830 Planning Schedule with Release Capability

Introduction:

This standard contains the format and establishes the data contents of a Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. 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 material; (3) a forecast that is also used as an order release mechanism. The order release forecast may also contain data related to purchase orders.

Table 1: 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		
			LOOP ID - N1			200	
	230	N1	Name	O	1		

Table 2: Detail

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			10000	
Must Use	010	LIN	Item Identification	M	1		
Must Use	020	UIT	Unit Detail	M	1		
	130	PRS	Part Release Status	O	1		
	140	REF	Reference Identification	O	12		
	150	PER	Administrative Communications Contact	O	3		
	230	ATH	Resource Authorization	O	20		
	260	N1	Name	O	200		
			LOOP ID - SDP			260	
	410	SDP	Ship Delivery Pattern	O	1		
	410	FST	Forecast Schedule	O	260		
			LOOP ID - SHP			25	
	470	SHP	Shipped/Received Information	O	1		
	480	REF	Reference Identification	O	5		

Table 3: Summary

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	CTT	Transaction Totals	M	1		
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. At least one occurrence of segment FST is required in the FST loop.
2. Number of line items (CTT01) is the accumulation of the number of LIN segments.
3. Hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment. (optional)

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) used by the translation routines of the interchange partners to select the appropriate transaction set definition.
Comments:	

Data Element Summary

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

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:				
Semantic Notes:		2 BFR06 Forecast Horizon Start Date: The date when the forecast horizon begins.		
		3 BFR07 Forecast Horizon End Date: The date when the forecast horizon ends.		
		4 BFR08 Date Forecast Generated: The date the forecast data was generated.		
Comments:				

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	**BFR01**	**353**	**Transaction Set Purpose Code**	**M ID 2/2**
			Code identifying purpose of transaction set	
			05 Replace	
			This code is used when a complete part schedule is sent.	
	BFR03	**328**	**Release Number**	**X AN 1/30**
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
			Assigned during transmission	
>>	**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	
			DL Delivery Based	
			DL dates specify when material is scheduled to arrive at the receiving location.	
			SH Shipment Based	
			SH dates specify when the material is scheduled to leave the shipping location.	
>>	**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	
>>	**BFR06**	**373**	**Beginning Forecast Date**	**M DT 8/8**
			Date expressed as CCYYMMDD	
			Earliest requirement date on this release.	
	BFR07	**373**	**Ending Forecast Date**	**O DT 8/8**
			Date expressed as CCYYMMDD	
			Last requirement date on this release.	
>>	**BFR08**	**373**	**Date**	**M DT 8/8**
			Date expressed as CCYYMMDD	
			Forecast generation date.	
	BFR11	**324**	**Purchase Order Number**	**O AN 1/22**
			Identifying number for Purchase Order assigned by the orderer/purchaser	
			Purchase order number for all parts on this release.	

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.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
>>	N101	98	**Entity Identifier Code**		M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual		
			MI	Planning Schedule/Material Release Issuer	
				Party responsible for establishing the contract. Can only use 1, 12 or ZZ in the N103.	
			ST	Ship To	
				Location where the Material Release Issuer (MI) wants the Supplier (SU) to ship to.	
			SU	Supplier/Manufacturer	
				Party responsible for the material or service.	
	N102	93	**Name**		X AN 1/60
			Free-form name		
			Name of the MI, ST or SU.		
	N103	66	**Identification Code Qualifier**		X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			01	D-U-N-S Number, Dun & Bradstreet	
			12	Telephone Number (Phone)	
			ZZ	Mutually Defined	
	N104	67	**Identification Code**		X AN 2/80
			Code identifying a party or other code		

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 LIN02 or LIN03 is present, then the other is required.
     2 If either LIN04 or LIN05 is present, then the other is required.
     3 If either LIN06 or LIN07 is present, then the other is required.

Semantic Notes:
Comments: **1** LIN02 through 07 provide for different product/service IDs for each item.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
>>	**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)		
			BP Buyer's Part Number		
>>	**LIN03**	**234**	**Product/Service ID - Buyer's Part Number**	**M**	**AN 1/48**
			Identifying number for a product or service		
	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)		
			PO Purchase Order Number		
	LIN05	**234**	**Product/Service ID – Purchase Order**	**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)		
			ZZ 3rd party Purchase Order Number		
	LIN07	**234**	**Product/Service ID – 3rd party PO Number**	**X**	**AN 1/48**
			Identifying number for a product or service		

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

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> UIT01	355	**Unit or Basis for Measurement Code**	M ID 2/2

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

UIT01 is a composite data element, C001, which contains 15 simple data elements. Only the first component of the composite, data element 355, is used.

Refer to 003020 Data Element Dictionary for acceptable code values.

Segment: **PRS** Part Release Status
Position: 130
Loop: LIN Mandatory
Level: Detail:
Usage: Optional
Max Use: 1
Purpose: To indicate the status of the part being ordered or forecast with respect to this material release or planning document
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> PRS01	682	**Part Release Status Code**	M ID 1/2

Code identifying the status of the specific part number being released or forecast or being used in an engineering change

7	Final Release for this Cancelled Part
B	Balance-Out Part; Eng. Change Pending

Segment: # REF Reference Identification
Position: 140
Loop: LIN   Mandatory
Level: Detail:
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
>> REF01	128	**Reference Number Qualifier** Code qualifying the Reference Identification	**M**	**ID 2/3**
		DK Dock Number		
REF02	127	**Reference Number - Dock Code** 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.
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	PER01	366	**Contact Function Code**	**M ID 2/2**
			Code identifying the major duty or responsibility of the person or group named	
			EX Expeditor	
	PER02	93	**Contact Name**	**O AN 1/60**
			Free-form name	
	PER03	365	**Contact Communication Qualifier**	**X ID 2/2**
			Code identifying the type of communication number	
			TE Telephone	
	PER04	364	**Contact Communication - Telephone Number**	**X AN 1/80**
			Complete communications number including country or area code when applicable	

Segment:	**ATH** Resource Authorization			
Position:	230			
Loop:	LIN Mandatory			
Level:	Detail:			
Usage:	Optional			
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.		
Semantic Notes:	**1**	ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.		
	2	ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).		
	3	ATH05 is the 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.		
Comments:	**1**	It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.		

Data Element Summary

Ref. Des.	Data Element	Name		Attributes
>> ATH01	672	**Resource Authorization Code**	**M**	**ID 2/2**
		Code identifying the resource which the buyer is authorizing the seller to commit to		
		FI Finished (Labor, Material, and Overhead/Burden)		
		MT Material		
		PQ Prior Cum Required		
ATH02	373	**Date**	**X**	**DT 8/8**
		Date expressed as CCYYMMDD		
ATH03	380	**Quantity**	**X**	**R 1/15**
		Numeric value of quantity		
ATH05	373	**Date**	**X**	**DT 8/8**
		Date expressed as CCYYMMDD		
		Cumulative Start Date. If PQ then cum required as of date		

Segment:	**N1** Name			
Position:	230			
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.		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	**N101**	**98**	**Entity Identifier Code**	**M ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			ST Ship To	
			Location where the Material Release Issuer (MI) wants the Supplier (SU) to ship to.	
	N102	**93**	**Name**	**X AN 1/60**
			Free-form name	
			Name of the ST .	
	N103	**66**	**Identification Code Qualifier**	**X ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			12 Telephone Number (Phone)	
			ZZ Mutually Defined	
	N104	**67**	**Identification Code**	**X AN 2/80**
			Code identifying a party or other code	

Segment:	**SDP** Ship/Delivery Pattern
Position:	450
Loop:	SDP Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To identify specific ship/delivery requirements
Syntax Notes:	
Semantic Notes:	
Comments:	1 The intent of this segment is to define the routine ship or delivery patterns, as required.
Notes:	Purpose: Indicate to Supplier that for this material release the delivery pattern is "As Directed".

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	SDP01	678	**Ship/Delivery or Calendar Pattern Code**	M ID 1/2
			Code which specifies the routine shipments, deliveries, or calendar pattern	
			"Y" indicating Shipment/Delivery Timing of "As Directed".	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
M	SDP02	679	**Ship/Delivery Pattern Time Code**	M ID 1/1
			Code which specifies the time for routine shipments or deliveries	
			Always "Y" indicating Shipment/Delivery Timing of "As Directed".	
			Refer to 004010 Data Element Dictionary for acceptable code values.	

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:
Comments: 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly)
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.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
>>	FST01	380	**Net Quantity**	M	R 1/15
			Numeric value of quantity		
>>	FST02	680	**Forecast Qualifier**	M	ID 1/1
			Code specifying the sender's confidence level of the forecast data or an action associated with a forecast		
			C Firm		
			D Planning		
>>	FST03	681	**Forecast Timing Qualifier**	M	ID 1/1
			Code specifying interval grouping of the forecast		
			D Discrete		
			M Monthly Bucket (Calendar Months)		
			W Weekly Bucket (Monday through Sunday)		
>>	FST04	373	**Requirement Date**	M	DT 8/8
			Date expressed as CCYYMMDD		
	FST06	374	**Requirement Date/Time Qualifier**	X	ID 3/3
			Code specifying type of date or time, or both date and time		
			002 Delivery Requested		
			010 Requested Ship		
	FST07	337	**Requirement Time**	X	TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM: where HH = hours (00-23), MM = minutes (00-59).		
	FST08	128	**Reference Number Qualifier**	X	ID 2/3
			Code qualifying the Reference Identification		
			DO Delivery Order Number		
	FST09	127	**Reference Number - RAN Number**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

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 SHP04 is required.		
Semantic Notes:	1	SHP04 is the date received or the cumulative quantity start date (as qualified by SHP03).		
Comments:	1	The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities and dates.		

Data Element Summary

Ref. Des.	Data Element	Name		Attributes
SHP01	673	**Quantity Qualifier**	O	ID 2/2
		Code specifying the type of quantity		
		01	Discrete Quantity	
		02	Cumulative Quantity	
SHP02	380	**Quantity**	X	R 1/15
		Numeric value of quantity		
		When SHP01 = 01 Last received discrete quantity. When SHP01 = 02 Cum received quantity.		
SHP03	374	**Date/Time Qualifier**	X	ID 3/3
		Code specifying type of date or time, or both date and time		
		050	Received	
			When SHP01 = 01	
		051	Cumulative Quantity Start	
			When SHP01 = 02	
SHP04	373	**Date**	X	DT 6/6
		Date (YYMMDD)		
		When SHP03 = 50 Last received date When SHP03 = 51 Cum start date		

Segment: # REF Reference Identification
Position: 480
Loop: SHP   Optional
Level: Detail:
Usage: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
>>	REF01	128	**Reference Number Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			SI Shipper's Identifying Number for Shipment (SID)		
			A unique number (to the shipper) assigned by the shipper to identify the shipment		
	REF02	127	**Reference Number - Bill of Lading**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment: # CTT **Transaction Totals**
Position: 010
Loop:
Level: Summary:
Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes:
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
>> CTT01	354	**Number of Line Items**	M	N0 1/6
		Total number of line items in the transaction set		
CTT02	347	**Hash Total**	O	R 1/10
		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.		

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
>>	SE01	96	**Number of Included Segments**	M N0 1/10

Total number of segments included in a transaction set including ST and SE segments

>>	SE02	329	**Transaction Set Control Number**	M AN 4/9

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

EXAMPLE 830 (Example below is provided as-is and does not preclude definitions above).

ISA*00*   *00*   *01*INERGYISA   *01*SUPPLIERISA
*040212*1154*U*00400*000000001*0*T*}
GS*PS*INERGY GS*SUPPLIERA_GS*20040212*1154*2*X*004010
ST*830*0001
BFR*00**2004021255*SH*A*20040206*20040330*20040212***PONBR
N1*MI**01*DUNS
N1*SU**ZZ*SUPPLIERTPADDRCODE
N1*ST**ZZ*INGERYTPSITECODE
LIN**BP*TESTITEM*PO*INERGY_PO*ZZ*ULTIMATE_PO
UIT*EA
PER*EX*BUYEREXPEDITORNAME*TE*555 444 3333
REF*DK*00
ATH*FI**0**20040201
ATH*MT**0**20040201
ATH*PQ**0**20040201
SDP*Y*Y
FST*0*C*W*20040201
FST*0*C*W*20040208
FST*0*C*W*20040215
FST*0*C*W*20040222
FST*0*C*W*20040301
FST*100*C*W*20040308
FST*0*D*W*20040315
SHP*01*60*050
REF*SI*SUPPLIERPSHIPPERID
SHP*02*660*051
CTT*1*100
SE*24*0001
GE*1*2
IEA*1*000000001