EDI Transaction Set

830 Planning Schedule with Release Capability

X12 Version 4010

September 2013

ECIA's EDI Committee has reviewed this transaction set and made modifications that will benefit the electronics industry by simplifying the transaction focusing on industry specific needs.

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830 Planning Schedule with Release Capability

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Functional Group ID=PS

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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.

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	
Must Use	230	N1	Name	M	1		
	280	PER	Administrative Communications Contact	O	1		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			>1	
Must Use	010	LIN	Item Identification	M	1		
Must Use	020	UIT	Unit Detail	M	1		
			LOOP ID - FST			>1	
Must Use	030	FST	Forecast Schedule	M	1		n1
			LOOP ID - SHP			25	
Must Use	470	SHP	Ship Delivery Pattern	M	1		
	480	REF	Reference Identification	O	1		

Summary:

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

Transaction Set Notes

1. At least one occurrence of segment FST is required.
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:	1
Purpose:	To indicate the start of a transaction set and to assign a control number
Syntax Notes:	
Semantic Notes:	1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:	

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
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: **1**   At least one of BFR02 or BFR03 is required.

Semantic Notes:
1   Does not apply.
2   BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
3   Does not apply.
4   Does not apply.
5   Does not apply.
6   Does not apply.

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		
BFR02	**127**	**Reference Identification**	**X**	**AN 1/30**
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
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		
>> **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		
		SH Shipment Based		
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**	**Date**	**M**	**DT 8/8**
		Date expressed as CCYYMMDD		
		Forecast horizon start date. The date when the forecast horizon (envelope) begins.		
BFR07	**373**	**Date**	**O**	**DT 8/8**
		Date expressed as CCYYMMDD		
		The date when the forecast horizon (envelope) ends.		
BFR08	**373**	**Date**	**M**	**DT 8/8**
		Date expressed as CCYYMMDD		
		Date forecast generated. The date the forecast data was generated.		

Segment:	**N1** Name
Position:	230
Loop:	N1
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	1 At least one of N102 or N103 is required.
	2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
	2 Does not apply.
Notes:	The N1 at the header level applies to all items (LIN) contained at the detail level.

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	
N102	**93**	**Name**	**X** **AN 1/60**
		Free-form name	
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	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		91 Assigned by Seller or Seller's Agent	
		92 Assigned by Buyer or Buyer's Agent	
N104	**67**	**Identification Code**	**X** **AN 2/80**
		Code identifying a party or other code	

Segment:	**PER** Administrative Communications Contact
Position:	280
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	1
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		
		BD Buyer Name or Department		
PER02	**93**	**Name**	**O**	**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 or area code when applicable		

Segment: # LIN Item Identification

Position: 010
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:
1   If either LIN04 or LIN05 is present, then the other is required.
2   If either LIN06 or LIN07 is present, then the other is required.
3   If either LIN08 or LIN09 is present, then the other is required.
Semantic Notes: 1   LIN01 is the line item identification
Comments:
1   See the Data Dictionary for a complete list of IDs.
2   LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes: If only the vendor part number (VP) is available, then send it in the first occurrence and float up all other remaining information.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
LIN01	350	**Assigned Identification**	O	**AN 1/20**
		Alphanumeric characters assigned for differentiation within a transaction set		
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**	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)		
		EC Engineering Change Level		
LIN05	234	**Product/Service ID**	X	**AN 1/48**
		Identifying number for a product or service		
LIN06	235	**Product/Service ID Qualifier**	X	**ID 2/2**
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		VP Vendor's (Seller's) Part Number		
LIN07	234	**Product/Service ID**	X	**AN 1/48**
		Identifying number for a product or service		
LIN08	235	**Product/Service ID Qualifier**	X	**ID 2/2**
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		PO Purchase Order Number		
LIN09	234	**Product/Service ID**	X	**AN 1/48**
		Identifying number for a product or service		

Segment: **UIT** Unit Detail
Position: 020
Loop: LIN
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	**C001**	**Composite Unit of Measure**	**M**
		To identify a composite unit of measure (See Figures Appendix for examples of use)	
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:	**FST** Forecast Schedule		

Segment: **FST** Forecast Schedule
Position: 030
Loop: FST
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify the forecasted dates and quantities
Syntax Notes:
Semantic Notes: 1 Does not apply.
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 Does not apply.

Data Element Summary

Ref. Des.	Data Element	Name		Attributes
FST01	380	**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		
		D	Planning	
		C	Firm	
FST03	681	**Forecast Timing Qualifier**		M ID 1/1
		Code specifying interval grouping of the forecast		
		D	Discrete	
		W	Weekly Bucket (Monday through Sunday)	
		M	Monthly	
		F	Flexible Interval	
FST04	373	**Date**		M DT 8/8
		Date expressed as CCYYMMDD		
FST05	681	**Date**		O DT 8/8
		Date expressed as CCYYMMDD		
		Not required except for flexible interval – so not recommended		
FST06	374	**Date Time Qualifier**		X ID 3/3
		If specific time is needed, can be used. Not recommended		
FST07	373	**Time**		X TM 4/8
		Not recommended		
FST08	128	**Reference Identification Qualifier**		X ID 2/3
		PO	if embedded releases with new purchase order is used in this process. Should only be provided here if firm schedule with its own purchase order identifier.	
FST09	127	**Reference Identification**		X AN 1/30
		Purchase Order identifier indicate for firm schedule with new purchase order.		

Segment:SHP **Shipped/Received Information**

Position:	470
Loop:	SHP Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify shipment and/or receipt information
Syntax Notes:	1 If SHP01 is present, then SHP02 is required.
	2 If SHP03 is present, then at least one of SHP04 or SHP05 is required.
	3 If SHP04 is present, then SHP03 is required.
	4 If SHP05 is present, then SHP03 is required.
Semantic Notes:	1 SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
	2 SHP06 is the cumulative quantity end date.
Comments:	1 The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
	2 If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

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		
	SHP03	**374**	**Date/Time Qualifier**	**X**	**ID 3/3**
			Code specifying type of date or time, or both date and time		
			050 Received		
	SHP04	**373**	**Date**	**X**	**DT 8/8**
			Date expressed as CCYYMMDD		
N/U	**SHP05**	**337**	**Time**	**X**	**TM 4/8**
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
N/U	**SHP06**	**373**	**Date**	**O**	**DT 8/8**
			Date expressed as CCYYMMDD		
N/U	**SHP07**	**337**	**Time**	**O**	**TM 4/8**
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		

Segment: **REF** Reference Identification
Position: 480
Loop: SHP
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify identifying information – in this case, last receipt information associated with the last shipment received..
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
REF01	**128**	**Reference Identification Qualifier**	**M**	**ID 2/2**
		Code identifying the reference identification		
		SI Shipper's Identifying Number for Shipment (SID)		
REF02	**127**	**Reference Identification**	**O**	**AN 1/30**
		Shipper ID Number		
REF03	**350**	**Description**	**X**	**AN 1/80**
		A free-form description to clarify the data elements and their content. Not used.		
REF04	**C040**	**Reference Identifier**	**O**	**Composite**
		Not used		

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:

```
ST*830*1234
BFR*05**366*DL*A*20101019*20110831*20101205
N1*ST*company name*91*1234
LIN*001*BP*PN12345*EC*001*VP*12345-6*PO*123456789
UIT*PC
FST*258*C*D*20101019
FST*52*C*D*20101101
FST*324*C*D*20101108
FST*463*C*D*20101129
FST*59*D*W*20110117
FST*54*D*W*20110124
FST*183*D*W*20110221
FST*63*D*W*20110228
FST*30*D*W*20110321
FST*82*D*W*20110328
FST*176*D*M*20110430
FST*557*D*M*20110531
FST*122*D*M*20110630
FST*454*D*M*20110731
FST*266*D*M*20110831
FST*0*D*M*20110930
SHP*01*912*050*20100810
REF*SI*7891234
SHP*01*912*050*20100622
REF*SI*7891521
SHP*02*6234*051*20100101**20101018
CTT*1
SE*28*1234
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