



830 Planning Schedule

X12 Vers. 4010: 830 Planning Schedule

Status: Final

| | |
|-------------------------|---|
| Author: | Adam Tenorio |
| Trading Partner: | CSA Suppliers |
| Modified: | 11/9/2011 |
| Notes: | 207 South West Street Auburn, IN 46706 |
| | atenorio@cooperstandar d.com |
| | Phone: 440.263.5616 |
| | Fax: 260.927.3201 |

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830 Planning Schedule with Release Capability

Functional Group=**PS**

Purpose: 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.

Not Defined:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|----------------------------|------------|----------------|---------------|--------------|--------------|
| | ISA | Interchange Control Header | M | 1 | | | Must use |
| | GS | Functional Group Header | M | 1 | | | Must use |

Heading:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|---|------------|----------------|---------------|--------------|--------------|
| 010 | ST | Transaction Set Header | M | 1 | | | Must use |
| 020 | BFR | Beginning Segment for Planning Schedule | M | 1 | | | Must use |

| <u>LOOP ID - N1</u> | | <u>200</u> | | | | | |
|---------------------|----|-----------------------------|---|---|--|--|----------|
| 230 | N1 | Name | O | 1 | | | Must use |
| 240 | N2 | Additional Name Information | O | 2 | | | Used |
| 250 | N3 | Address Information | O | 2 | | | Must use |
| 260 | N4 | Geographic Location | O | 1 | | | Must use |

Detail:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|----------------------|-----------|---------------------------------------|------------|----------------|---------------|----------------|--------------|
| <u>LOOP ID - LIN</u> | | <u>>1</u> | | | | | |
| 010 | LIN | Item Identification | M | 1 | | | Must use |
| 020 | UIT | Unit Detail | O | 1 | | | Must use |
| 130 | PRS | Part Release Status | O | 1 | | | Used |
| 140 | REF | Reference Identification | O | 12 | | | Used |
| 150 | PER | Administrative Communications Contact | O | 3 | | | Must use |
| 230 | ATH | Resource Authorization | O | 20 | | | Must use |
| <u>LOOP ID - FST</u> | | <u>>1</u> | | | | <u>N2/410L</u> | |
| 410 | FST | Forecast Schedule | O | 1 | | N2/410 | Must use |
| <u>LOOP ID - SHP</u> | | <u>25</u> | | | | | |
| 470 | SHP | Shipped/Received Information | O | 1 | | | Must use |

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|--------------------------|------------|----------------|---------------|--------------|--------------|
| 480 | REF | Reference Identification | O | 5 | | | Used |

Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|-------------------------|------------|----------------|---------------|--------------|--------------|
| 010 | CTT | Transaction Totals | O | 1 | | N3/010 | Must use |
| 020 | SE | Transaction Set Trailer | M | 1 | | | Must use |

Not Defined:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Notes</u> | <u>Usage</u> |
|------------|-----------|-----------------------------|------------|----------------|---------------|--------------|--------------|
| | GE | Functional Group Trailer | M | 1 | | | Must use |
| | IEA | Interchange Control Trailer | M | 1 | | | Must use |

Notes:

- 2/410L 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.
- 2/410 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.
- 3/010 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.

ISA Interchange Control Header

| | |
|--------------------------------|---------------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 16 |

User Option (Usage): Must use

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|--|------------|-------------|----------------|--------------|
| ISA01 | I01 | Authorization Information Qualifier | M | ID | 2/2 | Must use |
| Description: Code to identify the type of information in the Authorization Information CodeList Summary (Total Codes: 7, Included: 1) <u>Code</u> <u>Name</u> 00 No Authorization Information Present (No Meaningful Information in I02) | | | | | | |
| ISA02 | I02 | Authorization Information | M | AN | 10/10 | Must use |
| Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01) | | | | | | |
| ISA03 | I03 | Security Information Qualifier | M | ID | 2/2 | Must use |
| Description: Code to identify the type of information in the Security Information CodeList Summary (Total Codes: 2, Included: 1) <u>Code</u> <u>Name</u> 00 No Security Information Present (No Meaningful Information in I04) | | | | | | |
| ISA04 | I04 | Security Information | M | AN | 10/10 | Must use |
| Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03) | | | | | | |
| ISA05 | I05 | Interchange ID Qualifier | M | ID | 2/2 | Must use |
| Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified CodeList Summary (Total Codes: 38, Included: 1) <u>Code</u> <u>Name</u> 01 Duns (Dun & Bradstreet) | | | | | | |
| ISA06 | I06 | Interchange Sender ID | M | AN | 15/15 | Must use |
| Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element | | | | | | |
| ISA07 | I05 | Interchange ID Qualifier | M | ID | 2/2 | Must use |
| Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified CodeList Summary (Total Codes: 38, Included: 1) | | | | | | |

| | | <u>Code</u> | <u>Name</u> | | | |
|--|-----|---|------------------------------------|----|-------|----------|
| | | 01 | Duns (Dun & Bradstreet) | | | |
| ISA08 | I07 | Interchange Receiver ID | M | AN | 15/15 | Must use |
| Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them | | | | | | |
| ISA09 | I08 | Interchange Date | M | DT | 6/6 | Must use |
| Description: Date of the interchange | | | | | | |
| ISA10 | I09 | Interchange Time | M | TM | 4/4 | Must use |
| Description: Time of the interchange | | | | | | |
| ISA11 | I10 | Interchange Control Standards Identifier | M | ID | 1/1 | Must use |
| Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer | | | | | | |
| All valid standard codes are used. (Total Codes: 1) | | | | | | |
| ISA12 | I11 | Interchange Control Version Number | M | ID | 5/5 | Must use |
| Description: Code specifying the version number of the interchange control segments | | | | | | |
| CodeList Summary (Total Codes: 14, Included: 1) | | | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | 00300 | Standard Issued as ANSI X12.5-1992 | | | |
| ISA13 | I12 | Interchange Control Number | M | NO | 9/9 | Must use |
| Description: A control number assigned by the interchange sender | | | | | | |
| ISA14 | I13 | Acknowledgment Requested | M | ID | 1/1 | Must use |
| Description: Code sent by the sender to request an interchange acknowledgment (TA1) | | | | | | |
| CodeList Summary (Total Codes: 2, Included: 1) | | | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | 0 | No Acknowledgment Requested | | | |
| ISA15 | I14 | Usage Indicator | M | ID | 1/1 | Must use |
| Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information | | | | | | |
| CodeList Summary (Total Codes: 3, Included: 1) | | | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | P | Production Data | | | |
| ISA16 | I15 | Component Element Separator | M | | 1/1 | Must use |
| Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator | | | | | | |

GS Functional Group Header

| | |
|--------------------------------|--------------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 8 |

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|---|------------|-------------|----------------|--------------|
| GS01 | 479 | Functional Identifier Code | M | ID | 2/2 | Must use |
| Description: Code identifying a group of application related transaction sets | | | | | | |
| CodeList Summary (Total Codes: 240, Included: 1) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
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| GS02 | 142 | Application Sender's Code | M | AN | 2/15 | Must use |
| Description: Code identifying party sending transmission; codes agreed to by trading partners | | | | | | |
| GS03 | 124 | Application Receiver's Code | M | AN | 2/15 | Must use |
| Description: Code identifying party receiving transmission; codes agreed to by trading partners | | | | | | |
| GS04 | 373 | Date | M | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| GS05 | 337 | Time | M | TM | 4/8 | Must use |
| Description: 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) | | | | | | |
| GS06 | 28 | Group Control Number | M | N0 | 1/9 | Must use |
| Description: Assigned number originated and maintained by the sender | | | | | | |
| GS07 | 455 | Responsible Agency Code | M | ID | 1/2 | Must use |
| Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 | | | | | | |
| CodeList Summary (Total Codes: 2, Included: 1) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
| X Accredited Standards Committee X12 | | | | | | |
| GS08 | 480 | Version / Release / Industry Identifier Code | M | AN | 1/12 | Must use |
| Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed | | | | | | |

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|--|-----------|---------------------|--|-------------|----------------|--------------|
| CodeList Summary (Total Codes: 39, Included: 1) | | | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | 004010 | Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997 | | | |

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transaction Set Header

| | |
|---------------------|-------------|
| Pos: 010 | Max: 1 |
| Heading - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---------------------------------|------------|-------------|----------------|--------------|
| ST01 | 143 | Transaction Set Identifier Code | M | ID | 3/3 | Must use |

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code Name

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| | | | | | | |
|------|-----|--------------------------------|---|----|-----|----------|
| ST02 | 329 | Transaction Set Control Number | M | AN | 4/9 | Must use |
|------|-----|--------------------------------|---|----|-----|----------|

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

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BFR Beginning Segment for Planning Schedule

| | |
|---------------------|-------------|
| Pos: 020 | Max: 1 |
| Heading - Mandatory | |
| Loop: N/A | Elements: 9 |

User Option (Usage): Must use

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|-------------------------------------|------------|-------------|----------------|--------------|
| BFR01 | 353 | Transaction Set Purpose Code | M | ID | 2/2 | Must use |
| Description: Code identifying purpose of transaction set | | | | | | |
| CodeList Summary (Total Codes: 65, Included: 3) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
| 00 Original | | | | | | |
| 04 Change | | | | | | |
| 05 Replace | | | | | | |
| BFR02 | 127 | Reference Identification | X | AN | 1/30 | Must use |
| Description: 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 | Must use |
| Description: 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 | Must use |
| Description: Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast | | | | | | |
| CodeList Summary (Total Codes: 11, Included: 2) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
| DL Delivery Based | | | | | | |
| SH Shipment Based | | | | | | |
| BFR05 | 676 | Schedule Quantity Qualifier | M | ID | 1/1 | Must use |
| Description: Code identifying the type of quantities used when defining a schedule or forecast | | | | | | |
| CodeList Summary (Total Codes: 4, Included: 1) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
| A Actual Discrete Quantities | | | | | | |
| BFR06 | 373 | Date | M | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| BFR07 | 373 | Date | O | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| BFR08 | 373 | Date | M | DT | 8/8 | Must use |

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---|------------|-------------|----------------|--------------|
| | | Description: Date expressed as CCYYMMDD | | | | |
| BFR11 | 324 | Purchase Order Number | O | AN | 1/22 | Must use |
| | | Description: Identifying number for Purchase Order assigned by the orderer/purchaser | | | | |

Syntax Rules:

1. R0203 - At least one of BFR02 or BFR03 is required.

Semantics:

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.)

Loop Name

| | |
|----------|---------------|
| Pos: 230 | Repeat: 200 |
| Optional | |
| Loop: N1 | Elements: N/A |

User Option (Usage): Must use

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

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|-----------------------------|------------|----------------|---------------|--------------|
| 230 | N1 | Name | O | 1 | | Must use |
| 240 | N2 | Additional Name Information | O | 2 | | Used |
| 250 | N3 | Address Information | O | 2 | | Must use |
| 260 | N4 | Geographic Location | O | 1 | | Must use |

N1 Name

| | |
|---------------------------|--------------------|
| Pos: 230 | Max: 1 |
| Heading - Optional | |
| Loop: N1 | Elements: 4 |

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|--------------------------------------|------------|-------------|----------------|--------------|
| N101 | 98 | Entity Identifier Code | M | ID | 2/3 | Must use |
| Description: Code identifying an organizational entity, a physical location, property or an individual | | | | | | |
| CodeList Summary (Total Codes: 1312, Included: 2) | | | | | | |
| Code Name | | | | | | |
| ST Ship To | | | | | | |
| SU Supplier/Manufacturer | | | | | | |
| N102 | 93 | Name | X | AN | 1/60 | Must use |
| Description: Free-form name | | | | | | |
| N103 | 66 | Identification Code Qualifier | X | ID | 1/2 | Must use |
| Description: Code designating the system/method of code structure used for Identification Code (67) | | | | | | |
| CodeList Summary (Total Codes: 215, Included: 1) | | | | | | |
| Code Name | | | | | | |
| 1 D-U-N-S Number, Dun & Bradstreet | | | | | | |
| N104 | 67 | Identification Code | X | AN | 2/80 | Must use |
| Description: Code identifying a party or other code | | | | | | |
| User Note 1: | | | | | | |
| <i>When the N1-01=SU, this code is the CSA Supplier ID and must be used on pallet and carton labels</i> | | | | | | |

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

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.

N2 Additional Name Information

| | |
|--------------------|-------------|
| Pos: 240 | Max: 2 |
| Heading - Optional | |
| Loop: N1 | Elements: 1 |

User Option (Usage): Used
Purpose: To specify additional names or those longer than 35 characters in length

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|-----------------------------|-----------|---------------------|------------|-------------|----------------|--------------|
| N201 | 93 | Name | M | AN | 1/60 | Must use |
| Description: Free-form name | | | | | | |

N3 Address Information

| | |
|--------------------|-------------|
| Pos: 250 | Max: 2 |
| Heading - Optional | |
| Loop: N1 | Elements: 1 |

User Option (Usage): Must use
Purpose: To specify the location of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|----------------------------------|-----------|---------------------|------------|-------------|----------------|--------------|
| N301 | 166 | Address Information | M | AN | 1/55 | Must use |
| Description: Address information | | | | | | |

N4 Geographic Location

| | |
|--------------------|-------------|
| Pos: 260 | Max: 1 |
| Heading - Optional | |
| Loop: N1 | Elements: 3 |

User Option (Usage): Must use

Purpose: To specify the geographic place of the named party

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|------------|-------------|----------------|--------------|
| N401 | 19 | City Name | O | AN | 2/30 | Must use |
| | | Description: Free-form text for city name | | | | |
| N402 | 156 | State or Province Code | O | ID | 2/2 | Must use |
| | | Description: Code (Standard State/Province) as defined by appropriate government agency | | | | |
| N403 | 116 | Postal Code | O | ID | 3/15 | Must use |
| | | Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States) | | | | |

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

Loop Item Identification

| | |
|-----------|---------------|
| Pos: 010 | Repeat: >1 |
| Mandatory | |
| Loop: LIN | Elements: N/A |

User Option (Usage): Must use

Purpose: To specify basic item identification data

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|---------------------------------------|------------|----------------|---------------|--------------|
| 010 | LIN | Item Identification | M | 1 | | Must use |
| 020 | UIT | Unit Detail | O | 1 | | Must use |
| 130 | PRS | Part Release Status | O | 1 | | Used |
| 140 | REF | Reference Identification | O | 12 | | Used |
| 150 | PER | Administrative Communications Contact | O | 3 | | Must use |
| 230 | ATH | Resource Authorization | O | 20 | | Must use |
| 410 | | Loop FST | O | | >1 | Must use |
| 470 | | Loop SHP | O | | 25 | Must use |

LIN Item Identification

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Detail - Mandatory | |
| Loop: LIN | Elements: 5 |

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|------------------------------|------------|-------------|----------------|--------------|
| LIN01 | 350 | Assigned Identification | O | AN | 1/20 | Used |
| Description: Alphanumeric characters assigned for differentiation within a transaction set User Note 1: Future use: To be sent when when plant has implemented SAP. Must be sent in the LIN-01 of ASN | | | | | | |
| LIN02 | 235 | Product/Service ID Qualifier | M | ID | 2/2 | Must use |
| Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) CodeList Summary (Total Codes: 477, Included: 1) <u>Code</u> <u>Name</u> BP Buyer's Part Number | | | | | | |
| LIN03 | 234 | Product/Service ID | M | AN | 1/48 | Must use |
| Description: Identifying number for a product or service | | | | | | |
| LIN04 | 235 | Product/Service ID Qualifier | X | ID | 2/2 | Must use |
| Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) CodeList Summary (Total Codes: 477, Included: 1) <u>Code</u> <u>Name</u> PO Purchase Order Number | | | | | | |
| LIN05 | 234 | Product/Service ID | X | AN | 1/48 | Must use |
| Description: Identifying number for a product or service | | | | | | |

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.

13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

Semantics:

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.

UIT Unit Detail

| | |
|-------------------|-------------|
| Pos: 020 | Max: 1 |
| Detail - Optional | |
| Loop: LIN | Elements: 1 |

User Option (Usage): Must use

Purpose: To specify item unit data

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|---------------------------|------------|-------------|----------------|--------------|
| UIT01 | C001 | Composite Unit of Measure | M | Comp | | Must use |

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

Comments:

1. If C001-02 is not used, its value is to be interpreted as 1.
2. If C001-03 is not used, its value is to be interpreted as 1.
3. If C001-05 is not used, its value is to be interpreted as 1.
4. If C001-06 is not used, its value is to be interpreted as 1.
5. If C001-08 is not used, its value is to be interpreted as 1.
6. If C001-09 is not used, its value is to be interpreted as 1.
7. If C001-11 is not used, its value is to be interpreted as 1.
8. If C001-12 is not used, its value is to be interpreted as 1.
9. If C001-14 is not used, its value is to be interpreted as 1.
10. If C001-15 is not used, its value is to be interpreted as 1.

| | | | | | | |
|----------|-----|------------------------------------|---|----|-----|----------|
| UIT01-01 | 355 | Unit or Basis for Measurement Code | M | ID | 2/2 | Must use |
|----------|-----|------------------------------------|---|----|-----|----------|

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

User Note 1:

Any valid X12 code value except mutually defined: 'ZZ'

CodeList Summary (Total Codes: 794, Included: 1)

| <u>Code</u> | <u>Name</u> |
|-------------|-------------|
| PC | Piece |

Syntax Rules:

1. C0302 - If UIT03 is present, then UIT02 is required.

PRS Part Release Status

| | |
|-------------------|-------------|
| Pos: 130 | Max: 1 |
| Detail - Optional | |
| Loop: LIN | Elements: 1 |

User Option (Usage): Used

Purpose: To indicate the status of the part being ordered or forecast with respect to this material release or planning document

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--------------------------|------------|-------------|----------------|--------------|
| PRS01 | 682 | Part Release Status Code | M | ID | 1/2 | Must use |

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

REF Reference Identification

| | |
|-------------------|-------------|
| Pos: 140 | Max: 12 |
| Detail - Optional | |
| Loop: LIN | Elements: 2 |

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|------------------------------------|------------|-------------|----------------|--------------|
| REF01 | 128 | Reference Identification Qualifier | M | ID | 2/3 | Must use |

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 3)

Code Name

| | |
|----|-------------------------------------|
| DK | Dock Number |
| LF | Assembly Line Feed Location |
| RL | Reserve Assembly Line Feed Location |

| | | | | | | |
|-------|-----|--------------------------|---|----|------|------|
| REF02 | 127 | Reference Identification | X | AN | 1/30 | Used |
|-------|-----|--------------------------|---|----|------|------|

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

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

PER Administrative Communications Contact

| | |
|-------------------|-------------|
| Pos: 150 | Max: 3 |
| Detail - Optional | |
| Loop: LIN | Elements: 2 |

User Option (Usage): Must use

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> | | | | |
|--|-------------|------------------------------|------------|-------------|----------------|--------------|-------------|-------------|----|-----------|
| PER01 | 366 | Contact Function Code | M | ID | 2/2 | Must use | | | | |
| Description: Code identifying the major duty or responsibility of the person or group named | | | | | | | | | | |
| CodeList Summary (Total Codes: 230, Included: 1) | | | | | | | | | | |
| <table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>EX</td><td>Expeditor</td></tr></table> | | | | | | | <u>Code</u> | <u>Name</u> | EX | Expeditor |
| <u>Code</u> | <u>Name</u> | | | | | | | | | |
| EX | Expeditor | | | | | | | | | |
| PER02 | 93 | Name | O | AN | 1/60 | Must use | | | | |
| Description: Free-form name | | | | | | | | | | |

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

ATH Resource Authorization

| | |
|-------------------|-------------|
| Pos: 230 | Max: 20 |
| Detail - Optional | |
| Loop: LIN | Elements: 3 |

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|--|-----------|------------------------------------|------------|-------------|----------------|--------------|
| ATH01 | 672 | Resource Authorization Code | M | ID | 2/2 | Must use |
| Description: Code identifying the resource which the buyer is authorizing the seller to commit to | | | | | | |
| CodeList Summary (Total Codes: 8, Included: 3) | | | | | | |
| Code Name | | | | | | |
| FI Finished (Labor, Material, and Overhead/Burden) | | | | | | |
| MT Material | | | | | | |
| PQ Cumulative Quantity Required Prior to First Schedule Period | | | | | | |
| ATH03 | 380 | Quantity | X | R | 1/15 | Must use |
| Description: Numeric value of quantity | | | | | | |
| ATH05 | 373 | Date | X | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |

Syntax Rules:

1. R0203 - At least one of ATH02 or ATH03 is required.
2. C0305 - If ATH03 is present, then ATH05 is required.
3. C0405 - If ATH04 is present, then ATH05 is required.

Semantics:

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.
2. 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.

Loop Forecast Schedule

| | |
|-----------|---------------|
| Pos: 410 | Repeat: >1 |
| Optional | |
| Loop: FST | Elements: N/A |

User Option (Usage): Must use

Purpose: To specify the forecasted dates and quantities

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|---------------------|------------|----------------|---------------|--------------|
| 410 | FST | Forecast Schedule | O | 1 | | Must use |

FST Forecast Schedule

| | |
|-------------------|-------------|
| Pos: 410 | Max: 1 |
| Detail - Optional | |
| Loop: FST | Elements: 4 |

User Option (Usage): Must use

Purpose: To specify the forecasted dates and quantities

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|--|--|-------------|----------------|--------------|
| FST01 | 380 | Quantity | M | R | 1/15 | Must use |
| | | Description: Numeric value of quantity | | | | |
| FST02 | 680 | Forecast Qualifier | M | ID | 1/1 | Must use |
| | | Description: Code specifying the sender's confidence level of the forecast data or an action associated with a forecast | | | | |
| | | CodeList Summary (Total Codes: 21, Included: 3) | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | A | Immediate | | | |
| | | C | Firm | | | |
| | | D | Planning | | | |
| FST03 | 681 | Forecast Timing Qualifier | M | ID | 1/1 | Must use |
| | | Description: Code specifying interval grouping of the forecast | | | | |
| | | CodeList Summary (Total Codes: 11, Included: 3) | | | | |
| | | <u>Code</u> | <u>Name</u> | | | |
| | | D | Discrete | | | |
| | | F | Flexible Interval (from Date X through Date Y) | | | |
| | | M | Monthly Bucket (Calendar Months) | | | |
| FST04 | 373 | Date | M | DT | 8/8 | Must use |
| | | Description: Date expressed as CCYYMMDD | | | | |

Syntax Rules:

1. P0607 - If either FST06 or FST07 is present, then the other is required.
2. P0809 - If either FST08 or FST09 is present, then the other is required.

Semantics:

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.

Loop Shipped/Received Information

| | |
|-----------|---------------|
| Pos: 470 | Repeat: 25 |
| Optional | |
| Loop: SHP | Elements: N/A |

User Option (Usage): Must use

Purpose: To specify shipment and/or receipt information

Loop Summary:

| <u>Pos</u> | <u>Id</u> | <u>Segment Name</u> | <u>Req</u> | <u>Max Use</u> | <u>Repeat</u> | <u>Usage</u> |
|------------|-----------|------------------------------|------------|----------------|---------------|--------------|
| 470 | SHP | Shipped/Received Information | O | 1 | | Must use |
| 480 | REF | Reference Identification | O | 5 | | Used |

SHP Shipped/Received Information

| | |
|-------------------|-------------|
| Pos: 470 | Max: 1 |
| Detail - Optional | |
| Loop: SHP | Elements: 5 |

User Option (Usage): Must use

Purpose: To specify shipment and/or receipt information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|--|-----------|---------------------|------------|-------------|----------------|--------------|
| SHP01 | 673 | Quantity Qualifier | O | ID | 2/2 | Must use |
| Description: Code specifying the type of quantity CodeList Summary (Total Codes: 832, Included: 2) <u>Code</u> <u>Name</u> 01 Discrete Quantity 02 Cumulative Quantity | | | | | | |
| SHP02 | 380 | Quantity | X | R | 1/15 | Must use |
| Description: Numeric value of quantity | | | | | | |
| SHP03 | 374 | Date/Time Qualifier | X | ID | 3/3 | Must use |
| Description: Code specifying type of date or time, or both date and time CodeList Summary (Total Codes: 1112, Included: 3) <u>Code</u> <u>Name</u> 011 Shipped 050 Received 051 Cumulative Quantity Start | | | | | | |
| SHP04 | 373 | Date | X | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |
| SHP06 | 373 | Date | O | DT | 8/8 | Must use |
| Description: Date expressed as CCYYMMDD | | | | | | |

Syntax Rules:

1. C0102 - If SHP01 is present, then SHP02 is required.
2. L030405 - If SHP03 is present, then at least one of SHP04 or SHP05 is required.
3. C0403 - If SHP04 is present, then SHP03 is required.
4. C0503 - If SHP05 is present, then SHP03 is required.

Semantics:

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.

REF Reference Identification

| | |
|-------------------|-------------|
| Pos: 480 | Max: 5 |
| Detail - Optional | |
| Loop: SHP | Elements: 2 |

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|------------------------------------|------------|-------------|----------------|--------------|
| REF01 | 128 | Reference Identification Qualifier | M | ID | 2/3 | Must use |
| Description: Code qualifying the Reference Identification | | | | | | |
| CodeList Summary (Total Codes: 1503, Included: 1) | | | | | | |
| <u>Code</u> <u>Name</u> | | | | | | |
| SI Shipper's Identifying Number for Shipment (SID) | | | | | | |
| REF02 | 127 | Reference Identification | X | AN | 1/30 | Used |
| Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier | | | | | | |

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

CTT Transaction Totals

| | |
|--------------------|-------------|
| Pos: 010 | Max: 1 |
| Summary - Optional | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

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

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|------------|-----------|----------------------|------------|-------------|----------------|--------------|
| CTT01 | 354 | Number of Line Items | M | N0 | 1/6 | Must use |

Description: Total number of line items in the transaction set

User Note 1:

Total number of LIN segments

| | | | | | | |
|-------|-----|------------|---|---|------|----------|
| CTT02 | 347 | Hash Total | O | R | 1/10 | Must use |
|-------|-----|------------|---|---|------|----------|

Description: 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.

User Note 1:

Hash total of quantities released (FST01)

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

| | |
|---------------------|-------------|
| Pos: 020 | Max: 1 |
| Summary - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

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)

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|---------------------------------------|------------|-------------|----------------|--------------|
| SE01 | 96 | Number of Included Segments | M | N0 | 1/10 | Must use |
| Description: Total number of segments included in a transaction set including ST and SE segments | | | | | | |
| SE02 | 329 | Transaction Set Control Number | M | AN | 4/9 | Must use |
| Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set | | | | | | |

Comments:

1. SE is the last segment of each transaction set.

GE Functional Group Trailer

| | |
|--------------------------------|--------------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|--|-----------|--|------------|-------------|----------------|--------------|
| GE01 | 97 | Number of Transaction Sets Included | M | N0 | 1/6 | Must use |
| Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element | | | | | | |
| GE02 | 28 | Group Control Number | M | N0 | 1/9 | Must use |
| Description: Assigned number originated and maintained by the sender | | | | | | |

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

| | |
|-------------------------|-------------|
| Pos: | Max: 1 |
| Not Defined - Mandatory | |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

| <u>Ref</u> | <u>Id</u> | <u>Element Name</u> | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|---|-----------|--------------------------------------|------------|-------------|----------------|--------------|
| IEA01 | I16 | Number of Included Functional Groups | M | N0 | 1/5 | Must use |
| Description: A count of the number of functional groups included in an interchange | | | | | | |
| IEA02 | I12 | Interchange Control Number | M | N0 | 9/9 | Must use |
| Description: A control number assigned by the interchange sender | | | | | | |