830 Planning Schedule with Release Capability

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.

ANSI standards and AIAG guidelines list many optional segments and elements in the v4010 830. Segments and elements not listed below will not be used by DDM Plastics. The supplier's software must be able to process all segments and elements listed. The left-hand column provides information on DDM's normal usage. "Always" means that the segment or element will always be sent by DDM Plastics. "Optional +" indicates that this segment is usually sent. "Optional –" means that this segment is rarely used.

Heading:

DDM Usage	Pos No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
Always	010	ST	Transaction Set Header	M	1		
Always	020	BFR	Beginning Segment for Planning Schedule	M	1		
Optional +	060	PER	Administrative contact	O	3		
			LOOP ID - N1			200	
Always +	230	N1	Name	O	1		

Detail:

DDM Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID – LIN			>1	
Always	010	LIN	Item Identification	M	1		
Always	020	UIT	Unit Detail	O	1		
Optional -	130	PRS	Part Release Status	O	1		
Optional +	230	ATH	Resource Authorization	O	20		
			LOOP ID – LIN/ N1			200	
Optional +	320	N1	Name	O	1		
			LOOP ID – LIN/FST			>1	
Optional +	410	FST	Forecast Schedule	O	1		
			LOOP ID – LIN/SDP			260	
Optional -	450	SDP	Ship/Delivery Pattern	O	1		
Optional -	460	FST	Forecast Schedule	O	260		
			LOOP ID – LIN/SHP			25	
Optional +	470	SHP	Shipped/Received Information	O	1		
Optional +	480	REF	Reference Identification	O	5		

Summary:

DDM Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
Always	010	CTT	Transaction Totals	O	1		n1
Always	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. 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

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

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 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
2 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
3 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
4 BFR08 is the date forecast generated: The date the forecast data was generated.
5 BFR09 is not used by DDM
6 BFR11 is not used by DDM – see LIN05

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	**BFR01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of transaction set 04 Change 05 Replace	**M ID 2/2**
Always	**BFR02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**
Always	**BFR03**	**328**	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	**X AN 1/30**
Always	**BFR04**	**675**	**Schedule Type Qualifier** Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast DL Delivery Based	**M ID 2/2**
Always	**BFR05**	**676**	**Schedule Quantity Qualifier** Code identifying the type of quantities used when defining a schedule or forecast A Actual Discrete Quantities	**M ID 1/1**
Always	**BFR06**	**373**	**Forecast Horizon Start Date** Date expressed as CCYYMMDD	**M DT 8/8**
Always	**BFR07**	**373**	**Forecast Horizon End Date** Date expressed as CCYYMMDD	**O DT 8/8**
Always	**BFR08**	**373**	**Generation Date** Date expressed as CCYYMMDD	**M DT 8/8**

Segment: **PER** **Administrative Communications Contact**
Position: 60
Loop: N1
Level: Header
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.
2 If either PER05 or PER06 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Always	**PER01**	**366**	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named EX Expeditor	**M ID 2/2**
Always	**PER02**	**93**	**Name** Free-form name	**O AN 1/60**
Optional +	**PER03**	**365**	**Communications Number Qualifier** Code identifying the type of communications number TE Telephone	**X ID 2/2**
Optional +	**PER04**	**364**	**Communications Number** Complete communications number including country or area code	**X A/N 1/80**
Optional +	**PER05**	**365**	**Communications Number Qualifier** Code identifying the type of communications number FX Facsimile	**X ID 2/2**
Optional +	**PER06**	**364**	**Communications Number** Complete communications number including country or area code	**X A/N 1/80**

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.
2 The N1*ST will be used at either the header level or at the detail level, but never at both levels. If all parts in a transaction set have the same ship to destination, the header level N1*ST will be used. If parts have different destinations, the detail level segment will be used within every LIN loop.

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name		Attributes	
Always	**N101**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual		**M**	**ID 2/3**
Always			MI	Material Release Issuer		
See comment 2			ST	Ship To		
Always			SU	Supplier/Manufacturer		
Always	**N102**	**93**	**Name** Free-form name		**X**	**AN 1/60**
Always	**N103**	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67)		**X**	**ID 1/2**
			1	D-U-N-S Number, Dun & Bradstreet		
Always	**N104**	**67**	**Identification Code** Code identifying a party or other code Suppress internal dashes and spaces.		**X**	**AN 2/80**

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.
2 If either LIN08 or LIN09 is present, then the other is required.
3 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.
2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Model Year, Engineering Change Level

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	LIN02	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	M ID 2/2
Always	LIN03	234	**Product/Service ID** Identifying number for a product or service	M AN 1/48
Always	LIN04	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) PO Purchase Order Number	X ID 2/2
Always	LIN05	234	**Product/Service ID** Identifying number for a product or service	X AN 1/48
Optional -	LIN08	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) RY Record Keeping or Model Year	X ID 2/2
Optional -	LIN09	234	**Product/Service ID** Identifying number for a product or service	X AN 1/48
Optional -	LIN12	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) EC Engineering Change Level	X ID 2/2
Optional -	LIN13	234	**Product/Service ID** Identifying number for a product or service	X AN 1/48

Segment: **UIT** **Unit Detail**
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify item unit data
Syntax Notes: **1** If UIT03 is present, then UIT02 is required.
Semantic Notes: UIT01 is a composite data element, C001, which contains 15 simple data elements. AIAG only utilizes the first component of the composite, data element 355. This implementation guideline reflects that decision by substituting 355 for C001, which is syntactically correct.
Comments:

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	**UIT01**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Any valid X12 code value except mutually defined: 'ZZ'	**M**

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

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	PRS01	682	**Part Release Status Code** Code identifying the status of the specific part number being released or forecast or being used in an engineering change Any valid X12 code value.	M ID 1/2

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
Always	**ATH01**	**672**	**Resource Authorization Code** Code identifying the resource which the buyer is authorizing the seller to commit to FI Finished (Labor, Material, and Overhead/Burden) MT Material PQ Cumulative Quantity Required Prior to First Schedule Period	**M ID 2/2**
Always	**ATH02**	**373**	**Date** Date expressed as CCYYMMDD	**X DT 8/8**
See syntax	**ATH03**	**380**	**Authorization Cum Required Quantity** Numeric value of quantity	**X R 1/15**
See syntax	**ATH05**	**373**	**Required Ship Date** Date expressed as CCYYMMDD	**X DT 8/8**

Segment: **N1** **Name**
Position: 320
Loop: LIN/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.
2 The N1*ST will be used at either the header level or at the detail level, but never at both levels. If all parts in a transaction set have the same ship to destination, the header level N1*ST will be used. If parts have different destinations, the detail level segment will be used.

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual ST Ship To	M ID 2/3
Always	N102	93	**Name** Free-form name	X AN 1/60
Always	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet	X ID 1/2
Always	N104	67	**Identification Code** Suppress internal dashes and spaces. Code identifying a party or other code	X AN 2/80

Segment: **FST** **Forecast Schedule**
Position: 460
Loop: LIN/FST Optional
Level: Detail
Usage: Optional
Max Use: 260
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: **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.

Data Element Summary

DDM Usage	Ref. Des.	Data Element	Name	Attributes
Always	FST01	380	**Quantity** Numeric value of quantity	M R 1/15
Always	FST02	680	**Forecast Qualifier** Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm D Planning	M ID 1/1
Always	FST03	681	**Forecast Timing Qualifier** Code specifying interval grouping of the forecast D Discrete F Flexible Interval (from Date X through Date Y) M Monthly Bucket (Calendar Months) W Weekly Bucket	M ID 1/1
Always	FST04	373	**Forecast Begin Date** Date expressed as CCYYMMDD	M DT 8/8
See syntax &comments	FST05	373	**Forecast End Date** Date expressed as CCYYMMDD	O DT 8/8

Segment: **SHP** **Shipped/Received Information**
Position: 470
Loop: LIN/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.
Semantic Notes:
1 SHP04 is the date shipped, delivered, 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, dates, and times.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Always	**SHP01**	**673**	**Quantity Qualifier** Code specifying the type of quantity 01 Discrete Quantity 02 Cumulative Quantity	**O ID 2/2**
Always	**SHP02**	**380**	**Quantity** Numeric value of quantity	**X R 1/15**
Always	**SHP03**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 050 Received 051 Cumulative Quantity Start	**X ID 3/3**
Always	**SHP04**	**373**	**Date** Date expressed as CCYYMMDD	**X DT 8/8**

Segment: **REF** **Reference Identification**
Position: 480
Loop: SHP Optional
Level: Detail
Usage: Optional
Max Use: 5
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. Des.	Data Element	Name	Attributes
Always	**REF01**	**128**	**Reference Identification Qualifier** 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	**M ID 2/3**
Always	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

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.
2 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. Des.	Data Element	Name	Attributes
Always	**CTT01**	**354**	**Number of Line Items** Total number of line items in the transaction set Total number of LIN segments	**M N0 1/6**
Always	**CTT02**	**347**	**Hash Total** 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. Hash total of quantities released (FST01)	**O 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:
Comments: **1** SE is the last segment of each transaction set.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Always	**SE01**	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
> Always	**SE02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**