



# **Implementation Guide Motor Carrier Freight Details and Invoice message**

**EDI 210  
Version 4010**

**Description:** A Guide for the implementation of electronic receipt of Freight Invoices from CN pertaining to the movement of freight.

## **Purpose of EDI 210 Motor Carrier Freight Details and Invoice message**

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 (a tool on CN One website) are described on the CN One website at <http://www.cn.ca> 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 EDI 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 MFT is now available at CN at <https://mftedi.cn.ca/> and is free of charge to customers. Invoices sent via secured FTP will conform to EDI 210 Standards.

## **CN Contact**

CN provides an email address for Freight Invoice inquiries [RMGEC@cn.ca](mailto:RMGEC@cn.ca)

The **EDI Onboarding team** email address is [EDIMGR@cn.ca](mailto:EDIMGR@cn.ca). You can also visit us at [www.cn.ca](http://www.cn.ca). You can also visit us at <https://www.cn.ca/en/customer-centre/tools/edi/>

## **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.

## **Getting Started**

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

1. Notify us at [EDIMGR@cn.ca](mailto: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        \*250128\*0035\*U\*00401\*000000340\*0\*P\*>  
GS\*IM\*CN\*RECEIVERID\*20250128\*0035\*340\*X\*004010  
ST\*210\*340001  
B3\*B\*28066945\*291226\*PP\*\*20250128\*275433\*\*\*\*CNRU  
C3\*USD  
N9\*WY\*545497\*\*20250126  
N9\*BM\*291226\*\*20250126  
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\*30\*340001  
GE\*1\*340  
IEA\*1\*000000340

## Sample EDI 210 transmission: \$CAD Invoice

ISA\*00\*        \*00\*        \*02\*CN        \*ZZ\*RECEIVERID    \*250128\*0035\*U\*00201\*000000612\*0\*P\*>  
GS\*IM\*CN\*RECEIVERID\*20250128\*0035\*612\*X\*004010  
ST\*210\*612001  
B3\*B\*28061234\*102141\*PP\*\*20250128\*208360\*\*\*\*CNRU  
C3\*CAD  
N9\*WY\*557171\*\*20250127  
N9\*BM\*102141\*\*20250127  
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\*36\*612001  
GE\*1\*612  
IEA\*1\*000000612

### ISA Segment: Interchange Control Header

ISA\*00\*      \*00\*      \*02\*CN      \*ZZ\*RECEIVERID \*250128\*0035\*U\*00401\*000000340\*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 (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		1/1

**GS Segment: Functional Group Header****GS\*IM\*CN\*RECEIVERID\*20250128\*0035\*340\*X\*004010**

Ref. Des.	Name	Data Element	Attributes	
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	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**

Ref. Des.	Name	Data Element	Attributes	
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\*PP\*\*20250128\*275433\*\*\*\*CNRU**

Ref. Des.	Name	Data Element	Attributes	
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)	146	ID	2/2
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**

Ref. Des.	Name	Data Element	Attributes	
C301	Currency Code (USD=US Dollars)	100	ID	3/3

**N9 Segment: Reference Identification****N9\*WY\*545497\*\*20250126****N9\*BM\*291226\*\*20250126****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**

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

**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**

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

### **N3 Segment: Address Information**

**N3\*123 NEWBRIDGE ROAD**

**N3\*1800 INKSTER BLVD**

**N3\*123 NEWBRIDGE RD**

**N3\*123 NEWBRIDGE RD**

Ref.	Name	Data Element	Attributes
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N301	Address Information	166	AN 1/55
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### **N4 Segment: Geographic Location**

**N4\*ETOBICOKE\*ON**

**N4\*WINNIPEG SYMING YAR\*MB\*R2X2Z5**

**N4\*ETOBICOKE\*ON**

**N4\*BRAMPTON INTER TERM\*ON**

Ref.	Name	Data Element	Attributes
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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**

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

**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****L5\*1\*COMPOUNDS, CLEANING, SCOURING OR WASHING, NEC,LI\*2841920\*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\*\*\*187000\*N\*\*\*1\*TKR****L0\*1\*\*\*1\*N**

Ref. Des.	Name	Data Element	Attributes	
L001	Lading Line-Item Number	213	N0	1/3
L004	Weight	81	R	1/10
L005	Weight Qualifier (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (TKR=tank car)	211	ID	3/3

## L1 Segment: Rate and Charges

**L1\*1\*2510\*PC\*251000**

**L1\*1\*0.1980\*PM\*24433\*\*\*\*ENS\*\*\*\*\*1234\*MR**

Ref. Des.	Name	Data Element	Attributes	
L101	Lading Line Item Number	213	N0	1/3
L102	Freight Rate	60	R	1/9
L103	Rate/Value Qualifier (PU=per unit) (PC=per car) (PW=percentage) (CT=charges based on percentage) (PM=per miles) (MN=minimum charge)	122	ID	2/2
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=Canadian Currency Exchange) (295=Discount-Special) (730=Terminal Service Fee) (BLC=Bill of Lading Charge) (BRD=Bridge Charge (PEI Confederation)) (CSE=Customs Entry) (CUS=Customs Charge) (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) (HAZ=Hazardous Cargo 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 (Specific to CN)) (CSK=Carbon Tax – Saskatchewan (Specific to CN))	150	ID	3/3

(CMB=Carbon Tax – Manitoba (Specific to CN))  
(CON=Carbon Tax – Ontario (Specific to CN))  
(CQQ=Carbon Tax – Quebec (Specific to CN))  
(CNB=Carbon Tax – New Brunswick (Specific to CN))  
(CNS=Carbon Tax – Nova Scotia (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\*123456\*\*1050000**

Ref. Des.	Name	Data Element	Attributes
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**

Ref. Des.	Name	Data Element	Attributes	
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=Canadian Currency Exchange) (295=Discount-Special) (730=Terminal Service Fee) (BLC=Bill of Lading Charge) (BRD=Bridge Charge (PEI Confederation)) (CSE=Customs Entry) (CUS=Customs Charge) (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) (HAZ=Hazardous Cargo 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 (Specific to CN)) (CSK=Carbon Tax – Saskatchewan (Specific to CN)) (CMB=Carbon Tax – Manitoba (Specific to CN)) (CON=Carbon Tax – Ontario (Specific to CN)) (CQQ=Carbon Tax – Quebec (Specific to CN)) (CNB=Carbon Tact – New Brunswick (Specific to CN)) (CNS=Carbon Tax – Nova Scotia (Specific to CN))	150	ID	3/3

**SE Segment: Transaction Set Trailer****SE\*30\*340001**

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\*340**

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\*000000340**

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