



Implementation Guide Confirmation (Ocean) Message

EDI 301

Version 4010

Purpose of Confirmation (Ocean) EDI 301 message

Ocean Carriers transmit the EDI 301 to advise CN of Export Bookings for which CN Intermodal may release empty containers stored at CN terminals, receive loaded containers and transport by rail to a Port of Lading. These Export Bookings are processed in CN's Service Reliability Strategy (SRS) system. Online access to the Export Bookings to monitor status and equipment applied is also provided to Ocean Carrier personnel via CN's Intermodal Direct tool on CN One website at www.cn.ca

EDI Version & Guidelines

This EDI 301 version is 004010 and closely complies with the official published Guidelines of the Information Systems Agreement, Standards Work Group. CN can also accept version 003030 upon special request.

Customized Formats

It is entirely the responsibility of the Sender of the EDI 301 transmission who requires coding or mapping structure other than expressly written in the Guidelines and here in the CN Implementation documents to have the necessary changes performed at their system or through a Value Added Network (VAN).

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.

Systems Availability

CN's SRS system and EDI pipeline systems are available on average over twenty-two hours per day to process incoming EDI 301 transmissions. Systems maintenance outages are scheduled in generally low activity times in the early morning hours of Eastern Time. Transmissions received during this time are queued for processing.

Functional Acknowledgement

A key issue in the exchange of electronic data is the confirmation between the sender and receiver that the data is successfully sent and received. To ensure each EDI 301 transmission was received successfully, CN will send an EDI 997 Functional Acknowledgement message to the sender within one hour following reception of the EDI 301 transmission.

EDI Acknowledgement Report

Available in CN's Intermodal Direct tool on the CN One website www.cn.ca, the EDI Acknowledgement Report provides up to the minute information on the status of EDI bookings processed in our SRS system. Bookings can be Accepted, Accepted with Warnings or Rejected. It is the responsibility of the EDI 301 Sender to monitor the EDI Acknowledgement Report and take corrective action as required either directly in the Intermodal Direct Export Booking tool or by sending a corrected EDI 301 transmission.

CN Contact

CN provides an email address for Ocean Carriers to provide updates for tables such as changes in their vessel fleet. That email address is CN-INTLOG@cn.ca for imports and shipments. The other email address is for other information and inquiries relating to the actual formatting of the EDI 301 transmission. The **EDI Onboarding team** email address is EDIMGR@cn.ca. You can also visit us at www.cn.ca.

Industry Standard Values

The CN EDI 301 was designed to use industry standard values without usage of proprietary codes of CN or the Ocean Carrier.

Key data tables are:

Lloyds Vessel Code

CN maintains a table of Vessels as provided by each Ocean Carrier.

ISO Code

CN maintains a table of ISO codes with corresponding container size and type. This table is available upon request.

Standard Point Location Code (SPLC)

CN maintains a table of SPLC's that designate rail and Port of Lading locations throughout North America. Thus, any Port of Lading in North America can be definitively indicated in Export Bookings.

Schedule K Code:

CN maintains a table of Schedule K codes that designate the foreign (non North American) Ports of Discharge.

Mandatory Data Elements

Several data elements are mandatory in the EDI 301 and are edited for both their presence and content. The absence of any of the following data elements or with data values that do not pass the edits will cause the Booking Confirmation to be rejected:

- SCAC of Ocean Carrier
- Add, Modify or Delete Indicator
- Booking Number
- Port of Loading
- Port of Discharge
- Vessel
- Voyage
- Origin CN Intermodal Terminal
- Quantity of Containers
- Container Type

Work Order Reference Number Qualifier N9 Segment

The reference number qualifier Work Order number in the N9 segment is 'WO'.

Example N9*WO*5353999

Shipment Parties

The two parties used in the EDI 301 N1 Name Segments are for

(SH) = Shipper and

(PR) = Payer of Freight

N101 Segment is for the Qualifier (SH or PR) and the N102 the Full Name of the party.

For the EDI 301 to be processed correctly, the Full Name of the party entered must match the Full Name of the party contained in CN's intermodal Customer Name table. To verify the correct spelling of the Full Name of the party, call our EDI Support group at 1-800-267-9779.

It is very important to refer to the EDI Acknowledgement Booking Report in our Intermodal Direct tool on the CN One website at www.cn.ca after sending in an EDI 301. This report will specify whether the EDI 301 was accepted or rejected and for what reason. For example, if there is a mismatch on the spelling of the Full Name of the party.

Examples of the EDI output for Shipment Parties:

N1*SH*ABC COMPANY LTD

N1*PF*XYZ PAYMENT COMPANY

Confirmation Actions

The three actions allowed are Add, Modify and Delete as indicated in the B104 Segment. A code specifying one of these three actions is required or the specific Booking Confirmation will be rejected.

EDI 301 Systems Defaults

An Add action will be processed as a Modify if the Export Booking already exists.

A Modify action will be processed as an Add if the Export Booking does not exist.

A Delete action will be rejected if the Export Booking does not exist.

EDI 301 Business Rules

Split bookings for different types of containers at the same origin CN Intermodal Terminal are indicated by multiple Y4 segments.

Split bookings for more than one origin CN Intermodal Terminal are indicated by multiple Y4 segments that also must have the SPLC of each origin.

An Export Booking cannot be deleted if a container has been applied. That is, if a container has been reported Out Gate Empty and/or In Gate Load.

An Export booking can be modified to increase or reduce the quantity of containers. The quantity can be reduced to any amount down to 1 (one) or the amount already applied, whichever is greater. For example, an Export Booking for 5 containers with three already applied can be modified to reduce the quantity to 4 or 3.

To modify the container type in an Export Booking requires a two step process as container type is part of the index key. If no containers have been applied to the Export Booking, first delete the Export Booking, and then add again with the new container type. If containers have been applied to the Export Booking, first modify to reduce the quantity to the amount already applied and specify the different container type this creating a split booking. This modification can be accomplished in the same 301 transmission.

Start Date (Container Availability Date) of the Export Booking will default to current date if none is provided in the EDI 301.

Expiration Date (Cut Off Date) of the Export Booking will default to the Sailing Date if none is provided in the EDI 301.

Sailing Date of the vessel will default to 30 days from the Start Date if none is provided in the EDI 301.

The Quantity of containers must be one or more.

A qualifier (FA or CE) must be provided with the temperature of a temperature-controlled container.

Confirmation (Ocean) Mapping Guide (EDI 301)

This section contains the details of how the EDI 301 message will be formatted.

Example EDI 301 message

ISA*00* *00*MFT *02*GENERIC *02*CN *250119*0510*U*00401*000211932*0*P*:
GS*RO*GENERIC*CN*20250119*0510*211932*X*004010
ST*301*211932
B1*ABCD*RRRR95400500*20250119*R
Y3*RRRR95400500*ABCD*20250126****20250126
Y4*RRRR95400500*RRRR95400500***1*2200*ABCD
N9*BN* RRRR95400500
N1*SH*ABC COMPANY INC.*2*ABCD
N3*123 MAIN ST
N4*MADISON*NJ
R4*D*K*57035*SHANGHAI SHANGHAI
DTM*096*20231214
R4*L*UN*2704*LOS ANGELES
DTM*096*20250108
W09*CZ*-20*CE*-20*CE****0
LX*1
L0****10000*A3*****K
L5**MEDICAL GOODS DONATED FOR RELIEF OR CHARITY
V1*9560352*SEATTLE BRIDGE**034W****L
SE*22*211932
GE*1*211932
IEA*1*000211932

ISA Segment: Interchange Control Header**ISA*00* *00*MFT *02*GENERIC *02*CN *250119*0510*U*00401*000211932*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 (Fill out with spaces)	I04	AN	10/10
ISA05	Interchange ID Qualifier	I05	ID	2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	ID	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	ID	15/15
ISA09	Interchange Date (YYMMDD)	I08	DT	6/6
ISA10	Interchange Time (HHMM)	I09	TM	4/4
ISA11	Repetition Separator (U)	I10	ID	1/1
ISA12	Interchange Control Version Number (Value 00401)	I11		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*RO*GENERIC*CN*20250119*0510*211932*X*004010**

Ref. Des.	Name	Data Element	Attributes	
GS01	Functional Identifier Code (RO=Ocean Booking Information 301)	479	ID	2/2
GS02	Application Sender's Code	142	AN	2/15
GS03	Application Receiver's Code	124	AN	2/15
GS04	Date (YYYYMMDD)	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	ID	1/12

ST Segment: Transaction Set Header

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

ST*301*211932

Ref. Des.	Name	Data Element	Attributes	
ST01	Transaction Set Identifier Code (301 = Confirmation Ocean)	143	ID	3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN	4/9

B1 Segment: Beginning Segment for Booking or Pick-up/Delivery**B1*ABCD*RRRR95400500*20250119*R**

Ref. Des.	Name	Data Element	Attributes	
B101	Standard Carrier Alpha Code (SCAC of the carrier sending transmission)	140	ID	2/4
B102	Shipment Identification Number (Booking Number)	145	AN	1/30
B103	Date (CCYYMMDD=Booking Date)	373	DT	8/8
B104	Reservation Code (N=New) (R or D=Delete) (U=Change)	558	ID	1/1

Y3 Segment: Space Confirmation**Y3*RRRR95400500*ABCD*20280126****20250126**

Ref. Des.	Name	Data Element	Attributes	
Y301	Booking Number	13	AN	1/17
Y302	Standard Carrier Alpha Code (SCAC of the carrier sending transmission)	140	ID	2/4
Y303	Date (CCYYMMDD=Date of departure of vessel)	373	DT	8/8
Y307	Date (CCYYMMDD=required pier date/cut-off date)	373	DT	8/8

Y4 Segment: Container Release**Y4*RRRR95400500*RRRR95400500***1*2200*ABCD**

Ref. Des.	Name	Data Element	Attributes	
Y401	Booking Number (First booking number)	13	AN	1/17
Y402	Booking Number (Last booking number in a range of numbers)	13	AN	1/17
Y405	Number of Containers	95	N0	1/4
Y406	Equipment Type (ISO code of size and type of container)	24	ID	4/4
Y407	Standard Carrier Alpha Code (SCAC of the carrier sending transmission)	140	ID	2/4

N9 Segment: Reference Identification**N9*BN*RRRR95400500**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Identification Qualifier (BN=booking number)	128	ID	2/3
N902	Reference Identification	127	AN	1/30

N1 Segment: Name**N1*SH*ABC COMPANY INC.*2*ABCD
N3*123 MAIN ST
N4*MADISON*NJ**

Ref. Des.	Name	Data Element	Attributes	
N101	Entity Identifier Code (CN = Consignee) (PR= Payer of freight)	98	ID	2/3
N102	Name	93	AN	1/60
N103	Identification Code Qualifier (2 = SCAC code)	66	ID	1/2
N104	Identification Code (SCAC code)	67	AN	2/80

N3 Segment: Address Information

Ref. Des.	Name	Data Element	Attributes	
N301	Address Information	166	AN	1/55

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			

R4 Segment: Port or Terminal

R4*D*K*57035*SHANGHAI SHANGHAI
R4*L*UN*2704*LOS ANGELES

Ref. Des.	Name	Data Element	Attributes	
R401	Port or Terminal Function Code (D=port of discharge) (L=port of loading) (R=place of receipt CN Intermodal terminal at origin)	115	ID	1/1
R402	Location Qualifier (K=census schedule K code) (CS=Canadian SPLC code) (SL=US SPLC code)	309	ID	1/2
R403	Location Identifier	310	AN	1/30
R404	Port Name	114	AN	2/24

*****Schedule K code required for port of discharge. Canadian or US SPLC code required for port of loading and place of receipt.***

DTM Segment: Date/Time Reference

DTM*096*20250108

Ref. Des.	Name	Data Element	Attributes	
DTM01	Date/Time Qualifier (096=Discharge)	374	ID	3/3
DTM02	Date (CCYYMMDD)	373	DT	8/8

W09 Segment: Equipment and Temperature**W09*CZ*-20*CE*-20*CE****0**

Ref. Des.	Name	Data Element	Attributes	
W0901	Equipment Description Code (CZ=refrigerated container) (CN=container)	40	ID	2/2
W0902	Temperature (Minimum allowable temperature Condition)	408	R	1/4
W0903	Unit or basis for measurement code (CE=Celsius) (FA=Fahrenheit)	355	ID	2/2
W0904	Temperature (Maximum allowable temperature Condition)	408	R	1/4
W0905	Unit or basis for measurement code (CE=Celsius) (FA=Fahrenheit)	355	ID	2/2
W0909	Quantity (Number of air exchanges per hour)	380	R	1/15

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

L0 Segment: Line Item – Quantity and Weight**L0****10000*A3*****K**

Ref. Des.	Name	Data Element	Attributes	
L004	Weight	81	R	1/8
L005	Weight Qualifier (A3=shippers' weight)	187	ID	1/2
L011	Weight Unit Code (K=kilograms)	188	ID	1/1

L5 Segment: Description, Marks, and Numbers**L5**MEDICAL GOODS DONATED FOR RELIEF OR CHARITY**

Ref. Des.	Name	Data Element	Attributes	
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L502	Lading Description	213	N0	1/3
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V1 Segment: Vessel Identification**V1*9560352*SEATTLE BRIDGE**034W****L**

Ref. Des.	Name	Data Element	Attributes	
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V101	Vessel Code	597	ID	1/8
V102	Vessel Name	182	AN	2/28
V104	Voyage Number	55	AN	2/10
V108	Vessel Code Qualifier (L=Lloyd's Register of Shipping)	897	ID	1/1

SE Segment: Transaction Set Trailer**SE*22*211932**

Ref. Des.	Name	Data Element	Attributes	
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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*211932**

Ref. Des.	Name	Data Element	Attributes	
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GE01	Number of Transaction Sets Included	97	N0	1/10
GE02	Group Control Number	28	N0	1/9

IEA Segment: Interchange Control Trailer

IEA*1*000211932

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

CN Intermodal Terminals and Ports

The following lists CN Intermodal Terminals and Port Operations that can be an origin and destination on CN lines.

D/K	SPLC	Station Abbr. 333	St/Pr	Full Station Name
	328754	ARCADIA	WI	ARCADIA
01535	044761	BRAINTTER	ON	BRAMPTON INTER TERM
	082417	CALLOGPAR	AB	CALGARY LOGIST PARK
	328180	CHIFALLS	WI	CHIPPEWA FALLS
3901	380002	CHIINTTER	IL	CHICAGO INTER TERM
3801	315986	DETINTTER	MI	DETROIT INTER TERM
	500900	DULUTH	MN	DULUTH
80101	085646	EDMINTTER	AB	EDMONTON INTER TERM
13841	012548	FAICOVIMP	NS	FAIRVIEW COVE IMPEX
12493	093614	FRASURIMP	BC	FRASER SURREY IMPEX
13841	012504	HALHALTER	NS	HALIFAX HALTERM TER
13841	012500	HALIFAX	NS	HALIFAX
13841	012501	HALINTTER	NS	HALIFAX INTER TERM
	368700	INDINTTER	IN	INDIANAPOLIS INTER TERM
2015	487230	JACKSON	MS	JACKSON
3901	384040	JOLYARD	IL	JOLIET YARD
	047712	MALPORT	ON	MALPORT
2006	439875	MEMINTTER	TN	MEMPHIS INTER TERM
01535	044716	MISINTSER	ON	MISSISSAUGA INT SER
	479800	MOBILE	AL	MOBILE
01822	030313	MONBICKER	PQ	MONTREAL BICKERDIKE
13400	015289	MONINTTER	NB	MONCTON INTER TERM
01822	030308	MONTERMON	PQ	MONTREAL TERMONT
01822	030191	MONTASYAR	PQ	MONTREAL TASCH YAR
01822	030318	MONRACTER	PQ	MONTREAL RACINE TER
01822	030305	MONWHARF	PQ	MONTREAL WHARF
01822	030002	MONULTDEP	PQ	MONTREAL ULTRA DEPO
2002	646505	MAYYARD	LA	MAYS YARD
2002	647000	NEWORLEAN	LA	NEW ORLEANS
2002	329248	NEWRICHMO	WI	NEW RICHMOND
12200	096201	PRIGEORGE	BC	PRINCE GEORGE
12442	097438	PRIRUPTER	BC	PRINCE RUPERT TERM
	070156	REGINTTER	SK	REGINA INTER TERM
12493	093804	ROBBANK	BC	ROBERTS BANK
80103	072420	SASINTTER	SK	SASKATOON INTER TER
14428	016004	STJOHIMPE	NB	SAINT JOHN IMPEX
12493	093932	VANCENPIE	BC	VANCOUVER CENT PIER
12493	093696	VANINTTER	BC	VANCOUVER INTER TER
12493	093934	VANVANter	BC	VANCOUVER VANTERM
80102	061265	WINSYMYAR	MB	WINNIPEG SYMINGTON YARD