The Global Network for B2B Integration in High Tech Industries

Transaction Set

830

Planning Schedule with Release Capability

Functional Group ID = PS
X12 Version 004 Release 010

September 2002

Revision History

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Contents Page

OVERVIEW

1. FUNCTIONAL DEFINITION

This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) 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 practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

2. CONSIDERATIONS

Since the 830 Planning Forecast with Release Capability is designed to streamline Material Management Methodologies, specific areas outside of the transaction must be taken into consideration in order to fulfill detail contractual requirements. Examples of these requirements falling outside of the 830 transaction scope are pricing, terms and conditions, shipping conditions, and liability windows. Possible vehicles to comprehend these areas include supplemental transactions, Purchase Orders, Trading Partner Agreements, Contracts and Table Profiles setup within the system.

This program is ideally suited for stable and credible Material Requirements Planning (MRP) environments. The mutual success of these programs is dependent on a high degree of data integrity. “Stable” does not refer to flat line requirements, but rather managed upside and downside fluctuations. High-volume product with consistent delivery patterns are typically good candidates for this program.

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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. *DATA ELEMENT within a COMPOSITE:* 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. Some fields which have increased in maximum length are not listed.

- All date fields changed from 6/6 (YYMMDD) to 8/8 (CCYYMMDD)
- Changes made to bring transaction into conformance with Product and Other ID supporting document; miscellaneous changes to code lists and notes.
- Per Forecast supporting document, which recommended that all terms, including authorization, pricing, etc. be covered by contract, and other particulars such as paperwork requirements, special services, etc. be covered either by contract or on the Blanket PO, changed LIN.ATH segment to 'NOT USED', and changed the following segments (in all positions) to 'NOT USED': CUR, TAX, FOB, SAC, ITD, PWK, TD5.
- Per Product and Other ID support document, added codes to DE 98 and DE 66 code lists (used in N1 segment).
- Per Product and Other ID support document, changed N2, N3 and N4 segments to 'Used'
- Per Product and Other ID support document added code ‘EM’ Electronic Mail to DE 365 (used in PER03).
- Max length of DE 350 Assigned Identification (used in POC01) changed from 11 to 20; EDIFICE still recommends that trading partners use no more than 6 bytes.
- Per Forecast support document, usage of DE 360 Assigned Identification (used in LIN01) is changed to 'USED' but usage is optional.
- LIN.UIT changed to Optional from Mandatory.
- Max length of DE 212 Unit Price (used in UIT) changed from 14 to 17.
- 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
- Per Product and Other ID supporting document, added codes to DE 235 code list (used in LIN segment).
- Per Forecast support document added code ‘RE’ Release Number to DE 128 (used in detail level REF01 and in FST segment).
- Per Forecast support document, EDIFICE replaced use of SDP loop with use of FST loop.
- Per Forecast support document and task group review, codes added to DE 673 Quantity Qualifier in QTY segment.
- Requirement of DE 380 Quantity in QTY01 changed from 'M' Mandatory to 'X' Conditional.
- Per Forecast support document, code lists for SHP segment changed to support usage in Forecast-Based Supplier Managed Inventory processes.
- Requirement for CTT02 segment changed from 'M' Mandatory to 'O' Optional.

SEGMENT TABLES

830 Planning Schedule with Release Capability - List of Used and Not Used Segments

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	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		
Not Used	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:

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
		LOOP ID - LIN			>1	

Must Use	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		
			LOOP ID - SLN			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		
			LOOP ID - N1			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		
Not Used	360	REF	Reference Identification	O	12		
	370	PER	Administrative Communications Contact	O	3		
Not Used	380	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - LM			>1	
Not Used	390	LM	Code Source Information	O	1		
Not Used	400	LQ	Industry Code	M	100		
			LOOP ID - FST			>1	
	410	FST	Forecast Schedule	O	1		n2
Not Used	415	QTY	Quantity	O	>1		
	420	SDQ	Destination Quantity	O	50		
			LOOP ID - LM			>1	
Not Used	430	LM	Code Source Information	O	1		
Not Used	440	LQ	Industry Code	M	100		

			LOOP ID - SDP			260	
Not Used	450	SDP	Ship/Delivery Pattern	O	1		
Not Used	460	FST	Forecast Schedule	O	260		
			LOOP ID - SHP			25	
	470	SHP	Shipped/Received Information	O	1		
	480	REF	Reference Identification	O	5		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	010	CTT	Transaction Totals	O	1		n3
Must Use	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

	Ref. Des.	Data Element	Name	Attributes
Must Use	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set 830 Planning Schedule with Release Capability	M ID 3/3
Must Use	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set 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.	M AN 4/9

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

	Ref. Des.	Data Element	Name	Attributes
Must Use	BFR01	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set 00 Original 05 Replace	M ID 2/2
	BFR02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDIFICE Usage: ADVISED. This should be a unique identifier for this transmission of the planning schedule. Using a blanket purchase order (BPO) number alone may be insufficient. Multiple transmissions of a planning schedule may be sent for the same BPO number. If the BPO number is used as a component of the Reference Identification, the BPO number should also be sent explicitly either at the header (in DE 324 on the BFR) or in the detail of the transaction/message (in an REF segment at the line item level, or on the FST segment at the schedule level).	X AN 1/30
	BFR03	328	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction EDIFICE Usage: OPTIONAL. While release number may be carried at the header level, it is recommended that release number be carried in an REF segment at the line item level.	X AN 1/30

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 Use for Material Release and Embedded Release forecasts with delivery-based dates.
AS	Authorized Shipment Based Use for Material Release and Embedded Release forecasts with shipment-based dates.
DL	Delivery Based
PD	Planned Delivery Based May be used instead of "DL" for traditional planning forecasts with delivery-based dates.
PR	Planned Requirement Based Use to identify gross requirements forecasts for Supplier Managed Inventory (SMI) programs. Note: there is no distinction between ship date and delivery date in SMI. Dates sent in FST segments represent the date the sender plans to consume demand.
PS	Planned Shipment Based May be used instead of 'SH" for traditional planning forecasts with shipment-based dates.
SH	Shipment Based

Must Use	**BFR05**	**676**	**Schedule Quantity Qualifier**	**M**	**ID 1/1**

Code identifying the type of quantities used when defining a schedule or forecast

A	Actual Discrete Quantities

Must Use	**BFR06**	**373**	**Date**	**M**	**DT 8/8**

Date expressed as CCYYMMDD
Forecast Horizon Start Date

	BFR07	**373**	**Date**	**O**	**DT 8/8**

Date expressed as CCYYMMDD
Forecast Horizon End Date

EDIFICE Usage: OPTIONAL. This element was mandatory in previous versions of the standards, and some trading partners systems may require that it be sent.

Must Use	**BFR08**	**373**	**Date**	**M**	**DT 8/8**

Date expressed as CCYYMMDD
Date Forecast Generated

Not Used	**BFR09**	**373**	**Date**	**O**	**DT 8/8**

Date expressed as CCYYMMDD

	BFR10	367	**Contract Number** Contract number EDIFICE Usage: OPTIONAL. This is the buyer's contract number. For business that is conducted under a contract, it is RECOMMENDED that the contract number be placed in this field rather than in a header level REF segment.	O	AN 1/30
	BFR11	324	**Purchase Order Number** Identifying number for Purchase Order assigned by the orderer/purchaser EDIFICE Usage: Depending. For forecast processes using a Blanket Purchase Order (BPO) as the foundation, a reference to the BPO number is required by EDIFICE in either the BFR11 at the header level or the LIN.REF segment at the detail level.	O	AN 1/22
Not Used	BFR12	783	**Planning Schedule Type Code** 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	**Action Code** 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:
Notes: EDIFICE Usage: OPTIONAL. This segment is used for reference numbers that are agreed upon by both trading partners. There is one reference number per segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification CJ Clause Number DQ Delivery Quote Number GC Government Contract Number GP Government Priority Number PH Priority Rating PR Price Quote Number	M ID 2/3
	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDIFICE Usage: REQUIRED.	X AN 1/30
Not Used	REF03	352	**Description** A free-form description to clarify the related data elements and their content	X AN 1/80
Not Used	REF04	C040	**Reference Identifier** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O
Not Used	C04001	128	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/3
Not Used	C04002	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30

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

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: DEPENDING. EDIFICE recommends that parties be identified at the header level. If parties are not identified a the header level, they should be identified at the line item level.

It is encouraged that the trading partners codify all addresses within their system. The use of only the N1 segment with Bill-to and Ship-to values is encouraged.

See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual 28 Subcontractor AK Party to Whom Acknowledgment Should Be Sent 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 SE Selling Party ST Ship To SU Supplier/Manufacturer WH Warehouse	M ID 2/3

	N102	93	**Name** Free-form name EDIFICE Usage: ADVISED.	X	AN 1/60
	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) EDIFICE Usage: DEPENDING. Required if N104 used. 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	X	ID 1/2
	N104	67	**Identification Code** Code identifying a party or other code EDIFICE Usage: ADVISED.	X	AN 2/80
Not Used	N105	706	**Entity Relationship Code** Code describing entity relationship Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	N106	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/3

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

	Ref. Des.	Data Element	Name	Attributes
Must Use	N201	93	**Name** Free-form name	M AN 1/60
	N202	93	**Name** Free-form name EDIFICE Usage: OPTIONAL.	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

	Ref. Des.	Data Element	Name	Attributes
Must Use	N301	166	**Address Information** Address information	M AN 1/55
	N302	166	**Address Information** Address information EDIFICE Usage: OPTIONAL.	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	**City Name** Free-form text for city name EDIFICE Usage: ADVISED.	O AN 2/30
	N402	156	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency EDIFICE Usage: OPTIONAL.	O ID 2/2
	N403	116	**Postal Code** Code defining international postal zone code excluding punctuation and blanks (zip code for United States) EDIFICE Usage: ADVISED.	O ID 3/15
	N404	26	**Country Code** Code identifying the country EDIFICE Usage: ADVISED. EDIFICE recommends the use of N404. For non-US locations the ISO 2-character country code qualifier as found in UN/ECE Recommendation No. 3 should be used (http://www.unece.org/trade/rec/rec03en.htm).	O ID 2/3
Not Used	N405	309	**Location Qualifier** Code identifying type of location Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
Not Used	N406	310	**Location Identifier** 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:
Notes: EDIFICE Usage: ADVISED. Electronic Industry use should relate only to the parties responsible for originating the planning schedule. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department IC Information Contact	M ID 2/2
	PER02	93	**Name** Free-form name EDIFICE Usage: ADVISED.	O AN 1/60
	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number EDIFICE Usage: DEPENDING. Use if PER04 used. EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
	PER04	364	**Communication Number** 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.	X AN 1/80
Not Used	PER05	365	**Communication Number Qualifier** Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2

Not Used	PER06	364	Communication Number Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER07	365	Communication Number Qualifier Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	PER08	364	Communication Number Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER09	443	Contact Inquiry Reference Additional reference number or description to clarify a contact number	O	AN 1/20

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.

Notes: There is one LIN segment for each different part number. The Product ID Qualifiers and Product ID should completely specify the parts being forecasted. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
LIN01	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set EDIFICE Usage: OPTIONAL. See IMPLEMENTATION RECOMMENDATIONS FOR TRANSACTIONS USED IN FORECAST/PLANNING PROCESSES (March 1997). If this field is used, EDIFICE strongly recommends using no more than 6 characters for this field.	O AN 1/20

Must Use	**LIN02**	**235**	**Product/Service ID Qualifier**	**M**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234) EDIFICE Usage: REQUIRED. AB Assembly BP Buyer's Part Number DE Design Number DR Drawing Revision Number EC Engineering Change Level GS General Specification Number MG Manufacturer's Part Number PC Prime Contractor Part Number PK Packaging Drawing PN Company Part Number PO Purchase Order Number PT Print or Drawing UP U.P.C. Consumer Package Code (1-5-5-1) VP Vendor's (Seller's) Part Number		
Must Use	**LIN03**	**234**	**Product/Service ID**	**M**	**AN 1/48**
			Identifying number for a product or service EDIFICE Usage: REQUIRED. At least one occurrence of a combination of data elements 235 (Product/Service ID Qualifier) and 234 (Product/Service ID) is required. Additionally the use of the combination of these data elements must conform to IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).		
	LIN04	**235**	**Product/Service ID Qualifier**	**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**	**Product/Service ID**	**X**	**AN 1/48**
			Identifying number for a product or service		
	LIN06	**235**	**Product/Service ID Qualifier**	**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**	**Product/Service ID**	**X**	**AN 1/48**
			Identifying number for a product or service		
	LIN08	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234) See code list under LIN02.		
	LIN09	**234**	**Product/Service ID**	**X**	**AN 1/48**
			Identifying number for a product or service		
	LIN10	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		

		See code list under LIN02.		
LIN11	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN12	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN13	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN14	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN15	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN16	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN17	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN18	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN19	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN20	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN21	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN22	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN23	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN24	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN25	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN26	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID 2/2
		See code list under LIN02.		
LIN27	234	**Product/Service ID** Identifying number for a product or service	X	AN 1/48

LIN28	235	**Product/Service ID Qualifier** 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	**Product/Service ID** Identifying number for a product or service	X	AN 1/48
LIN30	235	**Product/Service ID Qualifier** 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	**Product/Service ID** 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:
Notes: EDIFICE Usage: REQUIRED.

Data Element Summary

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

Not Used	C00108	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00109	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10
Not Used	C00110	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	C00111	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00112	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10
Not Used	C00113	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	C00114	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00115	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10
	UIT02	212	**Unit Price** Price per unit of product, service, commodity, etc. EDIFICE Usage: OPTIONAL.	X	R 1/17
	UIT03	639	**Basis of Unit Price Code** Code identifying the type of unit price for an item EDIFICE Usage: OPTIONAL. CA Catalog CT Contract DI Distributor HP Price per Hundred PE Price per Each QT Quoted TE Contract Price per Each TP Price per Thousand	O	ID 2/2

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: EDIFICE Usage: OPTIONAL. Packaging information is conveyed using PO404, Packaging Code, in the PO4 segment. This is a 5 digit, concatenated field with the first 3 digits for "packaging form" and the final 2 for "packaging material".

See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Not Used	PO401	356	Pack The number of inner containers, or number of eaches if there are no inner containers, per outer container	O N0 1/6

Not Used	PO402	357	**Size** Size of supplier units in pack	X	R 1/8
Not Used	PO403	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
	PO404	103	**Packaging Code** 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 EDIFICE Usage: REQUIRED. These agreements apply to "secondary packaging", not items such as "surface mount", which are considered to be part specifications. This does not apply to shipping packaging, which is used in segment TD1. Part 1: BLK Bulk RAL Rail (Semiconductor) REL Reel TRY Tray Part 2: 90 Standard AMM Ammo Pack This code does not exist in the ASC X12 standard. BLK Bulk RAL Rail (Semiconductor) REL Reel TRY Tray 90 Standard	X	AN 3/5
Not Used	PO405	187	**Weight Qualifier** Code defining the type of weight Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 1/2
Not Used	PO406	384	**Gross Weight per Pack** Numeric value of gross weight per pack	X	R 1/9
Not Used	PO407	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2

Not Used	PO408	385	**Gross Volume per Pack** Numeric value of gross volume per pack	X	R 1/9
Not Used	PO409	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	PO410	82	**Length** Largest horizontal dimension of an object measured when the object is in the upright position	X	R 1/8
Not Used	PO411	189	**Width** Shorter measurement of the two horizontal dimensions measured with the object in the upright position	X	R 1/8
Not Used	PO412	65	**Height** Vertical dimension of an object measured when the object is in the upright position	X	R 1/8
Not Used	PO413	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	PO414	810	**Inner Pack** The number of eaches per inner container	O	N0 1/6
Not Used	PO415	752	**Surface/Layer/Position Code** Code indicating the product surface, layer or position that is being described Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	PO416	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	X	AN 1/20
Not Used	PO417	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	O	AN 1/20
Not Used	PO418	1470	**Number** A generic number	O	N0 1/9

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:
Notes: EDIFICE Usage: OPTIONAL. This segment is used for reference numbers that are agreed upon by both trading partners. There is one reference number per segment. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

References sent at this level overrides any references sent at header level.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification CJ Clause 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	M ID 2/3
	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDIFICE Usage: REQUIRED.	X AN 1/30
Not Used	REF03	352	**Description** A free-form description to clarify the related data elements and their content	X AN 1/80
Not Used	REF04	C040	**Reference Identifier** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O
Not Used	C04001	128	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/3

Not Used	C04002	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN 1/30
Not Used	C04003	128	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/3
Not Used	C04004	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN 1/30
Not Used	C04005	128	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/3
Not Used	C04006	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN 1/30

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:
Notes: EDIFICE Usage: ADVISED. Electronic Industry use should relate only to the parties responsible for the forecast. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department IC Information Contact	M ID 2/2
	PER02	93	**Name** Free-form name EDIFICE Usage: ADVISED.	O AN 1/60
	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number EDIFICE Usage: DEPENDING. Use if PER04 used. EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
	PER04	364	**Communication Number** 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.	X AN 1/80
Not Used	PER05	365	**Communication Number Qualifier** Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2

Not Used	PER06	364	**Communication Number** Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER07	365	**Communication Number Qualifier** Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	PER08	364	**Communication Number** Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER09	443	**Contact Inquiry Reference** Additional reference number or description to clarify a contact number	O	AN 1/20

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:
Notes: EDIFICE Usage: DEPENDING. QTY segment should be used if Schedule Type Qualifier (DE 675 on the BFR) is 'PR'.

In the Forecast-Based SMI (Supplier-Managed Inventory) process, the supplier is sent gross requirements, and needs additional data in order to perform netting and determine when to ship product. The quantity types in the code list below are basic to the process. This quantity data is not used in Material Release and Embedded Release forecasts. See IMPLEMENTATION RECOMMENDATIONS FOR TRANSACTIONS USED IN FORECAST/PLANNING PROCESSES (March 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity	M ID 2/2
			17 Quantity on Hand Total inventory at product level	
			36 Distributor Inventory Total product-level inventory held by distributor	
			40 Remaining Quantity Quantity remaining on blanket/individual PO	
			64 Past Due Quantity Usage for Supplier-Managed Inventory forecasts (BFRO4 Schedule Type = PR): Demand against the Quantity On Hand which is not reflected in the forecasts (FST segments). For all other forecast types, Past Due Quantity refers to past due supply (overdue order quantity).	
			72 Minimum Stock Level Minimum desired inventory/safety stock level specified by customer.	
			73 Maximum Stock Level Maximum desired inventory level specified by customer	

			85 Lot Size 96 Non-Billable Quantity Number of non-billable units May be consigned inventory.		
	QTY02	380	**Quantity** Numeric value of quantity EDIFICE Usage: REQUIRED.	X	R 1/15
	QTY03	C001	**Composite Unit of Measure** To identify a composite unit of measure (See Figures Appendix for examples of use)	O	
Must Use	C00101	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EDIFICE Usage: ADVISED. If not sent, Unit of Measure should be assumed to be the same as specified in the preceding UIT segment. Refer to 004010 Data Element Dictionary for acceptable code values.	M	ID 2/2
Not Used	C00102	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00103	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10
Not Used	C00104	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	C00105	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00106	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10
Not Used	C00107	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 2/2
Not Used	C00108	1018	**Exponent** Power to which a unit is raised	O	R 1/15
Not Used	C00109	649	**Multiplier** Value to be used as a multiplier to obtain a new value	O	R 1/10

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

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.

Notes: EDIFICE Usage: DEPENDING. EDIFICE recommends that parties be identified at the header level. If parties are not identified a the header level, they should be identified at the line item level.

Any identification sent at the line item level will override information sent at the header level.

It is encouraged that the trading partners codify all addresses within their system. The use of only the N1 segment with Bill-to and Ship-to values is encouraged.

See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual 28 Subcontractor AK Party to Whom Acknowledgment Should Be Sent 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 ST Ship To	M ID 2/3

			SU	Supplier/Manufacturer		
			WH	Warehouse		
	N102	93	**Name**		X	AN 1/60
			Free-form name			
			EDIFICE Usage: ADVISED.			
	N103	66	**Identification Code Qualifier**		X	ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)			
			EDIFICE Usage: DEPENDING. Required if N104 used.			
			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	**Identification Code**		X	AN 2/80
			Code identifying a party or other code			
			EDIFICE Usage: ADVISED.			
Not Used	N105	706	**Entity Relationship Code**		O	ID 2/2
			Code describing entity relationship Refer to 004010 Data Element Dictionary for acceptable code values.			
Not Used	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: 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

	Ref. Des.	Data Element	Name	Attributes
Must Use	N201	93	**Name** Free-form name	M AN 1/60
	N202	93	**Name** Free-form name EDIFICE Usage: OPTIONAL.	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

	Ref. Des.	Data Element	Name	Attributes
Must Use	N301	166	**Address Information** Address information	M AN 1/55
	N302	166	**Address Information** Address information EDIFICE Usage: OPTIONAL.	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. Des.	Data Element	Name	Attributes
	N401	19	**City Name** Free-form text for city name EDIFICE Usage: ADVISED.	O AN 2/30
	N402	156	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency EDIFICE Usage: OPTIONAL.	O ID 2/2
	N403	116	**Postal Code** Code defining international postal zone code excluding punctuation and blanks (zip code for United States) EDIFICE Usage: ADVISED.	O ID 3/15
	N404	26	**Country Code** Code identifying the country EDIFICE Usage: ADVISED EDIFICE recommends the use of N404. For non-US locations the ISO 2-character country code qualifier as found in UN/ECE Recommendation No. 3 should be used (http://www.unece.org/trade/rec/rec03en.htm).	O ID 2/3
Not Used	N405	309	**Location Qualifier** Code identifying type of location Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 1/2
Not Used	N406	310	**Location Identifier** Code which identifies a specific location	O AN 1/30

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:
Notes: EDIFICE Usage: ADVISED. Electronic Industry use should relate only to the parties responsible for the forecast. See IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS (June 1997).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department IC Information Contact	M ID 2/2
	PER02	93	**Name** Free-form name EDIFICE Usage: ADVISED.	O AN 1/60
	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number EDIFICE Usage: DEPENDING. Use if PER04 used. EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
	PER04	364	**Communication Number** 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.	X AN 1/80
Not Used	PER05	365	**Communication Number Qualifier** Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2

Not Used	PER06	364	**Communication Number** Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER07	365	**Communication Number Qualifier** Code identifying the type of communication number Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	PER08	364	**Communication Number** Complete communications number including country or area code when applicable	X	AN 1/80
Not Used	PER09	443	**Contact Inquiry Reference** Additional reference number or description to clarify a contact number	O	AN 1/20

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: EDIFICE Usage: REQUIRED. The ASC X12 standard requires that at least one FST segment is required, either by using the FST loop, or by using an FST within an SDP loop. In past versions of the standard, the FST segment was only available in the SDP loop, and the SDP segment itself was simply used as a dummy segment to gain access to the FST segment. Since the FST segment is now available outside the SDP loop, EDIFICE recommends use of this FST loop.

The FST always communicates the buyer's item schedule (planned or firm) in the electronics industry.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	FST01	380	**Quantity** Numeric value of quantity	M R 1/15
Must Use	FST02	680	**Forecast Qualifier** Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm D Planning	M ID 1/1

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 EDIFICE Usage: DEPENDING. Required if value of DE 681 Forecast Timing Qualifier is 'F' (Flexible Interval); not used if Forecast Timing Qualifier is any other value.		
Not Used	FST06	374	**Date/Time Qualifier**	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	**Time**	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	**Reference Identification Qualifier**	X	ID 2/3
			Code qualifying the Reference Identification EDIFICE Usage: DEPENDING. Use if FST09 sent. PO Purchase Order Number RE Release Number		
	FST09	127	**Reference Identification**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDIFICE Usage: OPTIONAL. Use if identifying a Purchase Order or Release number at the schedule level. References sent at this level overrides any references sent at line item or header level.		
Not Used	FST10	783	**Planning Schedule Type Code**	O	ID 2/2
			Code identifying type of planning schedule used Refer to 004010 Data Element Dictionary for acceptable code values.		

Segment: SDQ Destination Quantity

Position: 420
Loop: FST Optional
Level: Detail
Usage: Optional
Max Use: 50
Purpose: To specify destination and quantity detail
Syntax Notes:
1 If either SDQ05 or SDQ06 is present, then the other is required.
2 If either SDQ07 or SDQ08 is present, then the other is required.
3 If either SDQ09 or SDQ10 is present, then the other is required.
4 If either SDQ11 or SDQ12 is present, then the other is required.
5 If either SDQ13 or SDQ14 is present, then the other is required.
6 If either SDQ15 or SDQ16 is present, then the other is required.
7 If either SDQ17 or SDQ18 is present, then the other is required.
8 If either SDQ19 or SDQ20 is present, then the other is required.
9 If either SDQ21 or SDQ22 is present, then the other is required.

Semantic Notes:
1 SDQ23 identifies the area within the location identified in SDQ03, SDQ05, SDQ07, SDQ09, SDQ11, SDQ13, SDQ15, SDQ17, SDQ19, and SDQ21.

Comments:
1 SDQ02 is used only if different than previously defined in the transaction set.
2 SDQ03 is the store number.
3 SDQ23 may be used to identify areas within a store, e.g., front room, back room, selling outpost, end aisle display, etc. The value is agreed to by trading partners or industry conventions.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SDQ01	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	M	ID 2/2
	SDQ02	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) Refer to 004010 Data Element Dictionary for acceptable code values.	O	ID 1/2
Must Use	SDQ03	67	**Identification Code** Code identifying a party or other code	M	AN 2/80
Must Use	SDQ04	380	**Quantity** Numeric value of quantity	M	R 1/15
	SDQ05	67	**Identification Code** Code identifying a party or other code	X	AN 2/80

	SDQ06	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ07	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ08	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ09	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ10	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ11	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ12	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ13	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ14	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ15	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ16	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ17	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ18	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ19	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ20	380	**Quantity** Numeric value of quantity	X	R 1/15
	SDQ21	67	**Identification Code** Code identifying a party or other code	X	AN 2/80
	SDQ22	380	**Quantity** Numeric value of quantity	X	R 1/15
Not Used	SDQ23	310	**Location Identifier** Code which identifies a specific location	O	AN 1/30

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.

Notes: EDIFICE Usage: OPTIONAL.

In Supplier Managed Inventory processes, receipt data (embedded Receipt Advice) is sent so that the seller or ship from party can match them to open shipments and determine what is still in-transit.

EDIFICE recommends that a receipt will be reported only once (report only not-previously-reported receipts), and the seller or ship from party update the shipment on their system to indicate that the buyer, ship to party or consignee has received the material. Any shipments remaining open (not received) should be assumed to be 'in transit'. See IMPLEMENTATION RECOMMENDATIONS FOR TRANSACTIONS USED IN FORECAST/PLANNING PROCESSES (March 1997).

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
SHP01	673	**Quantity Qualifier** Code specifying the type of quantity EDIFICE Usage: REQUIRED. 75 Receipts	O ID 2/2
SHP02	380	**Quantity** Numeric value of quantity EDIFICE Usage: REQUIRED.	X R 1/15
SHP03	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time EDIFICE Usage: REQUIRED. 050 Received	X ID 3/3

	SHP04	373	**Date** Date expressed as CCYYMMDD EDIFICE Usage: ADVISED.	X	DT 8/8
Not Used	SHP05	337	**Time** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	X	TM 4/8
Not Used	SHP06	373	**Date** Date expressed as CCYYMMDD	O	DT 8/8
Not Used	SHP07	337	**Time** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	O	TM 4/8

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:
Notes: EDIFICE Usage: ADVISED. For Supplier Managed Inventory processes, a reference which will allow the seller or ship to party to match the receipts against shipments.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification IV Seller's Invoice Number MA Ship Notice/Manifest Number PK Packing List Number	M ID 2/3
	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDIFICE Usage: REQUIRED.	X AN 1/30
Not Used	REF03	352	**Description** A free-form description to clarify the related data elements and their content	X AN 1/80
Not Used	REF04	C040	**Reference Identifier** To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	O
Not Used	C04001	128	**Reference Identification Qualifier** Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/3
Not Used	C04002	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30

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

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.
Notes: EDIFICE Usage: ADVISED.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	CTT01	354	**Number of Line Items** Total number of line items in the transaction set	M	N0 1/6
	CTT02	347	**Hash Total** 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: OPTIONAL. Based on sum of the values of quantity (FST01) for each FST segment. For example, if the total number is 1234567.8901 (11 characters), the value sent in CTT02 would be: "234567.8901".	O	R 1/10
Not Used	CTT03	81	**Weight** Numeric value of weight	X	R 1/10
Not Used	CTT04	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	CTT05	183	**Volume** Value of volumetric measure	X	R 1/8

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

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

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE01	96	**Number of Included Segments** 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** 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.	M AN 4/9

830 PLANNING SCHEDULE EXAMPLES

830 Example 1- Simple Planning Forecast

This example supports Replenishment Scenario 1 (Planning Forecast). It is a simple planning forecast.

Example 1 Summary

HEADER SECTION	
ST*830*000000001'	This is a Planning Schedule (forecast) transaction with transaction set control number 000000001.
BFR*05*23456235**DL*A*20000501*20000930*20000501'	This is a full replacement forecast. The forecast number is 23456235. 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 SECTION	
LIN**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.
FST*330*D*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*1200*D*D*20000630'	The planned delivery quantity for June 30, 2000 is 1200..
FST*3500*D*M*20000701'	The planned delivery quantity for the month beginning July 1, 2000 is 3500.
FST*11700*D*F*20000801*20000930'	The planned delivery quantity for the interval from August 1, 2000 through September 30, 2000 is 11700.
SHP*75*2500*050*20000428'	2500 units were received by the buyer on April 28, 2000.

SUMMARY SECTION	
CTT*1*22817'	There is 1 line item in the transaction set, and the sum of the FST02 quantities is 22817.
SE*18*000000001'	There are 18 segments in transaction set 000000001, including the ST and ST segments.

830 Example 2 - Classic Material Release

This example supports Replenishment Scenario 2, and assumes that all parts sent in the Planning Schedule are on a blanket PO. The Blanket PO Number is sent at the line item level. The release mechanism in this model is the 862 Shipment Schedule, and release are not sent in the 830. Compare with Example 3 for Embedded Release.

Example 2 Summary

HEADER SECTION	
ST*830*000000001'	This is a Planning Schedule (forecast) transaction with transaction set control number 000000001.
BFR*05*53868069 98032600000014MR**AD*A*20000326* 20001231*20000326**95-359'	This is a full replacement forecast. The forecast number is 53868069 98032600000014MR. This is a material release schedule with delivery dates, and schedule quantities are discrete. The forecast horizon is March 26, 2000 through December 31, 2000, and the forecast was generated on March 26, 2000.
N1*BY*MIGHTY OEM*1*002344986'	The buying party is Mighty OEM, and their DUNS number is 002344986.
N1*ST* MIGHTY OEM *1*002344986'	The Ship-to party is Mighty OEM, and their DUNS number is 002344986.
PER*BD*GLORIA DEI*TE*415-555-4442'	The contact in the buyer's department is Gloria Dei, telephone 415-555-4442.
DETAIL SECTION	
LIN**BP*182034-23345*EC*G'	The buyer's part number is 182034-233345, and the engineering change (part revision) is G.
UIT*EA'	The unit of measure is Each.
REF*PO*53868069'	The purchase order number is 53868069.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
FST*13000*D*D*20000410'	The planned delivery quantity for April 10, 2000 is 13000.
FST*7000*D*W*20000814'	The planned delivery quantity for the week beginning August 14, 2000 is 7000.
FST*7000*D*W*20000821'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*4000*D*W*20000828'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*32000*D*M*20000905'	The planned delivery quantity for the month beginning September 5, 2000 is 32000.
FST*150000*D*F*20001002*20001229'	The planned delivery quantity for the interval from October 2, 2000 and December 29, 2000 is 150000.
LIN**BP*182034-23346*EC*G'	The buyer's part number is 182034-233346, and the engineering change (part revision) is G.
UIT*EA'	The unit of measure is Each.
REF*PO*53868070'	The purchase order number is 53868070.

PO4****REL90’	The parts are packaged in tape-and-reel, standard.
FST*13000*D*D*20000410’	The planned delivery quantity for April 10, 2000 is 13000.
FST*7000*D*W*20000814’	The planned delivery quantity for the week beginning August 14, 2000 is 7000.
FST*7000*D*W*20000821'	The planned delivery quantity for the week beginning August 28, 2000 is 7000.
FST*4000*D*W*20000828'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*32000*D*M*20000905’	The planned delivery quantity for the month beginning September 5, 2000 is 32000.
FST*150000*D*F*20001002*20001229’	The planned delivery quantity for the interval from October 2, 2000 and December 29, 2000 is 150000.
SUMMARY SECTION	
CTT*2*433000'	There are 2 line items in the transaction set, and the sum of the FST02 quantities is 433000.
SE*27*000000001'	There are 27 segments in transaction set 000000001, including the ST and ST segments.

830 Example 3 - Embedded Release

This example supports Replenishment Scenario 3 (Embedded Release), and assumes that all parts sent in the Planning Schedule are on a blanket PO. The Blanket PO Number is sent at the line item level. Firm schedules are to be processed as releases against the blanket order. Compare with Example 2 for Classic Material Release.

Example 3 Summary

HEADER SECTION	
ST*830*000000001'	This is a Planning Schedule (forecast) transaction with transaction set control number 000000001.
BFR*05*53868069 98032600000014MR**AD*A*20000326* 20001231*20000326**95-359'	This is a full replacement forecast. The forecast number is 53868069 98032600000014MR. This is a material release schedule with delivery dates, and schedule quantities are discrete. The forecast horizon is March 26, 2000 through December 31, 2000, and the forecast was generated on March 26, 2000.
N1*BY*MIGHTY OEM*1*002344986'	The buying party is Mighty OEM, and their DUNS number is 002344986.
N1*ST* MIGHTY OEM *1*002344986'	The Ship-to party is Mighty OEM, and their DUNS number is 002344986.
PER*BD*GLORIA DEI*TE*415-555-4442'	The contact in the buyer's department is Gloria Dei, telephone 415-555-4442.
DETAIL SECTION	
LIN**BP*182034-23345*EC*G'	The buyer's part number is 182034-233345, and the engineering change (part revision) is G.
UIT*EA'	The unit of measure is Each.
REF*PO*53868069'	The purchase order number is 53868069.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
FST*3500*C*D*20000403'	The firm (released) delivery quantity for April 3, 2000 is 3500.
FST*13000*D*D*20000410'	The planned delivery quantity for April 10, 2000 is 13000.
FST*7000*D*W*20000814'	The planned delivery quantity for the week beginning August 14, 2000 is 7000.
FST*7000*D*W*20000821'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*4000*D*W*20000828'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*32000*D*M*20000905'	The planned delivery quantity for the month beginning September 5, 2000 is 32000.
FST*150000*D*F*20001002*20001229'	The planned delivery quantity for the interval from October 2, 2000 and December 29, 2000 is 150000.
LIN**BP*182034-23346*EC*G'	The buyer's part number is 182034-233346, and the engineering change (part revision) is G.
UIT*EA'	The unit of measure is Each.

REF*PO*53868070’	The purchase order number is 53868070.
PO4****REL90’	The parts are packaged in tape-and-reel, standard.
FST*3500*C*D*20000403’	The firm (released) delivery quantity for April 3, 2000 is 3500.
FST*13000*D*D*20000410’	The planned delivery quantity for April 10, 2000 is 13000.
FST*7000*D*W*20000814’	The planned delivery quantity for the week beginning August 14, 2000 is 7000.
FST*7000*D*W*20000821'	The planned delivery quantity for the week beginning August 28, 2000 is 7000.
FST*4000*D*W*20000828'	The planned delivery quantity for the week beginning August 28, 2000 is 4000.
FST*32000*D*M*20000905’	The planned delivery quantity for the month beginning September 5, 2000 is 32000.
FST*150000*D*F*20001002*20001229’	The planned delivery quantity for the interval from October 2, 2000 and December 29, 2000 is 150000.
SUMMARY SECTION	
CTT*2*433000'	There are 2 line items in the transaction set, and the sum of the FST02 quantities is 433000.
SE*29*000000001'	There are 29 segments in transaction set 000000001, including the ST and ST segments.

830 Example 4 - Forecast-Based Supplier-Managed Inventory

This example supports Replenishment Scenario 4 (Forecast-Based Supplier Managed Inventory (SMI)) and Replenishment Scenario 8 (SMI, Third-Party Warehouse), and assumes that all parts sent in the Planning Schedule are on a blanket PO. The Blanket PO Number is sent at the header level.

Supplier Managed Inventory is a process within which the supplier relies on a manufacturing or sales based forecast to calculate required shipment quantities and dates to maintain the customer's available inventory. The calculation is made using gross (unnetted) forecast quantities, available inventory, Minimum and Maximum inventory targets and in-transit inventory. In-transit inventory is calculated by using receipt data reported in the 830 Planning Schedule to determine which recent shipments are still in-transit to the customer.

If Blanket POs are single item PO's, each planning schedule transaction set will contain one line item (one LIN loop); if Blanket POs are multiple item, the transaction set may contain several items (several LIN loops), but all items must be on the same Blanket PO. Gross requirements are sent as planned schedules.

Example 4 Summary

HEADER SECTION	
ST*830*000000001'	This is a Planning Schedule (forecast) transaction with transaction set control number 000000001.
BFR*05*53868069 98032600000014SMI**PR*A*20000326* 20001231*20000326**95-360*53868069'	This is a full replacement forecast. The forecast number is 53868069 98032600000014SMI. This is a forecast-based supplier-managed inventory schedule, with planned consumption dates, and schedule quantities are discrete. The forecast horizon is March 26, 2000 through December 31, 2000, and the forecast was generated on March 26, 2000. The contract number is 85-360, and the blanket purchase order number is 53868069.
N1*BY*MIGHTY OEM*1*002344986'	The buying party is Mighty OEM, and their DUNS number is 002344986.
N1*ST* MIGHTY OEM *1*002344986'	The Ship-to party is Mighty OEM, and their DUNS number is 002344986.
PER*BD*GLORIA DEI*TE*415-555-4442'	The contact in the buyer's department is Gloria Dei, telephone 415-555-4442.
DETAIL SECTION	
LIN**BP*182034-23345*EC*G'	The buyer's part number is 182034-233345, and the engineering change (part revision) is G.
UIT*EA'	The unit of measure is Each.
PO4****REL90'	The parts are packaged in tape-and-reel, standard.
QTY*17*58890'	The buyer's quantity on hand is 58890.
QTY*40*12300360'	The quantity remaining open on the blanket orders is 12300360.
QTY*64*1400'	The past-due demand (requirement against the

	quantity on hand that is not reflected in the forward-looking schedules) is 1400.
QTY*72*26036'	The minimum inventory level is 26036.
QTY*73*97500'	The maximum inventory level is 97500.
FST*3221*D*D*20000403'	The planned consumption quantity for April 3, 2000 is 3221.
FST*4196*D*D*20000410’	The planned consumption quantity for April 10, 2000 is 4196.
FST*6362*D*W*20000814’	The planned consumption quantity for the week of August 14, 2000 is 6362.
FST*6581*D*D*20000821’	The planned consumption quantity for August 21, 2000 is 6581.
FST*4011*D*D*20000828’	The planned consumption quantity for August 28, 2000 is 4011.
FST*32154*D*M*20000905’	The planned consumption quantity for the month beginning September 5, 2000 is 32154.
FST*150000*D*F*20001002*20001229’	The planned consumption quantity for the interval from October 2, 2000 to December 29, 2000 is 150000.
SHP*75*12500*050*20000313’	12500 units were received March 13, 2000.
REF*IV*IV22012’	The invoice number associated with the receipt is IV22012.
SHP*75*2500*050*20000323’	2500 units were received on March 23, 2000.
REF*IV*IV22363’	The invoice number associated with the receipt is IV22363.
SUMMARY SECTION	
CTT*1*216500'	**CTT Transaction Totals**
SE*26*000000001'	**SE Transaction Set Trailer**