# 830 Infor Supplier Exchange – Generic Planning Schedule with Release Capability / Version 004010

Functional Group ID=PS

## Introduction

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.

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	Pos. No.	Seg. <u>ID</u>	Req. Loop Notes and Name Des. Max.Use Repeat Comments
M	010	ST	Transaction Set Header M 1
M	020	BFR	Beginning Segment for Planning M 1 Schedule
			LOOP ID - N1 200
	230	N1	Name O 1

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Detail.	Pos. <u>No.</u>	Seg. <u>ID</u>	<u>Name</u>	Req. Des.	Loop <u>Max.Use</u>	Notes and Repeat Comments			
			LOOP	ID - LIN				>1	
M	010	LIN	Item Id	entificati	on	M	1		
	020	UIT	Unit De	etail		0	1		
	140	REF	Refere	nce Iden	tification	0	12		
	150	PER	Adminis Contac		Communications	Ο	3		
	230	ATH	Resour	ce Autho	orization	0	20		
			LOOP	ID - FST				>1	
	410	FST	Foreca	st Sched	dule	0	1		n1

		LOOP ID - SHP			25	
470	SHP	Shipped/Received Information	0	1		
480	REF	Reference Identification	0	5		

# Summary:

	Pos. <u>No.</u>	Seg. <u>ID</u>	Req. Loop  Name Des. Max.Use	Notes and Repeat Comments	
	010	CTT	Transaction Totals	0 1	n2
M	020	SE	Transaction Set Trailer	M 1	

## **Transaction Set Notes**

- 1. 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. 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:

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

**Syntax Notes:** 

**Semantic Notes:** 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. Data Des. Elen	n <u>nent</u>	Name Attr	<u>ributes</u>		
M	ST01	143	Transactio	on Set Identifier Code	M	ID 3/3
			Code uniqu	uely identifying a Transaction Set		
			830	Planning Schedule with Release C	apabi	lity
M	ST02	329	Transactio	on 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:

**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:** 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:

Ref. Data			Data Element Summary			
	Des. Element		Name Attributes			
M	BFR01	353	Transaction Set	Purpose Code	M	ID 2/2
			Code identifying	purpose of transaction set		
			00	Original		
			04	Change		
			05	Replace		
	BFR03	328	Release Number	r	X	AN 1/30
				ng a release against a Purchase Orde olved in the transaction	r pre	viously placed
M	BFR04	675	Schedule Type (	Qualifier	M	ID 2/2
			, ,	the type of dates used when defining schedule or forecast	a shi <sub>l</sub>	oping or
			DL	Delivery Based		
			SH	Shipment Based		
M	BFR05	676	Schedule Quant	ity Qualifier	M	ID 1/1
			Code identifying	the type of quantities used when defir	ning a	schedule or

forecast

		A Actual Discrete Quantities		
BFR06	373	Release Date	0	DT 8/8
		Date expressed as CCYYMMDD		
		This is for the outbound 830.		
BFR08	373	Release Date	0	DT 8/8
		Date expressed as CCYYMMDD		
		This is for the inbound 830.		
BFR11	324	Purchase Order Number	0	AN 1/22
		Identifying number for Purchase Order assigned by the	orde	rer/purchaser

Segment: N1 Name

Position: 230

Loop: N1 Optional

Level: Heading Usage: Optional

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.

If either N103 or N104 is present, then the other is required.

**Semantic Notes:** 

**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

### **Data Element Summary**

	Ref. Data Des. Elen		Name Attribu	tes		
M	N101	98	Entity Identifi	er Code	M	ID 2/3
			Code identifyir an individual	ng an organizational entity, a physical	location	, property or
			MI	Planning Schedule/Material Rele	ase Issi	uer
			ST	Ship To		
			SU	Supplier/Manufacturer		
	N102	93	Name		X	AN 1/60
			Free-form nam	ne		
	N103	66	Identification	Code Qualifier	X	ID 1/2
			Code designat Identification C	ting the system/method of code struct Code (67)	ure used	d for
			1	D-U-N-S Number, Dun & Bradstr	reet	
			92	Assigned by Buyer or Buyer's Ag	gent	
	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 LIN04 or LIN05 is present, then the other is required.

If either LIN06 or LIN07 is present, then the other is required.
If either LIN08 or LIN09 is present, then the other is required.
If either LIN10 or LIN11 is present, then the other is required.
If either LIN12 or LIN13 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.

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**2** LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

#### **Data Element Summary** Ref. Data Des. **Element** Name Attributes LIN01 350 **Assigned Identification** AN 1/20 Alphanumeric characters assigned for differentiation within a transaction Product/Service ID Qualifier ID 2/2 M LIN02 235 M Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buver's Part Number M LIN03 234 Product/Service ID AN 1/48 Buyer's Part Number 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** X AN 1/48 Purchase Order Number (when applicable) LIN06 235 Product/Service ID Qualifier ID 2/2 X Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Purchaser's Order Line Number

LIN07	234	Product/Service	ID	X	AN 1/48
		Purchase Order L	ine Number (when applicable)		
LIN08	235	Product/Service	ID Qualifier	X	ID 2/2
		Code identifying the Product/Service II	he type/source of the descriptive num D (234)	ıber u	sed in
		EC	Engineering Change Level		
LIN09	234	Product/Service	ID	X	AN 1/48
		Engineering Char	nge Level (when applicable)		
LIN10	235	Product/Service	ID Qualifier	X	ID 2/2
		Code identifying the Product/Service II	he type/source of the descriptive num D (234)	ıber u	sed in
		RY	Record Keeping or Model Year		
LIN11	234	Product/Service	ID	X	AN 1/48
		Model Year (wher	n applicable)		
LIN12	235	Product/Service	ID Qualifier	X	ID 2/2
		Code identifying the Product/Service II	he type/source of the descriptive num D (234)	ıber u	sed in
		PD	Part Number Description		
LIN13	234	Product/Service	ID	X	AN 1/48
		Buyer's Part Desc	cription (when applicable)		

Segment: UIT Unit Detail

Position: 020

**Loop:** LIN Mandatory

Level: Detail Usage: Optional

Max Use:

**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

Des. Element Name Attributes

M UIT01 C001 Composite Unit of Measure M

To identify a composite unit of measure (See Figures Appendix for

examples of use)

M C00101 355 Unit or Basis for Measurement Code M ID 2/2

Code specifying the units in which a value is being expressed, or manner

in which a measurement has been taken

EA Each

PC Piece

Segment: REF Reference Identification

Position: 140

**Loop:** LIN Mandatory

Level: Detail
Usage: Optional
Max Use: 12

**Purpose:** To specify identifying information

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

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.

Comments:

**Data Element Summary** 

Ref. Data

<u>Des. Element</u> Name Attributes

M REF01 128 Reference Identification Qualifier M ID 2/3

Code qualifying the Reference Identification

DK Dock Number

# REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

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.

If either PER05 or PER06 is present, then the other is required.
If either PER07 or PER08 is present, then the other is required.

Semantic Notes: Comments:

# **Data Element Summary**

	Ref. Data		Name Attributes		
M	PER01	366	Contact Function Code	M	ID 2/2
			Code identifying the major duty or responsibility of the named	perso	on or group
			IC Information Contact		
	PER02	93	Name	0	AN 1/60
			Free-form name		
	PER03	365	Communication Number Qualifier	X	ID 2/2
			Code identifying the type of communication number		
			TE Telephone		
	PER04	364	Communication Number	X	AN 1/80
			Complete communications number including country o applicable	r area	a code when
	PER05	365	Communication Number Qualifier	X	ID 2/2
			Code identifying the type of communication number		
			FX Facsimile		
	PER06	364	Communication Number	X	AN 1/80
			Complete Facsimile number including country or area applicable	code	when
	PER07	365	Communication Number Qualifier	X	ID 2/2

Code identifying the type of communication number

EM Electronic Mail

PER08 364 Communication Number X AN 1/80

Complete Email address 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.

If ATH03 is present, then ATH05 is required.
If ATH04 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.

ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through 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.

	Ref. Des.	Data <u>Element</u>		Dat	ta Element	Summary		
				<u>Name</u>	Attributes			
M	ATH	101	672	Reso	urce Autho	rization Code	M	ID 2/2
				Code		he resource which the buyer is autho	rizing	the seller to
				FI		Finished (Labor, Material, and Ove	rhead	/Burden)
				MT		Material		
				PQ		Cumulative Quantity Required Prior Period	r to Fi	rst Schedule
	ATH	H03	380	Quan	tity		X	R 1/15
				Nume	eric value of	quantity		
	ATH	H05	373	Date			X	DT 8/8
				Date 6	expressed a	s CCYYMMDD		

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.

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.

	Ref. Data					
	Des. Elen	_	Name Attribut	tes		
M	FST01	380	Quantity		M	R 1/15
			Numeric value	of quantity		
M	FST02 680		Forecast Qual	Forecast Qualifier		ID 1/1
			Code specifying action associat	orecas	st data or an	
			С	Firm		
			D	Planning		
M	M FST03 681		Forecast Timing Qualifier			ID 1/1
			Code specifying interval grouping of the forecast			
			С	Daily		
			D	Discrete		
			M	Monthly Bucket (Calendar Months)	)	
			W	Weekly Bucket (Monday through S	unday	y)
M	FST04	373	Requirement I	Date	M	DT 8/8
			Date expressed	d as CCYYMMDD		
	FST07	337	Time		X	TM 4/8

Time expressed in 24-hour clock time as follows: HHMMSSD, where H = hours (00-23), M = minutes (00-59) and S = integer seconds (00-59)

FST08 128 Reference Identification Qualifier X ID 2/3

Code qualifying the Reference Identification

DO Delivery Order Number

This qualifier will be used for inbound and outbound

files.

KB Beginning Kanban Serial Number

This qualifier will be used with inbound files only.

FST09 127 Reference Identification X AN 1/30

Dealer Order Number or Pull Signal (when applicable)

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.

If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

## **Data Element Summary**

Ref.	Data		Data Element Summary				
Des.	Eleme	<u>ent</u>	<u>Name</u>	<u>Attributes</u>			
SHP01 673		673	Quantity Qualifier			0	ID 2/2
			Code	specifying th	e type of quantity		
			01		Discrete Quantity		
			02		Cumulative Quantity		
			12		Ship Notice Quantity		
SH	IP02	380	Quan	tity		X	R 1/15
			Nume	ric value of c	quantity		
SH	SHP03 374 Date		Date/	Γime Qualifi	er	X	ID 3/3
	Code specifying type of date or time, or both date and		ime				
			011		Shipped		
			050		Received		
			051		Cumulative Quantity Start		
SH	IP04	373	Date			X	DT 8/8

Date expressed as CCYYMMDD

Segment: REF Reference Identification

Position: 480

**Loop:** SHP Optional

Data

Level: Detail Usage: Optional

Max Use: 5

**Purpose:** To specify identifying information

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

If either C04003 or C04004 is present, then the other is required.

If either C04005 or C04006 is present, then the other is required.

REF04 contains data relating to the value cited in REF02.

Semantic Notes: Comments:

Ref.

**Data Element Summary** 

Des. Element Name Attributes

M REF01 128 Reference Identification 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 Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Segment: CTT Transaction Totals

Position: 010

Loop:

Level: Summary Usage: Optional Max Use: 1

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

Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.

If either CTT05 or CTT06 is present, then the other is required.

**Semantic Notes:** 

**Comments:** 1 This segment is intended to provide hash totals to validate transaction

completeness and correctness.

## **Data Element Summary**

	Ref. Data <u>Des.</u> <u>Element</u>		Name Attributes		
M	CTT01	354	Number of Line Items	M	N0 1/6
			Total number of line items in the transaction set		
	CTT02	347	Hash Total	0	R 1/10

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:

Ref.

**Comments:** 1 SE is the last segment of each transaction set.

**Data Element Summary** 

Des. Element Name Attributes

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

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

Data

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

# **Generic Planning Schedule Example**

```
*ZZ*KARENSCUST
                                                  *77*X12SUPPLIER
*040728*1446*U*00400*00000021*0*P*~
GS*PS*KARENSCUST*X12SUPPLIER*20040728*1446*21*X*004010
ST*830*0001
BFR*00**Rel-X12*DL*A***20040715
N1*ST*Ship To 10*ZZ*10
N1*SU*X12 Supplier*ZZ*X12SUPPLIER
N1*MI*FACILITY ID: 10*ZZ*10
LIN*1*BP*X12-Part01*****EC*ECL***PD*X12-Part01 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PO**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*20040715
SHP*02*1000*050*20040715
LIN*2*BP*X12-Part02*****EC*ECL***PD*X12-Part02 Description
UTT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PO**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*20040715
SHP*02*1000*050*20040715
LIN*3*BP*X12-Part03*****EC*ECL***PD*X12-Part03 Description
UTT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PO**1000**20040701
ATH*FI**200000**20040701
ATH*MT**175000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
FST*81000*D*W*20041101
FST*121000*D*W*20041201
FST*161000*D*W*20050101
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*4*BP*Kanban-01*****EC*ECL***PD*Kanban-01 Description
UTT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PO**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
```

```
FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*5*BP*Kanban-02*****EC*ECL***PD*Kanban-02 Description
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
LIN*6*BP*Kanban-03*****EC*ECL***PD*Kanban-03 Description
UIT*EA
PER*SC*ContactName*TE*ContactPhone*EM*Contact@email.com*FX*ContactFax
ATH*PQ**1000**20040701
ATH*FI**100000**20040701
ATH*MT**150000**20040701
FST*11000*D*M*20040801
FST*26000*D*W*20040901
FST*41000*D*W*20041001
SHP*02*1000*011*
SHP*02*1000*050*20040715
CTT*6
SE*76*0001
GE*1*21
IEA*1*000000021
```