

830 Planning Schedule with Release Capability

X12/V4010/830: 830 Planning Schedule with Release Capability

Version: 2.2 Draft

Author:	Integration Services Team
Company:	Exostar
Publication:	3/27/2008
Trading Partner:	Boeing Trading Partner Community
Created:	2/12/2008

Table of Contents

830 Planning Schedule with Release Capability	1
ST Transaction Set Header	2
BFR Beginning Segment for Planning Schedule	3
LIN Loop Item Identification	5
LIN Item Identification	6
PID Product/Item Description	7
N1 Loop Name	8
N1 Name	9
FST Loop Forecast Schedule	10
FST Forecast Schedule	11
LM Loop Code Source Information	13
LM Code Source Information	14
LQ Industry Code	15
CTT Transaction Totals	16
SE Transaction Set Trailer	17

830 Planning Schedule with Release Capability

Functional Group=PS

Purpose: 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.

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BFR	Beginning Segment for Planning Schedule	M	1			Must use

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOOP ID - LIN					≥1		
010	LIN	Item Identification	M	1			Must use
080	PID	Product/Item Description	O	1000			Used
LOOP ID - N1					200		
320	N1	Name	O	1			Must use
LOOP ID - FST					≥1	N2/410L	
410	FST	Forecast Schedule	O	1		N2/410	Must use
LOOP ID - LM					≥1		
430	LM	Code Source Information	O	1			Used
440	LQ	Industry Code	M	100			Must use

Summary:

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

Notes:

- 2/410L 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.
- 2/410 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.
- 3/010 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 Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use
Description: Code uniquely identifying a Transaction Set						
Code Name						
830 Planning Schedule with Release Capability						
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

Semantics:

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

BFR Beginning Segment for Planning Schedule

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 6

User Option (Usage): Must use

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BFR01	353	Transaction Set Purpose Code	M	ID	2/2	Must use
Description: Code identifying purpose of transaction set						
Code Name						
00 Original						
BFR02	127	Reference Identification	X	AN	1/30	Must use
Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						
BFR04	675	Schedule Type Qualifier	M	ID	2/2	Must use
Description: Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast						
Code Name						
DL Delivery Based						
BFR05	676	Schedule Quantity Qualifier	M	ID	1/1	Must use
Description: Code identifying the type of quantities used when defining a schedule or forecast						
Code Name						
A Actual Discrete Quantities						
BFR06	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
Exostar Note: Forecast horizon start date: The date when the forecast horizon (envelope) begins.						
BFR08	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
Exostar Note: The date the forecast data was generated.						

Syntax Rules:

1. R0203 - At least one of BFR02 or BFR03 is required.

Semantics:

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.)

Loop Item Identification

Pos: 010 Repeat: >1
 Mandatory
 Loop: LIN Elements: N/A

User Option (Usage): Must use

Purpose: To specify basic item identification data

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	LIN	Item Identification	M	1		Must use
080	PID	Product/Item Description	O	1000		Used
320		Loop N1	O		200	Must use
410		Loop FST	O		>1	Used

LIN Item Identification

Pos: 010	Max: 1
Detail - Mandatory	
Loop: LIN	Elements: 2

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code Name

BP Buyer's Part Number

LIN03	234	Product/Service ID	M	AN	1/48	Must use
-------	-----	--------------------	---	----	------	----------

Description: Identifying number for a product or service

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

Semantics:

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.

PID Product/Item Description

Pos: 080	Max: 1000
Detail - Optional	
Loop: LIN	Elements: 2

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type	M	ID	1/1	Must use

Description: Code indicating the format of a description

Code Name

F Free-form

PID05	352	Description	X	AN	1/80	Must use
-------	-----	-------------	---	----	------	----------

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.
3. C0703 - If PID07 is present, then PID03 is required.
4. C0804 - If PID08 is present, then PID04 is required.
5. C0905 - If PID09 is present, then PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

Loop Name

Pos: 320	Repeat: 200
Optional	
Loop: N1	Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
320	N1	Name	O	1		Must use

N1 Name

Pos: 320	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use
Description: Code identifying an organizational entity, a physical location, property or an individual						
Code Name						
KU Receiver Site						
SU Supplier/Manufacturer						
N102	93	Name	X	AN	1/60	Used
Description: Free-form name						
N103	66	Identification Code Qualifier	X	ID	1/2	Must use
Description: Code designating the system/method of code structure used for Identification Code (67)						
Code Name						
92 Assigned by Buyer or Buyer's Agent						
N104	67	Identification Code	X	AN	2/80	Must use
Description: Code identifying a party or other code						

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

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

Loop Forecast Schedule

Pos: 410 Repeat: >1
 Optional
 Loop: FST Elements: N/A

User Option (Usage): Used

Purpose: To specify the forecasted dates and quantities

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
410	FST	Forecast Schedule	O	1		Must use
430		Loop LM	O		>1	Used

FST Forecast Schedule

Pos: 410	Max: 1
Detail - Optional	
Loop: FST	Elements: 6

User Option (Usage): Must use

Purpose: To specify the forecasted dates and quantities

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FST01	380	Quantity	M	R	1/15	Must use
		Description: Numeric value of quantity				
FST02	680	Forecast Qualifier	M	ID	1/1	Must use
		Description: Code specifying the sender's confidence level of the forecast data or an action associated with a forecast				
		Code Name				
		D Planning				
FST03	681	Forecast Timing Qualifier	M	ID	1/1	Must use
		Description: Code specifying interval grouping of the forecast				
		Code Name				
		D Discrete				
		M Monthly Bucket (Calendar Months)				
		W Weekly Bucket (Monday through Sunday)				
FST04	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
FST08	128	Reference Identification Qualifier	X	ID	2/3	Used
		Description: Code qualifying the Reference Identification				
		Code Name				
		7U Related Transaction Reference Number				
FST09	127	Reference Identification	X	AN	1/30	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

Syntax Rules:

1. P0607 - If either FST06 or FST07 is present, then the other is required.
2. P0809 - If either FST08 or FST09 is present, then the other is required.

Semantics:

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.

Loop Code Source Information

Pos: 430	Repeat: >1
Optional	
Loop: LM	Elements: N/A

User Option (Usage): Used

Purpose: To transmit standard code list identification information

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
430	LM	Code Source Information	O	1		Used
440	LQ	Industry Code	M	100		Must use

LM Code Source Information

Pos: 430	Max: 1
Detail - Optional	
Loop: LM	Elements: 1

User Option (Usage): Used

Purpose: To transmit standard code list identification information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LM01	559	Agency Qualifier Code	M	ID	2/2	Must use

Description: Code identifying the agency assigning the code values

<u>Code</u>	<u>Name</u>
ZZ	Mutually Defined

Comments:

1. LM02 identifies the applicable industry code list source information.

LQ Industry Code

Pos: 440	Max: 100
Detail - Mandatory	
Loop: LM	Elements: 2

User Option (Usage): Must use

Purpose: Code to transmit standard industry codes

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LQ01	1270	Code List Qualifier Code	O	ID	1/3	Used
Description: Code identifying a specific industry code list						
Code Name						
ZZ Mutually Defined						
LQ02	1271	Industry Code	X	AN	1/30	Used
Description: Code indicating a code from a specific industry code list						
Boeing Note: Use this element to pass the aircraft number.						

Syntax Rules:

1. C0102 - If LQ01 is present, then LQ02 is required.

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 1

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	NO	1/6	Must use

Description: Total number of line items in the transaction set

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

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

SE Transaction Set Trailer

Pos: 020	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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)

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use
		Description: Total number of segments included in a transaction set including ST and SE segments				
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Comments:

1. SE is the last segment of each transaction set.