

Utility Industry Group Implementation Standard

for

Electronic
Data
Interchange

TRANSACTION SET

850

Purchase Order

Ver/Rel 004010

OCTOBER 7, 1999

Summary of Changes

October 7, 1999

Initial release.

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850 Purchase Order

Introduction

The function of the Utility Industry Group is

To represent Electric, Gas, and Combination Utilities, their suppliers, their customers, and other interested parties as an Industry Action Group to the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12, specifically in the standards-setting process, for their Electronic Data Interchange business needs.

To encourage, promote, and establish conventions for the use of ASC X12 standards as the "recommended" method of EDI. To develop and coordinate, as required, implementation guidelines and tools to promote the growth and timely implementation of Electronic Commerce/EDI within the industry.

To provide a forum for the exchange of ideas related to Electronic Commerce/EDI and its influence on the business needs of the industry.

Purpose

This Utility Industry Group (UIG) Implementation Guideline contains the format and establishes the data contents of the UIG implementation of the ANSI X12 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.

Overview

The 850 Purchase Order transaction set consists of three groups of data segments: header, detail, and summary. In general, the header segments identify the interchanging partners, establish control numbers, and specify the use and purpose of the transaction set. The detail area consists of repeating segments of line item data. A number of line items can be included in a single purchase order transaction. The summary area provides the totals and control numbers to ensure a complete transmission.

The REF, PWK, and DTM segments and the N1 loop can be used in both the header and detail. Usage in the header will apply to the entire document unless used in one or more line items, in which case the usage at the line item(s) will override the header usage for the item(s).

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Best Practices

Global Best Practices

Use of Text Segments

- The UIG recommends that the note (NTE) segment be avoided because this segment is not machine-readable. Other text segments, such as MSG and PID, may be used if their use will lead to machine processable information in subsequent applications.

Use of ZZ Qualifier

- The use of data fields to transmit uncoded or textual information should be avoided. This practice is usually associated with the use of the ZZ qualifier as a normal course of doing business.

997 - Functional Acknowledgment

- The purpose of the 997 is to verify receipt of a transmitted document only, not the acceptance of the document. For example, the acceptance of a purchase order (850) is accomplished through the use of the purchase order acknowledgment transaction (855).

Interchange Control Number

- A unique and sequential interchange control number should be used on every envelope that is transmitted to a trading partner. This approach will allow the receiver to audit the interchange for any duplicate or missing transmissions.

Use of Dun & Bradstreet (D-U-N-S) Number

- Dun & Bradstreet assigns a nine-digit identification number to every business entity. This number, known as the D-U-N-S number, should be used to identify the trading partners. A trading partner may append a four-digit suffix to the D-U-N-S number to uniquely identify a specific location within the entity; this number is referred to as a D-U-N-S + 4 number

Banking Transactions

- Guidelines that outline the use of transactions relating to interactions between a sender and the sender's financial institution are available from the Bankers EDI Council and the NACHA EDI Council. Other publications that address the use of financial payment transactions include Technical Report 1 (TR1) and Technical Report 2 (TR2); both of these publications are available from DISA.

Document-Specific Best Practices

Notice of Evaluated Receipts

- Element BEG08 should be used to specify that the purchase order is covered by an evaluated receipt settlement (ERS) arrangement and that a supplier invoice is not required by the utility.
- The desire to develop an ERS relationship with a trading partner should be addressed between the partners prior to the initial transmission of an ERS purchase order.

Use of The PID Segment

- The use of the PID (product description) segment should be limited to those cases where no utility or supplier number is available to identify the material or where a product's technical description is required.
- If a description is transmitted in addition to a utility or supplier number, the sending application should limit the ability to modify this description field as this data may be used as key data in the receiving application.
- If a modified description (i.e., similar to) is transmitted along with a utility or supplier number within the PO1 loop, the qualifier associated with the supplier number should be changed to VI (vary item product number) to inform the receiving application of the change.

Safety-Related Purchasing

For the purpose of these best practices, the term 'attachments' refers to the technical and quality requirements and applicable specifications that are referenced as part of the purchase order, either by attachment to or by incorporation into the body of the purchase order.

- The utility is responsible for assuring that the supplier has received the original hard-copy set of all applicable safety-related attachments and for providing the supplier with all revisions or changes to the attachments.
- The supplier is responsible for assuring that the safety-related clauses or attachments identified in the REF or N9/MSG segments of the EDI purchase order are on file. The supplier is responsible for contacting the utility prior to processing if the supplier does not possess the referenced attachment(s).
- To assure integrity, all safety-related orders or change orders will require confirmation by means of a Purchase Order Acknowledgment (TS 855) or P.O. Change Acknowledgment (TS 865), specifically confirming the attachment data.
- Safety and non-safety items should not be combined in the same purchase order.
- All nuclear orders are to be coded as either safety or non-safety.
- The partners should attempt to consolidate and standardize attachments.
- Release purchase orders will only reference attachments that have been previously agreed to in the original blanket purchase order. All additional attachments or modifications to attachments must be accomplished by a change order to the original blanket order.

Use of The SCH Segment

When delivery dates are specified at the item level, the SCH segment is used instead of the DTM segment, even if only one delivery date is specified.

Multiple Ship-To Addresses

- Because many supplier order entry systems cannot handle multiple ship-to destinations on one purchase order, only one ship-to destination should be included in a purchase order, in the Header N1 loop. If the originator chooses to send multiple ship-to destinations, using the Detail N1 loop, the recipient should be contacted to confirm that multiple destinations can be processed.

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Header

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max. Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BEG	Beginning Segment for Purchase Order	M	1		
	040	CUR	Currency	O	1		
	050	REF	Reference Identification	O	>1		
	060	PER	Administrative Communications Contact	O	3		
	070	TAX	Tax Reference	O	>1		
	080	FOB	F.O.B. Related Instructions	O	>1		
	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
	150	DTM	Date/Time Reference	O	10		
	240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
	270	MAN	Marks and Numbers	O	10		
						LOOP ID - N9	1000
	295	N9	Reference Identification	O	1		
	300	MSG	Message Text	O	1000		
						LOOP ID - N1	200
	310	N1	Name	O	1		
	320	N2	Additional Name Information	O	2		
	330	N3	Address Information	O	2		
	340	N4	Geographic Location	O	>1		
	360	PER	Administrative Communications Contact	O	>1		

Detail

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max. Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
						LOOP ID - PO1	100000
Must Use	010	PO1	Baseline Item Data	M	1		n1
	015	LIN	Item Identification	O	>1		
						LOOP ID - PID	1000
	050	PID	Product/Item Description	O	1		
	070	PWK	Paperwork	O	25		
	100	REF	Reference Identification	O	>1		
	210	DTM	Date/Time Reference	O	10		
						LOOP ID - SCH	200
	295	SCH	Line Item Schedule	O	1		n2
	297	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		

		LOOP ID - N9			1000
	330	N9	Reference Identification	O	1
	340	MSG	Message Text	O	1000
Not Recomm	LOOP ID - N1			200	
	350	N1	Name	O	1
	360	N2	Additional Name Information	O	2
	370	N3	Address Information	O	2
	380	N4	Geographic Location	O	1

Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
		LOOP ID - CTT			1	
	010	CTT	Transaction Totals	O	1	n3
	020	AMT	Monetary Amount	O	1	n4
Must Use	030	SE	Transaction Set Trailer	M	1	

Transaction Set Notes:

1. PO102 is required.
2. The SCH segment is used to specify various quantities of items ordered that are to be scheduled. When this segment is used, the unit of measurement code (SCH02) should always be identical to the unit of measurement code in the associated PO1 segment (PO103) and the sum of values of quantity (SCH01) should always equal the quantity ordered (PO102) in the PO1 segment.
3. 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.
4. If AMT is used in the summary area, then AMT01 will equal TT and AMT02 will indicate total transaction amount as calculated by the sender.

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., 850 selects the Purchase Order Transaction Set).
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3
Must Use	ST02	329	850 Purchase Order 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	M AN 4/9

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BEG01	353	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
			00 Original	
			06 Confirmation Sent as follow-up to a verbal order.	
			07 Duplicate	
Must Use	BEG02	92	Purchase Order Type Code Code specifying the type of Purchase Order	M ID 2/2
			BE Blanket Order/Estimated Quantities (Not firm Commitment)	
			BK Blanket Order (Quantity Firm)	
			OS Special Order Indicates that manual intervention is required.	
			RL Release or Delivery Order An order for goods and services placed against a pre-existing contract or blanket order	
			RO Rush Order	
			SA Stand-alone Order	
Must Use	BEG03	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser	M AN 1/22
			This is the PO number when BEG02 = SA, or the blanket PO number when BEG02 = RL	
			Trading partners must agree on which reference numbers should be returned in related transaction sets i.e. BEG03, 04, 08.	
	BEG04	328	Release Number Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction.	O AN 1/30
			Release number is generally used when BEG02 = RL.	
Must Use	BEG05	373	Date Date expressed as CCYYMMDD	M DT 8/8
	BEG06	367	Contract Number Contract number	O AN 1/30
			This is a reference to an original master agreement on Terms & Conditions	

BEG08	1019	Invoice Type Code	O ID 3/3
		Code defining the method by which invoices are to be processed	
		IBM Invoice By Mail	
		IEL Invoice Electronically	
		INR Invoice Not Required (Such As Evaluated Receipts Settlements)	
BEG09	1166	Contract Type Code	O ID 2/2
		Code identifying a contract type	
		02 Per Diem	
			A contract which allows certain charges to be on a rate per day basis
		CP Cost Plus	
		FE Fixed Price with Escalation	
		FR Firm Fixed Price	
		FX Fixed Price with Economic Price Adjustment	
		LA Labor	
		TM Time and Materials	

Segment: **CUR** Currency
Position: 040
Loop:
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction
Syntax Notes:

- 1 If CUR08 is present, then CUR07 is required.
- 2 If CUR09 is present, then CUR07 is required.
- 3 If CUR10 is present, then at least one of CUR11 or CUR12 is required.
- 4 If CUR11 is present, then CUR10 is required.
- 5 If CUR12 is present, then CUR10 is required.
- 6 If CUR13 is present, then at least one of CUR14 or CUR15 is required.
- 7 If CUR14 is present, then CUR13 is required.
- 8 If CUR15 is present, then CUR13 is required.
- 9 If CUR16 is present, then at least one of CUR17 or CUR18 is required.
- 10 If CUR17 is present, then CUR16 is required.
- 11 If CUR18 is present, then CUR16 is required.
- 12 If CUR19 is present, then at least one of CUR20 or CUR21 is required.
- 13 If CUR20 is present, then CUR19 is required.
- 14 If CUR21 is present, then CUR19 is required.

Semantic Notes:

Comments: 1 See the Figures Appendix in the X12 Standards, Release 4010, for examples detailing the use of the CUR segment.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CUR01	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual BY Buying Party (Purchaser) SE Selling Party	M ID 2/3
Must Use	CUR02	100	Currency Code Code (Standard ISO) for country in whose currency the charges are specified	M ID 3/3

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

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CR Customer Reference Number	
			EQ Equipment Number Buyer's machine reference or identifier	
			L1 Letters or Notes	
			P4 Project Code	
			PR Price Quote Number Supplier's Quote Number	
			QC Product Specification Document Number Model designation of replacement component Represents a non-nuclear safety related item.	
			QR Quality Report Number Represents a utility specific classification of product safety. May include safety, commercial or non-safety parts. The buyer is responsible for proper classification while the supplier is responsible for proper interpretation. Represents a nuclear related item.	
			S3 Specification Number	
			SE Serial Number	
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C AN 1/30
			NSR represents nuclear safety related classification (10CFR21 or equivalent applies)	
			NNS represents nuclear non-safety related classification (10CFR21 or equivalent does not apply)	
	REF03	352	Description A free-form description to clarify the related data elements and their content. Used when REF01 = QC or QR and REF02 = NSR or NNS to identify relevant documents and requirements.	C AN 1/80

Segment: **PER Administrative Communications Contact**

Position: 060

Loop:

Level: Heading

Usage: Optional

Max Use: 3

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

- Syntax Notes:**
- 1 If either PER03 or PER04 is present, then the other is required.
 - 2 If either PER05 or PER06 is present, then the other is required.
 - 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
		BD Buyer Name or Department	
		CW Confirmed With	
		EX Expeditor	
		IC Information Contact	
PER02	93	Name Free-form name	O AN 1/60
PER03	365	Communication Number Qualifier Code identifying the type of communication number	C ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER04	364	Communication Number Complete communications number including country or area code when applicable	C AN 1/80
PER05	365	Communication Number Qualifier Code identifying the type of communication number	C ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER06	364	Communication Number Complete communications number including country or area code when applicable	C AN 1/80
PER07	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER08	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80

Segment: **TAX** Tax Reference
Position: 070
Loop:
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To provide data required for proper notification/determination of applicable taxes applying to the transaction or business described in the transaction

- Syntax Notes:**
- 1 At least one of TAX01 or TAX03 is required.
 - 2 If either TAX02 or TAX03 is present, then the other is required.
 - 3 If either TAX04 or TAX05 is present, then the other is required.
 - 4 If either TAX06 or TAX07 is present, then the other is required.
 - 5 If either TAX08 or TAX09 is present, then the other is required.
 - 6 If either TAX10 or TAX11 is present, then the other is required.

- Semantic Notes:**
- Comments:**
- 1 Tax ID number is, in many instances, referred to as a Tax Exemption Number. The paired (combined) use of data elements 309 and 310 provides for the designation of five taxing jurisdictions.
 - 2 TAX01 is required if tax exemption is being claimed.

Notes: Used to identify tax exemption.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
TAX01	325	Tax Identification Number Number assigned to a purchaser (buyer, orderer) by a taxing jurisdiction (state, county, etc.); often called a tax exemption number or certificate number	C AN 1/20
TAX02	309	Location Qualifier Code identifying type of location	C ID 1/2
		AC City and State	
		CI City	
		CY County/Parish	
		SP State/Province	
TAX03	310	Location Identifier Code which identifies a specific location	C AN 1/30
TAX04	309	Location Qualifier Code identifying type of location	C ID 1/2
		AC City and State	
		CI City	
		CY County/Parish	
		SP State/Province	
TAX05	310	Location Identifier Code which identifies a specific location	C AN 1/30
TAX06	309	Location Qualifier Code identifying type of location	C ID 1/2
		AC City and State	
		CI City	
		CY County/Parish	
		SP State/Province	

TAX07	310	Location Identifier Code which identifies a specific location	C AN 1/30
TAX08	309	Location Qualifier Code identifying type of location	C ID 1/2
		AC City and State	
		CI City	
		CY County/Parish	
		SP State/Province	
TAX09	310	Location Identifier Code which identifies a specific location	C AN 1/30
TAX12	441	Tax Exempt Code Code identifying exemption status from sales and use tax	O ID 1/1
		0 Exempt (For Export)	
		1 Yes (Tax Exempt)	
		2 No (Not Tax Exempt)	
		7 Direct Pay ID	
		8 Exempt (Sale to U.S. Government)	

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.
 2 If FOB04 is present, then FOB05 is required.
 3 If FOB07 is present, then FOB06 is required.
 4 If FOB08 is present, then FOB09 is required.
Semantic Notes:
 1 FOB01 indicates which party will pay the carrier.
 2 FOB02 is the code specifying transportation responsibility location.
 3 FOB06 is the code specifying the title passage location.
 4 FOB08 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

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	FOB01	146	Shipment Method of Payment Code identifying payment terms for transportation charges	M ID 2/2
			CC	Collect
			CF	Collect, Freight Credited Back to Customer
			DF	Defined by Buyer and Seller
			NC	Service Freight, No Charge Use to indicate no freight will be billed.
			PA	Advance Prepaid Use if material purchased includes shipment costs in the unit price, but freight charges will be invoiced as a separate amount.
			PC	Prepaid but Charged to Customer Use if material purchased does not include shipment costs in the unit price, but the seller prepays freight charges and invoices the buyer for reimbursement.
			PS	Paid by Seller The seller agrees to the transportation payment term requiring the seller to pay transportation charges to a specified location (origin or destination location) Use if material purchased includes shipment costs in the unit price, but freight charges will not be invoiced as a separate amount.
			PU	Pickup No charge incurred.

FOB05	335	Transportation Terms Code	C ID 3/3
		Code identifying the trade terms which apply to the shipment transportation responsibility	
		FAS Free Alongside Ship	
		Seller's obligation ends when goods have been placed alongside the vessel on the quay or in lighters at the named port of shipment; buyer bears all costs and risks thereafter	
		FOB Free on Board	
FOB06	309	Location Qualifier	C ID 1/2
		Code identifying type of location	
		AC City and State	
		DE Destination (Shipping)	
		OR Origin (Shipping Point)	
FOB07	352	Description	O AN 1/80
		A free-form description to clarify the related data elements and their content	

Segment: **ITD** **Terms of Sale/Deferred Terms of Sale**
Position: 130
Loop:
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To specify terms of sale
Syntax Notes:
 1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.
 2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.
 3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.
Semantic Notes:
 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.

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
ITD01	336	Terms Type Code Code identifying type of payment terms	O ID 2/2
		04 Deferred or Installment	
		05 Discount Not Applicable	
		08 Basic Discount Offered	
		09 Proximo	
		20 Progress Payment	
		Term at which progress payments are authorized by the terms of the contract	
ITD02	333	Terms Basis Date Code Code identifying the beginning of the terms period	O ID 1/2
		1 Ship Date	
		3 Invoice Date	
		5 Invoice Receipt Date	
		15 Receipt of Goods	
ITD03	338	Terms Discount Percent Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date	O R 1/6
ITD05	351	Terms Discount Days Due Number of days in the terms discount period by which payment is due if terms discount is earned	C NO 1/3
ITD07	386	Terms Net Days Number of days until total invoice amount is due (discount not applicable)	O NO 1/3
ITD14	107	Payment Method Code Code identifying type of payment procedures	O ID 1/2
		AC Credit Card	
		Use when payment is made by a purchasing card. BEG08 should equal INR, Invoice Not Required.	

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 DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

Ref.	Data Element	Name	Attributes
Must Use	DTM01	374 Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3
		007 Effective Date blanket PO order starts	
		036 Expiration Date coverage expires Date blanket PO order ends	
		055 Confirmed Date verbal order placed	
		064 Do Not Deliver Before	
		106 Required By Deliver on or before this date	
		112 Buyers Dock Deliver on this date	
		150 Service Period Start	
		151 Service Period End	
		994 Quote The date on which a (price) quote was rendered	
	DTM02	373 Date Date expressed as CCYYMMDD	X DT 8/8

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.
 - 2 If TD502 is present, then TD503 is required.
 - 3 If TD507 is present, then TD508 is required.
 - 4 If TD510 is present, then TD511 is required.
 - 5 If TD513 is present, then TD512 is required.
 - 6 If TD514 is present, then TD513 is required.
 - 7 If TD515 is present, then TD512 is required.

- Semantic Notes:** 1 TD515 is the country where the service is to be performed.
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

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
	TD501	133	Routing Sequence Code Code describing the relationship of a carrier to a specific shipment movement	O ID 1/2
			B Origin/Delivery Carrier (Any Mode)	
Recomm	TD502	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	C ID 1/2
			2 Standard Carrier Alpha Code (SCAC)	
	TD503	67	Identification Code Code identifying a party or other code	C AN 2/80
	TD504	91	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment	C ID 1/2
			A Air	
			D Parcel Post	
			FL Motor (Flatbed)	
			H Customer Pickup	
			M Motor (Common Carrier)	
			R Rail	
			SR Supplier Truck	
			T Best Way (Shippers Option)	
			U Private Parcel Service	
Not Recomm	TD505	387	Routing Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	C AN 1/35

TD507	309	Location Qualifier Code identifying type of location	O ID 1/2
		PA Port of Arrival Port where shipment enters country	
		PE Port of Entry Port where customs is declared	
TD508	310	Location Identifier Code which identifies a specific location	X AN 1/30
TD512	284	Service Level Code Code indicating the level of transportation service or the billing service offered by the transportation carrier	C ID 2/2
		ON Overnight	
		SD Saturday	
		SE Second Day	
		ST Standard Class	

Segment: **MAN** Marks and Numbers
Position: 270
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To indicate identifying marks and numbers for shipping containers
Syntax Notes:
 1 If either MAN04 or MAN05 is present, then the other is required.
 2 If MAN06 is present, then MAN05 is required.
Semantic Notes:
 1 MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
 2 When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
 3 When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.
Comments:
 1 When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
 2 MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
 When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	MAN01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87)	M ID 1/2
			AA SSCC-18	
			AI UCC/EAN-128 Application Identifier (AI) and Data	
			GM SSCC-18 and Application Identifier	
			UC U.P.C. Shipping Container Code	
			UP U.P.C. Consumer Package Code (1-5-5-1)	
Must Use	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	M AN 1/48
	MAN03	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O AN 1/48
	MAN04	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87)	X ID 1/2
			AA SSCC-18	
			AI UCC/EAN-128 Application Identifier (AI) and Data	
			GM SSCC-18 and Application Identifier	
			UC U.P.C. Shipping Container Code	
			UP U.P.C. Consumer Package Code (1-5-5-1)	
	MAN05	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	X AN 1/48
	MAN06	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment	O AN 1/48

Segment: **N9** Reference Identification
Position: 295
Loop: N9
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

- Syntax Notes:**
- 1 At least one of N902 or N903 is required.
 - 2 If N906 is present, then N905 is required.
 - 3 If either C04003 or C04004 is present, then the other is required.
 - 4 If either C04005 or C04006 is present, then the other is required.

- Semantic Notes:**
- 1 N906 reflects the time zone which the time reflects.
 - 2 N907 contains data relating to the value cited in N902.

Comments:

Notes: The N9/MSG loop provides a utility-specific document identification for a technical specification that relates to the product(s) being ordered, including any revision identification to the original technical document. A revision may include the date (and time) of the revision.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	N901	128 Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		C3 Customer Specification Number Represents a customer specification known by the supplier.	
		E4 Charge Card Number Use when payment will be made with a purchasing card.	
		SH Sender Defined Clause	
		SU Special Processing Code Unique code identifying the special handling requirements for the claim Represents a special customer specification where additional information must be included in the MSG segment(s).	
	N902	127 Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Specification/Attachment/Clause Number when N901 = C3, SH, or SU. Purchasing Card number when N901 = E4.	C AN 1/30
	N903	369 Free-form Description Free-form descriptive text Revision Number when N901 = C3, SH, or SU	C AN 1/45

N904	373	Date Date expressed as CCYYMMDD Revision Date when N901 = C3, SH, or SU. Purchasing Card Expiration Date when N901 = E4.	O DT 8/8
N905	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) Revision Time when N901 = C3, SH, or SU	X TM 4/8
N906	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 Use any valid code for Data Element 623, as agreed between the trading partners.	O ID 2/2

Segment: **MSG** Message Text
Position: 300
Loop: N9
Level: Heading
Usage: Optional
Max Use: 1000
Purpose: To provide a free-form format that allows the transmission of text information
Syntax Notes: 1 If MSG03 is present, then MSG02 is required.
Semantic Notes: 1 MSG03 is the number of lines to advance before printing.
Comments: 1 MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.
 2 If MSG02 is "AA - Advance the specified number of lines before print" then MSG03 is required.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	MSG01	933	Free-Form Message Text Free-form message text	M AN 1/264
			Free-form text from 1 to 60 characters is recommended to facilitate on-line presentation of the data. The MSG segment is used primarily in conjunction with the "SU" qualifier in N901 for additional text information.	

Segment: **N1** Name
Position: 310
Loop: N1
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. Des.	Data Element	Name	Attributes
Must Use	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
		BS Bill and Ship To	
		BT Bill-to-Party	
		BY Buying Party (Purchaser)	
		Can be used as the electronic signature for buyer	
		FP Name on Credit Card	
		MA Party for whom Item is Ultimately Intended	
		Used for internal distribution i.e. desktop delivery	
		PF Party to Receive Freight Bill	
		PN Party to Receive Shipping Notice	
		SF Ship From	
		SN Store	
		ST Ship To	
		VN Vendor	
		Specifies buyer's vendor ID	
	N102	93 Name Free-form name	C AN 1/60
	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	C ID 1/2
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		92 Assigned by Buyer or Buyer's Agent	
	N104	67 Identification Code Code identifying a party or other code	C AN 2/80

Segment: **N2 Additional Name Information**

Position: 320

Loop: N1

Level: Heading

Usage: Optional

Max Use: 2

Purpose: To specify additional names or those longer than 35 characters in length

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N201	93	Name Free-form name	M AN 1/60
	N202	93	Name Free-form name	O AN 1/60

Segment: **N3** Address Information
Position: 330
Loop: N1
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N301	166	Address Information Address information	M AN 1/55
	N302	166	Address Information Address information	O AN 1/55

Segment: **N4 Geographic Location**
Position: 340
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.
Semantic Notes:
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.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
N404	26	Country Code Code identifying the country	O ID 2/3

Segment: PER Administrative Communications Contact

Position: 360

Loop: N1

Level: Heading

Usage: Optional

Max Use: >1

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

- Syntax Notes:**
- 1 If either PER03 or PER04 is present, then the other is required.
 - 2 If either PER05 or PER06 is present, then the other is required.
 - 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:

Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
		DC Delivery Contact	
		EX Expeditor	
		IC Information Contact	
		OC Order Contact	
		RE Receiving Contact	
PER02	93	Name Free-form name	O AN 1/60
PER03	365	Communication Number Qualifier Code identifying the type of communication number	C ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER04	364	Communication Number Complete communications number including country or area code when applicable	C AN 1/80
PER05	365	Communication Number Qualifier Code identifying the type of communication number	C ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER06	364	Communication Number Complete communications number including country or area code when applicable	C AN 1/80
PER07	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
		EM Electronic Mail	
		FX Facsimile	
		TE Telephone	
PER08	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80

Segment: **PO1** **Baseline Item Data**
Position: 010
Loop: PO1
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

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
PO101	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set Customer assigned number that references / identifies the PO line item (not the blanket line item or a sequential line number). The Supplier shall return this number in all related transactions.	O AN 1/20
PO102	330	Quantity Ordered Quantity ordered	C R 1/15
PO103	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Use any valid code for Data Element 355, as agreed between the trading partners. The most commonly used codes include: DZ Dozen EA Each FT Foot HR Hours LB Pound PR Pair	O ID 2/2
PO104	212	Unit Price Price per unit of product, service, commodity, etc. The price and quantity must be expressed in the same unit of measure; i.e., that shown in PO103.	C R 1/17

PO105	639	Basis of Unit Price Code	O ID 2/2
		Code identifying the type of unit price for an item	
		If the price is firm, PO105 is not needed. The most commonly used codes include:	
		AP	Advise Price
		CA	Catalog
		CT	Contract
		ES	Estimated
		NC	No Charge
		QR	Previous Quoted Price
		QT	Quoted
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)	
		BP	Buyer's Part Number
		EN	European Article Number (EAN) (2-5-5-1)
		GS	General Specification Number
		MF	Manufacturer
		MG	Manufacturer's Part Number
		PT	Print or Drawing
		SN	Serial Number
		UP	U.P.C. Consumer Package Code (1-5-5-1)
		VP	Vendor's (Seller's) Part Number
PO107	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
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)	
		Use any of the qualifiers listed in PO106	
PO109	234	Product/Service ID	X AN 1/48
		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)	
		Use any of the qualifiers listed in PO106	
PO111	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
PO112	235	Product/Service ID Qualifier	C ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Use any of the qualifiers listed in PO106	
PO113	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
PO114	235	Product/Service ID Qualifier	C ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Use any of the qualifiers listed in PO106	

PO115	234	Product/Service ID Identifying number for a product or service	X AN 1/48
PO116	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C ID 2/2
Use any of the qualifiers listed in PO106			
PO117	234	Product/Service ID Identifying number for a product or service	X AN 1/48
PO118	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C ID 2/2
Use any of the qualifiers listed in PO106			
PO119	234	Product/Service ID Identifying number for a product or service	X AN 1/48
PO120	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C ID 2/2
Use any of the qualifiers listed in PO106			
PO121	234	Product/Service ID Identifying number for a product or service	X AN 1/48
PO122	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C ID 2/2
Use any of the qualifiers listed in PO106			
PO123	234	Product/Service ID Identifying number for a product or service	X AN 1/48
PO124	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C ID 2/2
Use any of the qualifiers listed in PO106			
PO125	234	Product/Service ID Identifying number for a product or service	X AN 1/48

Segment: **LIN** Item Identification
Position: 015
Loop: PO1
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify basic item identification data
Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes:

- 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: Use this segment when the PO106 - PO125 pairs do not provide enough iterations to convey all of the available item identifiers.

Data Element Summary

Ref.	Data Element	Name	Attributes
	LIN01	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
Must Use	LIN02	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	M ID 2/2
		Use any of the qualifiers listed in PO106	
Must Use	LIN03	Product/Service ID Identifying number for a product or service	M AN 1/48
	LIN04	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X ID 2/2
		Use any of the qualifiers listed in PO106	
	LIN05	Product/Service ID Identifying number for a product or service	X AN 1/48
	LIN06	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X ID 2/2
		Use any of the qualifiers listed in PO106	
	LIN07	Product/Service ID Identifying number for a product or service	X AN 1/48

LIN08	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN09	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN10	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN11	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN12	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN13	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN14	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN15	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN16	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN17	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN18	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN19	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN20	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN21	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN22	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN23	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		
LIN24	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		Use any of the qualifiers listed in PO106		
LIN25	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or service		

LIN26	235	Product/Service ID Qualifier	X ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Use any of the qualifiers listed in PO106	
LIN27	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
LIN28	235	Product/Service ID Qualifier	X ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Use any of the qualifiers listed in PO106	
LIN29	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	
LIN30	235	Product/Service ID Qualifier	X ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Use any of the qualifiers listed in PO106	
LIN31	234	Product/Service ID	X AN 1/48
		Identifying number for a product or service	

Segment: **PID** Product/Item Description

Position: 050

Loop: PID

Level: Detail

Usage: Optional

Max Use: 1

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

Syntax Notes:

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

Semantic Notes:

- 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.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	PID01	349	Item Description Type Code indicating the format of a description F Free-form	M ID 1/1
	PID05	352	Description A free-form description to clarify the related data elements and their content	C AN 1/80

Segment: **PWK** Paperwork
Position: 070
Loop: PO1
Level: Detail
Usage: Optional
Max Use: 25
Purpose: To identify the type or transmission or both of paperwork or supporting information

- Syntax Notes:** 1 If either PWK05 or PWK06 is present, then the other is required.
Semantic Notes:
Comments: 1 PWK05 and PWK06 may be used to identify the addressee by a code number.
 2 PWK07 may be used to indicate special information to be shown on the specified report.
 3 PWK08 may be used to indicate action pertaining to a report.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	PWK01	755 Report Type Code	M ID 2/2
		Code indicating the title or contents of a document, report or supporting item	
		CP Certificate of Compliance (Material Certification)	
		DW Drawing(s)	
		IT Certified Inspection and Test Results	
		MD Material Data Sheets	
		MS Material Safety Data Sheet	
		SP Specification	
		VD Data Request for Vendor's Specifications or Drawings.	
	PWK02	756 Report Transmission Code	O ID 1/2
		Code defining timing, transmission method or format by which reports are to be sent	
		BM By Mail	
		EL Electronically Only	
		EM E-Mail	
		FX By Fax	
		WS With Shipment (With Package)	
	PWK03	757 Report Copies Needed	O NO 1/2
		The number of copies of a report that should be sent to the addressee	

Segment: **REF** Reference Identification
Position: 100
Loop: PO1
Level: Detail
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:

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

Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			C7 Contract Line Item Number	
			CT Contract Number Use when the Blanket PO number can change from item to item	
			EQ Equipment Number Buyer's machine reference or identifier	
			Q1 Quote Number	
			S3 Specification Number	
			SE Serial Number	
			SZ Specification Revision	
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C AN 1/30
	REF03	352	Description A free-form description to clarify the related data elements and their content	C AN 1/80

Segment: **DTM** Date/Time Reference
Position: 210
Loop: PO1
Level: Detail
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:
Comments:

Notes: The SCH segment is used to specify the item delivery date at the line item level; the DTM segment is not used.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	Code specifying type of date or time, or both date and time	M ID 3/3
			150	Service Period Start	
			151	Service Period End	
			994	Quote	
				The date on which a (price) quote was rendered	
	DTM02	373	Date	Date expressed as CCYYMMDD	C DT 8/8

Segment: **SCH** Line Item Schedule
Position: 295
Loop: SCH Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the data for scheduling a specific line-item
Syntax Notes:
 1 If SCH03 is present, then SCH04 is required.
 2 If SCH08 is present, then at least one of SCH09 or SCH10 is required.
 3 If SCH09 is present, then SCH08 is required.
 4 If SCH10 is present, then SCH08 is required.
Semantic Notes:
 1 SCH12 is the schedule identification.
Comments:
 1 SCH05 specifies the interpretation to be used for SCH06 and SCH07.
Notes: Used to specify the delivery date at the line item level; the DTM segment at position 210 is not used.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	SCH01	380	Quantity Numeric value of quantity	M R 1/15
Must Use	SCH02	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Use any valid code for Data Element 355, as agreed between the trading partners. The most commonly used codes include: DZ Dozen EA Each FT Foot HR Hours LB Pound PR Pair	M ID 2/2
Must Use	SCH05	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 064 Do Not Deliver Before 074 Requested for Delivery (Prior to and Including) 106 Required By 112 Buyers Dock Deliver on or before this date Deliver on this date	M ID 3/3
Must Use	SCH06	373	Date Date expressed as CCYYMMDD	M DT 8/8
	SCH08	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 075 Promised for Delivery (Prior to and Including)	M ID 3/3
	SCH09	373	Date Date expressed as CCYYMMDD	M DT 8/8

Segment: **TD5** **Carrier Details (Routing Sequence/Transit Time)**
Position: 297
Loop: SCH
Level: Detail
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.
 - 2 If TD502 is present, then TD503 is required.
 - 3 If TD507 is present, then TD508 is required.
 - 4 If TD510 is present, then TD511 is required.
 - 5 If TD513 is present, then TD512 is required.
 - 6 If TD514 is present, then TD513 is required.
 - 7 If TD515 is present, then TD512 is required.

Semantic Notes: 1 TD515 is the country where the service is to be performed.
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

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
	TD501	133	Routing Sequence Code Code describing the relationship of a carrier to a specific shipment movement	O ID 1/2
			B Origin/Delivery Carrier (Any Mode)	
Recomm	TD502	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	C ID 1/2
			2 Standard Carrier Alpha Code (SCAC)	
	TD503	67	Identification Code Code identifying a party or other code	C AN 2/80
	TD504	91	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment	C ID 1/2
			A Air	
			D Parcel Post	
			FL Motor (Flatbed)	
			H Customer Pickup	
			M Motor (Common Carrier)	
			R Rail	
			SR Supplier Truck	
			T Best Way (Shippers Option)	
			U Private Parcel Service	
Not Recomm	TD505	387	Routing Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	C AN 1/35

TD507	309	Location Qualifier Code identifying type of location	O ID 1/2
		PA Port of Arrival Port where shipment enters country	
		PE Port of Entry Port where customs is declared	
TD508	310	Location Identifier Code which identifies a specific location	X AN 1/30
TD512	284	Service Level Code Code indicating the level of transportation service or the billing service offered by the transportation carrier	C ID 2/2
		ON Overnight	
		SD Saturday	
		SE Second Day	
		ST Standard Class	

Segment: **N9** Reference Identification
Position: 330
Loop: N9
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

- Syntax Notes:**
- 1 At least one of N902 or N903 is required.
 - 2 If N906 is present, then N905 is required.
 - 3 If either C04003 or C04004 is present, then the other is required.
 - 4 If either C04005 or C04006 is present, then the other is required.

- Semantic Notes:**
- 1 N906 reflects the time zone which the time reflects.
 - 2 N907 contains data relating to the value cited in N902.

Comments:

Notes: The N9/MSG loop provides a utility-specific document identification for a technical specification that relates to the product(s) being ordered, including any revision identification to the original technical document. A revision may include the date (and time) of the revision.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	N901	128 Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		C3 Customer specification number Represents a customer specification known by the supplier.	
		SH Sender Defined Clause	
		SU Special Processing Code Unique code identifying the special handling requirements for the claim Represents a special customer specification where additional information must be included in the MSG segment(s)	
	N902	127 Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C AN 1/30
		Specification / Attachment / Clause Number	
	N903	369 Free-form Description Free-form descriptive text	C AN 1/45
		Revision Number	
	N904	373 Date Date expressed as CCYYMMDD	O DT 8/8
		Revision Date	

N905

337

Time

O TM 4/8

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)

Revision Time

Segment: **MSG** Message Text
Position: 340
Loop: N9
Level: Detail
Usage: Optional
Max Use: 1000
Purpose: To provide a free-form format that allows the transmission of text information
Syntax Notes: 1 If MSG03 is present, then MSG02 is required.
Semantic Notes: 1 MSG03 is the number of lines to advance before printing.
Comments: 1 MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.
 2 If MSG02 is "AA - Advance the specified number of lines before print" then MSG03 is required.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MSG01	933	Free-Form Message Text Free-form message text	M AN 1/264
			Free-form text from 1 to 60 characters is recommended to facilitate on-line presentation of data. The MSG segment is used primarily in conjunction with the "SU" qualifier in N901 for additional text information.	

Segment: **N1** Name
Position: 350
Loop: N1
Level: Detail
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.

Notes: Many supplier order entry systems cannot handle multiple ship-to destinations on one purchase order. Prior to using this N1 loop, the originator should confirm that the recipient will be able to process multiple ship-to destinations.

Data Element Summary

Ref.	Data Element	Name	Attributes
Must Use	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
		ST Ship To	
	N102	93 Name Free-form name	C AN 1/60
	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	C ID 1/2
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		91 Assigned by Seller or Seller's Agent	
		92 Assigned by Buyer or Buyer's Agent	
	N104	67 Identification Code Code identifying a party or other code	C AN 2/80

Segment: **N2** Additional Name Information

Position: 360

Loop: N1

Level: Detail

Usage: Optional

Max Use: 2

Purpose: To specify additional names or those longer than 35 characters in length

Syntax Notes:

Semantic Notes:

Comments:

Notes:

Many supplier order entry systems cannot handle multiple ship-to destinations on one purchase order. Prior to using this N1 loop, the originator should confirm that the recipient will be able to process multiple ship-to destinations.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N201	93	Name Free-form name	M AN 1/60
	N202	93	Name Free-form name	O AN 1/60

Segment: **N3** Address Information
Position: 370
Loop: N1
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes:

Many supplier order entry systems cannot handle multiple ship-to destinations on one purchase order. Prior to using this N1 loop, the originator should confirm that the recipient will be able to process multiple ship-to destinations.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information Address information	M AN 1/55
	N302	166	Address Information Address information	O AN 1/55

Segment: **N4 Geographic Location**
Position: 380
Loop: N1
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.
Semantic Notes:
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.
Notes: Many supplier order entry systems cannot handle multiple ship-to destinations on one purchase order. Prior to using this N1 loop, the originator should confirm that the recipient will be able to process multiple ship-to destinations.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	C AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
N404	26	Country Code Code identifying the country	O ID 2/3

Segment: **CTT** Transaction Totals

Position: 010

Loop: CTT

Level: Summary

Usage: Optional

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

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	CTT01	354	Number of Line Items Total number of line items in the transaction set	M NO 1/6
			Total number of PO1 segments	

Segment: **AMT** Monetary Amount
Position: 020
Loop: CTT
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To indicate the total monetary amount
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code Code to qualify amount	M ID 1/3
Must Use	AMT02	782	TT Total Transaction Amount Monetary Amount Monetary amount	M R 1/18

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

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M NO 1/10
Must Use	SE02	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	M AN 4/9