



Boeing Global Services OneSAP Project

Formerly known in 2014 as the MMBST project

March 22, 2017

Webinar Instructions

Engineering, Operations & Technology | Information Technology

- After the call, if you have a question please send an e-mail to lan.h.bausano@boeing.com
- All questions will be consolidated and answers provided via the Boeing Supplier Integrations link on myexostar.com
 - <http://www.myexostar.com/Boeing/BSCP/Integrations/>

Background

Engineering, Operations & Technology | Information Technology

- **Back in April 2014, Boeing went live with the Boeing Supply Chain Platform (BSCP)**
 - Boeing migrated transactions and suppliers off the legacy Supply Chain Platform
 - The 787-SCMP platform continues to support the BCA 787 business
- **The focus of this presentation – is for the Commercial Aviation Services (BGS CAS) and their implementation of a new SAP system, and the requirements for integrated suppliers**

Integration Solution Overview

Engineering, Operations & Technology | Information Technology

- **A solution for Boeing's enterprise supplier integration requirements**
- **Multiple Business Systems supported in the Implementation Guides**
 - Boeing Defense Systems (BDS NWP)
 - Boeing Commercial Airplanes (BCA ERPLN)
 - Commercial Aviation Services (BGS CAS SAP)
 - Others to be added based on roadmap priorities
- **Transactions in EDI ANSI X12 and Flat File formats**
- **Multiple connectivity options for the supplier**
 - HTTPS
 - AS2
 - SFTP
 - B2B Client – separate instance and newer version
- **Suppliers will be provided new Accounts (MPIDs) on the Boeing Supply Chain Platform**

Boeing Global Services (CAS) Material Services SAP Implementation

Engineering, Operations & Technology | Information Technology

- **BGS CAS Material Services is implementing SAP to replace their existing legacy procurement, inventory, and sales systems.**
- **The implementation date is – July 17, 2017**
- **On July 17, 2017, BGS CAS Material Services will stop using the following procurement systems:**
 - ERPLN (Logistic Company 680)
 - TPS-II (Emergent Build Center)
- **All spares purchase orders will originate from SAP and will be sent to the Boeing Supply Chain Platform (BSCP).**
- **For integrated suppliers, they will process through the new EDI and Flat File interfaces Exostar is implementing**
- **The implementation guides for the transactions reflect the requirements of BGS CAS and their SAP system.**

Boeing CAS Material Services – SAP Purchase Order Conversion

Engineering, Operations & Technology | Information Technology

■ Purchase Order Conversion

- Purchase orders created in ERPLN co 680, and TPSII prior to July 17, 2017 will be converted into SAP purchase orders
 - Purchase orders out of ERPLN, will be canceled from ERPLN and converted into a SAP order with the same twelve digit PO number from ERPLN. (for example: 680001466678)
 - Purchase orders from TPSII, will be canceled from TPSII and converted into a SAP order with the new purchase order number convention (for example: 50024500000001). The new SAP purchase order will reference the old TPSII purchase order number.
- All new purchase orders released out of SAP will have 10 digit numbers that begin with 45 or 41. 5002 will be appended to the front of the 10 digit purchase order number for a total of 14 digit.
 - For example 50024500000001 or 50024100000001
- **BGS CAS Supplier Management will provide follow-on communication via Supplier bulletins viewable on the supplier portal**

Scope

Engineering, Operations & Technology | Information Technology

- **Suppliers will establish a new integrated connection with Exostar for the following transactions:**
 - Purchase Order
 - Purchase Order Change
 - Advance Ship Notice
 - Purchase Order Response
 - Purchase Order Change Response
 - Functional Acknowledgments

- **Suppliers have three options:**
 1. Integrate via the EDI ANSI X12 format
 2. Integrate via the Flat File
 3. Use the BSCP User Interface

- **Initially, this connection will just cover the BGS CAS SAP transactions**

- **For BGS CAS SAP, Suppliers will be establishing a new connection with Exostar, and will need a new set of maps**

- **Suppliers will need to maintain their existing 787-SCMP integration for BCA ERPLN transactions**

Implementation Guide Highlights

Engineering, Operations & Technology | Information Technology

- **General – The guides apply to all applicable Business Units/Systems (not just BCA). Differences by Boeing Business System (BBS) noted (often in notation boxes under the Element Name)**
- **Changes to document layout – Incl. addition of “Segment ID”, “Max Use” & “Usage” columns in segment sections. Some info may be displayed slightly different or been relocated on the page.**
- **Expanded set of examples – PO/POC Examples are specific to each BBS**
- **Element Instructions/Notes have been added showing examples by BBS (usually displayed under the associated element Name)**
- **Mandatory, Optional or Conditionally Required Segments & Elements may have changed or vary by BBS. Check the notes**

Implementation Guide Highlights – continued

Engineering, Operations & Technology | Information Technology

- **New Boeing ISA & GS Identifiers – GS will distinguish by BBS but no longer identifies 787 versus other BCA programs.**
- **Other identifiers such as Buyer & Supplier MPID (N1) & Buyer Account Code (N9) have been added & must be returned on some transactions like the ASN.**
- **Schedule Line Numbers are required on all transactions. BGS CAS & BDS NWP may include multiple schedule lines while BCA ERPLN includes only one**
- **BGS CAS SAP and BDS NWP provide full replacement POCs, BCA ERPLN will continue to provide net changes.**
- **Standard ASN barcode is changing from 24 characters to 21 removing the carton number at the end. A new 2D barcode is also required and the label has been reformatted.**
- **Carrier Name & SCAC must be provided using the Exostar code lists**
- **All Ship To addresses on the label must come from the PO/POC**
- **MPIDs & Buyer Account are new values that must be present in the ASN**

Boeing Barcode Ship Label

Engineering, Operations & Technology | Information Technology

- Boeing is implementing a new, enterprise-wide Ship Label
- Supplier will need to produce a ship label with both human- and machine-readable components.
- A label will need to be placed inside and on the outside of each container.
- The barcode label specifications will be emailed out to the supplier IT contacts. The specifications are located on the Boeing Supplier Portal.
- Suppliers must implement the new barcode label for the BSCP CAS SAP integration. You have the choice of either maintaining the existing label for the current SCMP ERPLN integration or consolidating to the new label for both.
- **Note:** FF suppliers please see next slide.

FROM: ABC Machine 6241 North Main St. Marshfield OK 34996-4012 US	
TO: The Boeing Company 420 Charles Dr Bldg 06, Door S 4 A, Col L1 Omaha, AK 98204 US	
(3J) LICENSE PLATE #:	
UN93833603400A3012567	
	
	
Order: 6325412645	Position/PO Item: 0077
P/S: 1234567890abcdefghijklmnopqrstuvwxyz1234567890	
Item: 1234567890abcdefghijklmnopqrstuvwxyz1234567890abcdefghijklmnopqrstuvwxyz42	
Qty Shipped: 1.0000 EA	
Boxes: 1 of 1	
Total Weight: 6,500.0000 LB	Actual Ship Date: 03/10/2011
Order Reference: HOT	On Dock Date: 03/20/2011
Receiver Reference: 12345678901234567890123456789032	
Call Off Number: G12345678	

ASN for Flat File Suppliers

Engineering, Operations & Technology | Information Technology

- ***As a part of the BSCP CAS OneSAP integration project, it was previously communicated that barcode labels generated by suppliers could use the Boeing Enterprise ASN label specifications communicated by Boeing for both the BSCP and 787 SCMP systems. An important amendment to this statement applies specifically to Flat File format suppliers that can interfere with their existing 787 SCMP Integration in production.***
-
- ***Issue: The ASN labels supported by the 787 SCMP integration originally requires a 24-character barcode, same as the requirement in the 787 SCMP integration data. If suppliers implement the Enterprise Label which supports a 21 character barcode label and send the same 21-character barcode as the License Plate number value in their existing Production 787 SCMP integration, all Production ASN data will fail. This failure occurs because 787 SCMP ASN flat file data expects 24 characters, with no exceptions.***
-
- ***Resolution Paths:***
- ***Use the Boeing Enterprise label (with 21-character barcode) for both BSCP and 787 SCMP integrations but concatenate an additional three digits to the 21-character barcode when the barcode value is sent to 787 SCMP integration so that the transmission successfully loads.***
- ***Accommodate two types of labels:***
- ***1) the enterprise label for BSCP***
- ***2) Retain the existing production 787 SCMP label for 787 SCMP.***
-
- ***Suppliers are requested to choose one of the two resolution paths to this issue***

Testing

Engineering, Operations & Technology | Information Technology

- **Connectivity – Exostar and the Supplier** ensure bi-directional connection is in successful (Communication on this will be provided in the next week)
- **Map Testing – Test PO, POC and ASN – Executed by Boeing CAS to Suppliers**
 - ASN test shipments will be against the corresponding POs and POCs
 - Labels will need to correspond to test ASN and PO transactions
- **Labels will need to be approved by Boeing**
 - If you were approved for the new labels in 2014 then you do not need to be re-approved.

CAS OneSAP Integration Schedule

Engineering, Operations & Technology | Information Technology

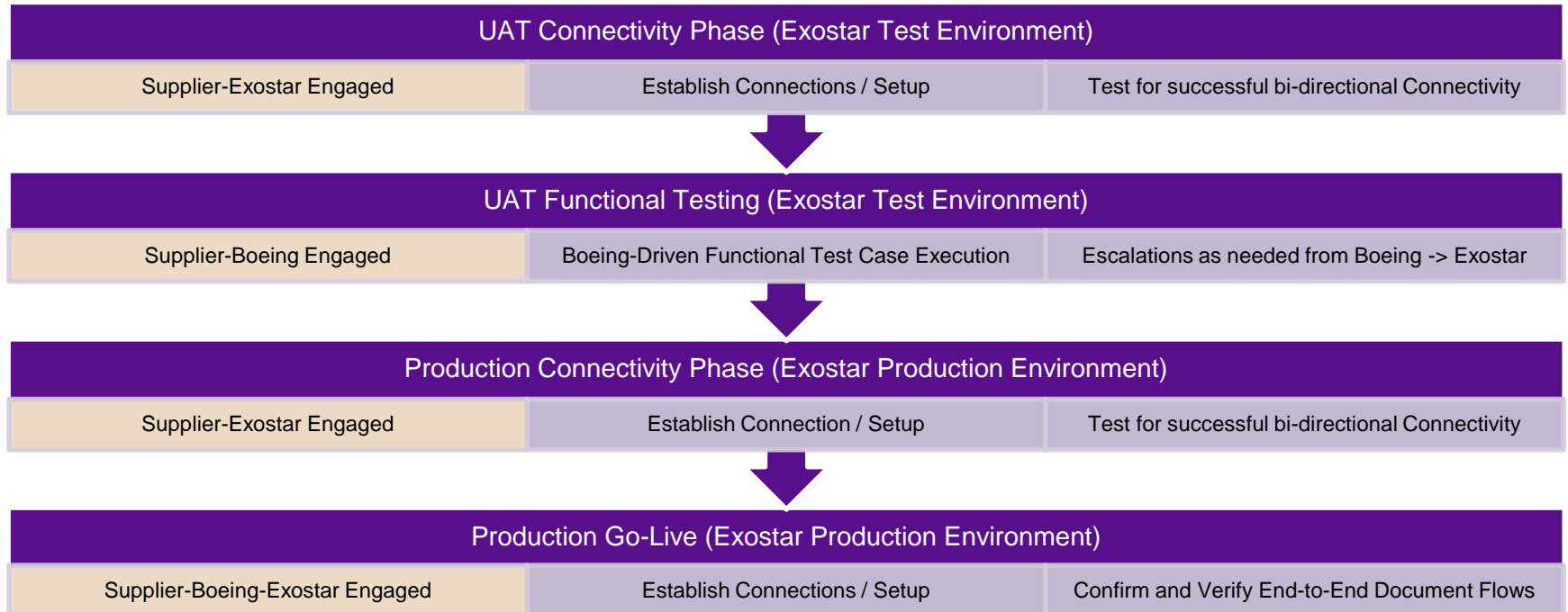
- **PO POC ASN & FA Supplier Integration Schedule Flat File & X12**
 - Obtain Supplier Test Readiness – **3/22 – 4/7**
 - Supplier Development - **3/22 – 5/19**
 - Connectivity Testing - **3/27-4/21**
 - Supplier Testing – **4/24 – 6/30**

- **POR/POCR Supplier Integration Schedule**
 - Supplier Receives POR/POCR Flat File & X12 - **5/5**
 - Supplier Development – **5/10 – 6/16**
 - Supplier Testing – **5/10 – 6/30**

- Supplier Deployment OneSAP **7/17/17**

Expected CAS Resumption Project Lifecycle

Engineering, Operations & Technology | Information Technology



Copyright 2017 Exostar LLC | All Rights Reserved |

UAT Connectivity Phase

Engineering, Operations & Technology | Information Technology

- **Connectivity Kickoff Request Communication (Email to connectivity contacts established by Boeing)**
 - Follow-up phone calls as needed (Phone)
- **Connectivity Kickoff (Exostar one-on-one with each Supplier w/ Boeing Visibility)**
 - Introduce UAT Connectivity Objectives (Provided via Slide Deck)
 - Confirm/Review Supplier Connectivity Type + Requirements (Provided in PDF)
 - Review Integration profile (Word Document that needs to be collaborated on by Supplier/Exostar)
 - Schedule Follow-up Weekly Touchpoints (Recurring Meeting between Exostar/Supplier)
 - Until bi-directional connectivity has been established in UAT.

Copyright 2017 Exostar LLC | All Rights Reserved |

15

Next Steps

Engineering, Operations & Technology | Information Technology

- **Supplier to review the Implementation Guides**
- **Boeing/Exostar will hold open conference calls for suppliers to dial in and ask questions about the Implementation Guides.**
 - March 22, 2017 – 1:00PM, March 24, 2017 – 10:00AM, March 28, 2017 – 8:30AM PST
- **Implementation Guides can be found at <http://www.myexostar.com/Boeing/BSCP/Integrations/>**
- **Boeing to obtain commitment on when connectivity with Exostar and End to End testing with Boeing will begin by March 31, 2017.**
 - Please e-mail commitments to lan.h.bausano@boeing.com

A decorative banner with a purple and pink abstract geometric pattern. The word "Information" is written in a large, light grey, sans-serif font across the right side of the banner.

Appendix – EDI Implementation Guides

Highlights and Differences from
787-SCMP EDI

PO Document Changes – Highlights

Engineering, Operations & Technology | Information Technology

Give Attention to ...

- **Added Segments :**
CUR (Currency), PER (Administrative Communication Contact), DTM (Date/Time Reference), TD5 (Carrier Details Routing Sequence/Transit Time)
 - Buyer Contact Info has been expanded & may include 2 or 3 contact type values
 - Supplier Contact Info added
 - Use of DTM & TD5 at the header varies by BBS
- **ISA (Interchange Control Header): Boeing Sender ID & Qualifier (ISA05/06)**
- **GS (Functional Group Header): Sender ID (GS02) varies by BBS**
- **BEG (Beginning Segment for PO): New elements (BEG07 & BEG09); Purchase Order Type Code (BEG02) varies by BBS; and element note/instruction updates (BEG03).**
- **FOB (F.O.B. Related Instructions): Codes used depend on BBS.**
- **ITD (Terms of Sale/Deferred Terms of Sale)**
 - Terms Type Code (ITD01) has been added; note that interpretation varies by BBS.
 - Description (ITD12) containing the Terms Note has been removed. Suppliers will need to use the values in Terms Discount Percent (ITD03), Terms Discount Days Due (ITD05) & Terms Net Days (ITD07) instead.

PO Document Changes – Highlights (continued)

Engineering, Operations & Technology | Information Technology

Give Attention to *(CONTINUED)* ...

- **N9 Loop - header (Reference Identification): (1) New and re-mapped Elements for some segment instances. (2) New and re-mapped codes for some elements. (3) Updated element notes/instructions specific to BBS.**
 - Buyer Account Code (19) added which identifies the BBS or site
 - Originating Company Identifier (8M) is 4 characters for CAS. It is embedded in the PO number.
 - LettersorNotes (L1) is used by both BCAERPLN & CAS SAP, however, order types & identification of note types differ. BDS uses an N9 Condition of Purchase Document Number (CP) instead.
 - LettersorNotes (L1)Tax Exempt Cert Text has been moved to the header
 - MSG (Message Text): Usage and text content depends on BBS.
- **N1 (Name and Address):**
 - Additional N1 loops added for Seller (SE), Bill To (BT) and Manufacturer (MF)
 - MPIDs are included for both Buyer (BY) & Seller (SE)
 - N2 Loop (Additional Name Information): Note changes for some N2 instances depending on BBS.
 - Street addresses will now be mapped to the next available address element
- **PO1 (Baseline Item Data): New and Changed elements & codes specific to BBS -- Attention to: PO101 Assigned Identification, PO103 (Unit or Basis of Measure), PO104 (Unit Price), PO105 (Basis of Unit Price Code), PO106 (Product/Service ID Qualifier), PO110 thru PO126 added.**
 - PO Position (PO101) format varies, BCA ERPLN & BDS use leading zeroes, CAS SAP does not.
 - Buyer Part Number ID Qualifier (PO106) has changed from “PN” to “BP”
- **PID (Part Description): Only present in PO108/09; however, the PID will be used by BDS for some additional part information.**

PO Document Changes – Highlights (continued)

Engineering, Operations & Technology | Information Technology

Give Attention to *(CONTINUED)* ...

- **TXI (Tax Information): TXI02 (Monetary Amount) was added. TXI06 codes depend on BBS. TXI04 & TXI05 were dropped. Use varies by BBS.**
 - Tax Monetary Amount (TXI02) may be included on CAS orders for taxable items
- **SCH (Line Item Schedule): Codes and elements depend on BBS. Assigned Identification (SCH12) added for Schedule Line Number.**
- **TD5 (Carrier Details): moved to the Schedule Line from Line. TD501 (Routing Sequence Code) added; TD502 & TD503 removed. BCA will no longer use TD505 (Routing).**
- **N9 Loop - detail (Reference Identification): (1) New and re-mapped Elements for some segment instances. (2) New and re-mapped codes for some elements. (3) Updated element notes/instructions specific to BBS.**
 - LettersorNotes (L1) is used by both BCAERPLN & CAS SAP, however, identification of note types differ. BDS uses an N9 Condition of Purchase Document Number (CP) instead.
 - LettersorNotes (L1) Tax Exempt Cert Text has been moved to the header
 - Contract & Line Number (CT) have been concatenated: Example 123456789-12
 - New Delivery Reference (KK) element included. A “NO” indicates an ASN is not permitted against a line.
 - MSG (Message Text): Usage and text content depends on BBS.

POC Document Changes – Highlights

Engineering, Operations & Technology | Information Technology

Give Attention to ...

- **Added Segments :**
CUR (Currency), PER (Administrative Communication Contact), DTM (Date/Time Reference), TD5 (Carrier Details Routing Sequence/Transit Time)
 - Buyer Contact Info has been expanded & may include 2 or 3 contact type values
 - Supplier Contact Info added
 - Use of DTM & TD5 at the header varies by BBS
- **ISA (Interchange Control Header): Boeing Sender ID & Qualifier (ISA05/06)**
- **GS (Functional Group Header): Sender ID (GS02) varies by BBS**
- **BCH (Beginning Segment for POC): Added elements (BCH12 & BCH14) & instruction changes (BCH03 & BCH05).**
 - Replace added to Transaction Set Purpose Code (BCH01) list for CAS and BDS
- **FOB (F.O.B. Related Instructions): Codes used depend on BBS.**
- **ITD (Terms of Sale/Deferred Terms of Sale)**
 - Terms Type Code (ITD01) has been added; note that interpretation varies by BBS.

POC Document Changes – Highlights (continued)

Engineering, Operations & Technology | Information Technology

Give Attention to *(CONTINUED)* ...

- **N9 Loop - header (Reference Identification): (1) New and re-mapped Elements for some segment instances. (2) New and re-mapped codes for some elements. (3) Updated element notes/instructions specific to BBS.**
 - Buyer Account Code (19) added which identifies the BBS or site
 - Originating Company Identifier (8M) is 4 characters for CAS & is not part of the PO Number
 - LettersorNotes (L1) is used by both BCAERPLN & CAS SAP, however, order types & identification of note types differ. BDS uses an N9 Condition of Purchase Document Number (CP) instead.
 - LettersorNotes (L1)Tax Exempt Cert Text has been moved to the header
 - MSG (Message Text): Usage and text content depends on BBS.
- **N1 (Name and Address):**
 - Additional N1 loops added for Seller (SE), Bill To (BT) and Manufacturer (MF)
 - MPIDs are included for both Buyer (BY) & Seller (SE)
 - N2 Loop (Additional Name Information): Note changes for some N2 instances depending on BBS.
 - Street addresses will now be mapped to the next available address element
- **POC (Line Item Change): Note new elements, plus element instructions & code values esp. POC02 (Change or Response Type Code), POC03 (Quantity Ordered), POC04 (Quantity Left to Receive), POC06 (Unit Price), POC07 (Basis of Unit Price Code), POC12 thru POC27 added.**
 - PO Position (POC01) format varies, BCA ERPLN & BDS use leading zeroes, CAS SAP does not.
 - Buyer Part Number ID Qualifier (POC08) has changed from “PN” to “BP”
- **PID (Part Description): Only present in POC10/11; however, the PID will be used by BDS for some additional part information.**

POC Document Changes – Highlights (continued)

Engineering, Operations & Technology | Information Technology

Give Attention to *(CONTINUED)* ...

- **TXI (Tax Information): TXI02 (Monetary Amount) was added. TXI06 codes depend on BBS. TXI04 & TXI05 were dropped. Use varies by BBS.**
 - Tax Monetary Amount (TXI02) may be included on CAS orders for taxable items
- **SCH (Line Item Schedule): Codes and elements depend on BBS. Assigned Identification (SCH12) added for Schedule Line Number.**
- **TD5 (Carrier Details): moved to the Schedule Line from Line. TD501 (Routing Sequence Code) added; TD502 & TD503 removed. BCA will no longer use TD505 (Routing).**
- **N9 Loop - detail (Reference Identification): (1) New and re-mapped Elements for some segment instances. (2) New and re-mapped codes for some elements. (3) Updated element notes/instructions specific to BBS.**
 - LettersorNotes (L1) is used by both BCAERPLN & CAS SAP, however, identification of note types differ. BDS uses an N9 Condition of Purchase Document Number (CP) instead.
 - LettersorNotes (L1) Tax Exempt Cert Text has been moved to the header
 - Contract & Line Number (CT) have been concatenated: Example 123456789-12
 - New Delivery Reference (KK) element included. A “NO” indicates an ASN is not permitted against a line.
 - MSG (Message Text): Usage and text content depends on BBS.
- **AMT (Monetary Amount): AMT02 instruction depends on BBS.**

ASN Document Changes – Highlights

Engineering, Operations & Technology | Information Technology

Give Attention to ...

- **Added Segments: N1 (Name) segments, TD5 (Carrier Details - Routing Sequence/Transit Time), SLN (Subline Item Detail)**
- **ISA (Interchange Control Header): Boeing Receiver ID & Qualifier changed (ISA07/08)**
- **GS (Functional Group Header): Boeing Receiver ID changed (GS03), varies by BBS)**
- **BSN (Beginning Segment for Ship Notice): Replace & Cancellation added (BSN01)**
- **TD1 (Carrier Details - Quantity and Weight) moved from Detail to Shipment level**
- **TD5 (Carrier Details - Routing) added including Carrier Name, SCAC, Mode & Routing**
- **REF (Reference Identification): (1) Some Max Use info may have changed. (2) Required elements and mapping values may have changed.**
 - Shipment Level: Code value for Bill of Lading/Tracking Number changed from “BM” to “2I”
 - Item Level: Buyer Account Code (19) required from PO; new codes added for Purchase Schedules
- **N1 (Name): Additional N1 segments added for Buyer (By) & Seller (SE) including MPIDs.**
 - Ship To Warehouse qualifier changed from “54” to “92”.
- **LIN (Item Identification): Element added (LIN01), LIN04 code value changed to “PL”; LIN06/07 dropped**
- **SLN (Subline Item Detail): replaces the SN1 segment & includes the Schedule Line Number in SLN01**
- **PRF (Purchase Order Number): For BCA, the PO Number is the full 12 characters not 9.**