Gexpro
Guideline for 810-Invoice
X12 ANSI
Verion 4010

810 Invoice - Version 4010

Functional Group=IN

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Notes: **N3/070** Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	BIG	Beginning Segment for Invoice	M	1			Must use
040	CUR	Currency	O	1			Used

LOOP ID - N1					200		
070	N1	Name	O	1			Must use
090	N3	Address Information	O	2			Used
100	N4	Geographic Location	O	1			Used
110	REF	Reference Identification	O	12			Must use
120	PER	Administrative Communications Contact	O	3			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
140	DTM	Date/Time Reference	O	10			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - IT1					200000		
010	IT1	Baseline Item Data (Invoice)	M	1			Must use
LOOP ID - PID					1000		
060	PID	Product/Item Description	O	1			Used
070	MEA	Measurements	O	10			Used
090	PKG	Marking, Packaging, Loading	O	25			Used
LOOP ID - SAC					25		
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
LOOP ID - SLN					1000		
200	SLN	Subline Item Detail	O	1			Used
210	REF	Reference Identification	O	>1			Used
230	SAC	Service, Promotion, Allowance, or Charge Info	O	25			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	TDS	Total Monetary Value Summary	M	1			Must use
030	CAD	Carrier Detail	O	1			Used
LOOP ID - SAC					25		
040	SAC	Service, Promotion, Allowance, or Charge Info	O	1			Not Used
070	CTT	Transaction Totals	O	1		N3/070	Used
080	SE	Transaction Set Trailer	M	1			Must use

ST   Transaction Set Header

<div style="text-align:right">

Pos: 010   **Max: 1**
Heading - Mandatory
Loop: N/A   **Elements: 2**

</div>

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

Semantics:

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).

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	**Must use**
		Description: Code uniquely identifying a Transaction Set				
		All valid standard codes are used.				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	**Must use**
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

BIG   Beginning Segment for Invoice

To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Semantics:

1. BIG01 is the invoice issue date.
2. BIG03 is the date assigned by the purchaser to purchase order.
3. BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments:

1. BIG07 is used only to further define the type of invoice when needed.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BIG01	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
		Mapper Notes: Invoice Date				
BIG02	76	**Invoice Number** **Description:** Identifying number assigned by issuer	M	AN	1/22	Must use
		Mapper Notes: Invoice number can not contain a leading zero				
		Example: 0123456 is not acceptable.				
BIG03	373	**Date** **Description:** Date expressed as CCYYMMDD	O	DT	8/8	Used
		Mapper Notes: PO Date				
BIG04	324	**Purchase Order Number** **Description:** Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Used
		Mapper Notes: MANDATORY.				
BIG05	328	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
		Mapper Notes: PO amendment number				
BIG06	327	**Change Order Sequence Number** **Description:** Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set	O	AN	1/8	Used
		Mapper Notes: PO amendment number.				
BIG07	640	**Transaction Type Code** **Description:** Code specifying the type of transaction	O	ID	2/2	Used

Code Name

CR   Credit Memo
DR   Debit Memo

CUR Currency

To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Syntax:

1. CUR08 C0807 -- If CUR08 is present, then CUR07 is required
2. CUR09 C0907 -- If CUR09 is present, then CUR07 is required
3. CUR10 L101112 -- If CUR10 is present, then at least one of CUR11 or CUR12 is required.
4. CUR11 C1110 -- If CUR11 is present, then CUR10 is required
5. CUR12 C1210 -- If CUR12 is present, then CUR10 is required
6. CUR13 L131415 -- If CUR13 is present, then at least one of CUR14 or CUR15 is required.
7. CUR14 C1413 -- If CUR14 is present, then CUR13 is required
8. CUR15 C1513 -- If CUR15 is present, then CUR13 is required
9. CUR16 L161718 -- If CUR16 is present, then at least one of CUR17 or CUR18 is required.
10. CUR17 C1716 -- If CUR17 is present, then CUR16 is required
11. CUR18 C1816 -- If CUR18 is present, then CUR16 is required
12. CUR19 L192021 -- If CUR19 is present, then at least one of CUR20 or CUR21 is required.
13. CUR20 C2019 -- If CUR20 is present, then CUR19 is required
14. CUR21 C2119 -- If CUR21 is present, then CUR19 is required

Comments:

1. See Figures Appendix for examples detailing the use of the CUR segment.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR01	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use

Code Name

BY Buying Party (Purchaser)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR02	100	**Currency Code** **Description:** Code (Standard ISO) for country in whose currency the charges are specified	M	ID	3/3	Must use

Mapper Notes: ISO two character country code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR03	280	**Exchange Rate** **Description:** Value to be used as a multiplier conversion factor to convert monetary value from one currency to another	O	R	4/10	Used
CUR04	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual	O	ID	2/3	Used

Code Name

SE Selling Party

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR05	100	**Currency Code** **Description:** Code (Standard ISO) for country in whose currency the charges are specified	O	ID	3/3	Used

Mapper Notes: ISO Two character code.

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Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR06	**669**	**Currency Market/Exchange Code**	**O**	**ID**	**3/3**	**Used**

Description: Code identifying the market upon which the currency exchange rate is based

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR07	**374**	**Date/Time Qualifier**	**C**	**ID**	**3/3**	**Used**

Description: Code specifying type of date or time, or both date and time
All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR08	**373**	**Date**	**O**	**DT**	**8/8**	**Used**

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR09	**337**	**Time**	**O**	**TM**	**4/8**	**Used**

Description: 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)

N1   Name

Pos: 070   Max: 1
Heading - Mandatory
Loop: N1   Elements: 4

To identify a party by type of organization, name, and code

Syntax:

1. N102 R0203 -- At least one of N102 or N103 is required.
2. N103 P0304 -- If either N103 or N104 are present, then the others are required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	**Must use**

Mapper Notes: The ship To address is mandatory whenever the material is indicated as a direct ship by the Gexpro business.

     Code   **Name**

     ST   Ship To
     RE   Remit To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name** **Description:** Free-form name	C	AN	1/60	Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) All valid standard codes are used.	C	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code	C	AN	2/80	Used

N3 Address Information

Pos: 090   **Max: 2**
Heading - Mandatory
Loop: N1   **Elements: 2**

To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	Address Information	M	AN	1/55	Must use
		Description: Address information				
N302	166	Address Information	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 100   Max: 1
Heading - Mandatory
Loop: N1   Elements: 4

To specify the geographic place of the named party

Syntax:

1. N406 C0605 -- If N406 is present, then N405 is required

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	O	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	**Postal Code**	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	**Country Code**	O	ID	2/3	Used
		Description: Code identifying the country				

REF Reference Identification

To specify identifying information

Syntax:

1. REF02 R0203 -- At least one of REF02 or REF03 is required.

Notes:

At least two REF's are expected and are MANDATORY for every invoice sent to Gexpro:

REF01 with the BM qualifier and REF02 containing the Bill of Lading number AND

REF01 with the ZZ qualifier and REF02 containing Gexpro's Vendor assigned AP CODE (6 digit alphanumeric number)

All other qualified REF01 listed below outside of above mentioned are optional.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	**Must use**

Description: Code qualifying the Reference Identification

Code Name

Code	Name
BC	Buyer's Contract Number
BM	**Bill of Lading Number**
CN	Carrier's Reference Number (PRO/Invoice)
DK	Dock Number
ED	Export Declaration
LS	Bar-Coded Serial Number
OB	Ocean Bill of Lading
OI	Original Invoice Number
PK	Packing List Number
VM	Ward
ZZ	**Mutually Defined**

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	C	AN	1/30	Used

Description: Reference information as defined for a particular
Transaction Set or as specified by the Reference Identification Qualifier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF03	352	**Description**	C	AN	1/80	Used

Description: A free-form description to clarify the related data elements
and their content

PER   Administrative Communications Contact

To identify a person or office to whom administrative communications should be directed

Syntax:

1. PER03 P0304 -- If either PER03 or PER04 are present, then the others are required.
2. PER05 P0506 -- If either PER05 or PER06 are present, then the others are required.
3. PER07 P0708 -- If either PER07 or PER08 are present, then the others are required.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER01	366	**Contact Function Code**	M	ID	2/2	**Must use**

Description: Code identifying the major duty or responsibility of the person or group named

Code	Name
AD	Accounting Department
BD	Buyer Name or Department
IC	Information Contact

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER02	93	**Name**	O	AN	1/60	Used

Description: Free-form name

Mapper Notes: For temporary or contract personnel billing the temporary or contract employee's manager should be specified in PER02, with a qualifier of IC in PER01, within the N1*ST loop

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ITD Terms of Sale/Deferred Terms of Sale

Pos: 130	**Max: >1**
Heading - Optional	
Loop: N/A	**Elements: 8**

To specify terms of sale

Syntax:

1. ITD03 L03040513 -- If ITD03 is present, then at least one of ITD04, ITD05 or ITD13 is required.
2. ITD08 L08040513 -- If ITD08 is present, then at least one of ITD04, ITD05 or ITD13 is required.
3. ITD09 L091011 -- If ITD09 is present, then at least one of ITD10 or ITD11 is required.

Semantics:

1. ITD15 is the percentage applied to a base amount used to determine a late payment charge.

Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

Mapper Notes:

Only the 05, 08, and ZZ codes are valid in ITD01. If the ITD segment is not provided, it will default to standard terms of settlement.

Do not use ITD unless a discount is offered.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD01	336	**Terms Type Code**	O	ID	2/2	**Used**

Description: Code identifying type of payment terms

Code	Name
05	Discount Not Applicable
08	Basic Discount Offered
ZZ	Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD02	333	**Terms Basis Date Code**	O	ID	1/2	**Used**

Description: Code identifying the beginning of the terms period

Code	Name
3	Invoice Date

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD03	338	**Terms Discount Percent**	O	R	1/6	**Used**

Description: Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD04	370	**Terms Discount Due Date**	C	DT	8/8	**Used**

Description: Date payment is due if discount is to be earned expressed in format CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD05	351	**Terms Discount Days Due**	C	N0	1/3	**Used**

Description: Number of days in the terms discount period by which payment is due if terms discount is earned

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD06	446	**Terms Net Due Date**	O	DT	8/8	**Used**

Description: Date when total invoice amount becomes due expressed in format CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD07	**386**	**Terms Net Days**	**O**	**N0**	**1/3**	**Used**

Description: Number of days until total invoice amount is due (discount not applicable)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD08	**362**	**Terms Discount Amount**	**O**	**N2**	**1/10**	**Used**

Description: Total amount of terms discount

Description: Date when total invoice amount becomes due expressed in format CCYYMMDD

DTM   Date/Time Reference

Pos: 140   Max: 10
Heading - Optional
Loop: N/A   Elements: 2

To specify pertinent dates and times

Syntax:

1. DTM02 R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
2. DTM04 C0403 -- If DTM04 is present, then DTM03 is required
3. DTM05 P0506 -- If either DTM05 or DTM06 are present, then the others are required.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	**Must use**
		Description: Code specifying type of date or time, or both date and time				

Code Name

011   Shipped
091   Report End

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	C	DT	8/8	Used
		Description: Date expressed as CCYYMMDD				

IT1 Baseline Item Data (Invoice)

Pos: 010	**Max: 1**
Detail - Mandatory	
Loop: IT1	**Elements: 7**

To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax:

1. IT102 P020304 -- If either IT102, IT103 or IT104 are present, then the others are required.
2. IT106 P0607 -- If either IT106 or IT107 are present, then the others are required.
3. IT108 P0809 -- If either IT108 or IT109 are present, then the others are required.
4. IT110 P1011 -- If either IT110 or IT111 are present, then the others are required.

Semantics:

1. IT101 is the purchase order line item identification.

Comments:

1. Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2. IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

MAPPER NOTES: Example of PO Line sent: PO1~001~16~EA~12.71~PE~UI~78656452430~VC~880MP~BP~78033252430

RETURN ON INVOICE AS: IT1~001~16~EA~12.71~PE~UI~78656452430~VC*880MP~BP~78033252430

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT101	**350**	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	M	AN	3/3	Must Use
		Mapper Notes: MANDATORY. Must be the same as purchase order line number sent by Gexpro. EXAMPLE: 001. Must be 3 digits long.				
IT102	**358**	**Quantity Invoiced** **Description:** Number of units invoiced (supplier units)	C	R	1/10	Must Use
IT103	**355**	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	C	ID	2/2	Must Use
		Mapper Notes: Must be the same as purchase order All valid standard codes are used.				
IT104	**212**	**Unit Price** **Description:** Price per unit of product, service, commodity, etc.	C	R	1/17	Must Use
IT105	**639**	**Basis of Unit Price Code** **Description:** Code identifying the type of unit price for an item	M	ID	2/2	Must Use
		Mapper Notes: If IT105 is not used, it will default to PE.				

Code	Name
HP	Price per Hundred
NC	No Charge

		PE	Price per Each				
		TF	Per 1000 Feet				
		TP	Price per Thousand				

IT106 235 **Product/Service ID Qualifier** **C** **ID** **2/2** **Used**

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Mapper Notes: This is the same qualifier sent in PO106

Code Name

UI UPC number

IT107 234 **Product/Service ID** **C** **AN** **1/48** **Used**

Description: Identifying number for a product or service

Mapper Notes: This is sent on Gexpro's PO in PO107

IT108 235 **Product/Service ID Qualifier** **C** **ID** **2/2** **Used**

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Mapper Notes: This is the same qualifier sent in PO108

Code Name

VC Vendor Catalog Number

IT109 234 **Product/Service ID** **C** **AN** **1/48** **Used**

Description: Identifying number for a product or service

Mapper Notes: This is sent on Gexpro's PO in PO109

IT110 235 **Product/Service ID Qualifier** **C** **ID** **2/2** **Used**

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Mapper Notes: This is the same qualifier sent in PO110. This is our NAED#

Code Name

BP Buyer's Part Number

IT111 234 **Product/Service ID** **C** **AN** **1/48** **Used**

Description: Identifying number for a product or service

Mapper Notes: This is sent on Gexpro's PO in PO111

PID Product/Item Description

To describe a product or process in coded or free-form format

Syntax:

1. PID04 C0403 -- If PID04 is present, then PID03 is required
2. PID04 R0405 -- At least one of PID04 or PID05 is required.
3. PID07 C0703 -- If PID07 is present, then PID03 is required
4. PID08 C0804 -- If PID08 is present, then PID04 is required
5. PID09 C0905 -- If PID09 is present, then PID05 is required

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	**349**	**Item Description Type**	M	ID	1/1	**Must use**
		Description: Code indicating the format of a description				
		Code Name				
		F Free-form				
PID02	**750**	**Product/Process Characteristic Code**	O	ID	2/3	Used
		Description: Code identifying the general class of a product or process characteristic				
		All valid standard codes are used.				
PID03	**559**	**Agency Qualifier Code**	C	ID	2/2	Used
		Description: Code identifying the agency assigning the code values				
		All valid standard codes are used.				
PID04	**751**	**Product Description Code**	C	AN	1/12	Used
		Description: A code from an industry code list which provides specific data about a product characteristic				
PID05	**352**	**Description**	C	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

MEA   Measurements

<div style="float:right; border:1px solid black; padding:4px;">
Pos: 070   Max: 10
Detail - Optional
Loop: PID   Elements: 6
</div>

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Syntax:

1. MEA03 R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. MEA05 C0504 -- If MEA05 is present, then MEA04 is required
3. MEA06 C0604 -- If MEA06 is present, then MEA04 is required
4. MEA07 L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. MEA08 E0803 -- Only one of MEA08 or MEA03 may be present.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA01	737	**Measurement Reference ID Code**	O	ID	2/2	Used
		Description: Code identifying the broad category to which a measurement applies				

Code	Name
PD	Physical Dimensions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Used
		Description: Code identifying a specific product or process characteristic to which a measurement applies				

Code	Name
GG	Gauge
LN	Length
WD	Width

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	**Measurement Value**	C	R	1/20	Used
		Description: The value of the measurement				
MEA04	C001	**Composite Unit of Measure**	C	Comp		Used
		Description: To identify a composite unit of measure(See Figures Appendix for examples of use)				
	355	**Unit or Basis for Measurement Code**	M	ID	2/2	**Must use**
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

> **Mapper Notes:**   Per GXS 12.00

All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA05	740	**Range Minimum**	C	R	1/20	Used
		Description: The value specifying the minimum of the measurement range				

MEA06	**741**	**Range Maximum**	**C**	**R**	**1/20**	**Used**

Description: The value specifying the maximum of the measurement range

Ref	Id	Element Name	Req	Type	Min/Max	Usage

MEA06	**741**	**Range Maximum**	**C**	**R**	**1/20**	**Used**

Description: The value specifying the maximum of the measurement range

PKG Marking, Packaging, Loading

To describe marking, packaging, loading, and unloading requirements

Syntax:

1. PKG04 R040506 -- At least one of PKG04, PKG05 or PKG06 is required.
2. PKG04 C0403 -- If PKG04 is present, then PKG03 is required
3. PKG05 C0501 -- If PKG05 is present, then PKG01 is required

Semantics:

1. PKG04 should be used for industry-specific packaging description codes.

Comments:

1. Use the MEA (Measurements) Segment to define dimensions, tolerances, weights, counts, physical restrictions, etc.
2. If PKG01 equals "F", then PKG05 is used. If PKG01 equals "S", then PKG04 is used. If PKG01 equals "X", then both PKG04 and PKG05 are used.
3. Use PKG03 to indicate the organization that publishes the code list being referred to.
4. Special marking or tagging data can be given in PKG05 (description).

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PKG01	349	**Item Description Type**	C	ID	1/1	Used

Description: Code indicating the format of a description

Code Name

S   Structured (From Industry Code List)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PKG02	753	**Packaging Characteristic Code**	O	ID	1/5	Used

Description: Code specifying the marking, packaging, loading and related characteristics being described

Code Name

67   Tagging/Bar Code Instructions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PKG03	559	**Agency Qualifier Code**	C	ID	2/2	Used

Description: Code identifying the agency assigning the code values
All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PKG04	754	**Packaging Description Code**	C	AN	1/7	Used

Description: A code from an industry code list which provides specific data about the marking, packaging or loading and unloading of a product

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PKG05	352	**Description**	C	AN	1/80	Used

Description: A free-form description to clarify the related data elements and their content

SAC — Service, Promotion, Allowance, or Charge Information

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge   ***********NOT USED BY GEXPRO***********

Syntax:

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator**	M	ID	1/1	Must use

Description: Code which indicates an allowance or charge for the service specified

Code	Name
A	Allowance
C	Charge

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC02	1300	**Service, Promotion, Allowance, or Charge Code**	C	ID	4/4	Used

Description: Code identifying the service, promotion, allowance, or charge

Mapper Notes: Mandatory if this segment is used.

Code	Name
C880	Expediting Premium
D240	Freight
E190	Labor Charges
F910	Quantity Discount

G510 Returnable Container
G740 Service Charge
H750 Tax - Sales Tax (State and Local)
ZZZZ Mutually Defined

SAC03	**559**	**Agency Qualifier Code**	**C**	**ID**	**2/2**	**Used**

Description: Code identifying the agency assigning the code values

Mapper Notes: Mandatory if this segment is used.

Code Name

AX   ANSI Accredited Standards Committee, X12

SAC05	**610**	**Amount**	**O**	**N2**	**1/15**	**Used**

Description: Monetary amount

Mapper Notes: Mandatory if this segment is used.

SAC12	**331**	**Allowance or Charge Method of Handling Code**	**O**	**ID**	**2/2**	**Used**

Description: Code indicating method of handling for an allowance or charge

All valid standard codes are used.

SAC14	**770**	**Option Number**	**O**	**AN**	**1/20**	**Used**

Description: A unique number identifying available promotion or allowance options when more than one is offered

SLN Subline Item Detail

To specify product subline detail item data

Syntax:

1. SLN04 P0405 -- If either SLN04 or SLN05 are present, then the others are required.
2. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
3. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
4. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
5. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
6. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
7. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
8. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
9. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
10. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
11. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
12. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
13. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are required.

Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Mapper Notes:

The purpose of the SLN segment in a Gexpro Invoice is to give a breakdown of information relating to that base-line item.

Do not use the SLN loop unless specifically requested by Gexpro.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN01	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	M	AN	1/20	**Must use**
		Mapper Notes:　Example: 1.1 or 1A might be used as a subline number or relate as a derivative of base-line number.				
SLN02	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	**Used**
SLN03	662	**Relationship Code** **Description:** Code indicating the relationship between entities All valid standard codes are used.	M	ID	1/1	**Must use**

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Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN04	380	**Quantity**	C	R	1/15	Used
		Description: Numeric value of quantity				
SLN05	C001	**Composite Unit of Measure**	C	Comp		Used
		Description: To identify a composite unit of measure(See Figures Appendix for examples of use)				
	355	**Unit or Basis for Measurement Code**	M	ID	2/2	**Must use**
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		Mapper Notes: Per GXS pub 12.00				
		All valid standard codes are used.				
SLN06	212	**Unit Price**	C	R	1/17	Used
		Description: Price per unit of product, service, commodity, etc.				
SLN07	639	**Basis of Unit Price Code**	O	ID	2/2	Used
		Description: Code identifying the type of unit price for an item				
		All valid standard codes are used.				
SLN08	662	**Relationship Code**	O	ID	1/1	Used
		Description: Code indicating the relationship between entities				
		All valid standard codes are used.				
SLN09	235	**Product/Service ID Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		All valid standard codes are used.				
SLN10	234	**Product/Service ID**	C	AN	1/48	Used
		Description: Identifying number for a product or service				

REF **Reference Identification**

To specify identifying information

Syntax:

1. REF02 R0203 -- At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification All valid standard codes are used.	M	ID	2/3	**Must use**
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	**Used**
REF03	352	**Description** **Description:** A free-form description to clarify the related data elements and their content	C	AN	1/80	**Used**

SAC Service, Promotion, Allowance, or Charge Information

<div style="float:right; border:1px solid black;">

Pos: 230   **Max: 25**
Detail - Optional
Loop: SLN   **Elements: 6**

</div>

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Syntax:

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator**	M	ID	1/1	**Must use**

Description: Code which indicates an allowance or charge for the service specified

Code	Name
A	Allowance
C	Charge

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC02	1300	**Service, Promotion, Allowance, or Charge Code**	C	ID	4/4	Used

Description: Code identifying the service, promotion, allowance, or charge

Mapper Notes: Mandatory if this segment is used

Code	Name
C880	Expediting Premium
D240	Freight
E190	Labor Charges
F910	Quantity Discount

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G510 Returnable Container
G740 Service Charge
H750 Tax - Sales Tax (State and Local)
ZZZZ Mutually Defined

SAC03   **559**   **Agency Qualifier Code**   C   ID   2/2   **Used**

Description: Code identifying the agency assigning the code values

Mapper Notes: Mandatory if this segment is used.

Code Name

AX   ANSI Accredited Standards Committee, X12

SAC05   **610**   **Amount**   O   N2   1/15   **Used**

Description: Monetary amount

SAC12   **331**   **Allowance or Charge Method of Handling Code**   O   ID   2/2   **Used**

Description: Code indicating method of handling for an allowance or charge

All valid standard codes are used.

SAC14   **770**   **Option Number**   O   AN   1/20   **Used**

Description: A unique number identifying available promotion or allowance options when more than one is offered

TDS Total Monetary Value Summary

Pos: 010   Max: 1
Summary - Mandatory
Loop: N/A   Elements: 2

To specify the total invoice discounts and amounts

Semantics:

1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
2. TDS02 indicates the amount upon which the terms discount amount is calculated.
3. TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
4. TDS04 indicates the total amount of terms discount.

Comments:

1. TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TDS01	610	Amount **Description:** Monetary amount	M	N2	1/15	Must use
TDS02	610	Amount **Description:** Monetary amount	O	N2	1/15	Used

> **Mapper Notes:** Use only if discount is offered (ITD01 = 08) and the amount that can be discounted is not equal to the total invoice amount (TDS01) after trade discount, but before cash discount.

CAD Carrier Detail

To specify transportation details for the transaction

Syntax:

1. CAD05 R0504 -- At least one of CAD05 or CAD04 is required.
2. CAD07 C0708 -- If CAD07 is present, then CAD08 is required

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD04	140	**Standard Carrier Alpha Code** **Description:** Standard Carrier Alpha Code	C	ID	2/4	Used
CAD05	387	**Routing** **Description:** Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	C	AN	1/35	Used

> **Mapper Notes:**   Specify the origin carrier's name and, if available, its SCAC code.

SAC Service, Promotion, Allowance, or Charge Information

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Syntax:

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Mapper Notes:

This SAC segment is only accepted for Drop Ship Orders. Freight and misc charges are not accepted on invoices of stock orders. The identifying difference is that AA is at the end of our PO for drop ships.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator** **Description:** Code which indicates an allowance or charge for the service specified **Code Name** A Allowance C Charge	M	ID	1/1	Must use
SAC02	1300	**Service, Promotion, Allowance, or Charge Code** **Description:** Code identifying the service, promotion, allowance, or charge	C	ID	4/4	Used

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Ref	Id	Element Name	Req	Type	Min/Max	Usage

Mapper Notes:	Mandatory if this segment is used

Code Name

D240 Freight
H750 Tax - Sales Tax (State and Local)

SAC03	**559**	**Agency Qualifier Code**	**C**	**ID**	**2/2**	**Used**

Description: Code identifying the agency assigning the code values

Mapper Notes:	Mandatory if this segment is used

Code Name

AX   ANSI Accredited Standards Committee, X12

SAC05	**610**	**Amount**	**O**	**N2**	**1/15**	**Used**

Description: Monetary amount

Mapper Notes:	Mandatory if this segment is used.

SAC12	**331**	**Allowance or Charge Method of Handling Code**	**O**	**ID**	**2/2**	**Used**

Description: Code indicating method of handling for an allowance or charge

All valid standard codes are used.

SAC14	**770**	**Option Number**	**O**	**AN**	**1/20**	**Used**

Description: A unique number identifying available promotion or allowance options when more than one is offered

Ref	Id	Element Name	Req	Type	Min/Max	Usage

CTT   Transaction Totals

Pos: 070   **Max: 1**
Summary - Optional
Loop: N/A   **Elements: 2**

To transmit a hash total for a specific element in the transaction set

Syntax:

1. CTT03 P0304 -- If either CTT03 or CTT04 are present, then the others are required.
2. CTT05 P0506 -- If either CTT05 or CTT06 are present, then the others are required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items** **Description:** Total number of line items in the transaction set	M	N0	1/6	Must use
		Mapper Notes: Number of line items (CTT01) is the accumulation of the number of IT1 segments.				
CTT02	347	**Hash Total** **Description:** Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element.Example:-.0018 First occurrence of value beinghashed..18 Second occurrence of value beinghashed.1.8 Third occurrence of value beinghashed.18.01 Fourth occurrence of value beinghashed.---------1855 Hash total prior to truncation.855 Hash total after truncation tothree-digit field.	O	R	1/10	Used
		Mapper Notes: If used, hash total (CTT02) is the sum of the values of quantity invoiced (ITA01) for each IT1 segment and free goods (ITA12) for each ITA segment.				

SE Transaction Set Trailer

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

Comments:

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	**Must use**
SE02	329	**Transaction Set Control Number** **Description:** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	**Must use**