6*JOHN Q SHIPPER

Ref. Des.	Name	Data Element	Attributes
LH601	Name	93	AN 1/60

SE Segment: Transaction Set Trailer

SE*38*376630005

Ref. Des.	Name	Data Element	Attributes
SE01	Number of Included Segments (Includes ST and SE segments)	96	N0 1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN 4/9

GE Segment: Functional Group Trailer

GE*1*37663

Ref. Des.	Name	Data Element	Attributes
GE01	Number of Transaction Sets Included	97	N0 1/6
GE02	Group Control Number (Repeated from GS Segment GS06)	28	N0 1/9

IEA Segment: Interchange Control Trailer

IEA*1*000037663

Ref. Des.	Name	Data Element	Attributes
IEA01	Number of included Functional Groups	I16	N0 1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0 9/9