

Customer EDI Guidelines

850 Purchase Order

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850**Purchase Order****Functional Group=PO**

This Draft Standard for Trial Use 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.

Segments:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Used
	GS	Functional Group Header	M	1			Used

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BEG	Beginning Segment for Purchase Order	M	1			Must use
050	REF	Reference Identification	O	>1			Used
070	TAX	Tax Reference	O	>1			Used
080	FOB	F.O.B. Related Instructions	O	>1		C1/080	Used
110	CSH	Sales Requirements	O	5			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
150	DTM	Date/Time Reference	O	10			Used
240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used

LOOP ID - N1**200**

310	N1	Name	O	1			Used
320	N2	Additional Name Information	O	2		C1/320	Used
330	N3	Address Information	O	2			Used
340	N4	Geographic Location	O	>1			Used
360	PER	Administrative Communications Contact	O	>1			Used

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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LOOP ID - PO1**100000**

010	PO1	Baseline Item Data	M	1		N2/010	Must use
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LOOP ID - PID**1000**

050	PID	Product/Item Description	O	1			Used
100	REF	Reference Identification	O	>1			Used

LOOP ID - SCH**200**

295	SCH	Line Item Schedule	O	1		N2/295	Used
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Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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<u>LOOP ID - CTT</u>					<u>1</u>		
010	CTT	Transaction Totals	O	1		N3/010	Used
030	SE	Transaction Set Trailer	M	1			Must use

Segments:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max</u> <u>Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Used

Notes:

- 2/010 PO102 is required.
- 2/295 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.
- 3/010 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.

Comments:

- 1/080 The FOB segment is used to specify transportation instructions relating to the shipment. EMD does not require the FOB segment to be transmitted with the purchase order. Most customers have boiler-plate shipping instructions posted at the EMD warehouse.
- 1/320 The N2 (Additional Name Information) segment is used to provide additional names or those longer than 35 characters in length. This segment is not required by EMD. It is the sender's option to enter information in this segment.

ISA Interchange Control Header

Pos:	Max: 1
- Mandatory	
Loop: N/A	Elements: 16

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information All valid standard codes are used.	M	ID	2/2	Must use
ISA02	I02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code to identify the type of information in the Security Information All valid standard codes are used.	M	ID	2/2	Must use
ISA04	I04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	M	ID	2/2	Must use
ISA06	I06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	M	ID	2/2	Must use
ISA08	I07	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	M	AN	15/15	Must use
ISA09	I08	Interchange Date Description: Date of the interchange	M	DT	6/6	Must use
ISA10	I09	Interchange Time Description: Time of the interchange	M	TM	4/4	Must use
ISA11	I10	Interchange Control Standards Identifier Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.	M	ID	1/1	Must use
ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: This version number covers the interchange control segments All valid standard codes are used.				use
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.	M	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	M	ID	1/1	Must use
ISA16	I15	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

GS**Functional Group Header**

Pos:	Max: 1
- Mandatory	
Loop: N/A	Elements: 8

To indicate the beginning of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets All valid standard codes are used.	M	ID	2/2	Must use
GS02	142	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission. Codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	Time 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)	M	TM	4/8	Must use
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	Responsible Agency Code Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard All valid standard codes are used.	M	ID	1/2	Must use
GS08	480	Version / Release / Industry Identifier Code Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed All valid standard codes are used.	M	AN	1/12	Must use

Semantics:

- GS04 is the group date.
- GS05 is the group time.
- The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

- A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST**Transaction Set Header**

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u> 850 Purchase Order				
ST02	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

Semantics:

- 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).

BEG Beginning Segment for Purchase Order

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BEG01	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set.	M	ID	2/2	Must use

In SAP, there is no difference between an original and a confirming order. The sales order will be created in SAP if the order is unique (Sold to, Ship to, PO Number). If not unique, the sales order will go to error and a workflow message will be sent to the responsible party. If a customer sends an '06' confirming order, and this order does not exist in SAP, it will be created.

SAP IDoc mapping:

If data found in BEG01, E1EDK01-ACTION = 000.

<u>Code</u>	<u>Name</u>
00	Original
06	Confirmation

BEG02	92	Purchase Order Type Code Description: Code specifying the type of Purchase Order.	M	ID	2/2	Must use
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SAP IDoc mapping:

E1EDK14-QUALF = 012.

PM&I stocking orders get a different discount.

If the concatenation of ISA06+N101+N104 =

- MKNBYESI (Engine Systems PM&I order),
- 00793278317BTHYS or 00793278317BTSSS (Steward & Stevenson PM&I order),
- VDDABTVDDAS (Valley Detroit Diesel PM&I order), or
- WESTERN01BTWDDASK (Inland Detroit Diesel PM&I order)

E1EDK14-ORGID = ZST (Discount order type).

Else

Value is determined from specific synonym table in map.

Following is the synonym mapping:

BEG02 SAP order type (E1EDK14-ORGID)

RL	ZOR
RR	ZOR
SA	ZOR
UE	ZOR
WO	ZWAR

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>												
		<p>*(all others) ZOR</p> <p>*IF RR, map ZTAB to E1EDP01-PSTYV (Sales document item) for all line items.</p> <p>If WO, map Z1 to E1EDK01-LIFSK (Delivery block), map 'Y' to \$warranty.</p> <p>When writing all the PO1 line items of this order, when \$warranty = 'Y', map '10' to E1EDP19-ABGRU. Warranty orders should not be sent via EDI. This is a rejection status.</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>RL</td> <td>Release or Delivery Order</td> </tr> <tr> <td>RR</td> <td>Repair and Return</td> </tr> <tr> <td>SA</td> <td>Stand-alone Order</td> </tr> <tr> <td>UE</td> <td>Unit Exchange</td> </tr> <tr> <td>WO</td> <td>Warranty Order</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	RL	Release or Delivery Order	RR	Repair and Return	SA	Stand-alone Order	UE	Unit Exchange	WO	Warranty Order				
<u>Code</u>	<u>Name</u>																	
RL	Release or Delivery Order																	
RR	Repair and Return																	
SA	Stand-alone Order																	
UE	Unit Exchange																	
WO	Warranty Order																	
BEG03	324	<p>Purchase Order Number</p> <p>Description: A number assigned by the sender/purchases used for identifying the purchase order. This field is brought in on the SAP Sales order into the Customer Purchase Order field (VBKD-BSTKD).</p> <p>SAP IDoc mapping:</p> <p>If data found in BEG03, E1EDK02-QUALF = 001. E1EDK02-BELNR = BEG03.</p>	M	AN	1/22	Must use												
BEG05	373	<p>Date</p> <p>Description: Date expressed as CCYYMMDD.</p> <p>SAP IDoc mapping:</p> <p>If data found in BEG05, E1EDK02-DATUM = BEG05.</p>	M	DT	8/8	Must use												

Semantics:

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

REF Reference Identification

Pos: 050	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

To specify identifying information

Element Summary:

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

SAP IDoc mapping:

If REF01 = L1,
E1EDKT1-TDID = Z004.

Revised 5/15/2000: The above mapping was removed

<u>Code</u>	<u>Name</u>
CR	Customer Reference Number
L1	Letters or Notes
ST	Store Number

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.						

SAP IDOC mapping:

This element is not mapped into the SAP IDoc.

REF03	352	Description	C	AN	1/80	Used
Description: A free-form description to clarify the related data elements and their content.						

Contains actual comments or instructions needed to be transmitted by the sender when 'L1' is transmitted in the REF01 element.

This information is mapped to the SAP Sales Order in the field on screen Header/Texts/Pick Ticket Notes. If REF01 = CR or ST, this description is not mapped.

When receiving quote information, EMD expects to find the quote number assigned to the customer in this field. Without this information the order will be booked with the normal price book prices.

SAP IDoc mapping:

If REF01 = L1,
E1EDKT2-TDLINE = REF03.

Revised 5/15/2000: The above mapping was removed

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.

TAX Tax Reference

Pos: 070	Max: >1
Heading - Optional	
Loop: N/A	Elements: 2

To provide data required for proper notification/determination of applicable taxes applying to the transaction or business described in the transaction

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>								
TAX01	325	Tax Identification Number Description: Number assigned to a purchaser (buyer, orderer) by a taxing jurisdiction (state, county, etc.); often called a tax exemption number or certificate number. This number should be transmitted by the sender if tax exemption is to be claimed. SAP IDoc mapping: TAX segment is not mapped into the SAP IDoc.	C	AN	1/20	Used								
TAX12	441	Tax Exempt Code Description: Code identifying exemption status from sales and use tax. Canadian Rail Customers will transmit a '2' in TAX12 to indicate that the provincial tax should be applied to this material. SAP IDoc mapping: TAX segment is not mapped into the SAP IDoc.	O	ID	1/1	Used								
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>2</td> <td>No (Not Tax Exempt)</td> </tr> <tr> <td>3</td> <td>Exempt (For Resale)</td> </tr> <tr> <td>5</td> <td>Exempt (Not For Resale)</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	2	No (Not Tax Exempt)	3	Exempt (For Resale)	5	Exempt (Not For Resale)				
<u>Code</u>	<u>Name</u>													
2	No (Not Tax Exempt)													
3	Exempt (For Resale)													
5	Exempt (Not For Resale)													

Syntax:

1. TAX01 R0103 -- At least one of TAX01 or TAX03 is required.
2. TAX02 P0203 -- If either TAX02 or TAX03 are present, then the others are required.
3. TAX04 P0405 -- If either TAX04 or TAX05 are present, then the others are required.
4. TAX06 P0607 -- If either TAX06 or TAX07 are present, then the others are required.
5. TAX08 P0809 -- If either TAX08 or TAX09 are present, then the others are required.
6. TAX10 P1011 -- If either TAX10 or TAX11 are present, then the others are required.

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.

FOB F.O.B. Related Instructions

Pos: 080	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

To specify transportation instructions relating to shipment

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FOB01	146	Shipment Method of Payment Description: Code identifying payment terms for transportation charges.	M	ID	2/2	Must use
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				
		<u>Code Name</u>				
		CC Collect				
		DF Defined by Buyer and Seller				
		PB Customer Pick-up/Backhaul				
		PU Pickup				
FOB06	309	Location Qualifier Description: Code identifying type of location.	C	ID	1/2	Used
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				
		<u>Code Name</u>				
		OR Origin (Shipping Point)				
FOB07	352	Description Description: A free-form description to clarify the related data elements and their content.	O	AN	1/80	Used
		FOB information is not mapped into SAP. All orders coming in to GMLG are paid for by customer on dock. The incoterms will be defaulted into the Sales Order from the SAP Customer Master record.				
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				

Syntax:

1. FOB03 C0302 -- If FOB03 is present, then FOB02 is required
2. FOB04 C0405 -- If FOB04 is present, then FOB05 is required
3. FOB07 C0706 -- If FOB07 is present, then FOB06 is required
4. FOB08 C0809 -- If FOB08 is present, then FOB09 is required

Semantics:

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.

CSH Sales Requirements

Pos: 110	Max: 5
Heading - Optional	
Loop: N/A	Elements: 1

To specify general conditions or requirements of the sale

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CSH01	563	Sales Requirement Code	O	ID	1/2	Used

Description: Code to identify a specific requirement or agreement of sale.

This information will not be mapped into SAP. SAP will determine the sales requirements.

SAP IDoc mapping:

CSH segment is not mapped into the SAP IDoc.

<u>Code</u>	<u>Name</u>
P2	Ship As Soon As Possible
SC	Ship Complete

Syntax:

1. CSH02 C0203 -- If CSH02 is present, then CSH03 is required
2. CSH06 P0607 -- If either CSH06 or CSH07 are present, then the others are required.
3. CSH09 P0910 -- If either CSH09 or CSH10 are present, then the others are required.

Semantics:

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.

ITD**Terms of Sale/Deferred Terms of Sale**

Pos: 130	Max: >1
Heading - Optional	
Loop: N/A	Elements: 5

To specify terms of sale

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD01	336	Terms Type Code Description: Code identifying type of payment terms.	O	ID	2/2	Used
		SAP IDoc mapping:				
		ITD segment is not mapped into the SAP IDoc.				
		<u>Code</u> <u>Name</u>				
		05 Discount Not Applicable				
		08 Basic Discount Offered				
ITD02	333	Terms Basis Date Code Description: Code identifying the beginning of the terms period.	O	ID	1/2	Used
		SAP IDoc mapping:				
		ITD segment is not mapped into the SAP IDoc.				
		<u>Code</u> <u>Name</u>				
		1 Ship Date				
		3 Invoice Date				
ITD03	338	Terms Discount Percent 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. 1% = 1 or 1.0.	O	R	1/6	Used
		SAP IDoc mapping:				
		ITD segment is not mapped into the SAP IDoc.				
ITD05	351	Terms Discount Days Due Description: Number of days in the terms discount period by which payment is due if terms discount is earned.	C	N0	1/3	Used
		SAP IDoc mapping:				
		ITD segment is not mapped into the SAP IDoc.				
ITD13	765	Day of Month Description: The numeric value of the day of the month between 1 and the maximum day of the month being referenced.	C	N0	1/2	Used
		This information will not be mapped into SAP. SAP will determine the terms of sale. 1% is standard across all orders.				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		SAP IDoc mapping:				
		ITD segment is not mapped into the SAP IDoc.				

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.

DTM Date/Time Reference

Pos: 150	Max: 10
Heading - Optional	
Loop: N/A	Elements: 2

To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time. A code of '176' may be used to expedite an order (emergency order).	M	ID	3/3	Must use

SAP IDoc mapping:

If data found in DTM02,
E1EDK03-IDDAT = 002.

<u>Code</u>	<u>Name</u>
002	Delivery Requested
010	Requested Ship
037	Ship Not Before
039	Ship Week of
074	Requested for Delivery (Prior to and Including)
077	Requested for Delivery (Week of)
176	Expedited on

DTM02	373	Date Description: Date expressed as CCYYMMDD.	C	DT	8/8	Used
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SAP IDoc mapping:

If data found in DTM02,
E1EDK03-DATUM = DTM02.

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.

TD5

Carrier Details (Routing Sequence/Transit Time)

Pos: 240	Max: 12
Heading - Optional	
Loop: N/A	Elements: 3

To specify the carrier and sequence of routing and provide transit time information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>														
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67). SAP IDoc mapping: This element is not mapped into the SAP IDoc. All valid standard codes are used.	C	ID	1/2	Used														
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment. SAP IDoc mapping: If data found in TD504 or TD505, E1EDKT1-TDID = Z003. If data found in TD504 or TD505, TD504 is translated using generic synonym table 'transmethod'. Table converts 1 char value to description. (Ex. A = Air). <i>Revised 5/15/2000: The above mapping was removed</i>	C	ID	1/2	Used														
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Air</td> </tr> <tr> <td>D</td> <td>Parcel Post</td> </tr> <tr> <td>H</td> <td>Customer Pickup</td> </tr> <tr> <td>M</td> <td>Motor (Common Carrier)</td> </tr> <tr> <td>T</td> <td>Best Way (Shippers Option)</td> </tr> <tr> <td>U</td> <td>Private Parcel Service</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	A	Air	D	Parcel Post	H	Customer Pickup	M	Motor (Common Carrier)	T	Best Way (Shippers Option)	U	Private Parcel Service				
<u>Code</u>	<u>Name</u>																			
A	Air																			
D	Parcel Post																			
H	Customer Pickup																			
M	Motor (Common Carrier)																			
T	Best Way (Shippers Option)																			
U	Private Parcel Service																			
TD505	387	Routing Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity. The information found in the TD505 routing will be printed on EMD's internal pick tickets. SAP IDoc mapping: If data found in TD504 or TD505, E1EDKT2-TDLINE = concatenation of (synonym translation of TD504) + TD505. <i>Revised 5/15/2000: The above mapping was removed</i>	C	AN	1/35	Used														
		Following is the synonym mapping: TD504 Translation A Air D Parcel Post																		

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
	H	Customer Pickup				
	M	Motor				
	T	Best Way				
	U	Private Parcel Service				

Syntax:

1. TD502 R0204050612 -- At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. TD502 C0203 -- If TD502 is present, then TD503 is required
3. TD507 C0708 -- If TD507 is present, then TD508 is required
4. TD510 C1011 -- If TD510 is present, then TD511 is required
5. TD513 C1312 -- If TD513 is present, then TD512 is required
6. TD514 C1413 -- If TD514 is present, then TD513 is required
7. TD515 C1512 -- If TD515 is present, then TD512 is required

Semantics:

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.

N1**Name**

Pos: 310	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

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

Element Summary:

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

EMD requires that all customers supply EMD with their identification code by inserting a 'BY' or 'BT' in the entity ID code (N101), a '92' in the ID code qualified (N103), and their identification code in the ID code (N104).

EMD requires that all customers supply EMD with their ship-to address by inserting a 'ST' in the entity ID code (N101), a '92' in the ID code qualifier (N103), and their ship to code in the ID code (N104).

EMD uses the ID Code identified in the N104 element to translate a customer's buyer, ship to, and bill to code into EMD's corresponding internal customer codes. However, when a customer sends a temporary ship to location not defined on EMD's Customer Master File, EMD requires a N1-N4 (Name/Address) group to properly identify the temporary ship to address. A temporary ship to is represented when the N103 does not have a value of '92'.

When a temporary ship to is sent, a one-time customer will be used in the SAP Sales order (SAP one-time customer = 'ZZZZ'). A code of 'BT' or 'BY' translates to an AG, and 'ST' translates to a WE in SAP. A specific synonym table is used for this translation.

SAP IDoc mapping:

Ship to logic:

If N101 = ST
and N103 <> 92 (temp ship to)
E1EDKA1-PARVW = WE.
E1EDKA1-PARTN = ZZZZ.

If N101 = ST
and N103 = 92 (permanent ship to)
E1EDKA1-PARVW = WE.
E1EDKA1-LIFNR = N104.

The SAP customer number is determined from the E1EDKA1-LIFNR.
The standard programming logic for IDOC_INPUT_ORDERS is to use the EDPAR table lookup.

Sold to logic:

The concatenation of ISA06+N101+N104 is used for the generic synonym table. When a match is found, the value is used for E1EDKA1-PARTN and EDI_DC40-SNDPRN.

E1EDKA1-PARVW = AG.

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																					
		E1EDKA1-LIFNR = GMLG.																									
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>BT</td> <td>Bill-to-Party</td> <td>—</td> </tr> <tr> <td>BY</td> <td>Buying Party (Purchaser)</td> <td></td> </tr> <tr> <td>SE</td> <td>Selling Party</td> <td></td> </tr> <tr> <td>SF</td> <td>Ship From</td> <td></td> </tr> <tr> <td>SN</td> <td>Store</td> <td></td> </tr> <tr> <td>ST</td> <td>Ship To</td> <td></td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>		BT	Bill-to-Party	—	BY	Buying Party (Purchaser)		SE	Selling Party		SF	Ship From		SN	Store		ST	Ship To					
<u>Code</u>	<u>Name</u>																										
BT	Bill-to-Party	—																									
BY	Buying Party (Purchaser)																										
SE	Selling Party																										
SF	Ship From																										
SN	Store																										
ST	Ship To																										
N102	93	<p>Name</p> <p>Description: The sender can transmit the name of the party or the location referred to by element N101.</p> <p>N102, N201, N202, N301, N401, N402, N403 are compared to the SAP ship-to customer address fields NAME1, NAME2, NAME3, STRAS, ORT01, REGIO, PSTLZ respectively. If there is a mis-match, these Sales Orders are sent to the EDI Workflow queue for manual processing by an EMD customer service representative.</p> <p>SAP IDoc mapping:</p> <p>E1EDKA1-NAME1 = N102.</p>	C	AN	1/60	Used																					
N103	66	<p>Identification Code Qualifier</p> <p>Description: This code is used to designate the code structure used in N104.</p> <p>Absence of code value N103 when N101 equal 'ST' indicates to EMD that the value in N104 is not a 'permanent' ship to address.</p> <p>Use of code value '92' in the N103 when the N101 = 'ST' notifies EMD that the value in N104, is expected to be a code of a 'permanent' ship to address.</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>16</td> <td>ZIP Code</td> <td>—</td> </tr> <tr> <td>92</td> <td>Assigned by Buyer or Buyer's Agent</td> <td></td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>		16	ZIP Code	—	92	Assigned by Buyer or Buyer's Agent		C	ID	1/2	Used												
<u>Code</u>	<u>Name</u>																										
16	ZIP Code	—																									
92	Assigned by Buyer or Buyer's Agent																										
N104	67	<p>Identification Code</p> <p>Description: The sender will transmit customer assigned codes representing desired ship to locations (N101 = ST), buying party (N101 = BY or BT), or ship from (N101 = SF). These codes are created by the sender and must be defined in EMD's system before a customer can begin sending an EDI purchase order to EMD.</p> <p>SAP IDoc mapping:</p> <p>E1EDKA1-LIFNR = N104.</p>	C	AN	2/80	Used																					

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.

N2

Additional Name Information

Pos: 320	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N201	93	Name Description: The name element is not required by EMD. It is the sender's option to enter information in this field.	M	AN	1/60	Must use
<p>If N2 is present, then N201 is a mandatory data element.</p> <p>The N201 contains the variable information of a given address. The N201 name is matched to EMD's internal customer master file to identify an address change(s) in the customer's ship to or sold to address.</p> <p>SAP IDoc mapping:</p> <p>E1EDKA1-NAME2 = N201.</p>						
N202	93	Name Description: The name element is not required by EMD. It's the sender's option to enter information in this field.	O	AN	1/60	Used
<p>SAP IDoc mapping:</p> <p>E1EDKA1-NAME3 = N202.</p>						

N3

Address Information

Pos: 330	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information Description: The address segment is not required by EMD. It is the sender's option to enter information in this field.	M	AN	1/55	Must use
<p>If N3 is present, then N301 is a mandatory data element.</p> <p>SAP IDoc mapping:</p> <p>E1EDKA1-STRAS = N301.</p>						
N302	166	Address Information Description: The address segment is not required by EMD. It's the sender's option to enter information in this field.	O	AN	1/55	Used
<p>SAP IDoc mapping:</p> <p>E1EDKA1-STRS2 = N302.</p>						

N4 Geographic Location

Pos: 340	Max: >1
Heading - Optional	
Loop: N1	Elements: 6

To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name Description: Free-form text for city name. The city name is not required by EMD. It is the sender's option to enter information in this field. SAP IDoc mapping: E1EDKA1-ORT01 = N401.	O	AN	2/30	Used
N402	156	State or Province Code Description: Code (Standard State/Province) as defined by appropriate government agency. The state/province code is not required by EMD. It is the sender's option to enter information in this field. SAP IDoc mapping: E1EDKA1-REGIO = N402.	O	ID	2/2	Used
N403	116	Postal Code Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States). The postal code is not required by EMD. It is the sender's option to enter information in this field. SAP IDoc mapping: E1EDKA1-PSTLZ = N403.	O	ID	3/15	Used
N404	26	Country Code Description: Code identifying the country. The country code is not required by EMD. It is the sender's option to enter information in this field. SAP IDoc mapping: E1EDKA1-LAND1 = N404.	O	ID	2/3	Used
N405	309	Location Qualifier Description: Code identifying type of location. If a 34 is sent in N405, this means that N406 is the district(county) for the address.	C	ID	1/2	Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		SAP IDoc mapping: If N101 = 'ST' and N405 = '34' E1EDKA1-ORT02 = N406.				
		<u>Code</u> <u>Name</u>				
		34 District				
N406	310	Location Identifier Description: Code which identifies a specific location	O	AN	1/30	Used

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.

PER Administrative Communications Contact

Pos: 360	Max: >1
Heading - Optional	
Loop: N1	Elements: 4

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PER01	366	Contact Function Code Description: Code identifying the major duty or responsibility of the person or group named. This code is transmitted by the sender to indicate the major duty or responsibility of the person or group named in PER02. SAP IDoc mapping: PER segment is not mapped into the SAP IDoc.	M	ID	2/2	Must use
PER02	93	Name Description: Free-form name. The sender can transmit the name of a person or department to whom administrative communications should be directed. SAP IDoc mapping: PER segment is not mapped into the SAP IDoc.	O	AN	1/60	Used
PER03	365	Communication Number Qualifier Description: Code identifying the type of communication number. This code is used to identify the type of communication number being transmitted. Usually "TE" is sent to identify a telephone number is being transmitted. SAP IDoc mapping: PER segment is not mapped into the SAP IDoc. All valid standard codes are used.	C	ID	2/2	Used
PER04	364	Communication Number Description: Complete communications number including country or area code when applicable. This element should contain the complete communications number referred to by PER03. The country or area code should be included when applicable. This element usually contains a telephone number. SAP IDoc mapping: PER segment is not mapped into the SAP IDoc.	C	AN	1/80	Used

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.

FOB F.O.B. Related Instructions

Pos: 080	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

To specify transportation instructions relating to shipment

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FOB01	146	Shipment Method of Payment Description: Code identifying payment terms for transportation charges.	M	ID	2/2	Must use
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				
		<u>Code</u> <u>Name</u>				
		CC Collect				
		DF Defined by Buyer and Seller				
		PB Customer Pick-up/Backhaul				
		PU Pickup				
FOB06	309	Location Qualifier Description: Code identifying type of location.	C	ID	1/2	Used
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				
		<u>Code</u> <u>Name</u>				
		OR Origin (Shipping Point)				
FOB07	352	Description Description: A free-form description to clarify the related data elements and their content.	O	AN	1/80	Used
		FOB information is not mapped into SAP. All orders coming in to GMLG are paid for by customer on dock. The incoterms will be defaulted into the Sales Order from the SAP Customer Master record.				
		SAP IDoc mapping:				
		FOB segment is not mapped into the SAP IDoc.				

Syntax:

1. FOB03 C0302 -- If FOB03 is present, then FOB02 is required
2. FOB04 C0405 -- If FOB04 is present, then FOB05 is required
3. FOB07 C0706 -- If FOB07 is present, then FOB06 is required
4. FOB08 C0809 -- If FOB08 is present, then FOB09 is required

Semantics:

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.

TD5

Carrier Details (Routing Sequence/Transit Time)

Pos: 240	Max: 12
Heading - Optional	
Loop: N/A	Elements: 3

To specify the carrier and sequence of routing and provide transit time information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>														
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67). SAP IDoc mapping: This element is not mapped into the SAP IDoc. All valid standard codes are used.	C	ID	1/2	Used														
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment. SAP IDoc mapping: If data found in TD504 or TD505, E1EDKT1-TDID = Z003. If data found in TD504 or TD505, TD504 is translated using generic synonym table 'transmethod'. Table converts 1 char value to description. (Ex. A = Air). Revised 5/15/2000: The above mapping was removed <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Air</td> </tr> <tr> <td>D</td> <td>Parcel Post</td> </tr> <tr> <td>H</td> <td>Customer Pickup</td> </tr> <tr> <td>M</td> <td>Motor (Common Carrier)</td> </tr> <tr> <td>T</td> <td>Best Way (Shippers Option)</td> </tr> <tr> <td>U</td> <td>Private Parcel Service</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	A	Air	D	Parcel Post	H	Customer Pickup	M	Motor (Common Carrier)	T	Best Way (Shippers Option)	U	Private Parcel Service	C	ID	1/2	Used
<u>Code</u>	<u>Name</u>																			
A	Air																			
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H	Customer Pickup																			
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T	Best Way (Shippers Option)																			
U	Private Parcel Service																			
TD505	387	Routing Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity. The information found in the TD505 routing will be printed on EMD's internal pick tickets. SAP IDoc mapping: If data found in TD504 or TD505, E1EDKT2-TDLINE = concatenation of (synonym translation of TD504) + TD505. Revised 5/15/2000: The above mapping was removed Following is the synonym mapping: TD504 Translation A Air D Parcel Post H Customer Pickup	C	AN	1/35	Used														

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
	M	Motor				
	T	Best Way				
	U	Private Parcel Service				

Syntax:

1. TD502 R0204050612 -- At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. TD502 C0203 -- If TD502 is present, then TD503 is required
3. TD507 C0708 -- If TD507 is present, then TD508 is required
4. TD510 C1011 -- If TD510 is present, then TD511 is required
5. TD513 C1312 -- If TD513 is present, then TD512 is required
6. TD514 C1413 -- If TD514 is present, then TD513 is required
7. TD515 C1512 -- If TD515 is present, then TD512 is required

Semantics:

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.

PO1 Baseline Item Data

Pos: 010	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 9

To specify basic and most frequently used line item data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO101	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set.	O	AN	1/20	Used

This maps to the SAP Sales Order on screen ordering parth/PO item#.

SAP IDoc mapping:

If data found in PO102,
E1EDP01-POSEX = P101.

PO102	330	Quantity Ordered Description: Quantity ordered.	C	R	1/15	Used
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SAP IDoc mapping:

If data found in PO102,
E1EDP01-MENGE = P102.

PO103	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.	O	ID	2/2	Used
-------	-----	--	---	----	-----	------

A translation table is used to translate to the corresponding SAP Unit of Measure.

SAP IDoc mapping:

If data found in PO102,
E1EDP01-MENEE = synonym of P103.

Following is the synonym mapping:

PO103	Value
EA	EA
FT	FOT
GL	GLL
IN	INH
LB	LBR
OZ	OZA
PT	PT
QT	QT
YD	YRD

Code Name

EA	Each
FT	Foot
GL	Grams per Liter

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		IN Inch LB Pound OZ Ounce - Av PT Pint QT Quart YD Yard				
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	C	R	1/17	Used
		EMD will not process the price transmitted by the buyer. There is a 5 cent variance tolerance. If the customer price is over or under by more than 5 cents of the SAP net price, the Order is saved in SAP, but with an incompletion log. Manual intervention is required to either change the Sales order Customer Expected price, or to Release the order. Releasing the order just overrides the pricing condition EDI1, and the SAP net price is still used.				
		SAP IDoc mapping: If data found in PO102, E1EDP01-VPREI = P104.				
PO105	639	Basis of Unit Price Code Description: Code identifying the type of unit price for an item.	O	ID	2/2	Used
		SAP IDoc mapping: This element is not mapped into the SAP IDoc.				
		<u>Code</u> <u>Name</u> CA Catalog CT Contract QT Quoted				
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234).	C	ID	2/2	Used
		SAP IDoc mapping: If PO106/108 = PI, PO107/109 is mapped to ordering party/customer material # in the SAP Sales Order. E1EDP19-QUALF = 001. E1EDP19-IDTNR = PO107/PO109. If PO106/108 = VP, PO107/109 is mapped to the line item material number of the SAP Sales Order. E1EDP19-QUALF = 002. E1EDP19-IDTNR = PO107/PO109.				
		<u>Code</u> <u>Name</u> IN Buyer's Item Number MF Manufacturer PI Purchaser's Item Code VC Vendor's (Seller's) Catalog Number VN Vendor's (Seller's) Item Number VP Vendor's (Seller's) Part Number				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO107	234	Product/Service ID Description: Identifying number for a product or service.	C	AN	1/48	Used
		This element should contain an item number being referred to in PO106.				
		EMD requires that the EMD part number is transmitted with all purchase orders. Usually a code of 'VP' is sent in PO106 to represent EMD's part number.				
		There are eight more pairs of prod/serv qualifier id groups (PO106 and PO107) that can be used. However, only two should be needed.				
PO108	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234). All valid standard codes are used.	C	ID	2/2	Used
PO109	234	Product/Service ID Description: Identifying number for a product or service.	C	AN	1/48	Used
PO110	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234). All valid standard codes are used.	C	ID	2/2	Used
PO111	234	Product/Service ID Description: Identifying number for a product or service.	C	AN	1/48	Used

Syntax:

1. PO103 C0302 -- If PO103 is present, then PO102 is required
2. PO105 C0504 -- If PO105 is present, then PO104 is required
3. PO106 P0607 -- If either PO106 or PO107 are present, then the others are required.
4. PO108 P0809 -- If either PO108 or PO109 are present, then the others are required.
5. PO110 P1011 -- If either PO110 or PO111 are present, then the others are required.
6. PO112 P1213 -- If either PO112 or PO113 are present, then the others are required.
7. PO114 P1415 -- If either PO114 or PO115 are present, then the others are required.
8. PO116 P1617 -- If either PO116 or PO117 are present, then the others are required.
9. PO118 P1819 -- If either PO118 or PO119 are present, then the others are required.
10. PO120 P2021 -- If either PO120 or PO121 are present, then the others are required.
11. PO122 P2223 -- If either PO122 or PO123 are present, then the others are required.
12. PO124 P2425 -- If either PO124 or PO125 are present, then the others are required.

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.

PID Product/Item Description

Pos: 050	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type Description: Code indicating the format of a description. The description is usually transmitted in a free-form format. This is represented by the ID code 'F'. SAP IDoc mapping: PID segment is not mapped into the SAP IDoc.	M	ID	1/1	Must use
PID05	352	Description Description: A free-form description to clarify the related data elements and their content. SAP IDoc mapping: PID segment is not mapped into the SAP IDoc.	C	AN	1/80	Used

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.

REF Reference Identification

Pos: 100	Max: >1
Detail - Optional	
Loop: PO1	Elements: 3

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification.	M	ID	2/3	Must use
		SAP IDoc mapping:				
		If REF01 = 'L1' (Notes) E1EDPT1-TDID = Z204. <i>Revised 5/15/2000: The above mapping was removed</i>				
		If REF01 = 'BO' or 'ST' (Bin Location/Store) E1EDPT1-TDID = Z213.				
		Code Name				
		BO Customer Bin Location Number				
		CR Customer Reference Number				
		L1 Letters or Notes				
		ST Store Number				
REF02	127	Reference Identification Description: The sender should transmit the customer number referred to by segment REF01. This number will be printed on EMD's pick ticket.	C	AN	1/30	Used
		SAP IDoc mapping:				
		If REF01 = 'BO' and REF02 is populated, E1EDPT2-TDLINE = REF02.				
REF03	352	Description Description: A free-form description to clarify the related data elements and their content.	C	AN	1/80	Used
		This element contains the actual comments or instructions needed to be transmitted by the sender when 'L1' is transmitted in the REF01 element.				
		When receiving quote information, EMD expects to find the quote number assigned to the customer in this field. Without this information the order will be booked with the normal price book prices. **The above comments regarding quote is taken from the 850 Implementation Guideline for the EDI EDS system. For Phase I SAP, there is no special EDI logic built for quote information.				
		SAP IDoc mapping:				
		If REF01 = 'L1' or 'ST', E1EDPT2-TDLINE = REF03. <i>Revised 5/15/2000: The above mapping for L1 was removed</i>				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		If REF01 = 'BO' and REF03 is populated, E1EDPT2-TDLINE = REF03.				

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.

SCH Line Item Schedule

Pos: 295	Max: 1
Detail - Optional	
Loop: SCH	Elements: 4

To specify the data for scheduling a specific line-item

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																														
SCH01	380	Quantity Description: This is a numeric value specifying the quantity of the item identified in the PO1 segment that this information is to apply. SAP IDoc mapping: If data found in SCH01, E1EDP20-WMENG = SCH01.	M	R	1/15	Must use																														
SCH02	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. SAP IDoc mapping: This field is not mapped to the SAP Sales Order. The schedule line uom is defaulted from the line item UOM code. <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> <td></td> </tr> <tr> <td>EA</td> <td>Each</td> <td>—</td> </tr> <tr> <td>FT</td> <td>Foot</td> <td></td> </tr> <tr> <td>GL</td> <td>Grams per Liter</td> <td></td> </tr> <tr> <td>IN</td> <td>Inch</td> <td></td> </tr> <tr> <td>LB</td> <td>Pound</td> <td></td> </tr> <tr> <td>OZ</td> <td>Ounce - Av</td> <td></td> </tr> <tr> <td>PT</td> <td>Pint</td> <td></td> </tr> <tr> <td>QT</td> <td>Quart</td> <td></td> </tr> <tr> <td>YD</td> <td>Yard</td> <td></td> </tr> </table>	<u>Code</u>	<u>Name</u>		EA	Each	—	FT	Foot		GL	Grams per Liter		IN	Inch		LB	Pound		OZ	Ounce - Av		PT	Pint		QT	Quart		YD	Yard		M	ID	2/2	Must use
<u>Code</u>	<u>Name</u>																																			
EA	Each	—																																		
FT	Foot																																			
GL	Grams per Liter																																			
IN	Inch																																			
LB	Pound																																			
OZ	Ounce - Av																																			
PT	Pint																																			
QT	Quart																																			
YD	Yard																																			
SCH05	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time. SAP IDoc mapping: This element is not mapped into the SAP IDoc. <table border="0"> <tr> <td><u>Code</u></td> <td><u>Name</u></td> <td></td> </tr> <tr> <td>002</td> <td>Delivery Requested</td> <td>—</td> </tr> <tr> <td>010</td> <td>Requested Ship</td> <td></td> </tr> <tr> <td>037</td> <td>Ship Not Before</td> <td></td> </tr> <tr> <td>039</td> <td>Ship Week of</td> <td></td> </tr> <tr> <td>074</td> <td>Requested for Delivery (Prior to and Including)</td> <td></td> </tr> <tr> <td>077</td> <td>Requested for Delivery (Week of)</td> <td></td> </tr> </table>	<u>Code</u>	<u>Name</u>		002	Delivery Requested	—	010	Requested Ship		037	Ship Not Before		039	Ship Week of		074	Requested for Delivery (Prior to and Including)		077	Requested for Delivery (Week of)		M	ID	3/3	Must use									
<u>Code</u>	<u>Name</u>																																			
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010	Requested Ship																																			
037	Ship Not Before																																			
039	Ship Week of																																			
074	Requested for Delivery (Prior to and Including)																																			
077	Requested for Delivery (Week of)																																			
SCH06	373	Date Description: Date expressed as CCYYMMDD. SAP IDoc mapping:	M	DT	8/8	Must use																														

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		If data found in SCH01, E1EDP20-EDATU = SCH06.				

Syntax:

1. SCH03 C0304 -- If SCH03 is present, then SCH04 is required
2. SCH08 L080910 -- If SCH08 is present, then at least one of SCH09 or SCH10 is required.
3. SCH09 C0908 -- If SCH09 is present, then SCH08 is required
4. SCH10 C1008 -- If SCH10 is present, then SCH08 is required

Semantics:

1. SCH12 is the schedule identification.

Comments:

1. SCH05 specifies the interpretation to be used for SCH06 and SCH07.

REF Reference Identification

Pos: 100	Max: >1
Detail - Optional	
Loop: PO1	Elements: 3

To specify identifying information

Element Summary:

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

SAP IDoc mapping:

If REF01 = 'L1' (Notes)

E1EDPT1-TDID = Z204.

Revised 5/15/2000: The above mapping was removed

Code Name

BO Customer Bin Location Number

CR Customer Reference Number

L1 Letters or Notes

ST Store Number

REF02	127	Reference Identification	C	AN	1/30	Used
Description: The sender should transmit the customer number referred to by segment REF01. This number will be printed on EMD's pick ticket.						

SAP IDoc mapping:

This element is not mapped into the SAP IDoc.

REF03	352	Description	C	AN	1/80	Used
Description: A free-form description to clarify the related data elements and their content.						

This element contains the actual comments or instructions needed to be transmitted by the sender when 'L1' is transmitted in the REF01 element.

When receiving quote information, EMD expects to find the quote number assigned to the customer in this field. Without this information the order will be booked with the normal price book prices.

**The above comments regarding quote is taken from the 850

Implementation Guideline for the EDI EDS system. For Phase I SAP, there is no special EDI logic built for quote information.

SAP IDoc mapping:

If REF01 = 'L1',

E1EDPT2-TDLINE = REF03.

Revised 5/15/2000: The above mapping was removed

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.

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: CTT	Elements: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items Description: Total number of line items in the purchase order.	M	N0	1/6	Must use
		SAP IDoc mapping:				
		CTT segment is not mapped into the SAP IDoc.				
CTT02	347	Hash Total Description: This element should contain the total quantity of items being ordered by the sender with this purchase order.	O	R	1/10	Used
		SAP IDoc mapping:				
		CTT segment is not mapped into the SAP IDoc.				

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.

SE**Transaction Set Trailer**

Pos: 030	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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

Comments:

- SE is the last segment of each transaction set.

GE**Functional Group Trailer**

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

To indicate the end of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

- The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

- The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use