

ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)

Implementation Recommendations for

Blanket Purchase Order Transactions

BLANKET PURCHASE ORDER (850/ORDERS)
BLANKET CHANGE ORDER (860/ORDCHG)
BLANKET ORDER ACKNOWLEDGMENTS (855/865/ORDRSP)

IMPORTANT NOTE

Pre-1999 business models are undergoing recast into Unified Modeling Language (UML) notation, and some restructuring. In addition, we've been adding cross-references to XML standards, such as RosettaNet. **The Downloadable business model documents have *not* been updated. Always refer to the "[Clickable Business Models](#)" for the latest and greatest information.** That area of the website also contains very useful information on newer, internet-based technologies. The changes to the existing models *have not changed the original intent* of the models published here in this table, but are (we hope) improvements to presentation that enhance understanding of the business processes and how to implement them.

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**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Purpose

The purpose of this document is to make recommendations on the blanket order processes and transactions to facilitate implementations. The EIDX guidelines give recommendations on which transactions to use, which segments within those transactions, and which codes within those segments. This document is a supplement to EIDX transaction guidelines which provides details which every implementor would like to know.

Any implementation method is agreed upon by trading partners. It is the intent of this document to make interpretation of the transactions used for *blanket orders* more consistent, so that implementations are based upon common practices.

Some of these recommendations may not apply to change orders and change order acknowledgments used for stand alone (discrete) order processes. In most cases, recommendations for those transactions apply to the blanket order process. Refer to *EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*, published August 1995. Information from that document will be repeated in this document where it facilitates flow of information.

Some of the recommendations in this document may require code list changes in the EIDX guidelines.

ADDITIONAL REFERENCES :

- *EIDX Business Models: Order Models* (July 1997).
- *EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction* (April 1995)
- *EIDX Implementation Recommendations for Transactions Used in Forecast / Planning Models* (March 1997)

STANDARDS VERSION

Data segment and element positions referred to in this document are particular to ASC X12 Version 003020 and UN-EDIFACT Version/Release 92.1. Users of this document may need to adapt information when applying these recommendations to other standards versions.

Abbreviations Used

ANSI	American National Standards Institute
ASC X12	Accredited Standards Committee X12 (ANSI)
BPO	Blanket Purchase Order
EDI	Electronic Data Interchange
PO	Discrete (Standalone) Purchase Order
SMI	Supplier-Managed Inventory
TCA:	Terms and Conditions Agreement
UN-EDIFACT:	United Nations - EDI For Administration, Commerce and Trade

Section 1 – Blanket Purchase Order: Recommendations for Usage of Order Models

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

General Information

The information in this section is a summary overview of order models. For further information refer to *EIDX Business Models: Order Models (to be published)*.

WHICH ORDER MODEL TO USE

The choice of which Forecast/Planning model to use, including the choice not to use a Forecast/Planning model, is the primary factor in deciding which Order model to use. Refer to "*Implementation Recommendations for Transactions used in Forecast/Planning Models*" for further information. A secondary consideration is whether or not consignment (a/k/a supplier-owned inventory, line side stocking) does or does not need to be supported.

EIDX has developed business models for five order models:

1. Traditional Standalone PO
2. Blanket PO, Discrete (Non-Forecast) Releases
3. Blanket PO, Forecast Releases
4. Consumption-Based SMI
5. Contract Manufacturing

This document addresses transactions used in Order Models 2, 3, and 4. These order models all use Blanket Purchase Orders as their foundation.

Blanket PO, Discrete (Non-Forecast) Releases

This process is intended for a non-forecast environment, and implies the need for acknowledgments. The buyer calculates requirements and generates a Blanket PO (BPO) for a stated period (such as yearly). Orders or Change Orders are issued to "release" discrete delivery schedules. Acknowledgments are returned to confirm and acknowledge releases.

Blanket PO, Forecast Releases

This process is by definition intended for a forecast environment. The buyer calculates requirements and generates a Blanket PO (BPO) for a stated period (such as yearly). The BPO includes authorization and other terms not already contained in or more specific than terms in the contractual agreement. The Change Order process used to handle changes to total order quantity, pricing, and other order parameters other than the delivery schedules. Releases are handled as specified in the Forecast / Planning model being used. Refer to "*Implementation Recommendations for Transactions used in Forecast/Planning Models*" for further information.

Consumption-Based SMI (Supplier-Managed Inventory)

In this process, the Seller calculates requirements based upon consumption information, and ships replenishment stock against a Blanket PO (BPO) which has been issued by the buyer. The characteristics of the BPO are the same as the characteristics of the BPO used in Order Model 2 (which uses Discrete Releases); the difference is that the buyer does not generate and transmit releases.

Contract Manufacturing - Prime Contractor Buys Components

In this process, a Prime Contractor (PC: End-Buyer or Customer) orders assemblies from a Contract Manufacturer (CM). The CM obtains components from the PC, who in turn orders parts from the seller for drop-ship to the CM. From the seller's point of view, the PC is the buyer, and the CM just another buyer's ship-to address, with the exception that the seller may need to reference the CM's part number or other references on packing lists, etc.

Return to

Definition of Blanket Purchase

The following is a summary definition. Each component of the definition will be covered in more detail later in this paper.

A Blanket Purchase Order (BPO) is a long-term commitment to a vendor for material against which short-term releases will be generated to satisfy requirements. The BPO defines specific terms, conditions, and pricing terms not already contained in or more specific than terms in the contractual agreement. The general recommendation is that a BPO is issued for a single item, however, trading partners may agree to process multiple item BPO's. A blanket order may specify a firm or estimated total quantity with no delivery schedules specified; in this case, releases are issued later either by way of a material release planning schedule or by way of discrete releases. Alternatively, a blanket order may specify a total quantity and predetermined delivery schedules; in this case, blanket change orders are used to make adjustments to the delivery schedules. Instead of specifying any quantity (firm or estimated), a blanket order may specify a total number of dollars to be purchased. Finally, a blanket order might be issued as a vehicle to ship against, where the TCA calls out that quantity commitments are forecast-based.

A generally accepted guideline is that a blanket is cost-effective if a buyer anticipates purchasing an item from the same supplier more than six times per year. The use of a BPO eliminates the necessity of issuing a new PO at the time of each release, resulting in efficiency and administrative cost savings. Minimum dollar amounts and minimum time periods BPO's may cover should be decided between trading partners.

TRANSACTION/MESSAGE USED

In the ASC X12 standard, the 850 Purchase Order transaction is used for Blanket Purchase Orders. In the UN-EDIFACT standard, the ORDERS Purchase Order message is used for Blanket Purchase Orders.

Length of Commitment

“A Blanket Purchase Order (BPO) is a long-term commitment to a vendor for material against which short-term releases will be generated to satisfy requirements.”

The typical BPO is issued to cover a defined extended period of time, and a typical commitment is for one year. However, the appropriate effective time period for a BPO may vary depending on the business need. Alternatively, the BPO can be issued to cover a defined quantity of product for delivery over an undefined extended time period. However, this alternative is exceptional.

The length of commitment for a BPO does not need to be equal to the length of commitment of the associated terms and conditions agreement (TCA). Several BPO's for a part might be issued during the life of TCA; conversely in the case of evergreen TCA's, one BPO might be issued, with the length of commitment continually extended when the associated TCA is renewed (see also “*Evergreen Blanket Purchase Orders*” below.)

The following factors should be taken into account when determining how long a commitment should be made:

- Systems capabilities
- Stability of pricing
- Stability of demand
- Attributes of the TCA

Example 1: If a trading partner's system has a limitation of 99 delivery schedules for an item, and there are more than 99 deliveries in a year for the item, BPO's for shorter terms, such as semi-annually, quarterly or monthly, should be considered.

Example 2: If the item contains gold or some other raw material that has a volatile price, rather than dealing with frequent change orders and re-negotiations, BPO's might be issued that cover a term consistent with the pricing stability.

Example 3: If demand is anticipated to be stable over a nine month period, but the item is expected to be discontinued later in the year, a BPO covering nine months might be issued.

Example 4: If a new terms and conditions agreement (TCA) is issued semi-annually, with a new contract number used, BPO's covering six months might be issued. Conversely, if an evergreen TCA is in place, a BPO might be issued that covers a longer period, with attributes of the BPO (such as unit price, expiration date) updated via the change order process whenever the TCA is renewed.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Systems Capabilities

The length of commitment for a BPO may be constrained by what trading partner systems can handle. Specific fields to watch out for include sub-item number (which may be how systems are numbering individual deliveries, and which therefore define the limit of number of deliveries for an item) and total line item quantity. For some trading partners, extended price (unit price * total quantity) may need to be considered if this is stored or reported and there are field size limitations. See also “*Systems Constraints for Evergreen BPO's*” below.

Stability of Pricing

Stability of pricing is relative. If trading partners feel that pricing is volatile enough, BPO's might be issued for a term that is consistent with the pricing stability, then new BPO's negotiated and issued. Alternatively, BPO's might be issued for a long-term commitment, but pricing re-negotiated periodically (semi-annually, quarterly, etc.), and price changes applied to the existing BPO's contractually or via blanket change orders (see “*Price Changes*” in the section on Blanket Change Orders below.)

Stability of Demand

While it is generally recommended that processes involving the use of BPO's be used in situations where demand is fairly stable, this is really a trading partner issue. BPO's may be used any time they add value to the management of the parts. When evaluating demand, both short-term and long-term demand should be evaluated. It should also be noted that “stable demand” does not mean “flat demand”; a part might have constant demand spikes yet still be suitable for a process which utilizes BPO's.

EVERGREEN BLANKET PURCHASE ORDERS

An “evergreen” BPO is one that is opened just like any other BPO, but constantly extended or renewed for an indefinite period. Typically, an evergreen PO is used in an environment where evergreen TCA's are used. However, evergreen BPO's may be used with non-evergreen TCA's and vice-versa.

Systems Constraints for Evergreen BPO's

If trading partners wish to maintain “evergreen,” or renewable BPO's, systems or administrative constraints may be a consideration. For example, BPO's may be renewed by extending the total quantity or total dollars; the fields for maintaining such data may only be so large. One solution for renewing the BPO may be to open up a new line item for the part on the existing BPO. In this case, trading partners should take into account the impact of having multiple line item numbers for the same part, especially when it comes to matching forecast schedules, acknowledgments, invoices, ship notices, etc. Most of these complications are avoided when a new BPO is being issued to replace an expired BPO, with the exception of matching up the forecast schedules (see “*Matching Schedules to Effective Dates*” below. Trading partners should work together outside the EDI process to establish the timing for BPO renewals/reissues so that complications can be avoided. See also the discussion below under “*Items Per Blanket Order*.”

It should be noted that some trading partners have their applications designed to disallow the same part number to be on an order more than once, in which case this would preclude the option of extending/renewing a BPO by opening (adding) a new line item.

If evergreen BPO's are used with non-evergreen TCA's, this means that the TCA (contract) number on the BPO header will change as old TCA's expire and new TCA's are issued. The systems constraint here is that few trading partners can handle order header level changes, particularly changes to a key field such as contract number. In most cases, trading partners will require that old BPO's be closed and new BPO's be issued in conjunction with expiration and issuance of TCA's.

Legal and Audit Concerns

It should also be noted that many legal departments are requiring that contracts be issued with new contract numbers each time re-negotiations take place, due to concerns about maintaining an audit trail of what terms, pricing, effective dates were in effect when; in effect, this precludes the use of evergreen agreements.

Terms and Conditions Agreements (Sample)

The general recommendation for Blanket Purchase Orders is the same as for Standalone Purchase Orders. To achieve efficiency in processing, any information that is static, or is to be applied across all BPO's exchanged between trading partners, should be covered in a Terms and Conditions agreement or other applicable type of contract.

Types of things to be covered in a contract may include:

- FOB instructions
- Pricing schedules
- Terms of sale
- Lead time
- Authorization and liability clauses
- Quality and warranty clause
- Confidentiality clause
- General ship/delivery requirements (e.g. anti-static packaging, etc.)
- Import/export requirements
- Cancellation clause
- Supplier-managed inventory
- Length of commitment (effective and expiration dates)
- Primacy clauses

The contract is then referenced on the BPO, and only information which is specific to the individual order needs to be processed by the trading partners. This eliminates the need to transmit a lot of redundant data with each individual BPO.

Types of things usually specified on individual BPO's may include:

- Reference to Terms and Conditions Agreement (TCA)
- Effective dates (if not specified in TCA)
- Item unit price (for systems requirements or information if price is per TCA)
- Total quantity or total dollar amount authorized
- Rates (not to exceed \$/month, if applicable)
- Supersedes (previous BPO number, if applicable)

This guideline assumes that a business agreement exists which defines all standard , basic trading terms and conditions as agreed between the buyer and seller, and that the BPO constitutes a business transaction under this agreement.

Items Per Blanket Order

“The general recommendation is that a BPO is issued for a single item, however, trading partners may agree to process multiple item BPO's.”

Generally, it is recommended that BPO's be issued for single items (one part number per BPO). This may be in order to accommodate administrative considerations or systems requirements. On the other hand, it is often more efficient to process multiple-item orders, and trading partners may agree to manage multiple item (multiple part number) BPO's when it makes sense.

Reasons for recommending single-item BPO's include:

- Some trading partners' systems only allow single-item BPO's
- Easier to manage if parts can be moved on or off the process during the commitment period
- Easier to perform acknowledgment and change order matching
- Easier to manage release numbers, since some systems manage release number at the header level and others maintain it at item level (see “*RELEASES AGAINST BPO's*” in the section on Change Orders below.)
- Easier to manage if part revision changes may occur during the commitment period
- If evergreen BPO's used, may facilitate renewing BPO by opening a new line item for a part
- When re-negotiating evergreen agreements, same length of commitment may not be desired for all parts
- Parts with the same terms and conditions when the BPO was issued might not have the same terms and conditions when the BPO is renewed
- Some trading partners manage BPO's as part of the forecasting application, which may not use line item numbers (see “*Line Item Number*” in Section 2 below).

Systems Requirements

Since historically many companies have treated BPO's as single-item orders, many trading partners may have systems that have been designed to handle only single-item BPO's.

Moving Parts On/Off Processes

It may be preferable for trading partners to manage single-item BPO's, since this allows for parts to be put on or taken off of new planning processes easily; processing new BPO's and BPO cancellations is easier than processing and tracking Blanket Change Orders when there are multiple items on the BPO.

Acknowledgments, Change Orders, and Release Management

In the non-forecast environment, change orders are used as releases, changes to releases and as changes to the BPO itself. Keeping changes, acknowledgments and releases in synch is much easier for single item BPO's. Even in a forecast environment, where changes to BPO's are ideally kept at a minimum, and where the use of release numbers is optional, changes will occur, and single-item BPO's are easier to manage.

Part Revision Changes

If part revision changes are likely to occur during the life of the BPO, these may be handled by closing or deleting an item on a BPO, and opening (adding) a new line item to the same, or by closing/canceling an open BPO and issuing a new BPO, and both of these alternatives are more easily facilitated when BPO's are single-item. Alternatively, BPO's with shorter length of commitment might be used in cases where it is known that the part revision will be changing.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Evergreen POs

If trading partners wish to maintain “evergreen,” or renewable BPO's, systems constraints may be a consideration. BPO's are may be renewed by extending the total quantity or total dollars; the fields for maintaining such data may only be so large, and the solution for renewing the BPO may be to open up a new line item for the part on the existing BPO. This is easier to manage this if BPO's are single-item. In this case, trading partners should take into account the impact of having multiple line item numbers for the same part, especially when it comes to matching forecast schedules, acknowledgments, invoices, ship notices, etc. It should be noted that some trading partners have their applications designed to disallow the same part number to be on an order more than once, in which case this would preclude the option of extending/renewing a BPO by opening (adding) a new line item. See also the discussion above under “*Length of Commitment.*” The following was recommended in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*”, published by EIDX in August, 1995:

“It is recommended that the purchase order have a given part number only on one line item in the order. If the part number must be repeated in a purchase order, the entire set of schedules for the given part are split between the line items. This may complicate the seller's processing of the orders and reviewing the schedules in their entirety. Likewise, when the seller splits line items in the sales order and they do not maintain the integrity of the original line item number, the buyer's system may have problems matching the acknowledgments to their data.

“If there is a business reason for repeating the same part on multiple line items within a given purchase order, then considerations should be given to splitting them into separate purchase orders.”

Another reason for using single-item BPO's when evergreen agreements are being used is that not all parts on the original agreement may be renewed against the same agreement, or some parts may be on the same agreement but with varying lengths of commitment.

GROUPING PARTS ON MULTIPLE-ITEM BPO'S

If trading partners agree to process multiple item BPO's, the currently agreed upon EIDX conventions apply (same Ship-To location, same contract number). For BPO's, EIDX further recommends that only parts with common process characteristics be grouped together on BPO's, including:

- Same planning environment (forecast vs. non-forecast)
- Same requirement release process (buyer-managed vs. supplier-managed)
- Same forecasting process (Embedded Release vs. Forecast-Based SMI, etc.)
- Same length of commitment
- Same terms and conditions agreement
- Same BPO type (agreement for firm quantities vs. agreement for estimated quantities)
- Same BPO scheduling type (BPO with pre-defined schedules vs. BPO against which releases are to be made)
- Similar schedule/release frequency (daily deliveries vs. weekly deliveries, etc.)
- Same schedule date type (delivery date vs. ship date, etc.)

Total Quantity and Delivery Schedules

“A blanket order may specify a firm or estimated total quantity with no delivery schedules ; in this case, releases are issued later either by way of a material release planning schedule, or by way of discrete releases, or the supplier may determine when to ship material based on consumption history. Alternatively, a blanket order may specify a total quantity and predetermined delivery schedules; in this case, blanket change orders are used to make adjustments to the delivery schedules. Instead of specifying any quantity (firm or estimated), a blanket order may specify a total number of dollars to be purchased. Finally, a blanket order might be issued as a vehicle to ship against, where the TCA calls out that quantity commitments are forecast-based.”

Blanket Order Total Quantity

A total line item quantity should be sent on a BPO even if the agreement is for certain number of dollars or are forecast-based. Most trading partners have open order systems that are quantity-driven, i.e. the system expects to see a quantity and unit price, and total dollars are then calculated. Translate dollars into a quantity and round up to a multiple of the standard (a/k/a pre-pack) quantity. The quantity in this case may be identified as an estimated quantity (see “*Identification Order Type*” below.)

Delivery Schedules

A BPO with pre-determined delivery schedules might be used in cases where an item has stable, regular demand, however this is rare. Most BPO's will be issued initially with no delivery schedules. In Supplier-Managed Inventory (SMI) processes, the supplier determines when to ship parts, so delivery schedules are meaningless. However, most trading partner's systems are designed to expect at least one delivery schedule on an open purchase order, so it is recommended that at least one schedule should be sent; trading partners who do not need schedules on new BPO's can ignore the schedule segments.

Limit on References Trading Partners Must Maintain

In general, the buyer should limit the number of references which sellers are expected to maintain in their systems and send back in response documents. The buyer should not expect the seller to maintain references needed only by the buyer; the buyer should maintain such references in the local purchasing application. The seller should be responsible for handling only those references necessary for conducting business or necessary for systems processing (e.g. identifiers for matching response documents to original documents).

This recommendation applies to data elements throughout transaction / messages, including:

Segments:

- BEG, BCA, etc. (X12), BGM (UN)
- PO1, POC, etc. (X12), LIN, PIA, etc. (UN)
- REF (X12), RFF (UN)

Reference Types:

- Part identifiers
- Drawings
- Third party's references (order number, part number, etc.)
- Contract numbers, quote numbers, etc.
- Export reference numbers
- Project numbers
- Etc.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

**Section 2 – Blanket Purchase Order Transaction/Message (850/ORDERS)
Recommendations**

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Usage of the 850/ORDERS Transaction/Message

BLANKET PURCHASE ORDERS

BPO's are always sent in a Blanket Order transaction (850 or ORDERS). New BPO's are distinguished from Standalone POs and Releases against the Blanket Order in the Purchase Order or Message Type coding (see "IDENTIFICATION OF ORDER TYPE" below).

RELEASES AGAINST BLANKET PURCHASE ORDERS

Non-Forecast Environment

If parts are not suitable for a forecast environment, releases may be sent in a Change to Blanket Order transaction (860 or ORDCHG) per EIDX Order Model 2 (releases via Change Order) or Order Model 4 (replenishment based on consumption). Releases are distinguished from Changes to the Blanket Order in the Purchase Order or Message Type coding (see "IDENTIFICATION OF CHANGE ORDER TYPE" in Section 3 below).

Releases may also be sent in an 850/ORDERS transaction/message, even though a release is in effect a "change" to an existing BPO. However, only new releases, not previously transmitted, may be sent using 850/ORDERS. Changes to releases are to be sent using an 860/ORDCHG transaction/message.

Typically in a non-forecast environment, releases are triggered either to replenish goods that have been consumed, or based on spot demand. The release should be transmitted only once at the time of release.

NOTE: Rather than repeating information in several places, recommendations regarding releases are covered below in Section 3 "Blanket Change Order Transaction/Message Recommendations". If 850/ORDERS is being used for releases, adapt those recommendations as needed.

Forecast Environment

Releases in a forecast environment using BPO's should be sent embedded in the 830 or DELFOR, or issued as discrete releases in an 862 or DELJIT message. A Purchase Order transaction is used as a release against forecast only when using the traditional Planning Forecast (Forecast / Planning Model 1), which does not use a BPO as its foundation.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Identification of Order Type

X12: BEG02 - PURCHASE ORDER TYPE

UN: BGM/C002.1001 - DOCUMENT/MESSAGE NAME

UN: SG25.QTY/C186.6063 - QUANTITY QUALIFIER

IDENTIFYING ORDER TYPE IN THE APPLICATION

Blanket Purchase Orders are sent in the same ASC X12 transaction or UN-EDIFACT message as Standalone (Discrete) Purchase Orders). Typically, these two order types are processed differently, and many trading partners using different mappings for the different order types and process them in different applications.

Ideally, the receiving application should be responsible for identifying which type of order is being processed. Identification of the type of order is found on the beginning segment of the transaction/message.

In ASC X12, Purchase Order Type is identified using the Purchase Order Type Code on the BEG segment (BEG02, Data Element 92); the Purchase Order Type code indicates whether the order quantity is firm or estimated.. In UN-EDIFACT Purchase Order Type is identified using the Document/Message Name element on the BGM segment (Data Element 1001 in Compound Element C002); the QTY segment in SG25 is used to indicate whether the order quantity is firm or estimated.

<u>X12 BEG02 (DE92)</u>	<u>MEANING</u>	<u>COMMENT</u>
BE	Blanket Order / Estimated Quantities	May be used when BPO is issued for a total (not-to-exceed) dollar amount, and quantity sent in PO102 Quantity Ordered is based on total dollars divided by unit price. Not all trading partners may be able to accommodate this code; in this case, trading partners may agree to use "BK" instead.
BK	Blanket Order (Quantity Firm)	May be used when BPO is issued for a total (not-to-exceed) quantity. For trading partners that cannot accommodate code "BE", this code may be used, and the fact that the quantity is an estimate must be called out in the business agreement.
RL	Release (Blanket Order) / Call-Off Order	Used when transmitting new schedule releases in a non-forecast environment when the original BPO did not contain pre-defined schedules.

(continued on next page)

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

<u>UN C002.1001</u>	<u>MEANING</u>	<u>COMMENT</u>
221	Blanket Order	Used for all Blanket Orders
226	Call-off order	Used when transmitting new schedule releases in a non-forecast environment when the original BPO did not contain pre-defined schedules.
<u>UN C18601 (DE6063)</u>	<u>MEANING</u>	<u>COMMENT</u>
21	Ordered quantity	May be used when BPO is issued for a total (not-to-exceed) quantity. For trading partners that cannot accommodate code "99", this code may be used, and the fact that the quantity is an estimate may be called out in the business agreement.
99	Estimated Quantity	May be used when BPO is issued for a total (not-to-exceed) dollar amount. Not all trading partners may be able to accommodate this code; in this case, trading partners may agree to use "21" instead if this is an estimated quantity, and this must be called out in the business agreement.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

BPO Effective and Expiration Dates

X12: DTM – DATE/TIME REFERENCE

UN: DTM/C507.2005 – DATE/TIME/PERIOD QUALIFIER

If the BPO is of the type where an effective date and expiration date are set (as opposed to a quantity-based agreement with no set expiration date), the effective date can be assumed to be the book date, or may be sent explicitly.

The expiration date should be sent if expiration is not specified in the TCA. If the expiration date is specified in the TCA but needs to be sent to accommodate systems requirements that a date be present, the TCA should be worded to indicate primacy, i.e. whether the effective and expiration dates stated in the TCA takes primacy over the effective and expiration dates on the BPO or vice-versa.

In ASC X12, dates which apply to the entire transaction are sent in a header level segment. In EDIFACT, dates which apply to the entire message are sent in the header DTM which immediately follows the BGM segment.

<u>X12 DTM01 (DE374) / UN C507.2005</u>	<u>MEANING</u>	<u>COMMENT</u>
007 / 7	Effective (Date Coverage Begins)	If not sent, assume that the effective date is the order date
NA / 158	Horizon start date	EDIFICE usage to identify effective date
NA / 159	Horizon end date	EDIFICE usage to identify expiration date
036 / 36	Expiration (Date Coverage Expires)	If not sent, assume that expiration date is per trading partner agreement

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Line Item Data

X12: PO1 – BASELINE ITEM DATA
EDIFACT: LIN - ITEM DATA
EDIFACT: PRI – PRICE DETAILS

BUYER PART NUMBER

Blanket Purchase Orders are generally issued for long-term commitments. If a buyer part number does not exist, it is highly recommended that one be created and sent in the Blanket Purchase Order (X12 PO107, UN LIN03).

LINE ITEM NUMBER

Line item numbers should be sent by the buyer if it is important that they be received back on response documents (acknowledgments, ship notices, invoices, etc.) in order to match those responses correctly to the original purchase order.

Line Item Numbers Not Used

Some trading partners that manage Blanket Purchase Orders as part of the same forecasting application that generates Material Release or other types of planning schedules may not use line item numbers in their BPO's. Typically, these trading partners have applications that are designed to disallow the same part number to be on an order more than once, in which case, line item number may be seen as irrelevant, and the line item number is not needed in response documents such as acknowledgments, ship notices and invoices.

Trading partners should be prepared to accommodate this type of situation; if the receiver's application must have a customer line item number, dummy values might be calculated by the application interface program; likewise, the buyer's application might be coded to ignore the dummy line item numbers if they are sent in a response document. This is an example of a situation where the use of single-item BPO's are recommended, since in this case, line item number is always 1.

Line Item Numbers Used

If line item numbers are used, all the currently agreed upon EIDX conventions apply.

Line Item Number Length in X12

Higher versions/releases of X12 have increased ASSIGNED IDENTIFICATION from a maximum of six characters to a maximum of eleven characters. EIDX recommends the continued use of a maximum of six characters to accommodate the more realistic length of a line item number in the Electronics Industry to avoid system constraints.

UNIT PRICE

Unit price should be sent even if it is specified in a TCA or pricing agreement. Most systems are designed to read the price from individual purchase orders. Unit price is used in matching acknowledgments, invoices, payments, and other related documents.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Schedules: Which to Send

X12: SCH – LINE ITEM SCHEDULE

UN: SG.49 DTM – DATE/TIME/PERIOD

BPO'S WITH DELIVERY SCHEDULES (SCHEDULING AGREEMENTS)

A BPO with pre-determined delivery schedules might be used in cases where an item has stable, regular demand, however this is rare. If delivery schedules are sent, all the currently agreed upon EIDX conventions apply.

BPO'S WITH NO DELIVERY SCHEDULES

Most BPO's will be issued initially with no delivery schedules. However, most trading partner's systems are designed to expect at least one delivery schedule on an open purchase order, so it is recommended that at least one "dummy" schedule should be sent; trading partners who do not need schedules on new BPO's can ignore the schedule segments.

SEGMENTS USED TO CONVEY SCHEDULES

In ASC X12, delivery schedules are sent at the detail level in SCH segments; the primary difference between actual delivery schedules and "dummy" delivery schedules is in the coding of the Date/Time Qualifier. In UN-EDIFACT, delivery schedules are sent using the SCC, QTY and DTM segments in Segment Groups 48 and 49; the primary difference between actual delivery schedules and "dummy" delivery schedules is in the coding of the DTM segment.

<u>X12 SCH05 (DE374) / UN C507.2005</u>	<u>MEANING</u>	<u>COMMENT</u>
002 / 2	Delivery Requested	Use for actual schedules, or for "dummy" schedule only per trading partner agreement
010 / 10	Requested Ship	
017 / 17	Estimated Delivery	
036 / 36	Expiration (Date Coverage Expires)	Use for "dummy" schedules if BPO has an expiration date; in the Quantity element, use the total line item quantity or zero, based on trading partner agreement; in the Date element (SCH06), use the expiration date of the BPO.
038 / 38	Ship No Later	
063 / 63	Do Not Deliver After	Use for "dummy" schedules if BPO is quantity-based with no set expiration date and no pre-defined schedules; in the Quantity element, use the total line item quantity or zero, based on trading partner agreement; in the Date element (SCH06), use the effective date of the BPO.
037 / 37	Do Not Ship Before	
064 / 64	Do Not Deliver Before	

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

**Section 3 – Blanket Change Order Transation/Message (860/ORDCHG)
Recommendations**

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Usage of the 860/ORDCHG Transaction/Message

CHANGES TO BLANKET PURCHASE ORDERS

Changes to BPO's are always sent in a Blanket Change Order transaction (860 or ORDCHG). Changes are distinguished from Releases against the Blanket Order in the Purchase Order or Message Type coding (see "IDENTIFICATION OF CHANGE ORDER TYPE" below).

RELEASES AGAINST BLANKET PURCHASE ORDERS

Non-Forecast Environment

If parts are not suitable for a forecast environment, releases may be sent in a Change to Blanket Order transaction (860 or ORDCHG) per EIDX Order Model 2 (releases via Change Order) or Order Model 4 (replenishment based on consumption). Releases are distinguished from Changes to the Blanket Order in the Purchase Order or Message Type coding (see "IDENTIFICATION OF CHANGE ORDER TYPE" below.)

Releases may also be sent in an 850/ORDERS transaction/message, even though a release is in effect a "change" to an existing BPO. However, only new releases, not previously transmitted, may be sent using 850/ORDERS. Changes to releases are to be sent using an 860/ORDCHG transaction/message.

Typically in a non-forecast environment, releases are triggered either to replenish goods that have been consumed, or based on spot demand. The release should be transmitted only once at the time of release.

NOTE: Rather than repeating information in several places, recommendations regarding releases are in this section. If 850/ORDERS is being used for releases, adapt these recommendations as needed.

Forecast Environment

Releases in a forecast environment using BPO's should be sent embedded in the 830 or DELFOR, or issued as discrete releases in an 862 or DELJIT message. A Purchase Order transaction is used as a release against forecast only when using the traditional Planning Forecast (Forecast / Planning Model 1), which does not use a BPO as its foundation.

CHANGES TO RELEASES

Changes to Releases for parts in a non-forecast environment are also sent in a Change Order transaction (860 or ORDCHG).

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Allowable Blanket Purchase Order Changes

HEADER LEVEL ALLOWABLE CHANGES

Releases and Changes to Releases

Header level changes are not allowed for releases. Header information changes should be sent in Changes to BPO's.

Changes to BPO's.

Recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply to the blanket purchase order process. Exceptions/additional recommendations for BPO's are included below.

ITEM LEVEL ALLOWABLE CHANGES

Releases and Changes to Releases

Item level changes are not allowed for Releases. Item level changes should be sent in Changes to BPO's.

Changes to BPO

Always check with trading partners on their ability to process price changes via EDI. Some systems require new blanket purchase orders. EIDX recommends that the following are allowable changes on Blanket Purchase Orders:

- Add item to order
- Delete item from order
- Cancel order
- Price change
- Quantity change

For multiple item BPO's, only items which are additions, deletions, or changes to the order are sent in the blanket change order transaction or message.

Adding and Deleting Items

Part substitutions (including just adding or changing a revision number) are accommodated by sending a change to delete the existing line item and add a new line item.

Part revision changes are considered total part substitutions. They should be coded like part substitutions.

Trading partners may *renew or extend blanket orders* by opening (adding) a new line item for the same part on an existing BPO. However, refer to “*Items Per Blanket PO*” above for caveats and recommendations.

If multiple-item BPO's are being used, add item or delete item may be used when parts are being put on (added to) or taken off (deleted from) a business process which uses blanket orders.

Cancel Order

If single-item BPO's are being used, order cancellation may be used when parts are deleted from a business process which uses blanket orders, or to confirm the seller's rejection of a BPO.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Price Changes

Price changes are discouraged, but they happen (changes in product life-cycle, price of raw materials, price reductions due to success of forecasting programs, price re-negotiation for blanket order renewal/extension, etc.) Price changes are difficult to handle systematically; and should always be called in (in addition to sending an EDI or paper document, which are necessary for accounting and legal audit). If price changes frequently (for example, if the commodity uses a volatile-priced raw material like gold), the trading partners should blanket orders that cover shorter periods, such as monthly or quarterly blanket orders.

If the contract specifies new pricing and effective dates, and if the contract says it applies to all open orders, or specifies effective dates, no change orders are needed. However, trading partners may agree to process change orders in order to automate data entry and/or verify that price changes have been applied by both parties and that systems are in synch. Particularly, in an Evaluated Receipts Settlement process, trading partners don't want to wait until payment to discover that one party didn't update the price in their system. However, failure to update systems on a timely basis is really a trading partner performance issue.

Quantity Change

Change orders should always be sent for quantity changes. Trading partners may *renew or extend blanket orders* by increasing the total order quantity for the part on the existing BPO. A quantity increase may be used, too, if there is a significant increase in demand projected for the period of time that the BPO covers. NOTE: In this situation, some trading partners may require that a new line item be opened, a new BPO issued, or that existing terms be re-negotiated.

Quantity changes may also be sent to decrease the total order quantity when the BPO is being *closed short*, or if the quantity remaining on the BPO is being *transferred* to a new, replacement BPO.

SCHEDULE LEVEL ALLOWABLE CHANGES

Forecast Environment: Releases and Changes to Releases

For parts that are suitable for a forecast environment, releases should be handled per the appropriate Forecast/Planning Model. Recommendations for Forecast/Planning Models are being published in a separate document. Changes to Releases in a non-forecast environment are also dealt with in that document.

Non-Forecast Environment: Releases and Changes to Releases

Schedule level changes are not appropriate for BPO's that have been issued without pre-defined schedules. Schedule changes for this type of BPO are really Releases or Changes to Releases.

Only schedule level changes are allowed for Releases and Changes to releases. SCHEDULE level changes are used to convey releases against BPO's in the non-forecast environment. The Blanket Change Order should not be used to convey releases in a forecast environment.

For releases and changes to releases in the non-forecast environment, quantity and date changes are allowed. However, when parts are set up on a process which involves contract agreements and blanket purchase orders, the process usually involves an agreement that the seller will have a certain amount of stock available and be able to ship as soon as a release is received; therefore releases should have short lead times and changes to releases (which could only be cancels or reschedules) should be avoided.

Recommendations in "EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction" generally apply to releases in the blanket purchase order process.

Exceptions/additional recommendations for BPO's are included below.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Releases per Transaction/Message

Multiple releases for the same item may be sent in one transaction set, for example, in a JIT environment, releases for a part for the next n hourly deliveries might be sent. However, each newly released schedule should be sent once, and once only. One release number should be assigned for the transaction/item, regardless of the number of schedules released. If multiple releases are issued on the same day for the same item, but in separate transaction sets, each transaction/item should use new release numbers. Releases for multiple line items may be sent in one transaction set or each item may be sent in a separate transaction. Capabilities for processing multiple releases per transactions or multiple items per transaction should be discussed between trading partners during the implementation process.

Non-Forecast Environment - Acknowledgments to Releases

The need for acknowledgments to releases in a non-forecast environment should be discussed between trading partners during the implementation process. If parts are expected to be shipped shortly after a release is received by the seller, acknowledgment may not be necessary. If the release lead time is longer than a day or two, acknowledgments may be required by the buyer.

Supplier-Managed Inventory (SMI)

By definition, in an SMI process, the supplier determines when it is appropriate to ship parts, so it is inappropriate for the buyer to issue releases. However, in order for the buyer to be able to receive parts, the buyer's open order system may need to have an open release. A recommended method is for the supplier to send a Ship Notice / Despatch Advice to the buyer, which can then be used to "fake" the buyer's application into creating an open receivable schedule.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Identification of Change Order Type

X12: BCH02 - PURCHASE ORDER TYPE

UN: BGM/C002.1001 - DOCUMENT/MESSAGE NAME

IDENTIFYING ORDER TYPE IN THE APPLICATION

Changes to Blanket Purchase Orders, Releases Against Blanket Orders are sent in the same X12 transaction or EDIFACT message as Changes to Standalone (Discrete) Purchase Orders. Typically, these change order types are processed differently, and many trading partners using different mappings for the different order types and process them in different applications.

Ideally, the receiving application should be responsible for identifying which type of change order is being processed. Identification of the type of order is found on the beginning segment of the transaction/message. Changes to BPO's and Releases Against BPO's can be distinguished by the Purchase Order Type Code. However, in X12, changes to a BPO and Changes to a Standalone PO both use the change Purchase Order Type Code. If both types of orders are maintained in the application, and the application should be able to identify the type of the original order (should different processing be required for different order types).

In ASC X12, Purchase Order Type is identified using the Purchase Order Type Code on the BCH segment (BCH02, Data Element 92). In UN-EDIFACT Purchase Order Type is identified using the Document/Message Name element on the BGM segment (Data Element 1001 in Compound Element C002); the same Document Message/Name is used for releases and changes to releases; original releases and changes to releases are distinguished in the Message Function (BGM03, Data Element 1225).

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

<u>X12 BEG02 (DE92)</u>	<u>MEANING</u>	<u>COMMENT</u>
CP	Change to Purchase Order	Used when transmitting changes to the BPO other than new schedule releases; used also for changes to schedules that have already been released; used also when the original BPO was transmitted with pre-defined schedules and those schedules are being changed. <i>Same code used for changes to Standalone POs</i>
RL	Release (Blanket Order) / Call-Off Order	Used when transmitting new schedule releases when the original BPO did not contain pre-defined schedules.
CR	Change to release	Used when transmitting changes to schedule releases previously transmitted
<u>UN C002.1001</u>	<u>MEANING</u>	<u>COMMENT</u>
230	Purchase order change request	Used when transmitting changes to the BPO other than new schedule releases; used also when the original BPO was transmitted with pre-defined schedules and those schedules are being changed. <i>Same code used for changes to Standalone POs</i>
226	Call-off order	Used when transmitting releases <i>or changes to releases</i> ; original release and change to release are distinguished in the Message Function code (BGM03)
<u>UN BGM.1225</u>		
9	Original	Used when transmitting original releases
5	Replace	Used when transmitting changes to releases

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Release Numbers - Header Level

X12: BCH04 - RELEASENUMBER

UN: SG1.RFF/C506.1153 REFERENCE QUALIFIER

USAGE OF RELEASENUMBERS

Changes to BPO's

If the change is to the Blanket Order itself, and applies to all open and future releases, do not use a release number. See also "*CHANGE ORDER SEQUENCE NUMBER*" below.

Consumption-Based SMI

Release numbers are not appropriate in Consumption-Based SMI, since the seller determines when to ship product.

Release Numbers Not Used

Some trading partners that manage Blanket Purchase Orders may not use release numbers in their BPO's. Typically, these trading partners do so because there is no demonstrated need, in which case, release number may be seen as irrelevant, and the release number is not needed in response documents such as acknowledgments, ship notices and invoices. Trading partners should be prepared to accommodate this type of situation; if the receiver's application must have a customer release number, dummy values might be calculated by the application interface program; likewise, the buyer's application might be coded to ignore the dummy release numbers if they are sent in a response document.

Release Numbers Used

If release numbers are used by the buyer, it is because it is an important field in the buyer's application. It is often part of the key along with the purchase order number when matching the sent 860/ORDCHG change order transaction to the received 865/ORDRSP change order acknowledgment transaction.

WHAT TO SEND

Release Number - Header or Detail

Some trading partners' systems assign releases at the header level of a release transaction, and others assign release number at the item level, and still others assign them at the schedule level. Trading partners should discuss this as part of the implementation process.

In the ASC X12 standard, release number is carried as a header level element in various beginning segments, including BEG, BCA, BFR, and BSS. It can also be carried elsewhere in REF segments. In the EDIFACT standard, release number can be carried anywhere in a message, using the appropriate level RFF segment. In current EIDX guidelines, release number is allowed for at the header level or the item level. In EDIFICE guidelines, release number is allowed only at the item level.

It is recommended that release number be assigned at the item level. Single-item BPO's will help to accommodate trading partners who maintain release numbers at the header level. In this case, since a transaction will contain only releases for one item, release number may be carried at the header level, and trading partners who need to treat it as item level detail may do so.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Change Order Sequence Number

X12: BCH05 - CHANGE ORDER SEQUENCE NUMBER

UN: SG1.RFF/C506.1153 REFERENCE QUALIFIER

Recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply to change order sequence numbers in the blanket purchase order process. However, there are special considerations in Blanket Order environment where the 860 / ORDCHG transaction / message is used for multiple purposes (Change to the BPO, Release, Change to Release).

While Change Order Sequence Numbers are optional in the standards, EIDX highly recommends using them.

IDENTIFYING CHANGE ORDER SEQUENCE

In the 860 Purchase Order Change transaction, the original order number is sent in the BCH03, and a Change Order Sequence Number is sent in the BCH05. Together, they uniquely identify a change order document. X12 conventions call for a *sequence* number, as opposed to a merely unique number.

[In the EDIFICE guidelines for the EDIFACT ORDCHG message, no usage of a change order sequence number is specified; the convention for EDIFACT is that a new, unique document / message number be used in the BGM02; this alone uniquely identifies the document. To satisfy the need to identify change order sequence, sequence number may be implied in the document / message number or sent explicitly in the SG1.RFF segment.

<u>X12 BCH03</u> <u>(DE324)</u>	<u>MEANING</u>	<u>COMMENT</u>
(No code value - element is type AN)	Purchase Order Number	Use original purchase order (blanket order) number.
<u>X12 BCH05</u> <u>(DE327)</u>	<u>MEANING</u>	<u>COMMENT</u>
(No code value - element is type AN)	Change Order Sequence Number	Use sequentially assigned numbers, regardless of change order type.
<u>UN BGM1004</u>	<u>MEANING</u>	<u>COMMENT</u>
(No code value - element is type AN)	Document / Message Number	Use unique number for each change order issued; may be used for implied sequencing by assigning a value which is a concatenation of original purchase order number and change order sequence number. This is preferred convention for EDIFACT documents.
<u>UN C506.1153</u>	<u>MEANING</u>	<u>COMMENT</u>
OP	Original purchase order	Use original purchase order (blanket order) number.
PP	Purchase order change number	May be used to identify explicit change order sequence number. This is not a preferred convention for EDIFACT documents.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

ASSIGNING CHANGE ORDER SEQUENCE NUMBER

Because the Change Order Sequence Number is part of what uniquely identifies a change order document, a single sequence of number should be used *regardless of the type of change order*. In other words, separate sequences of numbers should not be used for Changes to the BPO, Releases, and Changes to Releases, since duplicate identifiers would be assigned. The table below illustrates this; the order of events is hypothetical.

Date	BPO# A12345	NOT ALLOWED		CORRECT USAGE	
		CO Seq	Resulting ID	CO Seq	Resulting ID
950611	1st Change to BPO	01	A1234501	01	A1234501
950612	1st Release	01	A1234501	02	A1234502
950615	2nd Release	02	A1234502	03	A1234503
950620	3rd Release	03	A1234503	04	A1234504
950622	1st Change to Rlse	01	A1234501	05	A1234505
950701	2nd Change to BPO	02	A1234502	06	A1234506

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Line Item Number

X12: POC01 - ASSIGNED IDENTIFICATION

UN: SG25.LIN01 - LINE ITEM NUMBER

Line Item Numbers Used

Recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply to line item numbers in Blanket Change Orders. If line item numbers are used, it is *very important* that the *line item number not be changed* from the original ASSIGNED ID in the PO101 in the 850/ORDERS purchase order transaction. Line item number is likely to be a key value used to match the change order line item of the purchase order in the buyer's system to the sales order in the supplier's system. If a purchasing system should renumber line items, because line items are deleted or closed, *it may be difficult to match the line items in the seller's system.*

Line Item Numbers Not Used

On the other hand, if the buyer does not use line item numbers in BPO processes (which implies that a part number can only appear on an order once, and not on multiple lines -- see LINE ITEM NUMBER above in the section on 850/ORDERS), the seller's system should not be dependent on line item numbers, and should be able to match change order lines by using the order number and the buyer's part number.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Line Item Change Type

X12: POC02 - LINE ITEM CHANGE OR RESPONSE TYPE
UN: SG25.LIN.1229 - ACTION REQUEST/NOTIFICATION, CODED

LINE ITEM CHANGE OR RESPONSE TYPE is mandatory on the POC segment in X12, and it's EDIFACT counterpart, ACTION REQUEST/NOTIFICATION, is conditional in the standards, and required in EIDX and EDIFICE guidelines.

BPO's with Delivery Schedules (Scheduling Agreements)

In the case of BPO's with pre-determined delivery schedules, recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply.

Changes to BPO's without Delivery Schedules

Refer to “*ALLOWABLE BLANKET PURCHASE ORDER CHANGES*” above for a description of what changes are allowed in which type of Change Order.

In the case of BPO's without pre-determined delivery schedules, recommendations for in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” apply with the exception of schedule changes. Since the BPO has no schedules, there are none to change. A schedule is added by sending a release. A schedule that has been released is changed or deleted (canceled) in a Change to Release.

Releases and Changes to Releases

Refer to “*ALLOWABLE BLANKET PURCHASE ORDER CHANGES*” above for a description of what changes are allowed in which type of Change Order. Neither the X12 nor the UN-EDIFACT code list for the line item change type elements have a code which means “Release”. It is recommended that a generic “change to line item” code be used, since the fact that the change orders is a release is indicated in the transaction/message header.

<u>X12 POC02 (DE670)</u>	<u>MEANING</u>	<u>COMMENT</u>
CA	Change to Line Item	Use for original release
Other Codes	Various meanings	Use for change to BPO, change to release
<u>UN LIN.1229</u>	<u>MEANING</u>	<u>COMMENT</u>
3	Changed	Use for original release.
Other Codes	Various meanings	Use for change to BPO, change to release

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Other Line Item Data Fields

X12: POC SEGMENT

UN: SG25.LIN, PIA, QTY AND PRI SEGMENTS

UNIT PRICE AND BASIS OF UNIT PRICE

Unit Price is an allowable change on Changes to BPO's but not on Releases or Changes to Releases. Refer to "ALLOWABLE BLANKET PURCHASE ORDER CHANGES" above for a circumstances under which price changes would be sent. All recommendations for in "EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction" apply.

QUANTITY ORDERED, QUANTITY LEFT TO RECEIVE, UNIT OF MEASUREMENT

Refer to "ALLOWABLE BLANKET PURCHASE ORDER CHANGES" above for a circumstances under which quantity changes would be sent. Recommendations in "EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction" generally apply.

POC03 (X12) and the primary SG25.QTY segment (UN) should be the line item quantity ordered *including the current line item change*. Suppliers can compare the current sales order's Quantity Ordered to the change order's Quantity Ordered to determine a difference and act accordingly. POC04 (X12) and a secondary SG25.QTY segment (UN) are used to convey the QUANTITY LEFT TO RECEIVE ("Outstanding Quantity" in UN-EDIFACT).

If all open and closed schedules are sent, the sum of the quantities on the schedule segments should equal the QUANTITY ORDERED at the item level.

If only open schedules are sent, the sum of the quantities on the schedule segment should equal the QUANTITY LEFT TO RECEIVE at the item level.

PRODUCT/SERVICE ID FIELDS (X12: DE235/234 PAIRS; UN: C212 COMPOUND ELEMENTS)

It is necessary to send the *vendor part and/or buyer part and associated Engineering Changes (revisions) for the buyer part* as they were sent in the original purchase order. This data is critical to match the part on the seller's current sales order and the buyer's new change order.

There is no need to send other part information, such as drawing number, in the change order, which was on the original order, unless it is required by a trading partner *or it is needed for the actual change* (such as in an 'Add Item'). Miscellaneous part data is usually defined in the supplier's system given the vendor part or buyer part (plus associated engineering change).

Secondary packaging data should be sent only if it is being changed or it is critical for the trading partner. Sometimes a change in secondary packaging means a change in the part number. When this is the case, the new part number is recognized as any other part number change.

Re-sending the *secondary packaging data* is recommended only if it is critical between trading partners.

Recommendations in "EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction" generally apply.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Release Numbers - Detail Level

X12: LIN.REF02 - REFERENCE NUMBER
UN: SG28.RFF/C506.1153 - REFERENCE QUALIFIER

USAGE OF RELEASENUMBERS

Whether or not to use release numbers and when to carry release number at the header level or detail level are described above under “*Release Numbers*” at the Header level. To summarize: Release numbers are not always necessary but may be used if they are important to the buyer. Release levels may be carried at various levels; EIDX recommends that release number be carried at the item level.

ASSIGNING RELEASENUMBERS

In X12, Release Number may be carried at the item level either in the POC segment of the 860 Transaction, using ‘RN’ as the code value in DE 235, or it may be carried in the POC.REF02, using ‘RE’ as the code qualifier in REF01. EDIFACT uses the SG28.RFF (C506.1154) to carry Release Number. In order to be consistent EDIFACT, it is recommended that the REF segment be used in X12 to carry Release Number.

Release numbers and releases per transaction set

Multiple releases for the same item may be sent in one transaction set, but each release should be sent as a new release once, and once only. One release number should be assigned for the transaction/item, regardless of the number of schedules released. If multiple releases are issued on the same day for the same item, but in separate transaction sets, each transaction/item should be assigned a new release number.

Example 1 - Non-JIT			Example 2 - JIT		
Schedule	Release Date	Rlse Nbr	Schedule	Release Date/Time	Rlse Nbr
100 960205	960129	1	10 960205	9602050815	1
100 960212	960129	1	10 960205	9502050915	2
100 960220	960212	2	10 960205	9502051015	3
100 960226	960212	2	10 960205	9502051115	4

CODES FOR IDENTIFYING RELEASENUMBER

<u>X12 REF02 (DE127)</u>	<u>MEANING</u>	<u>COMMENT</u>
RE	Release Number	Self-explanatory
<u>UN C506.1153</u>		
AAN	Delivery schedule number	Self-explanatory

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Schedules: Which to Send

X12: SCH LINE ITEM SCHEDULE

UN: SG48.SCC SCHEDULING CONDITIONS SEGMENT GROUP

BPO's with Delivery Schedules (Scheduling Agreements)

In the case of BPO's with pre-determined delivery schedules, recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply.

Changes to BPO's without Delivery Schedules

Since the BPO has no schedules, there are none to change. A schedule is added by sending a release. A schedule that has been released is changed or deleted (canceled) in a Change to Release.

Releases and Changes to Releases

To distinguish between newly released schedules and changes to existing schedules, it is necessary to interpret the change order type in the header. See ‘*IDENTIFICATION OF CHANGE ORDER TYPE*’ at the header level above.

For releases and changes to releases in the non-forecast environment, quantity and date changes are allowed (reschedules) at the schedule level. However, when parts are set up on a process which involves contract agreements and blanket purchase orders, the process usually involves an agreement that the seller will have a certain amount of stock available and be able to ship as soon as a release is received; therefore releases should have short lead times and changes to releases should be avoided.

A newly released schedule should be sent once and once only; thereafter, a released schedule should only need to be sent in a Change to Release transaction/message.

In the case of schedule changes on a Change to Release, recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

**Section 4 – Blanket Order Acknowledgments Transaction/Message
(855/865/ORDRSP) Recommendations**

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Acknowledgments: When and What to Send

Some trading partners systems are not set up to handle acknowledgments to Blanket Orders, Changes to Blanket Orders, and Releases. Trading partners should discuss the need for acknowledgments as part of the implementation process.

If acknowledgments are used for any or all types of blanket orders and change orders, recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply.

ACKNOWLEDGMENTS TO BLANKET ORDERS AND CHANGES TO BLANKET ORDERS

Acknowledgments to BPO's with Delivery Schedules (Scheduling Agreements)

In the case of BPO's with pre-determined delivery schedules, recommendations in “*EIDX Implementation Recommendations for Change Order Transaction (860), Change Order Acknowledgment (865) Transaction*” generally apply. Any exceptions to those recommendations are noted below.

Acknowledgments to BPO's without Delivery Schedules

In a processing using BPO's, pricing, terms, etc. have usually been agreed upon in the pre-order model, and no schedules exist. The function of the change order acknowledgment in this case would be to confirm that the BPO has been received by the seller, and has been successfully transferred from the EDI system to the order management system.

ACKNOWLEDGMENTS TO RELEASES

Some trading partners may require that acknowledgments be sent to releases in a non-forecast environment. However, when parts are set up on a process which involves contract agreements and blanket purchase orders, the process usually involves an agreement that the seller will have a certain amount of stock available and be able to ship as soon as a release is received; therefore acknowledgments may not always be necessary.

Releases in forecast environment are not sent in an 860/ORDCHG transaction/message; refer to “*EIDX Implementation Recommendations for Transactions Used in Forecast / Planning Models*” for more information about releases in a forecast environment.

ACKNOWLEDGING REJECTS OF BLANKET ORDERS AND CHANGES

In a processing using BPO's, pricing, terms, etc. have usually been agreed upon in the pre-order model, and no schedules exist. In a blanket order environment, order or line item reject (non-acceptance) might occur under any of the following circumstances:

- Wrong price
- Wrong part (not on contract)
- Quantity not based on correct pre-pack size
- Didn't contact seller first to agree to put part on BPO process
- Different part revision than negotiated

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Identifying Type of Order Being Acknowledged

X12: BCA13 - PURCHASE ORDER TYPE

UN: BGM/C002.1001 - DOCUMENT/MESSAGE NAME

UN: SG1.RFF - REFERENCE NUMBER

IDENTIFYING ORDER TYPE IN THE APPLICATION

Acknowledgments to Blanket Orders, Changes to Blanket Purchase Orders, and Releases Against Blanket Orders are sent in the same X12 transaction or EDIFACT message as acknowledgments to Standalone (Discrete) Purchase Orders.

Typically, these acknowledgment types are processed differently, and many trading partners using different mappings for the different order types and process them in different applications.

Ideally, the receiving application should be responsible for identifying which type of acknowledgment is being processed. However, the 855 PO Acknowledgment transaction (X12) and ORDRSP message (UN) have no code to identify the original order or change order type; however, the original order type may be specified by using the appropriate qualifier and corresponding order number or document/message number (of the message being acknowledged) in the SG1.RFF segment. The 865 Change Order Acknowledgment allows identification of the original order type on the BCA segment.

<u>855</u>	<u>MEANING</u>	<u>COMMENT</u>
N/A	No element available	X12 855 has no data element for identifying original order type. The buyer must rely on the order number to look up the order in the internal application and determine what type it is.
<u>X12 BCA13 (DE92)</u>	<u>MEANING</u>	<u>COMMENT</u>
CP	Change to Purchase Order	Use for acknowledgment to Blanket Order Change. <i>Same code used for changes to Standalone POs</i>
RL	Release (Blanket Order) / Call-Off Order	Use when acknowledging a release against a BPO.
CR	Change to release	Use when acknowledging changes releases
<u>UN C002.1001</u>	<u>MEANING</u>	<u>COMMENT</u>
231	Purchase order response	Used for all order, change order, and release responses. The buyer must rely on the order number to look up the order in the internal application and determine what type it is.
<u>UN C506.1153</u>	<u>MEANING</u>	<u>COMMENT</u>
BO	Blanket order number	Use in acknowledgments to BPO's and BPO changes.
COF	Call-off order number	Use in acknowledgments call-offs (releases)
OP	Original purchase order number	Use in acknowledgments to standalone orders.

ALTERNATIVES FOR IDENTIFYING ORDER TYPE

If trading partners are using work-around that involves using different sender/receiver IDs at the functional group level in X12, or the secondary address level in UN-EDIFACT, acknowledgments should be routed back to the same address that the order or change order was received from. See "Identification of Order Type" in the section on Blanket Change Orders above.

**ELECTRONICS INDUSTRY DATA EXCHANGE (EIDX)
FORECAST/PLANNING PROCESS RECOMMENDATIONS**

Schedules: Which to Send

X12: SCH LINE ITEM SCHEDULE

UN: SG48.SCC SCHEDULING CONDITIONS SEGMENT GROUP

BPO's with Delivery Schedules (Scheduling Agreements)

For a BPO with pre-determined delivery schedules, all the currently agreed upon EIDX conventions apply for schedules to send back in acknowledgments.

BPO's with No Delivery Schedules

Just as most trading partner's systems are designed to expect at least one delivery schedule on an open purchase order, systems may require at least one delivery schedule on an acknowledgment. Therefore it is recommended that at least one "dummy" schedule should be sent; trading partners who do not need schedules on acknowledgments can ignore the schedule segments.

Segments Used to Convey Schedules

In ASC X12, acknowledged delivery schedules are sent at the detail level in ACK segments; the primary difference between actual acknowledged schedules and "dummy" delivery schedules is in the coding of the Date/Time Qualifier. In UN-EDIFACT, delivery schedules are sent using the SCC, QTY and DTM segments in Segment Groups 48 and 49; the primary difference between actual delivery schedules and "dummy" delivery schedules is in the coding of the DTM segment. Use the table in "SCHEDULES: WHICH TO SEND" in the section on Blanket Purchase Orders above for codes to use on "dummy" schedules in acknowledgments. In the ACK segment, DE374 is in position ACK04.