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# EDI Implementation Guidelines

ANSI X12 Version /Release 3020  
830 Planning Schedule with  
Release Capability



# 830 Planning Schedule with Release Capability

Functional Group ID= **PS**

## Introduction:

This standard provides the format and establishes the data contents of a planning schedule with release capability transaction set. The planning schedule with release capability transaction set provides 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.

## Heading:

	Pos No	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule	M	1		
	030	NTE	Note/Special Instruction	F	100		
Not Used	040	CUR	Currency	O	10		
Not Used	050	REF	Reference Numbers	O	12		
	060	PER	Administrative Communications Contact	O	3		
Not Used	070	TAX	Tax reference	O	3		
Not Used	080	FOB	F.O.B. Related Instructions	O	1		
LOOP-ID – N1						200	
M	090	N1	Name	M	1		
Not Used	100	N2	Additional Name Information	O	2		
Not Used	110	N3	Address Information	O	2		
Not Used	120	N4	Geographic Location	O	1		
Not Used	130	REF	Reference Numbers	O	12		
	140	PER	Administrative Communications Contact	O	3		
Not Used	150	FOB	F.O.B. Related Instructions	O	1		

Not Used	160	CTP	Pricing Information	O	25
Not Used	170	SSS	Special Services	O	25
Not Used	180	CSH	Header Sale Condition	O	1
Not Used	190	ITD	Terms of Sale/Deferred Terms of Sale	O	2
Not Used	200	DTM	Date/Time/Period	O	10
Not Used	210	PID	Product/Item Description	O	200
Not Used	220	MEA	Measurements	O	40
Not Used	230	PWK	Paperwork	O	25
Not Used	240	PKG	Marking, Packaging, Loading	O	25
Not Used	250	TD1	Carrier Details (Quantity and Weight)	O	2
Not Used	260	TD5	Carrier Details (Routing Sequence/Transit)	O	12
Not Used	270	TD3	Carrier Details (Equipment)	O	12
Not Used	280	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5
Not Used	290	MAN	Marks and Numbers	O	10

### Detail:

	Pos No	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes Comments
						10000	
M	010	LIN	Item Identification	M	1		
M	020	UIT	Unit Detail	M	1		
Not used	021	DTM	Date/Time/Period	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		
	080	PID	Product/Item Description	O	1000		
Not Used	090	MEA	Measurements	M	40		
Not used	100	PWK	Paperwork	O	25		
Not used	110	PKG	Marking, Packaging, Loading	O	25		
Not Used	120	PO4	Item Physical Details	O	1		
Not Used	130	PRS	Part Release Status	O	1		
Not Used	140	REF	Reference Numbers	O	12		
Not Used	150	PER	Administrative Communications Contact	O	3		
Not Used	160	SSS	Special Services	O	25		
Not Used	170	ITA	Allowance, Charge or Service	O	10		
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	205	LDT	Lead Time	O	12		
Not Used	206	QTY	Quantity	O	>1		
						100	
Not used	207	SLN	Subline Item Detail	O	1		
Not used	208	PID	Product/Item Description	O	1000		
						200	
M	210	N1	Name	M	1		
Not Used	220	N2	Additional Name Information	O	2		

Not used	230	N3	Address Information	O	2	
Not used	240	N4	Geographic Location	O	1	
Not used	250	REF	Reference Numbers	O	12	
Not used	260	PER	Administrative Communication Contact	O	3	
Not used	270	FOB	F.O.B. Related Instructions	O	1	
LOOP ID - FST					260	
Not used	280	FST	Forecast Schedule	O	1	
Not used	281	SDQ	Destination Quantity	O	50	
LOOP ID - SDP					260	
M	290	SDP	Ship/Delivery Pattern	M	1	
M	300	FST	Forecast Schedule	M	260	
M	320	ATH	Resource Authorization	M	20	
LOOP ID - SHP					25	
M	330	SHP	Shipped/Received Information	M	1	
M	340	REF	Reference Numbers	M	5	
Not Used	350	TD1	Carrier Details (Quantity and Weight)	O	1	
Not Used	360	TD5	Carrier Details (Routing Sequence/Transit/Time)	O	1	
Not Used	370	TD3	Carrier Details (Equipment)	O	12	
Not used	380	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5	
Not Used	390	MAN	Marks and Numbers	O	10	

**Summary:**

	Pos No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes
M	010	CTT	Transactions Total	M	1		N3
M	020	SE	Transaction Set Trailer	M	1		

**Transaction Set Notes**

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

# ST

**Segment:** 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:**

**Comments:** 1 The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

## Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 830 X12.14 Planning Schedule <b>M ID 3/3</b>
M	ST02	329	<b>Transaction Set Control Number</b> Identifying control number assigned by the originator for a transaction set. <b>M AN 4/9</b>

# BFR

**Segment:** 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:**

- Comments:**
- 1 If BFR01 equals "04" (Net Change) - BFR09 is required.
  - 2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
  - 3 BFR06 - Forecast Horizon Start Date: The date when the forecast horizon (envelope) begins.
  - 4 BFR07 - Forecast Horizon End Date: The date when the forecast horizon (envelope) ends.
  - 5 BFR08 - Date Forecast Generated: The date the forecast data was generated.
  - 6 BFR09 - Date Forecast Updated: The date the forecast was updated with "Net Change" data. (Used only when element 353 in BFR04 equals "04", meaning net change.)

## Data Element Summary

Ref.	Data				Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>			
M	BFR01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 05 Replace		M ID 2/2
X	BFR02	127	<b>Reference Number</b> Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.		X AN 1/30
	BFR03	328	<b>Release Number</b> <b>Schedule Type Qualifier</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast DL Delivery Based SH Shipment Based		X AN 1/30
M	BFR04	675	<b>Schedule Quantity Qualifier</b> Code identifying the type of quantities used when defining a schedule or forecast A Actual Discrete Quantities		M ID 2/2
M	BFR05	676			M ID 1/1

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<b>M</b>	<b>BFR06</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Horizon Start Date	<b>M</b>	<b>DT 6/6</b>
<b>M</b>	<b>BFR07</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Stop Date	<b>M</b>	<b>DT 6/6</b>
<b>M</b>	<b>BFR08</b>	<b>373</b>	<b>Date</b> Date (YYMMDD)	<b>M</b>	<b>DT 6/6</b>
<b>X</b>	<b>BFR09</b>	<b>373</b>	<b>Date</b> Date (YYMMDD)	<b>O</b>	<b>DT 6/6</b>
<b>X</b>	<b>BFR10</b>	<b>367</b>	<b>Contract Number</b> Contract number	<b>O</b>	<b>AN 1/30</b>
<b>X</b>	<b>BFR11</b>	<b>324</b>	<b>Purchase Order Number</b> Identifying number for Purchase Order assigned by the orderer/purchaser	<b>O</b>	<b>AN 1/22</b>
	<b>BFR12</b>	<b>783</b>	<b>Planning Schedule Type Code</b> Code identifying type of planning schedule used Refer to 003020 Data Element Dictionary for acceptable code values.	<b>O</b>	<b>ID 2/2</b>

# NTE

**Segment:** Note/Special Instruction

**Position:** 030

**Loop:**

**Level:** Heading

**Usage:** Floating

**Max Use:** 100

**Purpose:** To transmit information in a free-form format, if necessary, for comment or special instruction

**Syntax Notes:**

**Semantic Notes:**

- Comments:** 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
X	NTE01	363	<b>Note Reference Code</b> Code identifying the functional area or purpose for which the note applies Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 3/3
M	NTE02	3	<b>Free Form Message</b> Free-form text	M AN 1/60

# PER

**Segment:** Administrative Communications Contact

**Position:** 060

**Loop:**

**Level:** Heading

**Usage:** Optimal

**Max Use:** 3

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

**Syntax Notes:** If either PER03 or PER04 is present, then the other is required.

**Semantic Notes:**

**Comments:**

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
		<b>Contact Function Code</b>		
		Code identifying the major duty or responsibility of the person or group named		
M	PER01	366	Refer to 003020 Data Element Dictionary for acceptable code values.	M ID 2/2
		<b>Name</b>		
		Free-form name		
		<b>Communication Number Qualifier</b>		
		Code identifying the type of communication number		
		Refer to 003020 Data Element Dictionary for acceptable code values.		
		<b>Communication Number</b>		
		Complete communications number including country or area code when applicable		
	PER03	365		X ID 2/2
	PER04	364		X AN 7/25

# N1

**Segment:** Name  
**Position:** 090  
**Loop:** N1 Mandatory  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:**  
**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.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
		<b>Entity Identifier Code</b>		
		Code identifying an organizational entity or a physical location.		
		MI Planning Schedule/Material Release Issuer		
		SF Ship From		
M	N101	98 SU Supplier/Manufacturer		M ID 2/2
		<b>Name</b>		
	N102	93 Free-form name		X AN 1/35
		<b>Identification Code Qualifier</b>		
		Code designating the system/method of code structure used for Identification Code (67)		
		1 Dun and Bradstreet (Credit Reporting) (DUNS)		
	N103	66 92 Assigned by Buyer or Buyer's Agent		X ID 1/2
		<b>Identification Code</b>		
	N104	67 Code identifying a party.		X AN 2/17

# PER

**Segment:** Administrative Communications Contact

**Position:** 140

**Loop:**

**Level:** Heading

**Usage:** Optimal

**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.

**Semantic Notes:**

**Comments:**

## Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
		<b>Contact Function Code</b>		
		Code identifying the major duty or responsibility of the person or group named		
		BD Buyer Name or Department		
		NT Notification Contact		
M PER01	366	<b>Name</b>		M ID 2/2
		Free-form name		
PER02	93	<b>Communication Number Qualifier</b>		O AN 1/35
		Code identifying the type of communication number		
PER03	365	TE Telephone		X ID 2/2
		<b>Communication Number</b>		
PER04	364	Complete communications number including country or area code when applicable		X AN 7/25

# LIN

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

**Semantic Notes:**

- Comments:**
- 1 See the Data Dictionary for a complete list of ID's.
  - 2 LIN01 is the line item identification
  - 3 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
X	LIN01	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set <b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O AN 1/11
M	LIN02	235	BP Buyer's Part Number	M ID 2/2

M	LIN03	234	<b>Product/Service ID</b> Identifying number for a product or service	M	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
	LIN04	235	PO Purchase Order Number	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	M	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN06	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN08	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN10	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN12	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN14	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN16	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN18	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN20	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN22	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
			<b>Product/Service ID</b> Identifying number for a product or service	X	AN 1/30
			<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
X	LIN23	234	Identifying number for a product or service	X	AN 1/30

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			<b>Product/Service ID Qualifier</b>	
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
X	LIN24	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2
			<b>Product/Service ID</b>	
X	LIN25	234	Identifying number for a product or service	X AN 1/30
			<b>Product/Service ID Qualifier</b>	
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
X	LIN26	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2
			<b>Product/Service ID</b>	
X	LIN27	234	Identifying number for a product or service	X AN 1/30
			<b>Product/Service ID Qualifier</b>	
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
X	LIN28	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2
			<b>Product/Service ID</b>	
X	LIN29	234	Identifying number for a product or service	X AN 1/30
			<b>Product/Service ID Qualifier</b>	
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
X	LIN30	235	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2
			<b>Product/Service ID</b>	
X	LIN31	234	Identifying number for a product or service	X AN 1/30

# UIT

**Segment:** Unit Detail  
**Position:** 020  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify item unit data

**Syntax Notes:** 1 If UIT03 is present, then UIT02 is required.

**Semantic Notes:**

**Comments:**

## Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
		<b>Unit or Basis for Measurement Code</b>	
		Code identifying the basic unit of measurement.	
M	UIT01	355	M ID 2/2
		Refer to 003020 Data Element Dictionary for acceptable code values.	
		<b>Unit Price</b>	
X	UIT02	212	X R 1/14
		Price per unit of product, service, commodity, etc.	
		<b>Basis of Unit Price Code</b>	
		Code identifying the type of unit price for an item	
X	UIT03	639	O ID 2/2
		Refer to 003020 Data Element Dictionary for acceptable code values.	

# PID

**Segment:** Product/Item Description  
**Position:** 080  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1000  
**Purpose:** To describe a product or process in coded or free-form format

- Syntax Notes:**
- 1 If PID04 is present, then PID03 is required.
  - 2 At least one of PID04 or PID05 is required.

**Semantic Notes:**

- Comments:**
- 1 If PID01 = ``F", then PID05 is used. If PID01 = ``S", then PID04 is used. If PID01 = ``X", then both PID04 and PID05 are used.
  - 2 Use PID03 to indicate the organization that publishes the code list being referred to.
  - 3 PID04 should be used for industry-specific product description codes.
  - 4 Use PID06 when necessary to refer to the product surface or layer being described in the segment.

## Data Element Summary

Ref.	Data			Attributes
Des.	Element	Name		
		<b>Item Description Type</b>		
		Code indicating the format of a description		
M	PID01	349	F Free-form	M ID 1/1
		<b>Product/Process Characteristic Code</b>		
		Code specifying the product or process characteristic being described.		
X	PID02	750	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/3
		<b>Agency Qualifier Code</b>		
		Code identifying the agency assigning the code values		
X	PID03	559	Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 2/2
		<b>Product Description Code</b>		
		A code from an industry code list which provides specific data about a product characteristic		
X	PID04	751	<b>Description</b>	X AN 1/12
		<b>Surface/Layer/Position Code</b>		
		A free-form description to clarify the related data elements and their content		
	PID05	352	<b>Surface/Layer/Position Code</b>	X An 1/80
		Code indicating the product surface, layer or position that is being described		
X	PID06	752	Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2

# N1

**Segment:** Name

**Position:** 210

**Loop:** N1 Mandatory

**Level:** Heading

**Usage:** Mandatory

**Max Use:**

**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.

## Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
		<b>Entity Identifier Code</b>	
		Code identifying an organizational entity or a physical location.	
M	N101	98 ST Ship to	M ID 2/2
	N102	93 Name	X AN 1/35
		<b>Identification Code Qualifier</b>	
		Code designating the system/method of code structure used for Identification Code (67)	
	N103	66 1 Dun and Bradstreet (Credit Reporting) (DUNS) 92 Assigned by Buyer or Buyer's Agent	X ID 1/2
	N104	67 <b>Identification Code</b>	X AN 2/17
		Code identifying a party.	

# SDP

**Segment:** Ship/Delivery Pattern  
**Position:** 290  
**Loop:** SDP Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify specific ship/delivery requirements

**Syntax Notes:**

**Semantic Notes:**

**Comments:** 1 The intent of this segment is to define the routine ship or delivery patterns, as required, when order quantities are in "buckets", such as weekly, monthly. Ship/delivery patterns eliminate the need to transmit discrete quantities and dates for each required shipment or delivery. It is assumed that a "bucketed" quantity is to be divided equally by the ship/delivery pattern. For example, a weekly quantity of 100 with a delivery pattern of Monday and Wednesday would result in 50 to be delivered on Monday and 50 to be delivered on Wednesday.

## Data Element Summary

Ref.	Data				
<u>Des.</u>	<u>Element</u>	<u>Name</u>			<u>Attributes</u>
		<b>Ship/Delivery or Calendar Pattern Code</b>			
		Code which specifies the days for routine shipments or deliveries.			
M	SDP01	678	Y No Pattern		M ID 1/2
		<b>Ship/Delivery Pattern Time Code</b>			
		Code which specifies the time for routine shipments or deliveries			
M	SDP02	679	Z Mutually Defined		M ID 1/1
		<b>Ship/Delivery or Calendar Pattern Code</b>			
		Code which specifies the days for routine shipments or deliveries.			
X	SDP03	678	Refer to 003020 Data Element Dictionary for acceptable code values		O ID 1/2
		<b>Ship/Delivery Pattern Time Code</b>			
		Code which specifies the time for routine shipments or deliveries			
X	SDP04	679	Refer to 003020 Data Element Dictionary for acceptable code values.		O ID 1/1
		<b>Ship/Delivery or Calendar Pattern Code</b>			
		Code which specifies the days for routine shipments or deliveries.			
X	SDP05	678	Refer to 003020 Data Element Dictionary for acceptable code values.		O ID 1/2
		<b>Ship/Delivery Pattern Time Code</b>			
		Code which specifies the time for routine shipments or deliveries			
X	SDP06	679	Refer to 003020 Data Element Dictionary for acceptable code values.		O ID 1/1
		<b>Ship/Delivery or Calendar Pattern Code</b>			
		Code which specifies the days for routine shipments or deliveries.			
X	SDP07	678	Refer to 003020 Data Element Dictionary for acceptable code values.		O ID 1/2
		<b>Ship/Delivery Pattern Time Code</b>			
		Code which specifies the time for routine shipments or deliveries			
X	SDP08	679	Refer to 003020 Data Element Dictionary for acceptable code values.		O ID 1/1

# FST

**Segment:** Forecast Schedule

**Position:** 300

**Loop:** SDP Mandatory

**Level:** Detail

**Usage:** Mandatory

**Max Use:** 260

**Purpose:** To specify the forecast 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:**

- 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 If FST03-"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.
  - 3 FST06 - To qualify 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 "AM" or "PM"

## Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element Name</u>			
M	FST01	380	Quantity Numeric value of quantity	M R 1/15
			<b>Forecast Qualifier</b> Code specifying the sender's confidence level of the forecast data.	
			A Immediate	
			C Firm	
M	FST02	680	D Planning	M ID 1/1
			<b>Forecast Timing Qualifier</b> Code specifying interval grouping of the forecast	
			D Discrete	
			F Flexible Interval (from Date X through Date Y)	
M	FST03	681	W Weekly Bucket (Monday through Sunday)	M ID 1/1
			<b>Date</b>	
M	FST04	373	Date (YYMMDD)	M DT 6/6
			<b>Date</b>	
	FST05	373	Date (YYMMDD)	O DT 6/6
			<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	
X	FST06	374	Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 3/3

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X			<b>Time</b>		
	FST07	337	Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)	X	TM 4/6
			<b>Reference Number Qualifier</b>		
			Code qualifying the Reference Number.		
X	FST08	128	Refer to 003020 Data Element Dictionary for acceptable code values.	X	ID 2/2
			<b>Reference Number</b>		
			Reference number or identification number as defined for a particular		
X	FST09	127	Transaction Set, or as specified by the Reference Number Qualifier.	X	AN 1/30

# ATH

**Segment:** Resource Authorization  
**Position:** 320  
**Loop:** LIN Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 20  
**Purpose:** To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

- Syntax Notes:**
- 1 At least one of ATH02 or ATH03 is required.
  - 2 If ATH03 is present, then ATH05 is required.
  - 3 If ATH04 is present, then ATH05 is required.

**Semantic Notes:**

- Comments:**
- 1 It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
  - 2 ATH02 - Resource Authorization Thru-Date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
  - 3 ATH03 - Current Cumulative Requirements Quantity: The cumulative quantity that has been authorized to-date from the cumulative start-date (ATH05) through the resource authorization thru-date (ATH02).
  - 4 ATH04 - Maximum Cumulative Requirements Quantity: The maximum cumulative quantity that has been authorized to-date from the cumulative start-date (ATH05) through the resource authorization thru-date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.
  - 5 ATH05 - Cumulative Start-Date: The date where the cumulative quantity count starts. This date might be the start-date of a contract period, a calendar or fiscal year, or other.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
		<b>Resource Authorization Code</b>		
		Code identifying the resource which the buyer is authorizing the seller to commit to		
		FI Finished (Labor, Material, and Overhead/Burden)		
		MT Material		
M	ATH01	672	PQ Cumulative Quantity Required Prior to First Schedule Period	M ID 2/2
			<b>Date</b>	
X	ATH02	373	Date (YYMMDD)	X DT 6/6
			<b>Quantity</b>	
	ATH03	380	Numeric value of quantity	X R 1/15



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X	ATH04	380	<b>Quantity</b> Numeric value of quantity	O R 1/15
	ATH05	373	<b>Date</b> Date (YYMMDD)	X DT 6/6

# SHP

**Segment:** Shipped/Received Information

**Position:** 330

**Loop:** SHP Mandatory

**Level:** Detail

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To specify shipment and/or receipt information

- Syntax Notes:**
- 1 If SHP01 is present, then SHP02 is required.
  - 2 If SHP04 is present, then SHP03 is required.

**Semantic Notes:**

- 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 = "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.
  - 3 SHP04 - The date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
  - 4 SHP06 - The cumulative quantity end date.

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
		<b>Quantity Qualifier</b>		
		Code specifying the type of quantity		
		01 Discrete Quantity		
SHP01	673	02 Cumulative Quantity		O ID 2/2
		<b>Quantity</b>		
SHP02	380	Numeric value of quantity		X R 1/15
		<b>Date/Time Qualifier</b>		
		Code specifying type of date or time, or both date and time		
		050 Received		
SHP03	374	051 Cumulative Quantity Start		X ID 3/3
		<b>Date</b>		
SHP04	373	Date (YYMMDD)		O DT 6/6
		<b>Time</b>		
X SHP05	337	Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)		O TM 4/6
		<b>Date</b>		
SHP06	373	Date (YYMMDD)		O DT 6/6
		<b>Last Receipt Date</b>		
		<b>Time</b>		
X SHP07	337	Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)		O TM 4/6

# REF

**Segment:** Shipped/Received Information

**Position:** 340

**Loop:** SHP Mandatory

**Level:** Detail

**Usage:** Mandatory

**Max Use:** 5

**Purpose:** To specify identifying numbers.

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

**Semantic Notes:**

**Comments:**

## Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
		<b>Reference Number Qualifier</b>		
		Code qualifying the Reference Number.		
		SI Shipper's Identifying Number for Shipment (SID)		
M	REF01 128	A unique number (to the shipper) assigned by the shipper to identify the shipment		M ID 2/2
		<b>Reference Number</b>		
		Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.		
	REF02 127	Last Receipt Shipper Number		X AN 1/30
		<b>Description</b>		
X	REF03 352	A free-form description to clarify the related data elements and their content		X AN 1/80

# CTT

**Segment:** Transaction Totals

**Position:** 010

**Loop:**

**Level:** Summary

**Usage:** Mandatory

**Max Use:** 1

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

**Syntax Notes:** 1 If CTT03 is present, then CTT04 is required.

2 If CTT05 is present, then CTT06 is required.

**Semantic Notes:**

**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

## Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
M	CTT01	354	<b>Number of Line Items</b> Total number of line items in the transaction set <b>Hash Total</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	M NO 1/6
	CTT02	347	<b>Weight</b> Numeric value of weight	O R 1/10
	CTT03	81	<b>Unit or Basis for Measurement Code</b> Code identifying the basic unit of measurement.	O R 1/8
	CTT04	355	Refer to 003020 Data Element Dictionary for acceptable code values. <b>Volume</b>	X ID 2/2
	CTT05	183	Value of volumetric measure <b>Unit or Basis for Measurement Code</b> Code identifying the basic unit of measurement.	O R 1/8
	CTT06	355	Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 2/2
	CTT07	352	<b>Description</b> A free-form description to clarify the related data elements and their content	O AN 1/80

# SE

**Segment:** 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.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
M	SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	M NO 1/6
M	SE02	329	<b>Transaction Set Control Number</b> Identifying control number assigned by the originator for a transaction set.	M AN 4/9

Example:

```
ISA*00*      *00*      *01*105003      *01*123456
*090908*0814*U*00302*000000055*0*P*:~
GS*PS*105003*123456*090908*081400*55000001*X*003020~
ST*830*1000001~
BFR*05**0000431*DL*A*090908*991231*090908~
N1*ST**92*105003~
N1*SU**01*123456~
LIN**BP*1234-000-000*PO*55123455~
NTE*GEN*DATES SHOWN ARE FOR SHIPMENT BY SUPPLIER~
UIT*EA~
PID*F***DESCRIPTION~
N1*ST**92*105003~
SDP*Y*Z~
FST*2000*C*W*091002~
FST*1000*D*W*091030~
FST*1000*D*W*091204~
FST*1000*D*W*100101~
FST*1000*D*W*100129~
FST*2000*D*W*100226~
FST*0*D*W*100405~
FST*0*D*W*100412~
FST*1000*D*W*100419~
FST*0*D*W*100426~
FST*0*D*W*100501~
FST*1000*D*W*100601~
FST*0*D*W*100701~
FST*0*D*W*100801~
FST*0*D*W*100901~
ATH*PQ**0**090908~
SHP*02*12000*050*090908~
REF*SI*00035846~
CTT*15*10000~
SE*30*1000001~
GE*1*55000001~
IEA*1*000000055~
```

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## Document Revision

Version	Date	Description	Author
1.0	2009-09-17	Creation	Hans-Ulrich Berger
1.5	2016-Aug-10	Modified JCI or Johnson controls references to be Adient. Removed JCI logo and added Adient logo.	Hemant Bhardwaj