SAP Schema Documentation

SAP Business Network Freight Collaboration
Message Implementation Guide | Public
ANSI_X12_210
Message Type: 210
Document Version: 1.7 – 2023-12-09

Run Simple

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General Information

Name ANSI X12 Interchange headers and trailers

Direction Out

Status Active

Message Type Interchange Structure

External Category Message

Documentation

Definition The Interchange Envelope, often referred to as the “outer envelope,” is the wrapper for all the data to be sent in one transmission. It can contain multiple Functional Groups. This characteristic means that transactions of different types can be included in the Interchange Envelope, with each type of transaction stored in a separate Functional Group. The Interchange Envelope is defined by the header and trailer; the Interchange Control Header (designated ISA) appears at the beginning, and the Interchange Control Trailer (designated IEA) appears at the end. While the typical pattern from Enterprise Systems is to create one Functional Group (GS/GE) within an Interchange Group (ISA/IEA), the X12 enveloping supports one or more Functional Groups (GS/GE) within an Interchange Group (ISA/IEA).

1.1 Structure

The following table shows the complete structure.

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **S_ISA** — Interchange Control Header	1 .. 1				
│ ├ **D_I01** — Authorization Information Qualifier	1 .. 1	String		2 .. 2	D_I01
│ ├ **D_I02** — Authorization Information	1 .. 1	String		10 .. 10	
│ ├ **D_I03** — Security Information Qualifier	1 .. 1	String		2 .. 2	D_I03
│ ├ **D_I04** — Security Information	1 .. 1	String		10 .. 10	
│ ├ **D_I05_1** — Interchange ID Qualifier	1 .. 1	String		2 .. 2	D_I05
│ ├ **D_I06** — Interchange Sender ID	1 .. 1	String		15 .. 15	
│ ├ **D_I05_2** — Interchange ID Qualifier	1 .. 1	String		2 .. 2	D_I05
│ ├ **D_I07** — Interchange Receiver ID	1 .. 1	String		15 .. 15	
│ ├ **D_I08** — Interchange Date	1 .. 1	String		6 .. 6	
│ ├ **D_I09** — Interchange Time	1 .. 1	String		4 .. 4	
│ ├ **D_I10** — Interchange Control Standards Identifier	1 .. 1	String		1 .. 1	
│ ├ **D_I11** — Interchange Control Version Number	1 .. 1	String		5 .. 5	D_I11
│ ├ **D_I12** — Interchange Control Number	1 .. 1	String		9 .. 9	
│ ├ **D_I13** — Acknowledgment Requested	1 .. 1	String		1 .. 1	D_I13
│ ├ **D_I14** — Interchange Usage Indicator	1 .. 1	String		1 .. 1	D_I14
│ └ **D_I15** — Component Element Separator	1 .. 1	String		1 .. 1	
├ **FunctionalGroup** — Functional Group	1 .. 1				
│ ├ **S_GS** — Functional Group Header	1 .. 1				
│ │ ├ **D_479** — Functional Identifier Code	1 .. 1	String		2 .. 2	D_479
│ │ ├ **D_142** — Application Sender's Code	1 .. 1	String		2 .. 15	
│ │ ├ **D_124** — Application Receiver's Code	1 .. 1	String		2 .. 15	
│ │ ├ **D_373** — Date	1 .. 1	String		8 .. 8	
│ │ ├ **D_337** — Time	1 .. 1	String		6 .. 6	
│ │ ├ **D_28** — Group Control Number	1 .. 1	String		9 .. 9	
│ │ ├ **D_455** — Responsible Agency Code	1 .. 1	String		1 .. 1	D_455
│ │ └ **D_480** — Version / Release / Industry Identifier Code	1 .. 1	String		6 .. 6	D_480
│ └ **S_GE** — Functional Group Trailer	1 .. 1				
│ ├ **D_97** — Number of Transaction Sets Included	1 .. 1	String		1 .. 1	
│ └ **D_28** — Group Control Number	1 .. 1	String		9 .. 9	
└ **S_IEA** — Interchange Control Trailer	1 .. 1				
├ **D_I16** — Number of Included Functional Groups	1 .. 1	String		1 .. 1	
└ **D_I12** — Interchange Control Number	1 .. 1	String		9 .. 9	

2 DETAILS HEADER

2.1 Interchange — Interchange Structure

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **S_ISA** — Interchange Control Header	1 .. 1				
├ **FunctionalGroup** — Functional Group	1 .. 1				
└ **S_IEA** — Interchange Control Trailer	1 .. 1				

Documentation

Definition The Interchange Envelope, often referred to as the “outer envelope,” is the wrapper for all the data to be sent in one transmission. It can contain multiple Functional Groups. This characteristic means that transactions of different types can be included in the Interchange Envelope, with each type of transaction stored in a separate Functional Group. The Interchange Envelope is defined by the header and trailer; the Interchange Control Header (designated ISA) appears at the beginning, and the Interchange Control Trailer (designated IEA) appears at the end. While the typical pattern from Enterprise Systems is to create one Functional Group (GS/GE) within an Interchange Group (ISA/IEA), the X12 enveloping supports one or more Functional Groups (GS/GE) within an Interchange Group (ISA/IEA).

Properties

Identifier Interchange

Name Interchange Structure

Cardinality min: 1 max: 1

2.2 S_ISA — Interchange Control Header

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **S_ISA** — Interchange Control Header	1 .. 1				
│ ├ **D_I01** — Authorization Information Qualifier	1 .. 1	String		2 .. 2	D_I01
│ ├ **D_I02** — Authorization Information	1 .. 1	String		10 .. 10	
│ ├ **D_I03** — Security Information Qualifier	1 .. 1	String		2 .. 2	D_I03
│ ├ **D_I04** — Security Information	1 .. 1	String		10 .. 10	
│ ├ **D_I05_1** — Interchange ID Qualifier	1 .. 1	String		2 .. 2	D_I05
│ ├ **D_I06** — Interchange Sender ID	1 .. 1	String		15 .. 15	
│ ├ **D_I05_2** — Interchange ID Qualifier	1 .. 1	String		2 .. 2	D_I05
│ ├ **D_I07** — Interchange Receiver ID	1 .. 1	String		15 .. 15	
│ ├ **D_I08** — Interchange Date	1 .. 1	String		6 .. 6	
│ ├ **D_I09** — Interchange Time	1 .. 1	String		4 .. 4	
│ ├ **D_I10** — Interchange Control Standards Identifier	1 .. 1	String		1 .. 1	
│ ├ **D_I11** — Interchange Control Version Number	1 .. 1	String		5 .. 5	D_I11
│ ├ **D_I12** — Interchange Control Number	1 .. 1	String		9 .. 9	
│ ├ **D_I13** — Acknowledgment Requested	1 .. 1	String		1 .. 1	D_I13
│ ├ **D_I14** — Interchange Usage Indicator	1 .. 1	String		1 .. 1	D_I14
│ └ **D_I15** — Component Element Separator	1 .. 1	String		1 .. 1	

Documentation

Definition To start and identify an interchange of zero or more functional groups and interchange-related control segments

Properties

Identifier S_ISA

Name Interchange Control Header

Cardinality min: 1 max: 1

Syntax Type Related

External Category Element

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
D_I01 Authorization Information Qualifier	Code identifying the type of information in the Authorization Information **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 2 max: 2 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I01 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I02 Authorization Information	Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 10 max: 10 **External Category** Element **Data Type** xsd:string
D_I03 Security Information Qualifier	Code identifying the type of information in the Security Information **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 2 max: 2 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I03

		Type System Customer_TS **Version Mode** Local **Version** 1.1
D_I04 Security Information	This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 10 **max:** 10 **External Category** Element **Data Type** xsd:string
D_I05_1 Interchange ID Qualifier	Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified **Selected Values** All Values in Codelist	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 2 **max:** 2 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I05 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I06 Interchange Sender ID	Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element **Usage 1** This field contains the sender LBN ID. **Constraint 1** For EDI 997 message type the LBN ID is always “LBN” as the message will be generated by the network.	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 15 **max:** 15 **External Category** Element **Data Type** xsd:string
D_I05_2 Interchange ID Qualifier	Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified **Selected Values** All Values in Codelist	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 2 **max:** 2 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I05 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I07 Interchange Receiver ID	Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them **Usage 1** This field contains the receiver LBN ID.	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 15 **max:** 15 **External Category** Element **Data Type** xsd:string
D_I08 Interchange Date	Date of the interchange	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 6 **max:** 6 **External Category** Element **Data Type** xsd:string
D_I09 Interchange Time	Time of the interchange	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 4 **max:** 4 **External Category** Element **Data Type** xsd:string
D_I10 Interchange Control Standards Identifier	Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 1 **External Category** Element **Data Type** xsd:string

D_I11 Interchange Control Version Number	Code specifying the version number of the interchange control segments **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 5 max: 5 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I11 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I12 Interchange Control Number	A control number assigned by the interchange sender	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 9 max: 9 **External Category** Element **Data Type** xsd:string
D_I13 Acknowledgment Requested	Code indicating sender's request for an interchange acknowledgement **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 1 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I13 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I14 Interchange Usage Indicator	Code indicating whether data enclosed by this interchange envelope is test, production or information **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 1 **External Category** Element **Data Type** xsd:string **Codelist Id** D_I14 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_I15 Component Element Separator	Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 1 **External Category** Element **Data Type** xsd:string

2.3 FunctionalGroup — Functional Group

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **FunctionalGroup** — Functional Group	1 .. 1				
│ ├ **S_GS** — Functional Group Header	1 .. 1				
│ └ **S_GE** — Functional Group Trailer	1 .. 1				

Documentation

Definition Functional Groups, often referred to as the “inner envelope,” are made up of one or more Transaction Sets. One Functional Group Envelope must include transaction of all of the same type, which can be batched together into one transmission. The Functional Group is defined by the header and trailer segments.

Properties

Identifier FunctionalGroup

Name Functional Group

Cardinality min: 1 max: 1

Syntax Type Related

External Category Element

2.4 S_GS — Functional Group Header

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **FunctionalGroup** — Functional Group	1 .. 1				
│ ├ **S_GS** — Functional Group Header	1 .. 1				
│ │ ├ **D_479** — Functional Identifier Code	1 .. 1	String		2 .. 2	D_479
│ │ ├ **D_142** — Application Sender's Code	1 .. 1	String		2 .. 15	
│ │ ├ **D_124** — Application Receiver's Code	1 .. 1	String		2 .. 15	
│ │ ├ **D_373** — Date	1 .. 1	String		8 .. 8	
│ │ ├ **D_337** — Time	1 .. 1	String		6 .. 6	
│ │ ├ **D_28** — Group Control Number	1 .. 1	String		9 .. 9	
│ │ ├ **D_455** — Responsible Agency Code	1 .. 1	String		1 .. 1	D_455
│ │ └ **D_480** — Version / Release / Industry Identifier Code	1 .. 1	String		6 .. 6	D_480

Documentation

Definition To indicate the beginning of a functional group and to provide control information Comments 1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer. Semantic Notes: 1. GS04 is the group date. 2. GS05 is the group time. 3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Properties

Identifier S_GS

Name Functional Group Header

Cardinality min: 1 max: 1

Syntax Type Related

External Category Element

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
D_479 Functional Identifier Code	Code identifying a group of application related transaction sets **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 2 max: 2 **External Category** Element **Data Type** xsd:string **Codelist Id** D_479 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_142 Application Sender's Code	Code identifying party sending transmission; codes agreed to by trading partners	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 2 max: 15 **External Category** Element **Data Type** xsd:string
D_124 Application Receiver's Code	Code identifying party receiving transmission; codes agreed to by trading partners	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 2 max: 15 **External Category** Element **Data Type** xsd:string
D_373 Date	Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 8 max: 8 **External Category** Element

		Data Type xsd:string
D_337 Time	Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 6 **max:** 6 **External Category** Element **Data Type** xsd:string
D_28 Group Control Number	Assigned number originated and maintained by the sender	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 9 **max:** 9 **External Category** Element **Data Type** xsd:string
D_455 Responsible Agency Code	Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Selected Values** All Values in Codelist	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 1 **External Category** Element **Data Type** xsd:string **Codelist Id** D_455 **Type System** Customer_TS **Version Mode** Local **Version** 1.1
D_480 Version / Release / Industry Identifier Code	Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed **Selected Values** All Values in Codelist	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 6 **max:** 6 **External Category** Element **Data Type** xsd:string **Codelist Id** D_480 **Type System** Customer_TS **Version Mode** Local **Version** 1.1

2.5 S_GE — Functional Group Trailer

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
├ **FunctionalGroup** — Functional Group	1 .. 1				
│ └ **S_GE** — Functional Group Trailer	1 .. 1				
│ ├ **D_97** — Number of Transaction Sets Included	1 .. 1	String		1 .. 1	
│ └ **D_28** — Group Control Number	1 .. 1	String		9 .. 9	

Documentation

Definition To indicate the end of a functional group and to provide control information Comments 1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header. Semantic Notes: 1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Properties

Identifier S_GE

Name Functional Group Trailer

Cardinality min: 1 max: 1

Syntax Type Related

External Category Element

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
D_97 Number of Transaction Sets Included	Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 1 **External Category** Element **Data Type** xsd:string
D_28 Group Control Number	Assigned number originated and maintained by the sender	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 9 max: 9 **External Category** Element **Data Type** xsd:string

2.6 S_IEA — Interchange Control Trailer

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
Interchange — Interchange Structure	1 .. 1				
└ **S_IEA** — Interchange Control Trailer	1 .. 1				
├ **D_I16** — Number of Included Functional Groups	1 .. 1	String		1 .. 1	
└ **D_I12** — Interchange Control Number	1 .. 1	String		9 .. 9	

Documentation

Definition To define the end of an interchange of zero or more functional groups and interchange-related control segments

Properties

Identifier S_IEA

Name Interchange Control Trailer

Cardinality min: 1 max: 1

Syntax Type Related

External Category Element

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
D_I16 Number of Included Functional Groups	A count of the number of functional groups included in an interchange	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 1 **External Category** Element **Data Type** xsd:string
D_I12 Interchange Control Number	A control number assigned by the interchange sender	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 9 **max:** 9 **External Category** Element **Data Type** xsd:string

3 OVERVIEW MESSAGE

General Information

Name	SAP_LBN_ANSI_X12_210
Direction	In
Status	Active
Message Type	Motor Carrier Freight Details and Invoice
Type System	ASC_X12
Version	004010
External Category	Transaction Set

Documentation

Definition This Draft Standard for Trial Use contains the format and establishes the data contents of the Motor Carrier Freight Details and Invoice Transaction Set (210) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide detail information for charges for services rendered by a motor carrier. It is used both as a motor carrier invoice to request payment or as details pertaining to motor freight shipment(s) charges.

Notes

Example 1

```
ISA*00*          *00*          *02*”Carrier LBNID”*01*”Shipper
LBNID”*220602*1059*U*00401*000001102*0*T*>~
GS*QM*”Carrier LBNID”*”Shipper LBNID”*20220602*105900*000001102*X*004010~
ST*210*11020001~
B3**Invoice Number*FreightOrder ID*PP**20220526*44537****SCAC~
C3*USD~
N9*12*BillFromParty~
N9*CN*PurchasingParty~
N9*06*System ID~
K1*free text*optional free text~
K1*free text~
LX*1~
L1****742315****TAX****VAT_DEST*******19*USD*141040~
LX*2~
L1**7423.15*RC*742315********UNLOADING~
SE*13*11020001~
GE*1*000000102~
IEA*1*000000102~
```

3.1 Structure

The following table shows the complete structure.

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **ST** — Transaction Set Header	1 .. 1		010		
│ ├ **143** — Transaction Set Identifier Code	1 .. 1	Token	01	3 .. 3	143
│ └ **329** — Transaction Set Control Number	1 .. 1	String	02	4 .. 9	
├ **B3** — Beginning Segment for Carrier's Invoice	1 .. 1		020		
│ ├ **76** — Invoice Number	1 .. 1	String	02	1 .. 22	
│ ├ **145** — Shipment Identification Number	1 .. 1	String	03	1 .. 30	
│ ├ **146** — Shipment Method of Payment	1 .. 1	Token	04	2 .. 2	146
│ ├ **373** — Date	1 .. 1	Date	06	8 .. 8	
│ ├ **193** — Net Amount Due	1 .. 1	Decimal	07	1 .. 12	
│ └ **140** — Standard Carrier Alpha Code	1 .. 1	Token	11	2 .. 4	
├ **C3** — Currency	1 .. 1		040		
│ └ **100** — Currency Code	1 .. 1	Token	01	3 .. 3	ISO_4217
├ **N9** — Reference Identification	3 .. 300		060		
│ ├ **128** — Reference Identification Qualifier	1 .. 1	Token	01	2 .. 3	128
│ ├ **127** — Reference Identification - System Number	1 .. 1	String	02	1 .. 30	
│ ├ **127** — Reference Identification - Billing Account	1 .. 1	String	02	1 .. 30	
│ ├ **127** — Reference Identification - Purchasing Party	1 .. 1	String	02	1 .. 30	
│ ├ **369** — Free-form Description	0 .. 1	String	03	1 .. 45	
│ ├ **373** — Date	0 .. 1	Date	04	8 .. 8	
│ ├ **337** — Time	0 .. 1	Time	05	4 .. 8	
│ ├ **623** — Time Code	0 .. 1	Token	06	2 .. 2	623
│ └ **C040** — Reference Identifier	0 .. 1		07		
│ ├ **128** — Reference Identification Qualifier	1 .. 1	Token	01	2 .. 3	128
│ ├ **127** — Reference Identification	1 .. 1	String	02	1 .. 30	
│ ├ **128** — Reference Identification Qualifier	0 .. 1	Token	03	2 .. 3	128
│ ├ **127** — Reference Identification	0 .. 1	String	04	1 .. 30	
│ ├ **128** — Reference Identification Qualifier	0 .. 1	Token	05	2 .. 3	128
│ └ **127** — Reference Identification	0 .. 1	String	06	1 .. 30	
├ **K1** — Remarks	0 .. 10		100		
│ ├ **61** — Free-Form Message	1 .. 1	String	01	1 .. 30	
│ └ **61** — Free-Form Message	0 .. 1	String	02	1 .. 30	
├ **0400** — Loop 0400	0 .. 9999		120		
│ ├ **LX** — Assigned Number	1 .. 1		120		
│ │ └ **554** — Assigned Number	1 .. 1	Integer	01	1 .. 6	
│ ├ **L0** — Line Item - Quantity and Weight	0 .. 1		170		
│ │ ├ **221** — Billed/Rated-as Qualifier	0 .. 1	Token	03	2 .. 2	221
│ │ └ **380** — Quantity	0 .. 1	Decimal	13	1 .. 15	
│ └ **L1** — Rate and Charges	1 .. 1		180		
│ ├ **60** — Freight Rate	0 .. 1	Decimal	02	1 .. 9	
│ ├ **122** — Rate/Value Qualifier	0 .. 1	Token	03	2 .. 2	122
│ ├ **58** — Charge	1 .. 1	Decimal	04	1 .. 12	
│ ├ **150** — Special Charge or Allowance Code	0 .. 1	Token	08	3 .. 3	150
│ ├ **276** — Special Charge Description	1 .. 1	String	12	2 .. 25	
│ ├ **220** — Billed/Rated-as Quantity	0 .. 1	Decimal	17	1 .. 11	
│ ├ **221** — Billed/Rated-as Qualifier	0 .. 1	Token	18	2 .. 2	221
│ ├ **954** — Percent	0 .. 1	Decimal	19	1 .. 10	
│ ├ **100** — Currency Code	0 .. 1	Token	20	3 .. 3	ISO_4217
│ └ **610** — Amount	0 .. 1	Decimal	21	1 .. 15	
├ **L3** — Total Weight and Charges	0 .. 1		010		
│ ├ **58** — Charge	0 .. 1	Decimal	05	1 .. 12	
│ └ **150** — Special Charge or Allowance Code	0 .. 1	Token	08	3 .. 3	150
└ **SE** — Transaction Set Trailer	1 .. 1		020		
├ **96** — Number of Included Segments	1 .. 1	Integer	01	1 .. 10	
└ **329** — Transaction Set Control Number	1 .. 1	String	02	4 .. 9	

4 DETAILS MESSAGE

4.1 210 — Motor Carrier Freight Details and Invoice

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **ST** — Transaction Set Header	1 .. 1		010		
├ **B3** — Beginning Segment for Carrier's Invoice	1 .. 1		020		
├ **C3** — Currency	1 .. 1		040		
├ **N9** — Reference Identification	3 .. 300		060		
├ **K1** — Remarks	0 .. 10		100		
├ **0400** — Loop 0400	0 .. 9999		120		
├ **L3** — Total Weight and Charges	0 .. 1		010		
└ **SE** — Transaction Set Trailer	1 .. 1		020		

Properties

Identifier 210

Name Motor Carrier Freight Details and Invoice

Cardinality min: 1 max: 1

4.2 ST — Transaction Set Header

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **ST** — Transaction Set Header	1 .. 1		010		
│ ├ **143** — Transaction Set Identifier Code	1 .. 1	Token	01	3 .. 3	143
│ └ **329** — Transaction Set Control Number	1 .. 1	String	02	4 .. 9	

Documentation

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

Properties

Identifier ST

Name Transaction Set Header

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 010

Level 2

Notes

Usage 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
143 Transaction Set Identifier Code	Code uniquely identifying a Transaction Set **Selected Values** **Code** 210 **Name** Motor Carrier Freight Details and Invoice	**Cardinality** min: 1 max: 1 **Primitive Type** Token **Length** min: 3 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 01 **Fixed Value** 210 **Codelist Id** 143 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
329 Transaction Set Control Number	Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 4 max: 9 **External Category** Simple Data Element **Data Type** AN **Position** 02

4.3 B3 — Beginning Segment for Carrier's Invoice

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **B3** — Beginning Segment for Carrier's Invoice	1 .. 1		020		
│ ├ **76** — Invoice Number	1 .. 1	String	02	1 .. 22	
│ ├ **145** — Shipment Identification Number	1 .. 1	String	03	1 .. 30	
│ ├ **146** — Shipment Method of Payment	1 .. 1	Token	04	2 .. 2	146
│ ├ **373** — Date	1 .. 1	Date	06	8 .. 8	
│ ├ **193** — Net Amount Due	1 .. 1	Decimal	07	1 .. 12	
│ └ **140** — Standard Carrier Alpha Code	1 .. 1	Token	11	2 .. 4	

Documentation

Definition To transmit basic data relating to the carrier's invoice

Properties

Identifier B3

Name Beginning Segment for Carrier's Invoice

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 020

Level 2

Notes

Usage 1 B306 is the billing date.

Usage 2 On collect freight bills the data in B309 will be the actual delivery date. For the shipments invoiced prior to delivery, the B309 will be the estimated date of delivery.

Usage 3 If B314 is used, B304 will indicate the party or parties responsible for payment of the transportation terms identified in B314.

Constraint 1 P0910 Paired Multiple - If any are used, all must be used

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
76 Invoice Number	Identifying number assigned by issuer	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 22 **External Category** Simple Data Element **Data Type** AN **Position** 02
145 Shipment Identification Number	Identification number assigned to the shipment by the shipper that uniquely identifies the shipment from origin to ultimate destination and is not subject to modification; (Does not contain blanks or special characters)	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 30 **External Category** Simple Data Element **Data Type** AN **Position** 03
146 Shipment Method of Payment	Code identifying payment terms for transportation charges **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** Token **Length** min: 2 max: 2 **External Category** Simple Data Element **Data Type** ID **Position** 04 **Codelist Id** 146

		Type System ASC_X12 **Version Mode** Current **Version** 004010
373 Date	Date expressed as CCYYMMDD **Usage 1** The invoice date.	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** Date **Length** **min:** 8 **max:** 8 **Date Time Format** CCYYMMDD **External Category** Simple Data Element **Data Type** DT **Position** 06
193 Net Amount Due	Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** Decimal **Length** **min:** 1 **max:** 12 **Fraction Digits** 2 **Total Digits** 12 **External Category** Simple Data Element **Data Type** N2 **Position** 07
140 Standard Carrier Alpha Code	Standard Carrier Alpha Code **Usage 1** This field is not used.	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** Token **Length** **min:** 2 **max:** 4 **External Category** Simple Data Element **Data Type** ID **Position** 11

4.4 C3 — Currency

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **C3** — Currency	1 .. 1		040		
│ └ **100** — Currency Code	1 .. 1	Token	01	3 .. 3	ISO_4217

Documentation

Definition To specify the currency being used in the transaction set

Properties

Identifier C3

Name Currency

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 040

Level 2

Notes

Usage 1 C301 is the billing currency.

Usage 2 C303 is the payment currency.

Usage 3 C304 is the rated currency.

Usage 4 This is the currency of gross amount. This is a mandatory field for Business Network for Logistics.

Comment 1 Currency is implied by the code for the country in whose currency the monetary amounts are specified.

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
100 Currency Code	Code (Standard ISO) for country in whose currency the charges are specified **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** Token **Length** min: 3 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 01 **Codelist Id** ISO_4217 **Type System** ISO_CodelistsAndSchemes **Version Mode** Latest **Version** 2015

4.5 N9 — Reference Identification

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **N9** — Reference Identification	3 .. 300		060		
│ ├ **128** — Reference Identification Qualifier	1 .. 1	Token	01	2 .. 3	128
│ ├ **127** — Reference Identification - System Number	1 .. 1	String	02	1 .. 30	
│ ├ **127** — Reference Identification - Billing Account	1 .. 1	String	02	1 .. 30	
│ ├ **127** — Reference Identification - Purchasing Party	1 .. 1	String	02	1 .. 30	
│ ├ **369** — Free-form Description	0 .. 1	String	03	1 .. 45	
│ ├ **373** — Date	0 .. 1	Date	04	8 .. 8	
│ ├ **337** — Time	0 .. 1	Time	05	4 .. 8	
│ ├ **623** — Time Code	0 .. 1	Token	06	2 .. 2	623
│ └ **C040** — Reference Identifier	0 .. 1		07		

Documentation

Definition To transmit identifying information as specified by the Reference Identification Qualifier

Properties

Identifier N9

Name Reference Identification

Cardinality min: 3 max: 300

Syntax Type Related

External Category Segment

Position 060

Level 2

Notes

Usage 1 N906 reflects the time zone which the time reflects.

Usage 2 N907 contains data relating to the value cited in N902.

Constraint 1 R0203 Required - At least one of those noted must be used

Constraint 2 C0605 Conditional - If the first element is present, then the others must be present

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
128 Reference Identification Qualifier	Code qualifying the Reference Identification **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** Token **Length** min: 2 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 01 **Codelist Id** 128 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
127 [128 = "06"] Reference Identification - System Number	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 30 **External Category** Simple Data Element **Data Type** AN **Position** 02
127 [128 = "12"] Reference Identification -	Reference information as defined for a particular Transaction Set or as specified by the Reference	**Cardinality** min: 1 max: 1 **Primitive Type** String

Billing Account	Identification Qualifier	**Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 02
127 [128 = "CN"] Reference Identification - Purchasing Party	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **Usage 1** The CN qualifier is used to identify the Purchasing Party	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 02
369 Free-form Description	Free-form descriptive text	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 45 **External Category** Simple Data Element **Data Type** AN **Position** 03
373 Date	Date expressed as CCYYMMDD	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Date **Length** **min:** 8 **max:** 8 **Date Time Format** CCYYMMDD **External Category** Simple Data Element **Data Type** DT **Position** 04
337 Time	Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Time **Length** **min:** 4 **max:** 8 **Date Time Format** hhmm[ss[f[f]]] **External Category** Simple Data Element **Data Type** TM **Position** 05
623 Time Code	Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow **Selected Values** All Values in Codelist	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Token **Length** **min:** 2 **max:** 2 **External Category** Simple Data Element **Data Type** ID **Position** 06 **Codelist Id** 623 **Type System** ASC_X12 **Version Mode** Current **Version** 004010

4.6 C040 — Reference Identifier

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **N9** — Reference Identification	3 .. 300		060		
│ └ **C040** — Reference Identifier	0 .. 1		07		
│ ├ **128** — Reference Identification Qualifier	1 .. 1	Token	01	2 .. 3	128
│ ├ **127** — Reference Identification	1 .. 1	String	02	1 .. 30	
│ ├ **128** — Reference Identification Qualifier	0 .. 1	Token	03	2 .. 3	128
│ ├ **127** — Reference Identification	0 .. 1	String	04	1 .. 30	
│ ├ **128** — Reference Identification Qualifier	0 .. 1	Token	05	2 .. 3	128
│ └ **127** — Reference Identification	0 .. 1	String	06	1 .. 30	

Documentation

Definition To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier

Properties

Identifier C040

Name Reference Identifier

Cardinality min: 0 max: 1

Syntax Type Related

External Category Composite Data Structure

Position 07

Notes

Constraint 1 P0304 Paired Multiple - If any are used, all must be used

Constraint 2 P0506 Paired Multiple - If any are used, all must be used

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
128 Reference Identification Qualifier	Code qualifying the Reference Identification **Selected Values** All Values in Codelist	**Cardinality** min: 1 max: 1 **Primitive Type** Token **Length** min: 2 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 01 **Codelist Id** 128 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
127 Reference Identification	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 1 max: 30 **External Category** Simple Data Element **Data Type** AN **Position** 02
128 Reference Identification Qualifier	Code qualifying the Reference Identification **Selected Values** All Values in Codelist	**Cardinality** min: 0 max: 1 **Primitive Type** Token **Length** min: 2 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 03 **Codelist Id** 128

		Type System ASC_X12 **Version Mode** Current **Version** 004010
127 Reference Identification	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 04
128 Reference Identification Qualifier	Code qualifying the Reference Identification **Selected Values** All Values in Codelist	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Token **Length** **min:** 2 **max:** 3 **External Category** Simple Data Element **Data Type** ID **Position** 05 **Codelist Id** 128 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
127 Reference Identification	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 06

4.7 K1 — Remarks

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **K1** — Remarks	0 .. 10		100		
│ ├ **61** — Free-Form Message	1 .. 1	String	01	1 .. 30	
│ └ **61** — Free-Form Message	0 .. 1	String	02	1 .. 30	

Documentation

Definition To transmit information in a free-form format for comment or special instruction

Properties

Identifier K1

Name Remarks

Cardinality min: 0 max: 10

Syntax Type Related

External Category Segment

Position 100

Level 2

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
61 Free-Form Message	Free-form information	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 01
61 Free-Form Message	Free-form information	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** String **Length** **min:** 1 **max:** 30 **External Category** Simple Data Element **Data Type** AN **Position** 02

4.8 0400 — Loop 0400

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **0400** — Loop 0400	0 .. 9999		120		
│ ├ **LX** — Assigned Number	1 .. 1		120		
│ ├ **L0** — Line Item - Quantity and Weight	0 .. 1		170		
│ └ **L1** — Rate and Charges	1 .. 1		180		

Properties

Identifier 0400

Name Loop 0400

Cardinality min: 0 max: 9999

Syntax Type Related

External Category Loop

Position 120

Level 2

4.9 LX — Assigned Number

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **0400** — Loop 0400	0 .. 9999		120		
│ ├ **LX** — Assigned Number	1 .. 1		120		
│ │ └ **554** — Assigned Number	1 .. 1	Integer	01	1 .. 6	

Documentation

Definition To reference a line number in a transaction set

Properties

Identifier LX

Name Assigned Number

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 120

Level 3

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
554 Assigned Number	Number assigned for differentiation within a transaction set	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** Integer **Length** **min:** 1 **max:** 6 **Fraction Digits** 0 **Total Digits** 6 **External Category** Simple Data Element **Data Type** N0 **Position** 01

4.10 L0 — Line Item - Quantity and Weight

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **0400** — Loop 0400	0 .. 9999		120		
│ ├ **L0** — Line Item - Quantity and Weight	0 .. 1		170		
│ │ ├ **221** — Billed/Rated-as Qualifier	0 .. 1	Token	03	2 .. 2	221
│ │ └ **380** — Quantity	0 .. 1	Decimal	13	1 .. 15	

Documentation

Definition To specify quantity, weight, volume, and type of service for a line item including applicable “quantity/rate-as” data

Properties

Identifier L0

Name Line Item - Quantity and Weight

Cardinality min: 0 max: 1

Syntax Type Related

External Category Segment

Position 170

Level 3

Notes

Usage 1 L008 is the number of handling units of the line item tendered to the carrier.

Usage 2 L013 can only be used if the code in L009 is PLT, SKD, or SLP.

Usage 3 L015 designates whether the carrier will be required to verify the number of units contained on a pallet, slip sheet or skid. Code “Y” indicates that the carrier will be required to verify. Code “N” indicates that the carrier will not be required to verify.

Constraint 1 P0203 Paired Multiple - If any are used, all must be used

Constraint 2 P0405 Paired Multiple - If any are used, all must be used

Constraint 3 P0607 Paired Multiple - If any are used, all must be used

Constraint 4 P0809 Paired Multiple - If any are used, all must be used

Constraint 5 C1104 Conditional - If the first element is present, then the others must be present

Constraint 6 P1315 Paired Multiple - If any are used, all must be used

Comment 1 L013 is used to convey the total number of boxes, cartons, or pieces contained on a pallet, skid, or slip sheet for the line item.

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
221 Billed/Rated-as Qualifier	Code identifying the type of quantity or value on which the rate or item pricing is based **Usage 1** The unit of measurement of the quantity. **Selected Values** All Values in Codelist	**Cardinality** min: 0 max: 1 **Primitive Type** Token **Length** min: 2 max: 2 **External Category** Simple Data Element **Data Type** ID **Position** 03 **Codelist Id** 221 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
380	Numeric value of quantity	**Cardinality** min: 0 max: 1

Quantity		**Primitive Type** Decimal **Length** **min:** 1 **max:** 15 **Total Digits** 15 **External Category** Simple Data Element **Data Type** R **Position** 13

4.11 L1 — Rate and Charges

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **0400** — Loop 0400	0 .. 9999		120		
│ └ **L1** — Rate and Charges	1 .. 1		180		
│ ├ **60** — Freight Rate	0 .. 1	Decimal	02	1 .. 9	
│ ├ **122** — Rate/Value Qualifier	0 .. 1	Token	03	2 .. 2	122
│ ├ **58** — Charge	1 .. 1	Decimal	04	1 .. 12	
│ ├ **150** — Special Charge or Allowance Code	0 .. 1	Token	08	3 .. 3	150
│ ├ **276** — Special Charge Description	1 .. 1	String	12	2 .. 25	
│ ├ **220** — Billed/Rated-as Quantity	0 .. 1	Decimal	17	1 .. 11	
│ ├ **221** — Billed/Rated-as Qualifier	0 .. 1	Token	18	2 .. 2	221
│ ├ **954** — Percent	0 .. 1	Decimal	19	1 .. 10	
│ ├ **100** — Currency Code	0 .. 1	Token	20	3 .. 3	ISO_4217
│ └ **610** — Amount	0 .. 1	Decimal	21	1 .. 15	

Documentation

Definition To specify rate and charges detail relative to a line item including freight charges, advances, special charges, and entitlements

Properties

Identifier L1

Name Rate and Charges

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 180

Level 3

Notes

Usage 1 If D_150 used only tax information in this L1 segment will be handled. In this case the fields D_954 and D_610 are mandatory. Additionally all fields beside D_150, D_954, D_610 and D_100 will be ignored.

Usage 2 If D_150 is not used, this L1 segment will be handled as either percentage, rate or flat rate charge depending on the value of D_122. See notes of D_122 for more detailed information.

Example 1 L1 segment used for a tax charge: L1****1234****TAX****VAT_DEST*******19*USD*42

Example 2 L1 segment used for a percentage rate charge: L1***PW*1234********FUEL_EMERGENCY*******19 or L1*2*123*PH*48534********FUEL_EMERGENCY*****1*CC***

Example 3 L1 segment used for a rate charge: L1**6*RC*1200********FUEL_PER_MILE*****1*DM**USD

Example 4 L1 segment used for a flat rate charge: L1***FR*15022********BASE_CHARGE or L1****15022********BASE_CHARGE

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
60 Freight Rate	Rate that applies to the specific commodity **Usage 1** If D_122 has value RC, this field contains the rate for the charge.	**Cardinality** min: 0 max: 1 **Primitive Type** Decimal **Length** min: 1 max: 9 **Total Digits** 9 **External Category** Simple Data Element **Data Type** R **Position** 02
122 Rate/Value Qualifier	Code qualifying how to extend charges or interpret value	**Cardinality** min: 0 max: 1 **Primitive Type** Token

	Usage 1 If value is PW (Percentage of Charges), this will be handled as percentage charge. In this case L119 is mandatory. **Usage 2** If value is RC (Rate), this will be handled as rate charge. In this case L102 is mandatory. **Usage 3** If value is FR (Flat Rate) or missing, this will be handled as flat rate charge. In this case L104 is mandatory. **Usage 4** If value is FC (Flat Charge) or missing, this will be handled as flat rate charge. In this case L104 is mandatory. **Usage 5** If value is PH Name Per Hundred (of Basic Unit), this will be handled as percentage charge. In this case L102 is mandatory. **Selected Values** **Code** PW **Name** Percentage of Charges **Code** RC **Name** Rate **Code** FR **Name** Flat Rate **Code** FC **Name** Flat Charge **Code** PH **Name** Per Hundred (of Basic Unit)	**Length** **min:** 2 **max:** 2 **External Category** Simple Data Element **Data Type** ID **Position** 03 **Codelist Id** 122 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
58 Charge	For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** Decimal **Length** **min:** 1 **max:** 12 **Fraction Digits** 2 **Total Digits** 12 **External Category** Simple Data Element **Data Type** N2 **Position** 04
150 Special Charge or Allowance Code	Code identifying type of special charge or allowance **Usage 1** The tax code. **Usage 2** If this field is used, the L1 segment will be used for taxes. In this case the fields 954 (tax percentage) and 610 (tax amount) must also be used. **Selected Values** All Values in Codelist	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Token **Length** **min:** 3 **max:** 3 **External Category** Simple Data Element **Data Type** ID **Position** 08 **Codelist Id** 150 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
276 Special Charge Description	Identification of special charge; this data element is used whenever an applicable code cannot be found in data element 150 **Usage 1** Link to all supported charge codes and their descriptions: https://help.sap.com/docs/SAP_LBN_FC_OPTION/40f43410e8a64dc98792a5e610e81017/75449aad08db40a996244c516eb37cb0.html Important: Element 276 has to be populated with code values from column CHARGECODE, not from their language-dependent descriptions in column DESCRIPTION.	**Cardinality** **min:** 1 **max:** 1 **Primitive Type** String **Length** **min:** 2 **max:** 25 **External Category** Simple Data Element **Data Type** AN **Position** 12
220 Billed/Rated-as Quantity	Basis for rating (miles, value, volume, etc.); Note: Weight may be defined by either data element 220 or 81 **Usage 1** The price unit.	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Decimal **Length** **min:** 1 **max:** 11 **Total Digits** 11 **External Category** Simple Data Element **Data Type** R

		Position 17
221 Billed/Rated-as Qualifier	Code identifying the type of quantity or value on which the rate or item pricing is based **Usage 1** The unit of measurement of the price unit. **Selected Values** **Code** BA **Name** Barrels Identifies a billable unit expressed as a type of container **Code** CC **Name** Cubic Centimeter **Code** CF **Name** Cubic Foot **Code** CM **Name** Centimeter **Code** DK **Name** Kilometers **Code** DM **Name** Miles **Code** FT **Name** Foot **Code** GL **Name** Gallon **Code** KG **Name** Kilogram **Code** LB **Name** Pound **Code** LR **Name** Liter **Code** SY **Name** Square Yards **Code** TD **Name** Days **Code** TH **Name** Hours **Code** TN **Name** Tons Identifies a billable unit expressed as short tons (2000 pounds)	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Token **Length** **min:** 2 **max:** 2 **External Category** Simple Data Element **Data Type** ID **Position** 18 **Codelist Id** 221 **Type System** ASC_X12 **Version Mode** Current **Version** 004010
954 Percent	Percentage expressed as a decimal **Usage 1** If D_150 is present this fields contains the tax percentage.	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Decimal **Length** **min:** 1 **max:** 10 **Total Digits** 10 **External Category** Simple Data Element **Data Type** R **Position** 19
100 Currency Code	Code (Standard ISO) for country in whose currency the charges are specified **Usage 1** The currency code for taxes and rates. If not set the value from C301 will be used as a fallback. **Selected Values** All Values in Codelist	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Token **Length** **min:** 3 **max:** 3 **External Category** Simple Data Element **Data Type** ID **Position** 20 **Codelist Id** ISO_4217 **Type System** ISO_CodelistsAndSchemes **Version Mode** Latest **Version** 2015
610 Amount	Monetary amount **Usage 1** The tax amount. **Usage 2** This field will only be handled if D_150 is present.	**Cardinality** **min:** 0 **max:** 1 **Primitive Type** Decimal **Length** **min:** 1 **max:** 15 **Fraction Digits** 2 **Total Digits** 15 **External Category** Simple Data Element **Data Type** N2 **Position** 21

4.12 L3 — Total Weight and Charges

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
├ **L3** — Total Weight and Charges	0 .. 1		010		
│ ├ **58** — Charge	0 .. 1	Decimal	05	1 .. 12	
│ └ **150** — Special Charge or Allowance Code	0 .. 1	Token	08	3 .. 3	150

Documentation

Definition To specify the total shipment in terms of weight, volume, rates, charges, advances, and prepaid amounts applicable to one or more line items

Properties

Identifier L3

Name Total Weight and Charges

Cardinality min: 0 max: 1

Syntax Type Related

External Category Segment

Position 010

Level 2

Notes

Usage 1 L305 is the total charges.

Constraint 1 P0102 Paired Multiple - If any are used, all must be used

Constraint 2 P0304 Paired Multiple - If any are used, all must be used

Constraint 3 P0910 Paired Multiple - If any are used, all must be used

Constraint 4 C1201 Conditional - If the first element is present, then the others must be present

Constraint 5 P1415 Paired Multiple - If any are used, all must be used

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
58 Charge	For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified	**Cardinality** min: 0 max: 1 **Primitive Type** Decimal **Length** min: 1 max: 12 **Fraction Digits** 2 **Total Digits** 12 **External Category** Simple Data Element **Data Type** N2 **Position** 05
150 Special Charge or Allowance Code	Code identifying type of special charge or allowance **Selected Values** **Code** TAX **Name** Tax Charge	**Cardinality** min: 0 max: 1 **Primitive Type** Token **Length** min: 3 max: 3 **External Category** Simple Data Element **Data Type** ID **Position** 08 **Fixed Value** TAX **Codelist Id** 150 **Type System** ASC_X12 **Version Mode** Current **Version** 004010

4.13 SE — Transaction Set Trailer

Structure

Node	Card.	Prim.Type	Pos.	Length	Codelists
210 — Motor Carrier Freight Details and Invoice	1 .. 1				
└ **SE** — Transaction Set Trailer	1 .. 1		020		
├ **96** — Number of Included Segments	1 .. 1	Integer	01	1 .. 10	
└ **329** — Transaction Set Control Number	1 .. 1	String	02	4 .. 9	

Documentation

Definition To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Properties

Identifier SE

Name Transaction Set Trailer

Cardinality min: 1 max: 1

Syntax Type Related

External Category Segment

Position 020

Level 2

Notes

Comment 1 SE is the last segment of each transaction set.

Leaf Elements

Identifier/Name	Description/Notes/Code Values	Properties
96 Number of Included Segments	Total number of segments included in a transaction set including ST and SE segments	**Cardinality** min: 1 max: 1 **Primitive Type** Integer **Length** min: 1 max: 10 **Fraction Digits** 0 **Total Digits** 10 **External Category** Simple Data Element **Data Type** N0 **Position** 01
329 Transaction Set Control Number	Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**Cardinality** min: 1 max: 1 **Primitive Type** String **Length** min: 4 max: 9 **External Category** Simple Data Element **Data Type** AN **Position** 02

5 COPYRIGHT STATEMENTS

5.1 Copyright Statement for MIG

See also: https://www.sap.com/corporate/en/legal/copyright.html

5.2 Copyright Statement for Type System ASC X12

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