EDI 210

Implementation Guide for Freight Invoice

Overview

Purpose

When a movement of freight is initiated by the receipt of Shipping Instructions (a bill of lading), a charge for the transportation is generated and sent as an invoice. This document will explain how to receive an invoice using EDI. Other electronic options, such as eBill Service (an eBusiness tool on www.cn.ca) are described on the CN website at http://www.cn.ca/eBill where you can also view a demo.

Note: This process does not present invoices for ancillary or accessorial charges (Optional Services). These invoices are available on the web using the eBill Service tool.

Types of Invoices

The following types of invoices are available using this transaction:

- Normal Freight Invoice
- Balance Due Invoice (optional)
- Corrected Invoice (optional)

EDI Version & Guidelines

This document describes the implementation of EDI 210 Motor Carrier Freight Details and Invoice using ANSI version 4010. CN is also capable of sending EDI 410 Rail Carrier Freight Details and Invoice ANSI X12 Version 4010.

It is mandatory to send an EDI 997 Functional Acknowledgement for each EDI 210 or 410 received.

Special Format Options

It is the responsibility of the Receiver who requires coding or mapping structure, other than that expressly written in the Mapping or Implementation Guide documents, to have the necessary changes performed at their system or through a Value Added Network (VAN).

Connection Options

CN has direct connection with 3 VAN's (Value Added Networks). They are Open Text GXS, Transentric, and Kleinschmidt (KNSX). Interconnection to other VANs is also available. Exchange through secured FTP is now available at CN and is free of charge to customers. Invoices sent via secured FTP will conform to EDI 210 Standards.

Message Timing

Freight Invoices are created at all times of the day. The EDI process will accumulate all invoices for the day and transmit them overnight, seven days a week. EDI 824 Remittance Advice messages are accepted at all times of the day so you can send them as soon as your process completes the preparation of the file.

Your Data Requirements

If your company has specific data requirements, such as specific reference numbers that must be on the invoice to reconcile within your systems, it is important that this information be provided on the Shipping Instructions. Request for any information other than Bill of Lading number will not be reliably provided unless the Shipping Instructions provided by the shipper of the goods is submitted using electronic means.

CN Contact

You can email us at EDIMGR@cn.ca. You can also visit us at www.cn.ca.

Getting Started

To begin the process of implementation you should do the following:

1. Notify us at EDIMGR@cn.ca that you want to receive Freight Invoices using EDI. This message should include your full company name and location, as well as both an Accounts Payable and EDI Technical contact.

2. CN will then assign someone to work with you on the implementation

3. A review and walkthrough of the Mapping Guide and this Implementation Guide will facilitate understanding of the data and requirements.

4. Define any special data requirements, such as Purchase Order numbers or other reference numbers.

5. Technical details must be resolved such as the Value Added Network to be used, and the sender and receiver IDs.

6. CN supports a fully functional test system for technical and business validation of the exchange.

Using the Mapping Guide

Each Segment and Data Element in the transaction is identified in Segment and Data element order. The following information is available for each:

- Element Code, this is the Data Segment + position within the segment

- Element Number, this is the ANSI reference to the data contained in this position

- Element Name, the name of the data

- Element Type, the ANSI designation for the Data Elements

- Element Length, showing the Minimum/Maximum length of the data

- Required, shows the Mandatory, Conditional, or Optional indication for this information

- Description, notes on CN's usage of this data element, including accepted values

Sample EDI 210 transmission: $US Invoice

```
ISA*00*        *00*       *02*CN         *ZZ*RECEIVERID
*180628*0035*U*00401*000000340*0*P*>
GS*IM*CN*RECEIVERID*20180628*0035*340*X*004010
ST*210*340001
B3*B*28066945*291226*PP**20180628*275433****CNRU
C3*USD
N9*WY*545497**20180626
N9*BM*291226**20180626
N9*GT*10076 8779 RT0001*GOODS AND SERVICES TAX REGISTRATION
NUMBER N9*CT*CN  024091 19
N9*ZZ*1000043156 TQ 0514*QUEBEC SALES TAX REGISTRATION NUMBER
N1*PR*PAYER NAME*25*793585A
N3*123 W FRONTAGE RD
N4*NORTHFIELD*IL
N1*CN*CONSIGNEE*25*177835
N3*135 GUERNSEY IND BLVD
N4*CAMBRIDGE*OH*43725
N1*SH*SHIPPER NAME*25*793585
N3*123 MAIN ST
N4*MILLSDALE*IL
N7*UTLX*666955*187000*N*77500******RR*UTLX***0000*A****179**T107
LX*1
L5*1*COMPOUNDS, CLEANING, SCOURING OR WASHING, NEC,LI*2841920*T
L0*1***187000*N***1*TKR
L0*1***1*N L1*1*2510*PC*251000
L1*1*0.1980*PM*24433****ENS*********1234*MR
L7*1*CN*123456**1050000
L3*187000*N***275433****0*E
SE*26*340001
GE*1*340
IEA*1*000000340
```

Sample EDI 210 transmission: $CAD Invoice

```
ISA*00*      *00*       *02*CN          *ZZ*RECEIVERID
*180628*0035*U*00201*000000612*0*P*>
GS*IM*CN*RECEIVERID*20180628*0035*612*X*004010
ST*210*612001
B3*B*28061234*102141*PP**20180628*208360****CNRU
C3*CAD
N9*WY*557171**20180627
N9*BM*102141**20180627
N9*GT*10076 8779 RT0001*GOODS AND SERVICES TAX REGISTRATION NUMBER
N9*SI*102141
N9*PA**PRICE APPLICATION DATE*20060628
N9*ZZ*1000043156 TQ 0514*QUEBEC SALES TAX REGISTRATION NUMBER
N1*PR*PAYER NAME*25*772305B
N3*123 NEWBRIDGE ROAD
N4*ETOBICOKE*ON
N1*CN*CONSIGNEE*25*772305
N3*1800 INKSTER BLVD
N4*WINNIPEG SYMING YAR*MB*R2X2Z5
N1*SF*SHIP FROM NAME*25*772305
N3*123 NEWBRIDGE RD
N4*ETOBICOKE*ON
N1*SH*SHIPPER NAME*25*772305B
N3*123 NEWBRIDGE RD
N4*BRAMPTON INTER TERM*ON
N7*TCNU*911084*36986*N*7500******CN****4000*A******U203
LX*1
L5*1*ALL FREIGHT RATE SHIPMENTS, NEC, OR TRAILER-ON-F*4611110*T
L0*1***36986*N***1*CNT L0*1***1*N
L0*1***1*N L1*1*1705*PU*170500
L1*1*0.1980*PM*24433****ENS*********1234*MR
L1*1*.07*CT*13427****GST L7*1*CN*638931**1050000
L3*36986*N***208360****0*E
SE*33*612001
GE*1*612
```

ISA Segment: Interchange Control Header

ISA*00*   *00*   *02*CN   *ZZ*RECEIVERID
** *180628*0035*U*00401*000000340*0*P*>**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
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 (02=SCAC)	I05	ID	2/2
ISA06	Interchange Sender ID (CN – fill out rest of field with spaces)	I06	AN	15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID	2/2
ISA08	Interchange Receiver ID (RECEIVERID - fill out rest of 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 CN)	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	AN	1/1

GS Segment: Functional Group Header

GS*IM*CN*RECEIVERID*20180628*0035*340*X*004010

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
GS01	Functional Identifier Code (IM= Motor Carrier Freight Details and Invoice (210)	479	ID	2/2
GS02	Application Sender's Code	142	AN	2/15
GS03	Application Receiver's Code	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 CN)	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*210*340001

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
ST01	Transaction Set Identifier Code (210= Motor Carrier Freight Details and Invoice)	143	ID	3/3
ST02	Transaction Set Control Number (Sequential control number generated by CN)	329	AN	4/9

B3 Segment: Beginning Segment for Carrier's Invoice

B3*B*28066945*291226*PP20180628*275433****CNRU**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
B301	Shipment Qualifier (B= Bill of Lading for Individual Shipment)	147	ID	1/1
B302	Invoice Number (CN invoice Number)	76	AN	1/22
B303	Shipment ID Number (Bill of Lading Number)	145	AN	1/30
B304	Shipment Method of Payment (PP=prepaid CC=collect)	146	ID	2/2
B305	Weight Unit Code (L=pounds K=kilograms)	188	ID	1/1
B306	Invoice Date (YYYYMMDD)	373	DT	8/8
B307	Net Amount Due	193	N2	1/12
B311	Standard Carrier Alpha Code	140	ID	2/4

C3 Segment: Currency

C3*USD

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
C301	Currency Code (USD=US Dollars CAD=Canadian Dollars)	100	ID	3/3

N9 Segment: Reference Identification

N9*WY*545497**20180626
N9*BM*291226**20180626
N9*GT*10076 8779 RT0001*GOODS AND SERVICES TAX REGISTRATION NUMBER
N9*CT*CN   024091 19
N9*ZZ*1000043156 TQ 0514*QUEBEC SALES TAX REGISTRATION NUMBER

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N901	Reference Number Qualifier	128	ID	2/2
	(WY = waybill number)			
	(BM = Bill of Lading number)			
	(GT = GST Registration Number)			
	(ZZ = QST Registration Number)			
	(PA = Price application date)			
	(CT=Contract Number)			
N902	Reference Identification	127	AN	1/30
N903	Free-Form Description	369	AN	1/45
N904	Date	373	DT	8/8
	(YYYYMMDD)			

N1 Segment: Name

N1*PR*PAYER NAME*25*793585A
N1*CN*CONSIGNEE*25*772305
N1*SF*SHIP FROM NAME*25*772305
N1*SH*SHIPPER NAME*25*793585

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N101	Entity Identifier Code	98	ID	2/3
	(CN = Consignee)			
	(SH = Shipper)			
	(PR = Payer)			
	(SF= Shipped From)			
N102	Name	93	AN	1/35
N103	Identification Code Qualifier	66	ID	1/2
	(25=Carrier's customer code)			
N104	Identification Code	67	AN	2/17
	(CN's assigned patron number)			

N3 Segment: Address Information

N3*123 NEWBRIDGE ROAD
N3*1800 INKSTER BLVD
N3*123 NEWBRIDGE RD
N3*123 NEWBRIDGE RD

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N301	Address Information	166	AN	1/55

N4 Segment: Geographic Location

N4*ETOBICOKE*ON
N4*WINNIPEG SYMING YAR*MB*R2X2Z5
N4*ETOBICOKE*ON
N4*BRAMPTON INTER TERM*ON

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N401	City Name	19	AN	2/19
N402	State/Province Code	156	ID	2/2
N403	Zip/Postal Code	116	ID	3/9

N7 Segment: Equipment Details

N7*UTLX*666955*187000*N*77500****RR*UTLX***0000*A****179**T107**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/10
N703	Weight	81	R	1/10
N704	Weight Qualifier	187	ID	1/2
	(N = net weight)			
N705	Tare Weight	167	N0	3/8
N711	Equipment Description Code	40	ID	2/2
	(CN = container)			
	(RR= railcar)			
N712	Standard Carrier Alpha Code	140	ID	2/4
N715	Equipment Length	567	N0	4/5
N716	Tare Qualifier Code	571	ID	1/1
	(A = actual)			
N717	Weight Unit Code	188	ID	1/1
	(L = pounds)			
N720	Equipment Height	65	R	1/8
	(114 = 114 inches or 9 ft. 5 in.)			
N721	Width	189	R	1/8
N722	Equipment Type	24	ID	4/4
	(AAR Equipment Kind)			

LX Segment: Assigned Number

LX*1

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
LX01	Assigned Number	554	N0	1/6
	(Number assigned for differentiation within a transaction set)			

L5 Segment: Commodity Description

L5*1*COMPOUNDS, CLEANING, SCOURING OR WASHING, NEC,LI*2841920*T

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L501	Line Number	213	N0	1/3
L502	Commodity Description	79	AN	1/50
L503	Commodity Code	22	AN	1/16
	(7 digit Standard Transportation Commodity Code (STCC))			
L504	Commodity Code Qualifier	23	ID	1/1
	(T = Standard Transportation Commodity Code (STCC))			

L0 Segment: Line Item, Quantity and Weight

L0*1*187000*N***1*TKR**
L0*1*1*N**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L001	Lading Line Item Number	213	N0	1/3
L004	Weight	81	R	1/10
L005	Weight Qualifier (E = Estimated Weight) (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (TKR=tank car) (CLD = Carload)	211	ID	3/3

L1 Segment: Rate and Charges

L1*1*2510*PC*251000
L1*1*0.1980*PM*24433**ENS*********1234*MR**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L101	Lading Line Item Number	213	N0	1/3
L102	Freight Rate	60	R	1/9
L103	Rate/Value Qualifier	122	ID	2/2
	(PU=per unit			
	PC=per car			
	PW=percentage			
	CT=charges based on percentage			
	PM=per miles			
	MN=minimum charge)			
L104	Charge	58	N2	1/9
L105	Advances	191	N2	1/9
L106	Prepaid Amount	117	N2	1/9
L108	Spec Charge/Allow Code	150	ID	3/3
	150=Canadian Currency Exchange			
	295=Discount-Special			
	730=Terminal Service Fee			
	BLC=Bill Of Lading Charge			
	BRD=Bridge Charge (PEI Confederation)			
	DEL=Delivery Charge			
	DIV=Diversion and Re-consignment			
	DRC=Drayage			
	DSC=Discount Special			
	ENS=Fuel Surcharge			
	FLT=Ferry Service			
	GST=Goods and Services Tax Charge			
	HDF=Heavy Duty Flat Car Charge			
	HET=Heat in Transit Charges			
	HST=Harmonized Sales Tax			
	LDG=Loading			
	NHB=N.H.D Wharfage			
	PAD=Premium Charge			
	PUD=Pick-Up and Delivery			
	REF=Refrigeration			
	SAJ=Surcharge - Dollar Value			
	SOC=Stop-Off Charge			
	STC=State Surcharge			
	STR=Storage in Transit			
	SWC=Switching Charge			
	TER=Terminal Charge			
	TTS=State Tax			
	USF=Use - Special Type Flat Car			
	TAD=Carbon Tax – BC (Also available as default for all Carbon Tax)			
	ENC=Carbon Tax – Alberta			
	CON=Carbon Tax – Ontario (Specific to CN)			
	CQQ=Carbon Tax – Quebec (Specific to CN)			
L117	Billed/Rated-as Quantity	220	NO	1/11
L118	Billed/Rated-As Qualifier	221	ID	1/2

L7 Segment: Tariff Reference

L7*1*CN*1234561050000**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L701	Lading Line Item Number	213	NO	1/3
L702	Tariff Agency Code	168	ID	1/4
L703	Tariff Number	171	AN	1/7
L704	Tariff Section	172	AN	1/2
L705	Tariff Item Number	169	AN	1/16

L3 Segment: Total Weight and Charges

L3*187000*N*275433****0*E**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L301	Weight	81	R	1/10
L302	Weight Qualifier (N=net weight)	187	ID	1/2
L303	Freight Rate	60	R	1/9
L304	Rate/Value Qualifier	122	ID	2/2
L305	Charge	58	N2	1/9
L306	Advances	191	N2	1/9
L308	Spec Charge/Allow Code	150	ID	3/3

150=Canadian Currency Exchange
295=Discount-Special
730=Terminal Service Fee
BLC=Bill Of Lading Charge
BRD=Bridge Charge (PEI Confederation)
DEL=Delivery Charge
DIV=Diversion and Re-consignment
DRC=Drayage
DSC=Discount Special
ENS=Fuel Surcharge
FLT=Ferry Service
GST=Goods and Services Tax Charge
HDF=Heavy Duty Flat Car Charge
HET=Heat in Transit Charges
HST=Harmonized Sales Tax
LDG=Loading
NHB=N.H.D Wharfage
PAD=Premium Charge
PUD=Pick-Up and Delivery
REF=Refrigeration
SAJ=Surcharge - Dollar Value
SOC=Stop-Off Charge
STC=State Surcharge
STR=Storage in Transit
SWC=Switching Charge
TER=Terminal Charge
TTS=State Tax
USF=Use - Special Type Flat Car
TAD=Carbon Tax – BC (Also available as default for all Carbon Tax)
ENC=Carbon Tax – Alberta
CON=Carbon Tax – Ontario (Specific to CN)
CQQ=Carbon Tax – Quebec (Specific to CN)

SE Segment: Transaction Set Trailer

SE*26*340001

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
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*340

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
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*000000340

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
IEA01	Number of included Functional Groups	I16	N0	1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0	9/9