BOEING

COMMERCIAL AIRPLANES GROUP

SUPPLIER NETWORK
Electronic Data Interchange

PCOS (Purchasing/Control On-line System)

EDI Implementation Guide

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.

TableofContents

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RevisionSection

Date	Name	DescriptionofChange
11/4/02	R.Huber	OriginalVersioninthisstand -aloneformat.
08/08/05	D.Johnson	RemoveallreferencestoUn/Edi fact

Introduction

Overview

The Purchasing Control On-line System (PCOS) currently co-exists with Enterprise Resource Planning (ERP). PCOS is being phased out by airplane model. It is currently estimated that the move to ERP will be complete by third or fourth quarter 2003. The PCOS retirement will follow sometime within the next few years.

Benefits of EDI

EDI provides many benefits to support your business in achieving its objectives. Keep the following in mind as we begin to work together to implement the ASN EDI Application.

- ♦ EDI reduces paperwork (forms handling), data entry labor costs, postage costs, and printing costs.
- ♦ EDI supports the concept of Just In Time (JIT) manufacturing by promoting improvement in flow time to enhance inventory control.
- ♦ EDI drives out inefficiencies in the business process.

Organizations choosing EDI should consider that the full benefits are only received when both parties fully integrate the EDI data into their application systems.

Key Steps

COMMERCIAL AIRPLANES

1. The Commercial Airplanes Supplier Network EDI Group will provide the applicable documents (e.g. implementation guides/mapping specifications) to the trading partner.

TRADING PARTNER

1. The trading partner must map to the new specifications (maps) provided by Commercial Airplanes by:
   a) mapping internally or
   b) acquiring overlays from an EDI translation software provider

Trading Partner Agreement

Commercial Airplanes and its existing EDI suppliers have signed trading partner agreements that outline electronic business communications. Re-negotiation or revisions to these existing signed agreements are not required for the implementation of this transaction.

EDIStandards

AIACompliance

BoeingCommercial Airplaneisamemberof the AerospaceIndustryAssociation's(AIA) ElectronicEnterpriseWorkingGroup(EEWG).TheAIAEEWG'spurposeistoreviewthe ANSIX12transactionsetsusedwithintheaerospaceindustryandharmonizethem.To harmonizemeansto definecommontransactionsettemplate(s).Thiswillenableall companieswithintheaerospaceindustrytouseacommonformat.Thisappliesto aerospacemanufacturersaswellassuppliers.

PleasefeelfreetocontactanyoftheEDIspecialistslisteda ttthebeginningofthis implementationguideifyouwouldliketodiscussthisfurther.

EDIStandards andTransaction Sets

Thefollowing **ANSIASCX12** Version4010transactionaresupported:

- 850 -PurchaseOrder
- 855 -PurchaseOrderAcknowledgment
- 856 –AdvanceShipmentNotice
- 860 -PurchaseOrderChange
- 865 -PurchaseOrderChangeAcknowledgment
- 997 -FunctionalAcknowledgment

PurchaseOrderandPurchaseOrderChangeandAcknowledgements

- TheANSIASCX12 **850**transactionsetmessagerequiresthe **855**to bereturned within10daysofissueoftheoriginalPurchaseOrder.

- TheANSIASCX12 **860**transactionsetmessagerequiresthe **865**tobereturned within10daysofissueofthePurchaseorderchange.

- TheANSIASCX12 **997**transactionsetmessageisrequired tobereturnedwith48 hoursofthe **850/860**beingsenttotheTradingPartner.

EDIIntegrationTest

Purpose

This section defines Boeing Commercial Airplane Materiel Division, EDI test requirements for all inbound and outbound EDI transactions.

The purpose of the integration testing is to confirm that the trading partner can successfully:

1. Acknowledge an EDI transmission;

2. Translate between the ANSI ASC X12 format and native application files, i.e. confirm the application data is mapped correctly.

Although the following is not a direct part of the testing process, it is equally important DURING TESTING for the trading partner to confirm their internal business processes are receiving the data they require, and can interpret the data and understand what data is being sent.

Testand Production Environment Considerations (ANSIX12)

<u>**Overview**</u>

- Testingisrequiredforeachtradingpartnerbeforetheycanbemovedintoaproduction environment.
- Astepbystepprocessisdescribedtodocumentthetest procedure.

<u>**ANSIX12ControlGuidelines:**</u>

ISA
- TheISAusageindicator(ISA15) <u>duringthetestperiod</u> willreflect **"T".**
- TheISAusageindicator(ISA15) <u>for **production**</u>mustberevisedto" **P**"when productionreadinesshasbeendeterminedandscheduledbythe TradingPartnerand theECCoordinatorattheBoeingCompany.

GS –InboundtoBoeing
- TheApplicationSender'sCode(GS02)willreflecttheTradingPartner's **Interchange ID**duringthe **testing**phaseandfor **production**.
- TheApplicationReceiver'sCode(GS03) willbesetto" **PCOSTEST**"duringthe **testing** phaseandwillberevisedto" **PCOS**"for **production**.

GS –OutboundfromBoeing
- TheApplicationSender'sCode(GS02)willreflect **"PCOSTEST"**duringthe **testing** phaseandwillberevisedto" **PCOS**"for **production**.
- TheApplicationReceiver'sCode(GS03)willreflecttheTradingPartner's **Interchange ID**duringthe **testing**phaseandfor **production**.

SegmentTerminators/ElementSeparators/Sub -ElementSeparators *– Preferred*

- **Terminator** –CRorLF(CarriageReturnorLine Feed)

- **ElementSeparator** –"~"(Tilde)

- **Sub-ElementSeparator** –"|"(Bar)

TheuseofanyothersymbolsshouldbecoordinatedwithBoeingpriortotesting.

<u>**VANandInterchangeID**</u>
- TheVANweuseisGXS.BoeingQualifierandIDinformationis:

	TEST environment:	**PRODUCTION** environment:
GEIS	Qualifier:12 InterchangeId:4252376148	Qualifier:12 InterchangeId:4252660502

Integrated Functional Test Steps – Outboundfrom Boeing

StepI –

- Boeing willsendapplicabletesttransactions(850/860)viaEDItoTradingPartner.
- TradingPartnerwillsend997FunctionalAcknowledgmentsviaEDItoBoeing.

StepII -DataVerification

- TradingPartnerverifiesdatareceivedfromBoeing.
- Boeingcorrectsanyde ficienciesandrepeatsStepsI&IIifnecessary.

StepIII –Production

- Uponsuccessfulcompletionoftheintegratedfunctionaltest,theTradingPartnerwill bemigratedintoproduction.

Integrated Functional Test Steps –Inbound toBoeing

StepI –

- TradingPartnerwillsendapplicabletesttransactions(855/865/856)viaEDItoBoeing.
- Boeingwillsend997FunctionalAcknowledgmentsviaEDItoTradingPartner.

StepII -DataVerification

- BoeingverifiesdatareceivedfromTradingPartner.
- TradingPar tnercorrectsanydeficienciesandrepeatsStepsI&IIifnecessary.

StepIII –Production

- Uponsuccessfulcompletionoftheintegratedfunctionaltest,theTradingPartnerwill bemigratedintoproduction.

AttachmentA

UnitofMeasureCodesList

ThefollowingcodelistrepresentstheonlycodesthatwillbesentfromthePCOSapplicationviaEDI.

Code	Name		Code	Name
03	Seconds		LF	LinearFoot
BD	Bundle		LN	Length
BF	BoardFeet		LO	Lot
BG	Bag		LT	Liter
BM	Bolt		LY	LinearYard
BO	Bottle		MJ	Minutes
BR	Barrel		ML	Milliliter
CA	Case		MM	Millimeter
CF	CubicFeet		OZ	Ounce
CG	Card		PA	Pail
CI	CubicInches		PC	Piece
CL	Cylinder		PD	Pad
CM	Centimeter		PK	Package
CN	Can		PR	Pair
CT	Carton		PT	Pint
CX	Coil		QT	Quart
CY	CubicYard		RL	Roll
DA	Days		RM	Ream
DF	Dram		SC	SquareCentimeter
DH	Miles		SF	SquareFoot
DR	Drum		SH	Sheet
DZ	Dozen		SI	SquareInch
EA	Each		SJ	Sack
FT	Foot		SM	SquareMeter
GA	Gallon		SO	Spool
GR	Gram		SQ	Square
GS	Gross		ST	Set
HA	Hank		SY	SquareYard
HR	Hours		TB	Tube
HU	Hundred		TG	GrossTon
HV	HundredWeight (Short)		TH	Thousand
IN	Inch		TO	TroyOunce
JA	Job		TQ	ThousandFeet
JR	Jar		UN	Unit
KG	Kilogram		VI	Vial
KT	Kit		ZP	Page
LB	Pound		ZZ	MutuallyDefined

AttachmentB

SpecialChargeCodes –A NSIASCX12

Code X12DescriptionPCOSDescription

Code	X12 Description	PCOS Description
B110	ChemicalMillingCharge	ChemicalMilling
B670	ContractEscalation	AccelerationCharge
B940	CuttingCharge	CuttingCharges
C230	Die ServiceCharge	DieCharge
C690	Escalation	EscalationCharge
C870	ExpeditingFee	ExpediteCharge
C880	ExpeditingPremium	AOGPremiumCharge
C930	ExportShippingCharge	PortofExport(POE)Fees
D580	HeatTreatCharge	HeatTreat
D900	Installation	InstallationCharge
E290	Layout/Design	DesignCharge
E960	One-Time-OnlyCharge	Non-RecurringCharges
F150	PackagingService	Packaging/PreservationCharge
G400	Repair	DamageRepair
G470	RestockingCharge	RestockCharge
G510	ReturnableContainer	Returnable ContainerCharge
G660	ScrapAllowance	ScrapAllowanceCharge
G760	Set-up	Set-UpCharge
H000	SpecialAllowance	NegotiatedDebit(Rejection)
H980	Test/QualificationCharge	TestPerformanceCharge
I000	Testing	TestPieces/SamplesCharge
I110	Tooling	No AccountableToolingCharge
ZZZZ	MutuallyDefined i.e.:DecelerationCharge	DecelerationCharge

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