



The Global Network for B2B Integration in High Tech Industries

Transaction Set

**830**

**Response to Forecast**

Functional Group ID = PS  
X12 Version 004 Release 010

**September 2002**



**Revision History**

<b>Date</b>	<b>Description</b>
January 1999	Published
September 2002	Applied new publication template



Contents

Page

---

**Introduction..... Error! Bookmark not defined.**

Hyperlinks in this document ..... **Error! Bookmark not defined.**

Abbreviations and Notations ..... **Error! Bookmark not defined.**

General Recommendations and Best Practices..... **Error! Bookmark not defined.**

Additional References ..... **Error! Bookmark not defined.**

---

**Overview ..... 5**

1. Functional Definition ..... 5

2. Considerations..... 5

3. Trading Partners ..... 5

4. EDIFICE Business Models..... 5

5. Field of Application..... 6

6. Format ..... 6

7. Attributes ..... 8

8. Changes from version 3020..... 9

---

**Segment Tables ..... 10**

830 Response to Forecast – List of Used and Not Used Segments..... 10

Segment: ST Transaction Set Header ..... 13

Segment: REF Reference Identification..... 16

Segment: PER Administrative Communications Contact ..... 18

Segment: N1 Name..... 20

Segment: N2 Additional Name Information ..... 21

Segment: N3 Address Information..... 22

Segment: N4 Geographic Location ..... 23

Segment: PER Administrative Communications Contact ..... 24

Segment: LIN Item Identification..... 26

Segment: UIT Unit Detail ..... 29

Segment: PO4 Item Physical Details..... 31

Segment: REF Reference Identification..... 34

Segment: PER Administrative Communications Contact ..... 36

Segment: QTY Quantity ..... 38

Segment: N1 Name..... 40

Segment: N2 Additional Name Information ..... 42

Segment: N3 Address Information..... 43

Segment: N4 Geographic Location ..... 44



Segment: REF Reference Identification.....	45
Segment: PER Administrative Communications Contact .....	47
Segment: FST Forecast Schedule .....	49
Segment: SDP Ship/Delivery Pattern .....	51
Segment: FST Forecast Schedule .....	53
Segment: SHP Shipped/Received Information .....	55
Segment: REF Reference Identification.....	57
Segment: CTT Transaction Totals.....	59
Segment: SE Transaction Set Trailer .....	61
<hr/>	
<b><i>830 Response to Forecast Examples .....</i></b>	<b><i>62</i></b>
830 Example 1 – Response to Simple Planning Forecast.....	62
830 Example 2 – Response to Simple Planning Forecast with SDP Loops .....	64

# OVERVIEW

## 1. FUNCTIONAL DEFINITION

This 830 Planning Schedule with Release Capability standard provides the format and establishes the data contents of a planning schedule with release capability transaction set. This guideline convention provides the recommended standardized format and establishes the data contents of the Response to Forecast (RTF) for use within the context of an Electronic Data Interchange (EDI) environment.

Response to Forecast is a business process designed to link customer procurement and planning systems with the supplier's order and scheduling systems.

## 2. CONSIDERATIONS

## 3. TRADING PARTNERS

1. Any buyer to any seller.

## 4. EDIFICE BUSINESS MODELS

The business models referenced in this document are from the EDIFICE Forecast/Planning Business Models. Refer to the listing below for business models used in this document.

Model Number	EDIFICE Business Model	Supported by this Guideline	
		Yes	No
(1)	Planning Forecast (Set BFR04 to 'DL', 'PD', 'PS' or 'SH')	X	
(2)	Material Release Schedule (Embedded Release Forecast) (Set BFR04 to 'AD' or 'AS')	X	
(3)	Consumption Schedule (Supplier-Managed Inventory Forecast) (Set BFR04 to 'PR')	X	

### *Business Model Examples*

The Planning Schedule with Release Capability is best understood in the context of Replenishment Scenarios. The examples in this document depict the following business models:

*Replenishment Scenario 1 – Planning Schedule with Discrete Purchase Order, uses Forecast Model 1 – Planning Forecast:* This forecast is informational only, for capacity or lead-time planning purposes only. It is to convey anticipated demand or run rates. There is no authorization to build or ship except per trading partner agreement.

*Replenishment Scenario 2 – Classic Material Release, uses Forecast Model 1 – Planning Forecast:* A *net rolling forecast* is generated by the buying party to the selling party supported by a blanket order or contract which commits resources for a stated period, e.g., one year. The 862 Shipping Schedule transaction is sent as a release mechanism to provide daily or hourly Just-In-Time (JIT) releases.

*Replenishment Model 3 – Embedded Release, uses Forecast Model 2 – Material Release Schedule:* A *net rolling forecast* is generated by the buying party to the selling party supported by a blanket order or contract which commits resources for a stated period, e.g., one year. Firm requirements are explicitly marked. When requirement dates enter a pre-negotiated lead-time ship window they are released. Requirements falling outside of the lead-time ship window are marked as planned, i.e., resources are committed but cannot be released.

*Replenishment Model 4 – Forecast-based Supplier-Managed Inventory (SMI), uses Forecast Model 3 – Consumption Schedule –* Buyer sends planning schedule containing gross requirements(planned consumption), inventory levels, and min/max inventory targets. Seller nets forecast data to determine ship requirements based on buyer's inventory levels and min/max targets.

## 5. FIELD OF APPLICATION

This transaction may be applied for both national and international trade. It is based on universal commercial practice and is not dependent on the type of business or industry.

## 6. FORMAT

The transmission in the ASC X12 format uses two required envelopes. One is the ISA Interchange Control Header Segment, which starts and identifies an interchange of zero or more functional groups and interchange-related control segments. The ISA includes the sender's mailbox address and a receiver's mailbox address, and specifies which delimiter (a/k/a control, service) characters (data element separator, component element separator and data segment terminator) are being used.

There are no default service characters reserved for use in ASC X12. Allowable service characters should be discussed between trading partners.

The second required envelope is GS Functional Group Header, which indicates the beginning of a functional group and provides group level control information. The GS segment includes functional group level sender and receiver addresses, typically used by the trading partner(s) for internal routing. The GS also includes the GS08 ASC X12 Version/Release/Industry Identifier Code. EDIFICE does not recommend the use of an Industry Identifier code.



The functional groups are analogous to batches of like documents, i.e. purchase orders, invoices, etc. Each functional group contains one or more transaction sets (electronic documents).

Each transaction set is an ordered collection of segments.

Each segment is an ordered collection of data elements. Each segment has been assigned a two or three character identifier. This identifier marks the beginning of each segment. Each element within the segment is separated by a data element delimiter. EDIFICE recommends the use of the asterisk (\*) character as a data element delimiter. A segment terminator character is used to mark the end of a segment.

Any shaded areas indicate EDIFICE recommended usage and comment.

## 7. ATTRIBUTES

Each data element has three ANSI attributes: Element usage, element type and minimum/maximum length. EDIFICE has additional usage indicated for optional segments and elements which are noted in the following table.

MARGIN	ATTRIBUTE	DE NOTE	MEANING
Must Use	M (Mandatory)	N/A	If a segment, composite, or stand alone data element is mandatory according to the standard, EDIFICE cannot change the mandatory status on that component.  <i>DATA ELEMENT within a COMPOSITE:</i> A data element within a composite is mandatory only if the composite is used.
X	C or X (Conditional) or O (Optional)	No note or NOT USED	EDIFICE has determined no value in supplying the composite or data element; hence, it need not be generated.
Blank	C or X (Conditional) or O (Optional)	REQUIRED	EDIFICE members agree that the data concerned must be sent.
Blank	C or X (Conditional) or O (Optional)	No note	Indicates that EDIFICE makes no recommendation regarding usage. The trading partners must agree on usage.
Blank	C or X (Conditional) or O (Optional)	ADVISED	EDIFICE has determined value in supplying the data element; hence, it should be generated.
Blank	C or X (Conditional) or O (Optional)	DEPENDING	Data must be sent if a particular defined condition or set of conditions exist. The associated conditions must be explained at the appropriate level of detail.



## 8. CHANGES FROM VERSION 3020

Only segments, elements or codes used by EDIFICE are listed. Because this is a recast and EDIFICE is not adding codes to any code lists except codes identified in EDIFICE's guidelines for product and other identifiers. Type ID fields which have increased in maximum length are not listed.

- Proprietary code 'ZS' (Gross Requirements) replaced by X12 code 'PR' (Planning Requirements Based) in BFR04.
- Changes made to bring transaction into conformance with Product and Other ID supporting document; miscellaneous changes to code lists and notes.
- All date fields changed from 6/6 (YYMMDD) to 8/8 (CCYYMMDD)
- Max length of DE 93 Name (used in N102) changed from 35 to 60
- Max length of DE 67 Identification Code (used in N104) changed from 17 to 80
- Max length of DE 235 Product/Service ID (used in LIN segment) changed from 30 to 48.
- Requirement of DE 234 Product/Service ID Qualifier (used in LIN segment) changed from 'O' Optional to 'X' Conditional
- Requirement of DE 380 Quantity in QTY01 changed from 'M' Mandatory to 'X' Conditional.
- Max length of DE 212 Unit Price (used in UIT02) changed from 14 to 17.
- Max use of N1 loop in detail area (LIN.N1) changed from 5 to 200.
- Requirement for CTT segment changed from 'M' Mandatory to 'O' Optional.
- Max length of DE 96 Number of Included Segments in SE01 changed from 6 to 10.



## SEGMENT TABLES

### 830 Response to Forecast – List of Used and Not Used Segments

Heading:

	<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>
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule	M	1		
Not Used	025	XPO	Preassigned Purchase Order Numbers	O	>1		
Not Used	040	CUR	Currency	O	1		
	050	REF	Reference Identification	O	12		
	060	PER	Administrative Communications Contact	O	3		
Not Used	070	TAX	Tax Reference	O	3		
Not Used	080	FOB	F.O.B. Related Instructions	O	1		
Not Used	090	CTP	Pricing Information	O	25		
Not Used	100	SAC	Service, Promotion, Allowance, or Charge Information	O	25		
Not Used	110	CSH	Sales Requirements	O	1		
Not Used	120	ITD	Terms of Sale/Deferred Terms of Sale	O	2		
Not Used	130	DTM	Date/Time Reference	O	10		
Not Used	140	PID	Product/Item Description	O	200		
Not Used	150	MEA	Measurements	O	40		
Not Used	160	PWK	Paperwork	O	25		
Not Used	170	PKG	Marking, Packaging, Loading	O	25		
Not Used	180	TD1	Carrier Details (Quantity and Weight)	O	2		
Not Used	190	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
Not Used	200	TD3	Carrier Details (Equipment)	O	12		
Not Used	210	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		
Not Used	220	MAN	Marks and Numbers	O	10		
LOOP ID – N1						200	
	230	N1	Name	O	1		
	240	N2	Additional Name Information	O	2		
	250	N3	Address Information	O	2		
	260	N4	Geographic Location	O	1		
Not Used	270	REF	Reference Identification	O	12		
	280	PER	Administrative Communications Contact	O	3		
Not Used	290	FOB	F.O.B. Related Instructions	O	1		
LOOP ID – LM						>1	
Not Used	300	LM	Code Source Information	O	1		
Not Used	310	LQ	Industry Code	M	100		

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 – LIN						>1	
M	010	LIN	Item Identification	M	1		



	020	UIT	Unit Detail	O	1	
Not Used	021	DTM	Date/Time Reference	O	10	
Not Used	030	CUR	Currency	O	1	
Not Used	060	PO3	Additional Item Detail	O	25	
Not Used	070	CTP	Pricing Information	O	25	
Not Used	080	PID	Product/Item Description	O	1000	
Not Used	090	MEA	Measurements	O	40	
Not Used	100	PWK	Paperwork	O	25	
Not Used	110	PKG	Marking, Packaging, Loading	O	25	
	120	PO4	Item Physical Details	O	1	
Not Used	130	PRS	Part Release Status	O	1	
	140	REF	Reference Identification	O	12	
	150	PER	Administrative Communications Contact	O	3	
Not Used	170	SAC	Service, Promotion, Allowance, or Charge Information	O	25	
Not Used	180	ITD	Terms of Sale/Deferred Terms of Sale	O	2	
Not Used	190	TAX	Tax Reference	O	3	
Not Used	200	FOB	F.O.B. Related Instructions	O	1	
Not Used	210	LDT	Lead Time	O	12	
	220	QTY	Quantity	O	>1	n1
Not Used	230	ATH	Resource Authorization	O	20	
Not Used	240	TD1	Carrier Details (Quantity and Weight)	O	1	
Not Used	250	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12	
Not Used	260	TD3	Carrier Details (Equipment)	O	12	
Not Used	270	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5	
Not Used	280	MAN	Marks and Numbers	O	10	
Not Used	290	DD	Demand Detail	O	10	
					100	
Not Used	300	SLN	Subline Item Detail	O	1	
Not Used	310	PID	Product/Item Description	O	1000	
Not Used	315	NM1	Individual or Organizational Name	O	10	
					200	
	320	N1	Name	O	1	
	330	N2	Additional Name Information	O	2	
	340	N3	Address Information	O	2	
	350	N4	Geographic Location	O	1	
	360	REF	Reference Identification	O	12	
	370	PER	Administrative Communications Contact	O	3	
Not Used	380	FOB	F.O.B. Related Instructions	O	1	
					>1	
Not Used	390	LM	Code Source Information	O	1	
Not Used	400	LQ	Industry Code	M	100	
					>1	
	410	FST	Forecast Schedule	O	1	n2
Not Used	415	QTY	Quantity	O	>1	
Not Used	420	SDQ	Destination Quantity	O	50	
					>1	
Not Used	430	LM	Code Source Information	O	1	
Not Used	440	LQ	Industry Code	M	100	
					260	



450	SDP	Ship/Delivery Pattern	O	1
460	FST	Forecast Schedule	O	260
LOOP ID - SHP				25
470	SHP	Shipped/Received Information	O	1
480	REF	Reference Identification	O	5

**Summary:**

	<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>
	010	CTT	Transaction Totals	O	1		n3
M	020	SE	Transaction Set Trailer	M	1		

**Transaction Set Notes**

1. QTY is used to specify supplemental quantities relevant to the forecast function. However, QTY is not related to the actual forecast quantity in the FST segments.
2. At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.
3. Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

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

**Position:** 010

**Loop:**

**Level:** Heading

**Usage:** Mandatory

**Max Use:** 1

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

**Syntax Notes:**

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

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			830 Planning Schedule with Release Capability	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.	



**Segment:** **BFR** Beginning Segment for Planning Schedule  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates  
**Syntax Notes:** 1 At least one of BFR02 or BFR03 is required.  
**Semantic Notes:** 1 If BFR01 contains the value "04" (Net Change), BFR09 is required.  
 2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.  
 3 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.  
 4 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.  
 5 BFR08 is the date forecast generated: The date the forecast data was generated.  
 6 BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BFR01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set 11 Response This is the only allowable code for the 830 Response to Forecast.	
	BFR02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
	BFR03	328	Release Number	X AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
Must Use	BFR04	675	Schedule Type Qualifier	M ID 2/2
			Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast AD Authorized Delivery Based AS Authorized Shipment Based DL Delivery Based PD Planned Delivery Based PR Planned Requirement Based PS Planned Shipment Based SH Shipment Based	



Must Use	BFR05	676	<b>Schedule Quantity Qualifier</b> Code identifying the type of quantities used when defining a schedule or forecast	M	ID 1/1
			A Actual Discrete Quantities		
Must Use	BFR06	373	<b>Date</b> Date expressed as CCYYMMDD	M	DT 8/8
	BFR07	373	<b>Date</b> Date expressed as CCYYMMDD	O	DT 8/8
Must Use	BFR08	373	<b>Date</b> Date expressed as CCYYMMDD	M	DT 8/8
Not Used	BFR09	373	<b>Date</b> Date expressed as CCYYMMDD	O	DT 8/8
	BFR10	367	<b>Contract Number</b> Contract number	O	AN 1/30
	BFR11	324	<b>Purchase Order Number</b> Identifying number for Purchase Order assigned by the orderer/purchaser	O	AN 1/22
Not Used	BFR12	783	<b>Planning Schedule Type Code</b> Code identifying type of planning schedule used Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	BFR13	306	<b>Action Code</b> Code indicating type of action Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 1/2



**Segment: REF Reference Identification**

**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**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>
<b>Must Use</b>	REF01	128	<b>Reference Identification Qualifier</b>	<b>M ID 2/3</b>
			Code qualifying the Reference Identification	
			CG Consignee's Order Number	
			CO Customer Order Number	
			DQ Delivery Quote Number	
			GC Government Contract Number	
			GP Government Priority Number	
			PH Priority Rating	
			PO Purchase Order Number	
			PR Price Quote Number	
			RE Release Number	
			VN Vendor Order Number	
	REF02	127	<b>Reference Identification</b>	<b>X AN 1/30</b>
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
<b>Not Used</b>	REF03	352	<b>Description</b>	<b>X AN 1/80</b>
			A free-form description to clarify the related data elements and their content	
<b>Not Used</b>	REF04	C040	<b>Reference Identifier</b>	<b>O</b>
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
<b>Not Used</b>	C04001	128	<b>Reference Identification Qualifier</b>	<b>M ID 2/3</b>
			Code qualifying the Reference Identification	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>Not Used</b>	C04002	127	<b>Reference Identification</b>	<b>M AN 1/30</b>
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	





Not Used	C04003	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04004	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
Not Used	C04005	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04006	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		



**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Must Use</b>	PER01	366	<b>Contact Function Code</b>	<b>M ID 2/2</b>
			Code identifying the major duty or responsibility of the person or group named	
			BD Buyer Name or Department	
			EX Expeditor	
			IC Information Contact	
			RD Receiving Dock	
	PER02	93	<b>Name</b>	<b>O AN 1/60</b>
			Free-form name	
	PER03	365	<b>Communication Number Qualifier</b>	<b>X ID 2/2</b>
			Code identifying the type of communication number	
			EM Electronic Mail	
			TE Telephone	
	PER04	364	<b>Communication Number</b>	<b>X AN 1/80</b>
			Complete communications number including country or area code when applicable	
<b>Not Used</b>	PER05	365	<b>Communication Number Qualifier</b>	<b>X ID 2/2</b>
			Code identifying the type of communication number	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>Not Used</b>	PER06	364	<b>Communication Number</b>	<b>X AN 1/80</b>
			Complete communications number including country or area code when applicable	
<b>Not Used</b>	PER07	365	<b>Communication Number Qualifier</b>	<b>X ID 2/2</b>
			Code identifying the type of communication number	
			Refer to 004010 Data Element Dictionary for acceptable code values.	



Not Used	PER08	364	<b>Communication Number</b>	X	AN 1/80
			Complete communications number including country or area code when applicable		
Not Used	PER09	443	<b>Contact Inquiry Reference</b>	O	AN 1/20
			Additional reference number or description to clarify a contact number		



**Segment: N1 Name**

- Position:** 230
- Loop:** N1 Optional
- Level:** Heading
- Usage:** Optional
- Max Use:** 1
- Purpose:** To identify a party by type of organization, name, and code
- Syntax Notes:**
  - 1 At least one of N102 or N103 is required.
  - 2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:**

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

**Notes:**

EDIFICE Usage: REQUIRED

This segment is used to identify the parties involved in the transaction. It is encouraged that the trading partners codify all addresses within their system. The use of the N1 segment with Bill-To and Ship-To values is encouraged.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual Refer to 004010 Data Element Dictionary for acceptable code values.	
	N102	93 Name	X AN 1/60
		Free-form name	
	N103	66 Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67) Refer to 004010 Data Element Dictionary for acceptable code values.	
N104	67 Identification Code	X AN 2/80	
	Code identifying a party or other code		
N105	706 Entity Relationship Code	O ID 2/2	
	Code describing entity relationship Refer to 004010 Data Element Dictionary for acceptable code values.		
N106	98 Entity Identifier Code	O ID 2/3	
	Code identifying an organizational entity, a physical location, property or an individual Refer to 004010 Data Element Dictionary for acceptable code values.		



**Segment: N2 Additional Name Information**

**Position:** 240

**Loop:** N1 Optional

**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:**

**Notes:** EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Note: Use of this segment may impede automation and application integration.

**Data Element Summary**

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

**Segment:** **N3** Address Information

**Position:** 250  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party

**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Notes:** EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

**Data Element Summary**

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

**Segment: N4 Geographic Location**

- Position:** 260
- Loop:** N1 Optional
- 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.
- Notes:** EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
N401	19	<b>City Name</b> Free-form text for city name	O AN 2/30
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
N404	26	<b>Country Code</b> Code identifying the country	O ID 2/3
N405	309	<b>Location Qualifier</b> Code identifying type of location Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
N406	310	<b>Location Identifier</b> Code which identifies a specific location	O AN 1/30



**Segment: PER Administrative Communications Contact**

**Position:** 280  
**Loop:** N1 Optional  
**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	<b>Contact Function Code</b>	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			BD Buyer Name or Department	
			EX Expeditor	
			IC Information Contact	
			RD Receiving Dock	
	PER02	93	<b>Name</b>	O AN 1/60
			Free-form name	
	PER03	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			TE Telephone	
	PER04	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
			EDIFICE Usage: ADVISED. If Communications Number Qualifier equals "TE" (Telephone), the proposed format is: 800-555-1212X1234.	
Not Used	PER05	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	PER06	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	





Not Used	PER07	365	<b>Communication Number Qualifier</b>	X	ID 2/2
			Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PER08	364	<b>Communication Number</b>	X	AN 1/80
			Complete communications number including country or area code when applicable		
Not Used	PER09	443	<b>Contact Inquiry Reference</b>	O	AN 1/20
			Additional reference number or description to clarify a contact number		

**Segment:** **LIN** Item Identification

- Position:** 010
- Loop:** LIN Mandatory
- Level:** Detail
- Usage:** Mandatory
- 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.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
LIN01	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set Recommended in RTF if multiple line items are used in the original forecast	O AN 1/20
<b>Must Use</b>	LIN02	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) Values also used in LIN04, LIN06, LIN08, etc. Whenever there is an EC (engineering change level) specified, it should immediately follow 235/234 set with the related part number.	M ID 2/2
		AB Assembly	
		BP Buyer's Part Number	
		DE Design Number	
		DR Drawing Revision Number	
		EC Engineering Change Level	
		EN European Article Number (EAN) (2-5-5-1)	
		MG Manufacturer's Part Number	



			PC	Prime Contractor Part Number	
			PW	Part Drawing	
			SW	Stock Number	
			UI	U.P.C. Consumer Package Code (1-5-5)	
			UP	U.P.C. Consumer Package Code (1-5-5-1)	
			VP	Vendor's (Seller's) Part Number	
Must Use	LIN03	234	<b>Product/Service ID</b>		M AN 1/48
			Identifying number for a product or service		
	LIN04	235	<b>Product/Service ID Qualifier</b>		X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			See Code List Under LIN02		
	LIN05	234	<b>Product/Service ID</b>		X AN 1/48
			Identifying number for a product or service		
	LIN06	235	<b>Product/Service ID Qualifier</b>		X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			See Code List Under LIN02		
	LIN07	234	<b>Product/Service ID</b>		X AN 1/48
			Identifying number for a product or service		
	LIN08	235	<b>Product/Service ID Qualifier</b>		X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			See Code List Under LIN02		
	LIN09	234	<b>Product/Service ID</b>		X AN 1/48
			Identifying number for a product or service		
LIN10	235	<b>Product/Service ID Qualifier</b>		X ID 2/2	
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
		See Code List Under LIN02			
LIN11	234	<b>Product/Service ID</b>		X AN 1/48	
		Identifying number for a product or service			
LIN12	235	<b>Product/Service ID Qualifier</b>		X ID 2/2	
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
		See Code List Under LIN02			
LIN13	234	<b>Product/Service ID</b>		X AN 1/48	
		Identifying number for a product or service			
LIN14	235	<b>Product/Service ID Qualifier</b>		X ID 2/2	
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
		See Code List Under LIN02			
LIN15	234	<b>Product/Service ID</b>		X AN 1/48	
		Identifying number for a product or service			
LIN16	235	<b>Product/Service ID Qualifier</b>		X ID 2/2	
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
		See Code List Under LIN02			
LIN17	234	<b>Product/Service ID</b>		X AN 1/48	
		Identifying number for a product or service			



LIN18	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN19	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN20	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN21	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN22	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN23	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN24	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN25	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN26	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN27	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN28	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN29	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48
LIN30	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) See Code List Under LIN02	X	ID 2/2
LIN31	234	<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/48



**Segment: UIT Unit Detail**

**Position:** 020  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify item unit data  
**Syntax Notes:** 1 If UIT03 is present, then UIT02 is required.  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	UIT01	C001	Composite Unit of Measure	M
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			EA Each	
Not Used	C00102	1018	Exponent	O R 1/15
			Power to which a unit is raised	
Not Used	C00103	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value	
Not Used	C00104	355	Unit or Basis for Measurement Code	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00105	1018	Exponent	O R 1/15
			Power to which a unit is raised	
Not Used	C00106	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value	
Not Used	C00107	355	Unit or Basis for Measurement Code	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			Refer to 004010 Data Element Dictionary for acceptable code values.	



Not Used	C00108	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00109	649	<b>Multiplier</b>	O R 1/10
			Value to be used as a multiplier to obtain a new value	
Not Used	C00110	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00111	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00112	649	<b>Multiplier</b>	O R 1/10
			Value to be used as a multiplier to obtain a new value	
Not Used	C00113	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00114	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00115	649	<b>Multiplier</b>	O R 1/10
			Value to be used as a multiplier to obtain a new value	
	UIT02	212	<b>Unit Price</b>	X R 1/17
			Price per unit of product, service, commodity, etc. UIT02 and UIT03 may be used by distributors to comment on price changes before the Order Cycle.	
	UIT03	639	<b>Basis of Unit Price Code</b>	O ID 2/2
			Code identifying the type of unit price for an item UIT02 and UIT03 may be used by distributors to comment on price changes before the Order Cycle.	

**Segment: PO4 Item Physical Details**

**Position:** 120  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the physical qualities, packaging, weights, and dimensions relating to the item

- Syntax Notes:**
- 1 If either PO402 or PO403 is present, then the other is required.
  - 2 If PO405 is present, then PO406 is required.
  - 3 If either PO406 or PO407 is present, then the other is required.
  - 4 If either PO408 or PO409 is present, then the other is required.
  - 5 If PO410 is present, then PO413 is required.
  - 6 If PO411 is present, then PO413 is required.
  - 7 If PO412 is present, then PO413 is required.
  - 8 If PO413 is present, then at least one of PO410 PO411 or PO412 is required.
  - 9 If PO417 is present, then PO416 is required.
  - 10 If PO418 is present, then PO404 is required.

- Semantic Notes:**
- 1 PO415 is used to indicate the relative layer of this package or range of packages within the layers of packaging. Relative Position 1 (value R1) is the innermost package.
  - 2 PO416 is the package identifier or the beginning package identifier in a range of identifiers.
  - 3 PO417 is the ending package identifier in a range of identifiers.
  - 4 PO418 is the number of packages in this layer.

- Comments:**
- 1 PO403 – The "Unit or Basis for Measure Code" in this segment position is for purposes of defining the pack (PO401) /size (PO402) measure which indicates the quantity in the inner pack unit. For example: If the carton contains 24 12-Ounce packages, it would be described as follows: Data element 356 = "24"; Data element 357 = "12"; Data element 355 = "OZ".
  - 2 PO413 defines the unit of measure for PO410, PO411, and PO412.

**Notes:** To specify secondary packaging on an item.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Not Used	PO401	356	Pack	O N0 1/6
			The number of inner containers, or number of eaches if there are no inner containers, per outer container	
Not Used	PO402	357	Size	X R 1/8
			Size of supplier units in pack	



Not Used	PO403	355	<b>Unit or Basis for Measurement Code</b>	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.		
	PO404	103	<b>Packaging Code</b>	X	AN 3/5
			Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required		
			AMM Ammo Pack		
			BLK Bulk		
			RAL Rail (Semiconductor)		
			REL Reel		
			TRY Tray		
			90 Standard		
Not Used	PO405	187	<b>Weight Qualifier</b>	O	ID 1/2
			Code defining the type of weight Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PO406	384	<b>Gross Weight per Pack</b>	X	R 1/9
			Numeric value of gross weight per pack		
Not Used	PO407	355	<b>Unit or Basis for Measurement Code</b>	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PO408	385	<b>Gross Volume per Pack</b>	X	R 1/9
			Numeric value of gross volume per pack		
Not Used	PO409	355	<b>Unit or Basis for Measurement Code</b>	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PO410	82	<b>Length</b>	X	R 1/8
			Largest horizontal dimension of an object measured when the object is in the upright position		
Not Used	PO411	189	<b>Width</b>	X	R 1/8
			Shorter measurement of the two horizontal dimensions measured with the object in the upright position		
Not Used	PO412	65	<b>Height</b>	X	R 1/8
			Vertical dimension of an object measured when the object is in the upright position		





Not Used	PO413	355	<b>Unit or Basis for Measurement Code</b>	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PO414	810	<b>Inner Pack</b>	O	N0 1/6
			The number of eaches per inner container		
Not Used	PO415	752	<b>Surface/Layer/Position Code</b>	O	ID 2/2
			Code indicating the product surface, layer or position that is being described Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PO416	350	<b>Assigned Identification</b>	X	AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set		
Not Used	PO417	350	<b>Assigned Identification</b>	O	AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set		
Not Used	PO418	1470	<b>Number</b>	O	N0 1/9
			A generic number		



**Segment: REF Reference Identification**

**Position:** 140  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 12  
**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	M ID 2/3
			Code qualifying the Reference Identification	
			CG Consignee's Order Number	
			CO Customer Order Number	
			DQ Delivery Quote Number	
			GC Government Contract Number	
			GP Government Priority Number	
			PH Priority Rating	
			PO Purchase Order Number	
			PR Price Quote Number	
			RE Release Number	
			VN Vendor Order Number	
	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
Not Used	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
Not Used	C04001	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C04002	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	



Not Used	C04003	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04004	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
Not Used	C04005	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04006	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		



**Segment: PER Administrative Communications Contact**

**Position:** 150  
**Loop:** LIN Mandatory  
**Level:** Detail  
**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	<b>Contact Function Code</b>	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department EX Expeditor IC Information Contact RD Receiving Dock	
	PER02	93	<b>Name</b>	O AN 1/60
			Free-form name	
	PER03	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number EM Electronic Mail TE Telephone	
	PER04	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable Recommended format for telephone number is: 800-555-1212X1234.	
Not Used	PER05	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	PER06	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	



Not Used	PER07	365	<b>Communication Number Qualifier</b>	X	ID 2/2
			Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PER08	364	<b>Communication Number</b>	X	AN 1/80
			Complete communications number including country or area code when applicable		
Not Used	PER09	443	<b>Contact Inquiry Reference</b>	O	AN 1/20
			Additional reference number or description to clarify a contact number		

**Segment:** QTY Quantity

**Position:** 220  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To specify quantity information

**Syntax Notes:**  
 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.

**Semantic Notes:**  
 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			17 Quantity on Hand	
			In Original Forecast, this is the quantity the buyer has on-hand; In RTF, this is the quantity the seller has on-hand.	
			27 Committed Quantity	
			29 Projected Available Inventory	
			33 Quantity Available for Sale (stock quantity)	
			34 Noncommitted Inventory on Shelf	
			36 Distributor Inventory	
			63 On Order Quantity	
	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	
	QTY03	C001	Composite Unit of Measure	O
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00102	1018	Exponent	O R 1/15
			Power to which a unit is raised	
Not Used	C00103	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value	



Not Used	C00104	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00105	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00106	649	<b>Multiplier</b>	O R 1/10
			Power to which a unit is raised	
Not Used	C00107	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Value to be used as a multiplier to obtain a new value Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00108	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00109	649	<b>Multiplier</b>	O R 1/10
			Power to which a unit is raised	
Not Used	C00110	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Value to be used as a multiplier to obtain a new value Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00111	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00112	649	<b>Multiplier</b>	O R 1/10
			Power to which a unit is raised	
Not Used	C00113	355	<b>Unit or Basis for Measurement Code</b>	O ID 2/2
			Value to be used as a multiplier to obtain a new value Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C00114	1018	<b>Exponent</b>	O R 1/15
			Power to which a unit is raised	
Not Used	C00115	649	<b>Multiplier</b>	O R 1/10
			Power to which a unit is raised	
Not Used	QTY04	61	<b>Free-Form Message</b>	X AN 1/30
			Value to be used as a multiplier to obtain a new value Free-form information	



**Segment: N1 Name**

- Position:** 320
- Loop:** N1 Optional
- 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.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Must Use</b>	N101	98	<b>Entity Identifier Code</b>	<b>M ID 2/3</b>
	Code identifying an organizational entity, a physical location, property or an individual			
		28	Subcontractor	
		AK	Party to Whom Acknowledgment Should Be Sent	
		BS	Bill and Ship To	
		BT	Bill-to-Party	
		BY	Buying Party (Purchaser)	
		CN	Consignee	
		DB	Distributor Branch	
		DS	Distributor	
		EN	End User	
		MA	Party for whom Item is Ultimately Intended	
		MF	Manufacturer of Goods	
		PG	Prime Contractor	
		RI	Remit To	
		SE	Selling Party	
		SF	Ship From	
		ST	Ship To	
		SU	Supplier/Manufacturer	
		WH	Warehouse	
	N102	93	<b>Name</b>	<b>X AN 1/60</b>
			Free-form name	
			EDIFICE Usage: OPTIONAL	



	N103	66	<b>Identification Code Qualifier</b>	X	ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			1 D-U-N-S Number, Dun & Bradstreet		
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
			14 UCC/EAN Location Code Prefix		
			The first part of a 13 digit UCC/EAN Location Code within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system. A globally unique 3 to 10 digit code for the identification of a company		
			91 Assigned by Seller or Seller's Agent		
			92 Assigned by Buyer or Buyer's Agent		
	N104	67	<b>Identification Code</b>	X	AN 2/80
			Code identifying a party or other code		
			The number that identifies the location.		
Not Used	N105	706	<b>Entity Relationship Code</b>	O	ID 2/2
			Code describing entity relationship		
			Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	N106	98	<b>Entity Identifier Code</b>	O	ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual		
			Refer to 004010 Data Element Dictionary for acceptable code values.		



**Segment: N2 Additional Name Information**

**Position:** 330

**Loop:** N1 Optional

**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:**

EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Note: Use of this segment may impede automation and application integration.

**Data Element Summary**

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

**Segment: N3 Address Information**

**Position:** 340  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

**Data Element Summary**

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

**Segment: N4 Geographic Location**

- Position:** 350
- Loop:** N1 Optional
- 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:** EDIFICE Usage: OPTIONAL. Use only when address information cannot be conveyed via an Identification Code on the N1 segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

**Data Element Summary**

Ref.	Data	Name	Attributes
Des.	Element		
N401	19	<b>City Name</b> Free-form text for city name	O AN 2/30
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
N404	26	<b>Country Code</b> Code identifying the country	O ID 2/3
Not Used	N405	<b>Location Qualifier</b> Code identifying type of location Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
Not Used	N406	<b>Location Identifier</b> Code which identifies a specific location	O AN 1/30



**Segment: REF Reference Identification**

**Position:** 360  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 12  
**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	M ID 2/3
			Code qualifying the Reference Identification	
			CG Consignee's Order Number	
			CO Customer Order Number	
			DQ Delivery Quote Number	
			GC Government Contract Number	
			GP Government Priority Number	
			PH Priority Rating	
			PO Purchase Order Number	
			PR Price Quote Number	
			RE Release Number	
			VN Vendor Order Number	
	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
Not Used	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
Not Used	C04001	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C04002	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	



Not Used	C04003	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04004	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
Not Used	C04005	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04006	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		



**Segment: PER Administrative Communications Contact**

**Position:** 370  
**Loop:** N1 Optional  
**Level:** Detail  
**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	<b>Contact Function Code</b>	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			BD Buyer Name or Department	
			EX Expeditor	
			IC Information Contact	
	PER02	93	<b>Name</b>	O AN 1/60
			Free-form name	
	PER03	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			TE Telephone	
	PER04	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
			Recommended format for telephone number is: 800-555-1212X1234.	
Not Used	PER05	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	PER06	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	



Not Used	PER07	365	<b>Communication Number Qualifier</b>	X	ID 2/2
			Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	PER08	364	<b>Communication Number</b>	X	AN 1/80
			Complete communications number including country or area code when applicable		
Not Used	PER09	443	<b>Contact Inquiry Reference</b>	O	AN 1/20
			Additional reference number or description to clarify a contact number		



- Segment:** **FST** Forecast Schedule
- Position:** 410
- Loop:** FST Optional
- Level:** Detail
- Usage:** Optional
- Max Use:** 1
- Purpose:** To specify the forecasted dates and quantities
- Syntax Notes:**
- 1 If either FST06 or FST07 is present, then the other is required.
  - 2 If either FST08 or FST09 is present, then the other is required.
- Semantic Notes:**
- 1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.
- Comments:**
- 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
  - 2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.
- Notes:** If FST segment in the SDP loop is not used, the FST segment in the FST loop must be used.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	FST01	380	Quantity	M R 1/15
			Numeric value of quantity	
Must Use	FST02	680	Forecast Qualifier	M ID 1/1
			Code specifying the sender's confidence level of the forecast data or an action associated with a forecast	
			C Firm	
			D Planning	
Must Use	FST03	681	Forecast Timing Qualifier	M ID 1/1
			Code specifying interval grouping of the forecast	
			D Discrete	
			F Flexible Interval (from Date X through Date Y)	
			M Monthly Bucket (Calendar Months)	
			Q Quarterly (Calendar Quarters)	
			W Weekly Bucket (Monday through Sunday)	
Must Use	FST04	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
	FST05	373	Date	O DT 8/8
			Date expressed as CCYYMMDD	



Not Used	FST06	374	<b>Date/Time Qualifier</b>	X ID 3/3
			Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	FST07	337	<b>Time</b>	X 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)	
	FST08	128	<b>Reference Identification Qualifier</b>	X ID 2/3
			Code qualifying the Reference Identification PO Purchase Order Number	
	FST09	127	<b>Reference Identification</b>	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	FST10	783	<b>Planning Schedule Type Code</b>	O ID 2/2
			Code identifying type of planning schedule used Refer to 004010 Data Element Dictionary for acceptable code values.	

**Segment: SDP Ship/Delivery Pattern**

**Position:** 450  
**Loop:** SDP Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify specific ship/delivery requirements  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** 1 The intent of this segment is to define the routine ship or delivery patterns, as required, when order quantities are in "buckets", such as weekly, monthly. Ship/delivery patterns eliminate the need to transmit discrete quantities and dates for each required shipment or delivery. It is assumed that a "bucketed" quantity is to be divided equally by the ship/delivery pattern. For example, a weekly quantity of 100 with a delivery pattern of Monday and Wednesday would result in 50 to be delivered on Monday and 50 to be delivered on Wednesday.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SDP01	678	Ship/Delivery or Calendar Pattern Code	M ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern Refer to 004010 Data Element Dictionary for acceptable code values.	
Must Use	SDP02	679	Ship/Delivery Pattern Time Code	M ID 1/1
			Code which specifies the time for routine shipments or deliveries Y None (Also Used to Cancel or Override a Previous Pattern)	
	SDP03	678	Ship/Delivery or Calendar Pattern Code	O ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern Refer to 004010 Data Element Dictionary for acceptable code values.	
	SDP04	679	Ship/Delivery Pattern Time Code	O ID 1/1
			Code which specifies the time for routine shipments or deliveries Refer to 004010 Data Element Dictionary for acceptable code values.	
	SDP05	678	Ship/Delivery or Calendar Pattern Code	O ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern Refer to 004010 Data Element Dictionary for acceptable code values.	

SDP06	679	<b>Ship/Delivery Pattern Time Code</b>	<b>O ID 1/1</b>
		Code which specifies the time for routine shipments or deliveries Refer to 004010 Data Element Dictionary for acceptable code values.	
SDP07	678	<b>Ship/Delivery or Calendar Pattern Code</b>	<b>O ID 1/2</b>
		Code which specifies the routine shipments, deliveries, or calendar pattern Refer to 004010 Data Element Dictionary for acceptable code values.	
SDP08	679	<b>Ship/Delivery Pattern Time Code</b>	<b>O ID 1/1</b>
		Code which specifies the time for routine shipments or deliveries Refer to 004010 Data Element Dictionary for acceptable code values.	

**Segment: FST Forecast Schedule**

**Position:** 460  
**Loop:** SDP Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 260  
**Purpose:** To specify the forecasted dates and quantities

**Syntax Notes:**  
 1 If either FST06 or FST07 is present, then the other is required.  
 2 If either FST08 or FST09 is present, then the other is required.

**Semantic Notes:**  
 1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.

**Comments:**  
 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.  
 2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	FST01	380	Quantity	M R 1/15
			Numeric value of quantity	
Must Use	FST02	680	Forecast Qualifier	M ID 1/1
			Code specifying the sender's confidence level of the forecast data or an action associated with a forecast	
			C Firm	
			D Planning	
Must Use	FST03	681	Forecast Timing Qualifier	M ID 1/1
			Code specifying interval grouping of the forecast	
			D Discrete	
			F Flexible Interval (from Date X through Date Y)	
			M Monthly Bucket (Calendar Months)	
			Q Quarterly (Calendar Quarters)	
			W Weekly Bucket (Monday through Sunday)	
Must Use	FST04	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
	FST05	373	Date	O DT 8/8
			Date expressed as CCYYMMDD	



Not Used	FST06	374	<b>Date/Time Qualifier</b>	X ID 3/3
			Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	FST07	337	<b>Time</b>	X 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)	
	FST08	128	<b>Reference Identification Qualifier</b>	X ID 2/3
			Code qualifying the Reference Identification PO Purchase Order Number	
	FST09	127	<b>Reference Identification</b>	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	FST10	783	<b>Planning Schedule Type Code</b>	O ID 2/2
			Code identifying type of planning schedule used Refer to 004010 Data Element Dictionary for acceptable code values.	

**Segment:** **SHP** Shipped/Received Information

- Position:** 470
- Loop:** SHP Optional
- Level:** Detail
- Usage:** Optional
- Max Use:** 1
- Purpose:** To specify shipment and/or receipt information
- Syntax Notes:**
  - 1 If SHP01 is present, then SHP02 is required.
  - 2 If SHP03 is present, then at least one of SHP04 or SHP05 is required.
  - 3 If SHP04 is present, then SHP03 is required.
  - 4 If SHP05 is present, then SHP03 is required.
- Semantic Notes:**
  - 1 SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
  - 2 SHP06 is the cumulative quantity end date.
- Comments:**
  - 1 The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
  - 2 If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

**Data Element Summary**

Ref.	Data	Name	Attributes
Des.	Element		
SHP01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity 39 Shipped Quantity	O ID 2/2
SHP02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
SHP03	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time 011 Shipped	X ID 3/3
SHP04	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8
Not Used	SHP05	337 <b>Time</b>  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)	X TM 4/8
	SHP06	373 <b>Date</b> Date expressed as CCYYMMDD	O DT 8/8



Not  
Used

SHP07

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)





**Segment: REF Reference Identification**

**Position:** 480  
**Loop:** SHP Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 5  
**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	M ID 2/3
			Code qualifying the Reference Identification	
			IV Seller's Invoice Number	
			MA Ship Notice/Manifest Number	
			PK Packing List Number	
	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
Not Used	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
Not Used	C04001	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Not Used	C04002	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Not Used	C04003	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			Refer to 004010 Data Element Dictionary for acceptable code values.	



Not Used	C04004	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
Not Used	C04005	128	<b>Reference Identification Qualifier</b>	X	ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	C04006	127	<b>Reference Identification</b>	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		



**Segment: CTT Transaction Totals**

- Position:** 010
- Loop:**
- 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. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CTT01	354	Number of Line Items	M N0 1/6
	CTT02	347	Total number of line items in the transaction set <b>Hash Total</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field. EDIFICE Usage: Required	O R 1/10
Not Used	CTT03	81	Weight	X R 1/10
Not Used	CTT04	355	Numeric value of weight <b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
Not Used	CTT05	183	<b>Volume</b> Value of volumetric measure	X R 1/8



Not Used	CTT06	355	<b>Unit or Basis for Measurement Code</b>	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.		
Not Used	CTT07	352	<b>Description</b>	O	AN 1/80
			A free-form description to clarify the related data elements and their content		

**Segment:** **SE** Transaction Set Trailer

**Position:** 020

**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. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.	

## 830 RESPONSE TO FORECAST EXAMPLES

### 830 Example 1 – Response to Simple Planning Forecast

This example supports Replenishment Scenario 1 (Planning Forecast). It is a response to a simple planning forecast. In this example, the SDP loop used in older versions of X12 is replaced by the FST loop.

#### Example 1 Summary

HEADER SECTION:	
ST*830*000555'	This is a Planning Schedule (forecast) transaction with transaction set control number 000555.
BFR*11*123456**DL*A*20000501*20000930*20000501'	This is a response to a forecast. The forecast number is 123456. The schedule dates are delivery dates, and schedule quantities are discrete. The forecast horizon is May 1, 2000 through September 30, 2000, and the forecast was generated on May 1, 2000.
N1*BY*SANTA CLARA ELECTRONICS*1*000231776'	The buying party is Santa Clara Electronics, and their DUNS number is 000231776.
N1*ST*SANTA CLARA ELECTRONICS*1*000231776'	The Ship-to party is Santa Clara Electronics, and their DUNS number is 000231776.
N1*SE*MC, INC.*1*009124350'	The selling party is MC, Inc., and their DUNS number is 009124350.
DETAIL - LINE ITEM 1	
LIN*01*BP*182034-233345'	The buyer's part number is 182034-233345.
UIT*EA'	The unit of measure is Each.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
PER*BD*KATHY GRASSO*TE*408-555-4434'	The buyer is Kathy Grasso, and her telephone number is 408-555-4434.
FST*330*C*D*20000509'	The planned delivery quantity for May 9, 2000 is 330.
FST*255*D*D*20000513'	The planned delivery quantity for May 13, 2000 is 255.
FST*2500*D*D*20000605'	The planned delivery quantity for June 5, 2000 is 2500.
FST*4332*D*D*20000615'	The planned delivery quantity for June 15, 2000 is 4332.
FST*3500*D*F*20000701*20000731'	The planned delivery quantity for the interval from July 1, 2000 to July 31, 2000 is 3500.
FST*5100*D*M*20000801'	The planned delivery quantity for the interval for the month beginning August 1, 2000 is 5100.
FST*5600*D*M*20000901'	The planned delivery quantity for the interval for the month beginning September 1, 2000 is 5600.
FST*16600*D*Q*20001001'	The planned delivery quantity for the interval for



	the quarter beginning October 1, 2000 is 16600.
SHP*39*2500*011*20000428'	2500 units were shipped on April 28, 2000.
REF*IV*IV12345'	The invoice number for the shipped units is IV12345.
<b>DETAIL - LINE ITEM 2</b>	
LIN*02*BP*182034-234445'	The buyer's part number is 182034-234445.
UIT*EA'	The unit of measure is Each.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
PER*BD*KATHY GRASSO*TE*408-555-4434'	The buyer is Kathy Grasso, and her telephone number is 408-555-4434.
FST*330*C*D*20000509'	The planned delivery quantity for May 9, 2000 is 330.
FST*255*D*D*20000513'	The planned delivery quantity for May 13, 2000 is 255.
FST*2500*D*D*20000605'	The planned delivery quantity for June 5, 2000 is 2500.
FST*4332*D*D*20000615'	The planned delivery quantity for June 15, 2000 is 4332
FST*3500*D*F*20000701*20000731'	The planned delivery quantity for the interval from July 1, 2000 to July 31, 2000 is 3500.
FST*5100*D*M*20000801'	The planned delivery quantity for the interval for the month beginning August 1, 2000 is 5100.
FST*5600*D*M*20000901'	The planned delivery quantity for the interval for the month beginning September 1, 2000 is 5600.
FST*16600*D*Q*20001001'	The planned delivery quantity for the interval for the quarter beginning October 1, 2000 is 16600.
SHP*39*2500*011*20000428'	2500 units were shipped on April 28, 2000.
REF*IV*IV12346'	The invoice number for the shipped units is IV12346.
<b>SUMMARY SECTION:</b>	
CTT*2'	<b>CTT Transaction Totals</b>
SE*35*000555'	SE TRANSACTION SET TRAILER

## 830 Example 2– Response to Simple Planning Forecast with SDP Loops

This example supports Replenishment Scenario 1 (Planning Forecast). It is a response to a simple planning forecast. In this example, FST segments in the SDP loop are used.

### Example 2 Summary

HEADER SECTION:	
ST*830*000556'	This is a Planning Schedule (forecast) transaction with transaction set control number 000556.
BFR*11*123456**DL*A*20000501* 20000930*20000501'	This is a response to a forecast. The forecast number is 123456. The schedule dates are delivery dates, and schedule quantities are discrete. The forecast horizon is May 1, 2000 through September 30, 2000, and the forecast was generated on May 1, 2000.
N1*BY*SANTA CLARA ELECTRONICS*1*000231776'	The buying party is Santa Clara Electronics, and their DUNS number is 000231776.
N1*ST*SANTA CLARA ELECTRONICS*1*000231776'	The Ship-to party is Santa Clara Electronics, and their DUNS number is 000231776.
N1*SE*MC, INC.*1*009124350'	The selling party is MC, Inc., and their DUNS number is 009124350.
DETAIL - LINE ITEM 1	
LIN*01*BP*182034-233345'	The buyer's part number is 182034-233345.
UIT*EA'	The unit of measure is Each.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
PER*BD*KATHY GRASSO*TE*408-555- 4434'	The buyer is Kathy Grasso, and her telephone number is 408-555-4434.
SDP*Y*Y'	There is no specific ship/delivery pattern.
FST*330*C*D*20000509'	The planned delivery quantity for May 9, 2000 is 330.
FST*255*D*D*20000513'	The planned delivery quantity for May 13, 2000 is 255.
FST*2500*D*D*20000605'	The planned delivery quantity for June 5, 2000 is 2500.
FST*4332*D*D*20000615'	The planned delivery quantity for June 15, 2000 is 4332.
FST*3500*D*F*20000701*20000731'	The planned delivery quantity for the interval from July 1, 2000 to July 31, 2000 is 3500.
FST*5100*D*M*20000801'	The planned delivery quantity for the interval for the month beginning August 1, 2000 is 5100.
FST*5600*D*M*20000901'	The planned delivery quantity for the interval for the month beginning September 1, 2000 is 5600.
FST*16600*D*Q*20001001'	The planned delivery quantity for the quarter beginning October 1, 2000 is 16600.
SHP*39*2500*011*20000428'	2500 units were shipped on April 28, 2000.





REF*IV*IV12345'	The invoice number for the shipped units is IV12345.
<b>DETAIL - LINE ITEM 2</b>	
LIN*02*BP*182034-234445'	The buyer's part number is 182034-234445.
UIT*EA'	The unit of measure is Each.
PO4***REL90'	The parts are packaged in tape-and-reel, standard.
PER*BD*KATHY GRASSO*TE*408-555-4434'	The buyer is Kathy Grasso, and her telephone number is 408-555-4434.
SDP*Y*Y'	There is no specific ship/delivery pattern.
FST*330*C*D*20000509'	The planned delivery quantity for May 9, 2000 is 330.
FST*255*D*D*20000513'	The planned delivery quantity for May 13, 2000 is 255.
FST*2500*D*D*20000605'	The planned delivery quantity for June 5, 2000 is 2500.
FST*4332*D*D*20000615'	The planned delivery quantity for June 15, 2000 is 4332
FST*3500*D*F*20000701*20000731'	The planned delivery quantity for the interval from July 1, 2000 to July 31, 2000 is 3500.
FST*5100*D*M*20000801'	The planned delivery quantity for the interval for the month beginning August 1, 2000 is 5100.
FST*5600*D*M*20000901'	The planned delivery quantity for the interval for the month beginning September 1, 2000 is 5600.
FST*16600*D*Q*20001001'	The planned delivery quantity for the quarter beginning October 1, 2000 is 16600.
SHP*39*2500*011*20000428'	2500 units were shipped on April 28, 2000.
REF*IV*IV12346'	The invoice number for the shipped units is IV12346.
<b>SUMMARY SECTION:</b>	
CTT*2'	<b>CTT Transaction Totals</b>
SE*37*000556'	SE TRANSACTION SET TRAILER