850 Purchase Order

Functional Group ID=PO

Updates:
- September 20, 2006: Add ISBN-13, GTIN-14 Product ID's. Replace XNET with US ECPA Christian.
- August 10, 2016: Modified document's file name and Header to replace "XNet" with "US ECPA Christian." Added version, "X12 vers 3060.." Since this standard has been in use at least 12 years, replaced "Draft Standard Trial Use" with "Standard."

Introduction:

This Standard contains the format and establishes the data contents of the Purchase Order Transaction Set (850) 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 placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BEG	Beginning Segment for Purchase Order	M	1		
	050	REF	Reference Identification	O	>1		
	080	FOB	F.O.B. Related Instructions	O	>1		
	110	CSH	Sales Requirements	O	5		
	150	DTM	Date/Time Reference	O	10		
	240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
			LOOP ID - N1			200	
	310	N1	Name	O	1		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - PO1			100000	
M	010	PO1	Baseline Item Data	M	1		n1
			LOOP ID - CTP			>1	

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	040	CTP	Pricing Information	O	1		
	142	CSH	Sales Requirements	O	>1		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - CTT			1	
M	010	CTT	Transaction Totals	M	1		n2
M	030	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. PO102 is required.
2. The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

Segment: **ST** **Transaction Set Header**

Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
MST01	**143**	**Transaction Set Identifier Code**	**M**	**ID 3/3**
		Code uniquely identifying a Transaction Set		
		850 X12.1 Purchase Order		
MST02	**329**	**Transaction Set Control Number**	**M**	**AN 4/9**

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

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Segment: **BEG** **Beginning Segment for Purchase Order**

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

Syntax Notes:

Semantic Notes: 1 BEG05 is the date assigned by the purchaser to purchase order.

Comments:

Data Element Summary

Ref. Des.	Data Element	Name		Attributes
MBEG01	353	**Transaction Set Purpose Code**	M	ID 2/2
		Code identifying purpose of transaction set		
		00 Original		
MBEG02	92	**Purchase Order Type Code**	M	ID 2/2
		Code specifying the type of Purchase Order		
		CN Consigned Order		
		NE New Order		
MBEG03	324	**Purchase Order Number**	M	AN 1/22
		Identifying number for Purchase Order assigned by the orderer/purchaser		
BEG04	328	**Release Number**	O	AN 1/30
		Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction		
MBEG05	373	**Date**	M	DT 6/6
		Date (YYMMDD)		

Segment: **REF** **Reference Identification**

Position: 050

Loop:

Level: Heading

Usage: Optional

Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:1REF04 contains data relating to the value cited in REF02.
   Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
REF01	128	**Reference Identification Qualifier**	O ID 2/3
		Code qualifying the Reference Identification	
		PD Promotion/Deal Number	
REF02	127	**Reference Identification**	C AN 1/30
		Promotion Code	

Segment:FOB F.O.B. Related Instructions
   Position:080
      Loop:
      Level: Heading
      Usage: Optional
   Max Use:>1
   Purpose: To specify transportation instructions relating to shipment
Syntax Notes:1 If FOB03 is present, then FOB02 is required.
            2If FOB04 is present, then FOB05 is required.
            3If FOB07 is present, then FOB06 is required.
            4If FOB08 is present, then FOB09 is required.
Semantic Notes:1FOB01 indicates which party will pay the carrier.
            2FOB02 is the code specifying transportation responsibility location.
            3FOB06 is the code specifying the title passage location.
            4FOB08 is the code specifying the point at which the risk of loss transfers. This may be
             different than the location specified in FOB02/FOB03 and FOB06/FOB07.
   Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
MFOB01	146	**Shipment Method of Payment**	M ID 2/2
		Code identifying payment terms for transportation charges	
		CC Collect	
		DF Defined by Buyer and Seller	
		PC Prepaid but Charged to Customer	
		PP Prepaid (by Seller)	

Segment:CSH **Sales Requirements**

Position:110
Loop:
Level: Heading
Usage: Optional
Max Use:5
Purpose: To specify general conditions or requirements of the sale
Syntax Notes:1 If CSH02 is present, then CSH03 is required.
2If either CSH06 or CSH07 is present, then the other is required.
3If either CSH09 or CSH10 is present, then the other is required.
Semantic Notes:1CSH03 is the maximum monetary amount value which the order must not exceed.
2CSH04 is the account number to which the purchase amount is charged.
3CSH05 is the date specified by the sender to be shown on the invoice.
4CSH06 identifies the source of the code value in CSH07.
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
CSH01	563	**Sales Requirement Code**	O ID 1/2

Code to identify a specific requirement or agreement of sale
B   Back Order Only If New Item
N   No Back Order
O   Back Order If Items Are Out of Stock or Not Yet Published
P2   Ship As Soon As Possible
SC   Ship Complete
Y   Back Order if Out of Stock

Segment:DTM **Date/Time Reference**

Position:150
Loop:
Level: Heading
Usage: Optional
Max Use:10
Purpose: To specify pertinent dates and times
Syntax Notes:1 At least one of DTM02 DTM03 or DTM06 is required.
2If either DTM06 or DTM07 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
MDTM01	374	**Date/Time Qualifier**	M	ID 3/3

    Code specifying type of date or time, or both date and time
    001 Cancel After
    010 Requested Ship
    175 Cancel if not shipped by

DTM02	373	**Date**	C	DT 6/6

    Date (YYMMDD)

DTM05	624	**Century**	C	N0 2/2

    The first two characters in the designation of the year (CCYY)

Segment:TD5 Carrier Details (Routing Sequence/Transit Time)
  Position:240
    Loop:
    Level: Heading
    Usage: Optional
  Max Use:12
   Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
     2If TD502 is present, then TD503 is required.
     3If TD507 is present, then TD508 is required.
     4If TD510 is present, then TD511 is required.
     5If TD513 is present, then TD512 is required.
     6If TD514 is present, then TD513 is required.
Semantic Notes:
  Comments:1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
TD501	133	**Routing Sequence Code**	O	ID 1/2

    Code describing the relationship of a carrier to a specific shipment movement
    B Origin/Delivery Carrier (Any Mode)

TD502	66	**Identification Code Qualifier**	C	ID 1/2

    Code designating the system/method of code structure used for Identification Code (67)
    2 Standard Carrier Alpha Code (SCAC)

TD503   67   Identification Code   C   AN 2/20
Code identifying a party or other code.
List of Carriers is provided for those without access to SCAC Codes. Any valid SCAC Code
should be supported.
 CDDN Caliber Dedicated Transport
 CFYW Consolidated Freightways
 DHLC DHL Airways
 FDE   Federal Express
 RPSI   Roadway Package System
 UPSN   United Parcel Service -UPS
 USPS   US Postal Service
 YFSY   Yellow Freight

TD505   387   Routing   O   AN 1/35
Free-form description of the routing or requested routing for shipment, or the originating
carrier's identity

TD512   284   Service Level Code   C   ID 2/2
Code indicating the level of transportation service or the billing service offered by the
transportation carrier
 3D   Three Day Service
 G2   Standard Service
 ME   Metro
 ND   Next Day Air
      Delivery during business day hours of next business day
 NH   Next Day Hundred Weight
 ON   Overnight
 SE   Second Day
 SG   Standard Ground
 SH   Second Day Hundred Weight
 SI   Standard Ground Hundred Weight

Segment: **N1** **Name**
Position: 310
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: **1** At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
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.

Data Element Summary

Ref. Data				
Des.	ElementName		**Attributes**	
MN101	98	**Entity Identifier Code**	M	ID 2/2

Code identifying an organizational entity, a physical location, or an individual

ST Ship To

N102	93	**Name**	C	AN 1/35

Free-form name

N103	66	**Identification Code Qualifier**	C	ID 1/2

Code designating the system/method of code structure used for Identification Code (67)

15 Standard Address Number (SAN)

N104	67	**Identification Code**	C	AN 2/20

Code identifying a party or other code (SAN #)

Segment:PO1 Baseline Item Data

Position:010
Loop:PO1 Mandatory
Level: Detail
Usage: Mandatory
Max Use:1
Purpose: To specify basic and most frequently used line item data
Syntax Notes:1 If PO103 is present, then PO102 is required.
    2 If PO105 is present, then PO104 is required.
    3 If either PO106 or PO107 is present, then the other is required.
    4 If either PO108 or PO109 is present, then the other is required.
    5 If either PO110 or PO111 is present, then the other is required.
    6 If either PO112 or PO113 is present, then the other is required.
    7 If either PO114 or PO115 is present, then the other is required.
    8 If either PO116 or PO117 is present, then the other is required.
    9 If either PO118 or PO119 is present, then the other is required.
    10 If either PO120 or PO121 is present, then the other is required.
    11 If either PO122 or PO123 is present, then the other is required.
    12 If either PO124 or PO125 is present, then the other is required.
Semantic Notes:
Comments:1 See the Data Element Dictionary for a complete list of IDs.
    2 PO101 is the line item identification.
    3 PO106 through PO125 provide for ten different product/service IDs per each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

Ref. Data				
Des.	ElementName		**Attributes**	
PO101	350	**Assigned Identification**	O	AN 1/20

Alphanumeric characters assigned for differentiation within a transaction set

PO102	**330**	**Quantity Ordered**	**C**	**R 1/9**

Quantity ordered

PO103	**355**	**Unit or Basis for Measurement Code**	**O**	**ID 2/2**

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

BX Box
CA Case
DZ Dozen
PK Package
ST Set
UN Unit
    "Unit" or "Each"
YD Yard

PO104	**212**	**Unit Price**	**O**	**R 1/17**

Price per unit of product, service, commodity, etc.

PO105	**639**	**Basis of Unit Price Code**	**O**	**ID 2/2**

Code identifying the type of unit price for an item
NC No Charge
NT Net
    Indicates a net unit price
PR Promotion
SR Suggested Retail
WE Wholesale Price per Each

PO106	**235**	**Product/Service ID Qualifier**	**C**	**ID 2/2**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)
CB Buyer's Catalog Number

PO107	**234**	**Product/Service ID**	**C**	**AN 1/40**

Identifying number for a product or service (SKU #)

PO108	**235**	**Product/Service ID Qualifier**	**C**	**ID 2/2**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)
CB Buyer's Catalog Number
IB International Standard Book Number (ISBN)
UP U.P.C. Consumer Package Code (1-5-5-1)
EN (ISBN-13) 13-digit European Article Number (EAN) (2-5-5-1)
UK 14-digit GTIN, UCC/EAN 1-2-5-5-1. Used when a leading digit is added to the ISBN-13 that specifies the packaging level (such as a carton). When the packaging level is greater than a unit (such as a carton), a new check digit must be calculated.
VN Vendor's (Seller's) Item Number

PO109	**234**	**Product/Service ID**	**C**	**AN 1/40**

Identifying number for a product or service

PO110	**235**	**Product/Service ID Qualifier**	**C**	**ID 2/2**

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

PO111	**234**	**Product/Service ID**	**C**	**AN 1/40**

Identifying number for a product or service

Segment:CTP **Pricing Information**
  Position:040
    Loop:CTP Optional

Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify pricing information
Syntax Notes: 1 If either CTP04 or CTP05 is present, then the other is required.
2 If CTP06 is present, then CTP07 is required.
3 If CTP09 is present, then CTP02 is required.
4 If CTP10 is present, then CTP02 is required.
Semantic Notes: 1 CTP07 is a multiplier factor to arrive at a final discounted price. A multiplier of .90 would be the factor if a 10% discount is given.
2 CTP08 is the rebate amount.
Comments: 1 See Figures Appendix for an example detailing the use of CTP03 and CTP04.
See Figures Appendix for an example detailing the use of CTP03, CTP04 and CTP07.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
CTP02	236	**Price Identifier Code**	X	ID 3/3
		Code identifying pricing specification		
		RES Resale		
		SLP Suggested List Price		
CTP03	212	**Unit Price**	O	R 1/17
		Price per unit of product, service, commodity, etc.		
CTP04	380	**Quantity**	X	R 1/15
		Numeric value of quantity		
CTP05	C001	**Composite Unit of Measure**	X	
		To identify a composite unit of measure (See Figures Appendix for examples of use)		
MC00101	355	**Unit or Basis for Measurement Code**	M	ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
		EA Each		
		UN Unit		
CTP06	648	**Price Multiplier Qualifier**	O	ID 3/3
		Code indicating the type of price multiplier		
		DIS Discount Multiplier		
CTP07	649	**Multiplier**	X	R 1/10
		Value to be used as a multiplier to obtain a new value		

Segment: **CSH** Sales Requirements
Position: 142
Loop: PO1 Mandatory
Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify general conditions or requirements of the sale
Syntax Notes: **1** If CSH02 is present, then CSH03 is required.
2 If either CSH06 or CSH07 is present, then the other is required.
3 If either CSH09 or CSH10 is present, then the other is required.
Semantic Notes: **1** CSH03 is the maximum monetary amount value which the order must not exceed.
2 CSH04 is the account number to which the purchase amount is charged.
3 CSH05 is the date specified by the sender to be shown on the invoice.
4 CSH06 identifies the source of the code value in CSH07.
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
CSH01	563	**Sales Requirement Code**	O ID 1/2

Code to identify a specific requirement or agreement of sale
B   Back Order Only If New Item
N   No Back Order
O   Back Order If Items Are Out of Stock or Not Yet Published
SC Ship Complete
Ship Order When all items are in stock and shippable, otherwise do not ship any of the lines.
Y   Back Order if Out of Stock

Segment: **CTT** Transaction Totals
Position: 010
Loop: CTT Mandatory
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: **1** If either CTT03 or CTT04 is present, then the other is required.
2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: **1** This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes

| MCTT01 | 354 | **Number of Line Items** | M | N0 1/6 |

Total number of line items in the transaction set

| CTT02 | 347 | **Hash Total** | O | R 1/10 |

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 being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

Segment:SE Transaction Set Trailer
    Position:030
      Loop:
     Level: Summary
     Usage: Mandatory
  Max Use:1
   Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:
Semantic Notes:
   Comments:1 SE is the last segment of each transaction set.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
MSE01	96	**Number of Included Segments**	M	N0 1/10

Total number of segments included in a transaction set including ST and SE segments

| MSE02 | 329 | **Transaction Set Control Number** | M | AN 4/9 |

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set