



# ***PART 4:***

***830 (PLANNING SCHEDULE WITH RELEASE  
CAPACITY)***

***ANSI X.12 - RELEASE 003060***

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This CMI standard provides the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830). 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.

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat
<i>Data Segment Sequence for the Heading Area</i>				
ST	Transaction Set Header	M	1	
BFR	Beg Seg for Planning Schedule	M	1	
N1	Name	M	1	N1/200
N3	Address Information	M	2	
N4	Geographic Location	O	1	
<i>Data Segment Sequence for the Detail Area</i>				
LIN	Item Identification	M	1	LIN/10000
UIT	Unit Detail	M	1	
PID	Product/Item Description	M	1000	
REF	Reference Numbers	M	2	
PER	Admin Communications Contact	O	3	
ATH	Resource Authorization	M	20	
N1	Name	O	1	
N2	Address Information	O	2	
N3	Geographic Information	O	3	
SDP	Ship/Delivery Pattern	O	1	SDP/260 S
FST	Forecast Schedule	M	260	SDP
SHP	Shipped/Received Information	M	1	SHP/25
REF	Reference Numbers	O	5	SHP
<i>Data Segment Sequence for the Summary Area</i>				
CTT	Transaction Totals	M	1	
SE	Transaction Set Trailer	M	1	
Sample 830				

## **GLOSSARY**

Abbreviations in the columns headed **Req. Des.** (Requirement Designation) have the following definitions:

- |                 |  |
|-----------------|--|
| C (Conditional) | The presence of this item is dependent on the presence or absence of other items.  |
| F (Floating)    | This is used only for the NTE segment that may appear anywhere in the transaction set between the transaction set header and the transaction set trailer.  |
| M (Mandatory)   | This data segment shall be included in the transaction set. (Note that though a data segment may be mandatory in a loop of data segments, the loop itself is optional if the beginning segment of the loop is designated as optional.) |
| N (Not Used)    | CMI does not use this segment at this time.  |
| O (Optional)    | The presence of this data segment is at the option of the sending party.   |

Segment: ST - Transaction Set Header

Level: Heading

Max. Use: 1

Purpose: To indicate the start of the 830 transaction set and assign a transaction control number.

Comments: The transaction set control number (data element ST02) in the header must match the transaction set control number in the trailer (data element SE02).

Example: ST\*830\*000000001

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
ST01	143	Transaction Set ID Code	M ID 3/3	830
ST02	329	Transaction Set Control Number	M AN 4/9	A unique number assigned to each transaction set. This value must match the corresponding value in data element SE02.

Segment: BFR - Beginning Segment for Planning Schedule  
 Level: Heading  
 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.  
 Example: BFR\*05\*\*917001\*SH\*A\*910228\*920101\*910220\*\*\*

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
BFR01	353	Transaction Set Purpose Code	M ID 2/2	05 = Replace
BFR02	127	Reference Number	N	
BFR03	328	Release Number	M AN 1/30	
BFR04	675	Schedule Type Qualifier	M ID 2/2	SH = Shipment Based DL = Delivery Based
BFR05	676	Schedule Quantity Qualifier	M ID 1/1	"A" Net Quantities
BFR06	373	Date	M DT 6/6	Start Date
BFR07	373	Date	M DT 6/6	End Date
BFR08	373	Date	M DT 6/6	Release Issue Date
BFR09	373	Date	N	
BFR10	367	Contract Number	N	
BFR11	324	P.O. Number	O AN 1/22	If there is only one purchase order number for the entire release, use the PO number; otherwise, put the PO number in the LIN segment.

Segment: N1 - Name

Level: Heading

Max. Use: 1

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

Example: N1\*ST\*CMI COMPETITIVE SOLUTIONS, INC.\*01\*009571302

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
N101	098	Entity ID Code	M ID 2/2	BT = Bill-to Party ST = Ship-to Location SU = Supplier Location* SF = Ship-from Location*
N102	093	Name	O AN 1/35	Company Name
N103	066	ID Code Qualifier	M ID 1/2	Any Valid ANSI Data Element
N104	067	ID Code	M AN 2/9	

**\*Note:** RPS users have the ability to define the data elements used in the N1\*SU and N1\*SF segments on the 830 document via fields in Vendor Communications Update (SRPS1,4). If any of these fields are left null, the data will default from the vendor file (Vendor Maintenance; SRPS1,2). The controlling vendor code will then be used in the N1\*SU segment and the sub-vendor code will be used in the N1\*SF segment.

Segment: N3 - Address Information  
Level: Heading  
Max. Use: 2  
Purpose: To specify the location of the named party.  
Example: N3\*3940 Peninsular Drive; Suite 100

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
N301	166	Address	M AN 1/35	
N302	166	Address	N	

Segment: N4 - Geographic Location  
Level: Heading  
Max. Use: 1  
Purpose: To specify the geographic place of the named party.  
Example: N4\*Grand Rapids\*MI\*49456

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
N401	019	City Name	M AN 2/19	
N402	156	State or Province Code	M ID 2/2	
N403	116	Postal Code	M ID 5/9	
N404	026	Country Code	N	
N405	309	Location Qualifier	N	
N406	310	Location Ident.	N	

Segment: LIN - Item Identification  
 Level: Detail  
 Max. Use: 1  
 Purpose: To specify basic item identification data.  
 Example: LIN\*\*BP\*255\*VP\*2341123\*EC\*123

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
LIN01	350	Assigned Ident.	N	
LIN02	235	Product/Service ID Qualifier	M ID 2/2	BP = Buyer's Part Number
LIN03	234	Product/Service ID	M AN 1/20	Part Number
LIN04	235	Product/Service ID Qualifier	O ID 2/2	VP = Vendor's Part Number
LIN05	234	Product/Service ID	O AN 1/20	Part Number
LIN06	235	Product/Service ID Qualifier	O AN 2/2	EC = Engineering Change
LIN07	234	Product/Service ID	O AN 1/20	Engineering Change Revision Level
LIN08	235	Product/Service ID Qualifier	O AN 2/2	PO = Purchase Order
LIN09	234	Product/Service ID	O AN 1/20	Purchase Order Number

**Note: If multiple PO numbers exist, the PO number will show up on the LIN segment for each detail; otherwise, the PO number will show up on the BFR segment.**

Segment: UIT - Unit Detail  
Level: Detail  
Max. Use: 1  
Purpose: To specify item unit data.  
Example: UIT\*EA

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
UIT01	355	Unit of Measure Code	M ID 2/2	
UIT02	212	Unit Price	O R 1/14	

Segment: PID - Product/Item Description  
Level: Detail  
Max. Use: 1000  
Purpose: To describe a product or process in coded or freeform format.  
Example: PID\*F\*\*\*\*Sheet Metal

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
PID01	349	Item Description Type	M ID 1/1	F = Freeform
PID02	750	Prod/Proc Char Code	N	
PID03	348	Item Desc. Qualifier	N	
PID04	751	Product Desc. Code	N	
PID05	352	Description	M AN 1/80	
PID06	752	Surf/Layer Pos Code	N	

Segment: REF - Reference Numbers  
Level: Detail  
Max. Use: 2  
Purpose: To transmit identifying numbers associated with named party.  
Example: REF\*DK\*DOCK1

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
REF01	128	Reference Number Qualifier	M ID 2/2	DK = Dock Code
REF02	127	Reference Number	M AN 1/30	
REF03	352	Description	N	

Segment: PER - Administrative Communications Contact  
 Level: Detail  
 Max. Use: 3  
 Purpose: To identify a person or office to whom administrative communications should be directed.  
 Example: PER\*BD\*SUE\*TE\*555-1234

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
PER01	366	Contact Function Code	M ID 2/2	BD = Buyer Name or Department EX = Expeditor SC = Schedule Contact
PER02	093	Name	O AN 1/35	
PER03	365	Communication No. Qualifier	O ID 2/2	TE = Telephone
PER04	364	Communication Number	O AN 7/21	Telephone Number

Segment: ATH - Resource Authorization

Level: Detail

Max. Use: 20

Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule.

Example: ATH\*PQ\*\*22\*\*971212  
ATH\*FI\*970625\*980\*051121  
ATH\*MI\*970626\*980\*051121

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
ATH01	672	Resource Authorization Code	M ID 2/2	FI = Finished Inventory MT = Material Inventory PQ = Cumulative Quantity Required Prior to First Schedule Period
ATH02	373	Date	O DT 6/6	Used for Codes FI and MT
ATH03	380	Quantity	M R 1/10	
ATH04	380	Quantity	N	
ATH05	373	Date	M DT 6/6	Cumulative Quantity Start Date

Segment: N1 - Name

Level: Heading

Max. Use: 1

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

Example: N1\*ST\*CMI COMPETITIVE SOLUTIONS, INC.\*01\*009571302

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
N101	098	Entity ID Code	M ID 2/2	ST = Ship-to Location
N102	093	Name	O AN 1/35	Company Name
N103	066	ID Code Qualifier	M ID 1/2	Any Valid ANSI Data Element
N104	067	ID Code	M AN 2/9	

Segment: N3 - Address Information  
Level: Heading  
Max. Use: 2  
Purpose: To specify the location of the named party.  
Example: N3\*3940 Peninsular Drive; Suite 100

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
N301	166	Address	M AN 1/35	Ship-to Address Line 1
N302	166	Address	N	Ship-to Address Line 2

Segment: N4 - Geographic Location

Level: Heading

Max. Use: 1

Purpose: To specify the geographic place of the named party.

Example: N4\*Grand Rapids\*MI\*49456

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
N401	019	City Name	M AN 2/19	
N402	156	State or Province Code	M ID 2/2	
N403	116	Postal Code	M ID 5/9	
N404	026	Country Code	N	
N405	309	Location Qualifier	N	
N406	310	Location Ident.	N	

Segment:       SDP - Ship/Delivery Pattern  
Level:            Detail  
Max. Use:        1  
Purpose:         To identify specific ship/delivery requirements.  
Example:         SDP\*S\*Z

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
SDP01	678	Ship/Delivery Pattern Code	M ID 1/2	Any Valid Code
SDP02	679	Ship/Delivery Pattern Time	M ID 1/1	Z = Mutually Defined
SDP03	678	Ship/Delivery Pattern Code	N	
SDP04	679	Ship/Delivery Pattern Time	N	
SDP05	678	Ship/Delivery Pattern Code	N	
SDP06	679	Ship/Delivery Pattern Time	N	
SDP07	678	Ship/Delivery Pattern Code	N	
SDP08	679	Ship/Delivery Pattern Time	N	

Segment: FST - Forecast Schedule  
 Level: Detail  
 Max. Use: 260  
 Purpose: To specify the forecasted dates and quantities.  
 Example: FST\*2050\*C\*D\*910204

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
FST01	380	Quantity	M R 1/10	
FST02	680	Forecast Qualifier	M ID 1/1	A = Immediate Quantity C = Firm Quantity D = Planning Quantity
FST03	681	Forecast Timing Qualifier	M ID 1/1	D = Discrete W = Weekly F = Flexible Time Interval
FST04	373	Date	M DT 6/6	Delivery/Ship Date
FST05	373	Date	C DT 6/6	End Date
FST06	374	Date/Time Qualifier	N	
FST07	337	Time	N	
FST08	128	Reference No. Qualifier	N	
FST09	127	Reference Number	N	

Segment: SHP - Shipped/Received Information  
 Level: Detail  
 Max. Use: 1  
 Purpose: To specify shipment and/or receipt information.  
 Example: SHP\*01\*52\*050\*900827

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
SHP01	673	Quantity Qualifier	M ID 2/2	01 = Discrete 02 = Cumulative
SHP02	380	Quantity	C R 1/10	Last Receipt Qty if SHP01 = 01 Cum Receipt Qty if SHP01 = 02
SHP03	374	Date/Time Qualifier	O ID 3/3	When SHP = 01: 011 Shipped 050 Received When SHP = 02: 011 Shipped 050 Received 051 Cum Qty
SHP04	373	Date	C DT 6/6	Last Receipt Date if SHP03 = 050 Cum Start Date if SHP03 = 051 Ship Date if SHP03 = 011
SHP05	337	Time	N	
SHP06	373	Date	O	Cum End Date if SHP03 = 051
SHP07	337	Time	N	

Segment: REF - Reference Numbers

Level: Detail

Max. Use: 1

Purpose: To transmit identifying numbers associated with named party.

Example: REF\*SI\*45

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
REF01	128	Reference Number Qualifier	M ID 2/2	SI = Last Received Shipment Identification Number
REF02	127	Reference Number	M AN 1/30	
REF03	352	Description	N	

Segment: CTT - Transaction Totals

Level: Summary

Max. Use: 1

Purpose: To transmit a hash total for the forecast quantity within the transaction set.

Example: CTT\*1\*1600

ELEM ID	ELE#	NAME	FEATURES	COMMENTS
CTT01	354	Number of Line Items	M N0 1/6	Total Number of LIN Segments
CTT02	347	Quantity Hash Total	M R 1/10	
CTT03	081	Weight	N	
CTT04	355	Unit of Measure Code	N	
CTT05	183	Volume	N	
CTT06	355	Unit of Measure Code	N	
CTT07	352	Description	N	

Segment: SE - Transaction Set Trailer

Level: Summary

Max. Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments.

Comments: The transaction control number (SE02) must be identical to the transaction set control number in the ST segment (ST02).

Example: SE\*25\*0000000005

<b>ELEM ID</b>	<b>ELE#</b>	<b>NAME</b>	<b>FEATURES</b>	<b>COMMENTS</b>
SE01	096	Number of Included Segments	M N0 1/6	Number of Segments Including SE and ST
SE02	329	Transaction Set Control Number	M AN 4/9	Same as ST02

Character	Represented As
data segment terminating character (a hexadecimal 1C)	a period ( . )
data element separating character	an asterisk ( * )
data sub-element separating character	a backslash ( \ )
<p>The actual characters will be defined in the ISA segment. These characters are being used for display purposes only.</p> <p>Any valid ASNI X.12 defined &lt;control_char&gt; will be used for the data segment terminator (i.e., hex 1C).</p> <p>Any valid ANSI X.12 defined &lt;control_char&gt;, &lt;special_char&gt;, or &lt;other_special_char&gt; will be used for the data element and subelement separator (i.e., * and \).</p>	

The following represents a sample 830:

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ISA*00*          *00*          *01*005346481      *01*005346481      *940613*102
(ISA cont.) 5*U*02040*000000333*0*P*\ .
GS*PS*005346481*005346481*940613*1025*000000433*X*003060.
ST*830*000001048.
BFR*05**929701*DL*A*940606*950531*940613***.
N1*ST*CMI - COMPETITIVE SOL.*1*009571302.
N3*3940 PENINSULAR DR #100.
N4*GRAND RAPIDS*MI*49506.
N1*SU*UNIVERSAL SUPPLY INC.*92*1000.
N3*2107 CROOKS ROAD.
N4*TORONTO*ONT*L16 LH8.
PER*SC**TE*416/555-1256.
N1*SF*UNIVERSAL SUPPLY INC.*92*1000.
N3*2107 CROOKS ROAD.
N4*TORONTO*ONT*L16 LH8.
PER*SC**TE*416/555-1256.
LIN**BP*440*VP*VP440*PO*PO123.
UIT*EA*2.00000.
PID*F***WIDGETS.
REF*DK*DOCK1.
PER*BD*John Doe*TE*616/957-4444.
ATH*PQ**10000**940101.
SDP*S*Z.
FST*600*C*D*940606.
FST*5000*D*W*940704.
FST*10000*D*F*940905*941002.
SHP*01*10000*050*940613.
REF*SI*987654321.
SHP*02*10000*051*940606**940613.
LIN**BP*4562*VP*100*EC*123*PO*PO456.
UIT*EA.
PID*F***WIDGET COUPLING.
PER*BD*John Doe*TE*616/957-4444.
ATH*PQ**0**900819.
ATH*MT**600**900819.
SDP*S*Z.
FST*50*C*D*940606.
FST*50*C*D*940613.
FST*150*C*W*940627.
FST*2000*D*W*940801.
CTT*2*20550.
SE*49*000001048.
GE*1*000000433.
IEA*1*000000333.

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