# EDI SUPPLIER IMPLEMENTATION GUIDE MERCEDES-BENZ U.S. INTERNATIONAL, INC.

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See Page vi for a list of revisions.

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# **Revisions Made Since Earlier Versions**

Revision Issue Date	Summary of Change(s) Made
11 JUN 03	Updated example 830 transaction (report and data) to reflect output generated from new SAP system
26 JUN 03	Increased maximum length of the Linefeed location (MAN segment) in 830 Transaction
22 SEP 03	Corrected example of TD5 record in the 856 transaction, p. 12
	Added clarification of Release #, p. 12
	Added requirement for ZGS (engineering change level) to be included in the LIN segment in 856
	(indicates ZGS level of the part that will be shipped), P. 51
	Changed "Ship To" N104 from Route Code (e.g., V10) to Plant Code (i.e., 8010), p. 15
	Added "Ship To" N4*ST line including Storage Location and final delivery point, p. 15
	Added clarification of Plant Code, p. 15 Added clarification of Dock#, p. 18
	Added clarification of how ZGS is coordinated, p.20
	Added LOOP ID-PER ( <i>note: see next revision</i> ) – this is a new loop starting after the BFR segment and
	before the PER. Each loop conveys the schedule for a part-number/plant combination. If a
	part number is used in both plants, it will appear in two loop iterations, pp. 11 & 25
	Corrected example on HL, p. 38
	Clarified Release Number on BFR, p. 10
	Clarification of handling hierarchical shipments, p. 56
	Corrected example of shipment & ASN, pp 54-55
14 OCT 03	Corrected MEA02 field designation to 738, p. 38
	Removed LOOP ID-PER, pp. 11, 25. It was unnecessary since a separate release is created for each Plant
	number - Part number combination.
	Swapped fields N405 and N406 to enable conformance with ANSI standards for N405's length, p. 15.
16 OCT 03	Corrected examples to reflect the swap of N405 and N406, as above.
17 OCT 03	Added "EC" Product/Service ID to the LIN segment for conformance to ANSI standard, p. 51, and
	fixed related example
29 OCT 03	Changed N405 to "DE" to conform to ANSI standard, p. 15; also related examples.
17 MAR 04	Updated Specification to include information on EDI format for Service Parts orders
	p. 16 – Added plant code for Service Parts orders
	pp. 18 and 22 – added format for Service Parts orders
	pp. 23 through 27 – added "Not used for Service Parts orders" as applicable
	Bill of Lading number made mandatory, p. 45 (SAP requirement)
	Added LIN segment specific to Service Parts, p. 53 Added option to use MBUS002S as Application ID for Service Parts orders, p. 82
23 JUN 04	Made the Release Number conditional (not used on Service Parts orders), p. 11
23 JUN 04	Added detailed examples of ISA and GS segments, pp. 84-85
17 AUG 04	Removed "Not used in Service Parts" related to C*D, C*Z, and D*D, pp. 23, 24, 25, 26
17710004	Added clarification that part quantities in open POs for Service duplicate those in new, p. 24
	Updated example of Service Parts release to be more complete, p. 35
25 AUG 04	Clarified meaning of the PO# when used in LIN segment with Service Parts, p. 18
26 MAY 05	Added section on EDI820 Prepayment Advice, pp. 36-52
	Note: Highlighted section pp. 49-50 contains information that is revised since the last publication of the
EDI 820	
	specification, which was Oct. 19, 2005. The new segments contain reference data related to
	DMT/returned material, to aid in tracking causes of rejected material.
	Clarified how to use the RAN#, p. 104.
27 JUN 05	Corrected maximum length of segment N104, p. 42
08 FEB 06	Defined "MULTI", p 14
	Clarifications of state and country code contents, p. 16

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	LIN05 denoted as optional, p. 19	(continued)
08 FEB 06	(continued)	
	Increased max. length of REF02; defined meaning of "C	ALL", p. 21
	Noted that dollar values are always positive, p. 40	
	SLN10 denoted as optional, p. 50	
	Noted that there are no RAN numbers for debit memos ar	ny more, p. 52
	Noted that "LT" is not valid as Equipment Description, p.	. 63
	Noted that returnable packaging tracking is not currently	implemented, p. 70
	Explained difference in representing color codes in produ	action vs Service part number, p. 72
	Reduced max. length of SN101; clarified requirement for	SN103, p. 73
12 DEC 06	Corrected reference to RMR04 and IT104, p. 10	
	Corrected reference to PER*ST segment, p. 39	
	Put messages in ascending order by ANSI #	
	Added sections on ANSI 824 and 862	
	Added new Appendix D to explain JIT process	
	Appendix E: Updated RAN format to include consolidate	ed deliveries (not tied to plant), p. 126
6 FEB 07	Removed section on outbound 824 that appeared in 12 D	EC 06 Draft for Comment; MBUSI
	will not implement the 824 (outbound) at this time.	
20 FEB 07	Removed idoc and JIT CallOff# from BSN segment, p. 2	2
	Added section on reference numbers (REF segment) for i	doc#, p. 25
26 FEB 07	Added DTM segment to 830 (JIT Suppliers Only), p. 34	
	Added example of 830 for JIT Supplier, p. 58	
28 FEB 07	Removed incorrect reference to BSS02, p. 24	
12 MAR 07	Added instruction to contact Logistics for information or	n DTM field, p. 34
	Removed REF*RE from the 830 (JIT suppliers) – this wi	ll not be used; p. 73

#### INTRODUCTION

This implementation guide documents the Electronic Data Interchange (EDI) requirements for Mercedes-Benz U.S. International (MBUSI).

MBUSI is using the Automotive Industry Action Group (AIAG) version 3050 sub-set of the American National Standard Institute (ANSI) Accredited Standard Committee (ASC) X12 Electronic Data Interchange (EDI) Standards. The formats for those business documents are defined herein.

MBUSI will be using networking services provided by IBM Information Exchange (the Value Added Network formerly known as Advantis). The Information Exchange software application provides store and retrieval data file mailbox services. ISA/GS information in found in Appendix B.

# PrePayment Advice(820)

## Payment Order/Remittance Advice

### **Target Audience**

This section (dealing with the EDI 820, PrePayment advice) is only for those suppliers who elect to receive it. This is an optional transaction that is sent by request. You can use it in a *cash application* activity to reconcile your records of what you have shipped with the payment you receive by wire transfer. Generally, your bank will send you an EDI820 that contains payment information summarized by (MBUSI's internal)invoice#. This transaction gives complete detail on the part numbers, quantities, and pricing (by RAN# or production#)used to compute the payment.

This data is also available as an encrypted attachment to an email, for those suppliers who do not wish to implement it in EDI; please contact the MBUSI EDI coordinator for more information.

#### Introduction

MBUSI will send the Payment Order/Remittance Advice using the ANSI X12 820 Transaction Set version 003050.

Only the Remittance Advice portion of the 820 will be used. This detail version is a prenotification of part level components, and is the only payment information that suppliers will receive by EDI directly from MBUSI. This transaction will reflect MBUSI generated ERS(Evaluated Receipts Settlement) invoices. Non-productive ("indirect") materials, Service Parts, or parts bought with purchase orders or "spot buys," are not included in this process.

The final (monthly) payment made may include adjustments and miscellaneous supplier invoices. Suppliers must contact their own bank to get a summarized EDI file of the final payment made. This file is not available from MBUSI or MBUSI's bank.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. An M in the option shows that the element will always be included, an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

# ST Transactions Set Header

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

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identified Code 820 - Payment Order/Remittance Adv	M vice	ID 3/3
ST02	329	Transaction Set Control Number	М	AN 9/9

## Example:

ST\*820\*00000001

# BPR Beginning Segment for Payment Order/Remittance Advice

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position BPR01	Element Number 305	Description Content Option Transaction Handling Code E - Debit/Credit Advice With Remitt	M	Type Size ID 1/1 Detail
BPR02	782	Monetary Amount <total amount="" payment=""></total>	M	R 1/15
BPR03	478	Credit/Debit Flag Code C A credit to receiver/debit to D A debit to receiver/credit to (D will be accompanied by info fields SLN11 through SLN26 for defective material)	orig: ormat:	inator inator ion in
BPR04	591	Payment Method Code NON Non-Payment Data	M	ID 3/3
BPR10	509	Originating Company Identifier (Should match TRN03)	0	AN 10/10
BPR11	510	Originating Company Supplemental Code (Should match TRN04)	0	AN 9/9

## Example:

BPR\*E\*81984.00\*C\*NON\*\*\*\*\*3824839872\*MBUSI

## **Notes**

The "D" (debit) may occur in situations such as returns of damaged (DMT) material or non-conforming parts. See also section on SLN segment.

Dollar values are always reported as positive numbers, even in debit memos.

# TRN Trace

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position TRN01	Element Number 481	Description Content Opt Trace Type Code 1 Current Transaction Trace Numbers	ion M	Type Size ID 1/2
TRN02	127	Reference Number (MBUSI Batch Number)	М	AN 1/30
TRN03	509	Originating Company Identifier (Should match BPR10)	0	AN 10/10
TRN04	127	Reference Number (Should match BPR11)	0	AN 1/30

# Example:

TRN\*1\*743-743\*3824839872\*MBUSI

# DTM Date/Time Reference

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position DTM01	Element Number 374	Description Content Date/Time Qualifier 097 Transaction Creation	Option M	Type Size ID 3/3
DTM02	373	Date (Creation Date)	М	DT 6/6
DTM05	624	Century	0	NO 2/2

# Example:

DTM\*097\*050624\*\*\*20

# N1 Name(Payee)

Section: Header

Loop: N1

Mandatory, 2 Occurrence

Payee Name Information

Element Position N101	Element Number 98	Description Content Entity Identifier Code PE - Payee	otion M	Type Size ID 2/2
N102	93	Name (Payee's Name)	М	AN 1/35
N103	66	Identification Code Qualifier 92 - Assigned by Buyer or Buyer's Age	M ∋nt	ID 2/2
N104	67	Identification Code (MBUSI Vendor Code)	М	AN 2/10

# Example:

N1\*PE\*AMERICAN WIDGET FACTORY\*92\*15548622

# N1 Name(Payer)

Section: Header

Loop: N1

Mandatory, 2 Occurrence

Payer Name Information

Element Position N101	Element Number 98	Description Content Op Entity Identifier Code PR - Payer	tion M	Type Size ID 2/2
N102	93	Name ("MERCEDES-BENZ")	М	AN 1/35
N103	66	Identification Code Qualifier 92 - Assigned by Buyer or Buyer's Age	M nt	ID 2/2
N104	67	Identification Code "MBUSI"	М	AN 2/6

# Example:

N1\*PR\*MERCEDES-BENZ\*92\*MBUSI

ENT Entity

Section: Detail

Loop: ENT

Mandatory, 1 Occurrence

ElementElementDescriptionTypePositionNumberContentOptionSizeENT01554Assigned NumberMN0 1/6

## Example:

ENT\*<#>

## RMR Remittance Advice Accounts Receivable open Item

Section: Detail

Loop: ENT/RMR

Mandatory

Note: For the detail version of the 820 the RMR05 value is equal to the extended

value(IT102 \* IT104) of all IT1 segments below it.

MBUSI Internal Invoice number is generated by MBUSI SAP system.

Element Position RMR01 2/2	Element Number 128	Description Content Reference Number Qualifier	Option M	Type Size ID
		IK - (SAP) Invoice Number		
RMR02 1/30	127	Reference Number	М	AN
		(MBUSI Internal Invoice Number)		
RMR05 1/15	777	Total Invoice or Credit/Debit Amou	nt M	R
		(Total Invoice Amount in USD)		

#### Example:

RMR\*IK\*5150018356\*\*\*1645.32

### Note

The reference number given here acts as a "seller's invoice number." It is internally generated by MBUSI's SAP system as a part of self-billing. The supplier can refer to this number when communicating to MBUSI for resolving discrepancies, as it will appear inside MBUSI's SAP system as a vendor invoice number.

# IT1 Baseline Item Data

Section: Detail

Loop: ENT/RMR/IT1

Mandatory

Element Position IT101	Element Number 350	Description Content Assigned Identification	Option M	Type Size AN
1/11		(Line Item Number)		
IT102 1/10	358	Quantity Invoiced	М	R
1/10		(Actual Quantity of Parts Used/Rec	eived)	
IT103 2/2	355	Unit or Basis for Measurement	M	ID
2/2		(Dynamic, based on value in SAP; for piece parts, contains "EA" - Ea	ach)	
IT104 1/17	212	Unit Price (US dollars)	М	R
IT105 2/2	639	Basis of Unit Price Code	M	ID
2/2		UM Price per Unit of Measure PN Price Per 10 HP Price Per 100 TP Price Per 1000		
IT106 2/2	235	Product/Service Qualifier	М	ID
2/2		BP Buyers Part Number		
IT107 1/40	234	Product/Service ID	M	AN
1, 10		(MBUSI Part Number)		
IT108 2/2	235	Product/Service Qualifier	M	ID
2,2		PD Part Description		
IT109 1/40	234	Product/Service ID	M	AN
<b>1</b> / <b>T</b> 0		(MBUSI Part Description)		

## Example:

IT1\*000001\*23\*EA\*80.00\*PE\*BP\*A2512410234\*PD\*Ground Cable~

# REF Reference Numbers

Section: Detail

Loop: ENT/RMR/IT1/REF

Mandatory, 1 Occurrence

Element Position REF01 1/11	Element Number 128	Description Content Reference Number Qualifier "VV" Voucher Number	Option M	Type Size AN
REF02 1/30	127	Reference Number	М	AN
,		MBUSI (SAP) Internal Invoice No.		

# DTM Date/Time Reference

Section: Detail

Loop: ENT/RMR/IT1/DTM

Mandatory, 1 Occurrence

Element Position DTM01 3/3	Element Number 374	Description Content Date/Time Qualifier  050 Received	Option M	Type Size ID
DTM02 6/6	373	Date	M	DT
		(Receipt Date or Off-Line Date)		
DTM05 2/2	624	Century	Ο	NO
		"20"		

# Example:

DTM\*050\*050409\*\*\*20

## SLN Subline Item Detail

Section: Detail

Loop: ENT/RMR/IT1/SLN Repeat: > 1

Mandatory

Element Position SLN01 1/11	Element Number 350	Description Content Assigned Identification	Opti	on M	Type Size N
1/11		Voucher Number			
SLN02 1/11	350	Assigned Identification		Ο	AN
1/11		Part Number ID Number			
SLN03 1/1	661	Configuration Code		M	ID
1/1		"I" (included)			
SLN04 1/15	380	Quantity		M	R
1/15		(Quantity of parts received/cons this RAN/Production No.)	umed	on	
SLN05 2/2	355	Unit or Basis for Measurement Code		M	ID
2/2		Dynamic; "EA" for piece parts			
SLN09 2/2	235	Product/Service ID Qualifier		M	ID
2/2		"PO" if this is a RAN part "SI" if this is ASN data related "PR" if this is a Sequence Part "CN" if this is a JIT part	to a	RAN	part
SLN10	234	Product/Service ID		Ο	AN
1/30		RAN Number (if SLN09="PO") ASN Number (If SLN09="SI") Production Number (if SLN09="PR" Call-off Number (if SLN09 = "CN"			

The following 16 fields appear only in the case of Debit memos. Included in this area is information you need to contact the Supplier Quality Engineer to determine the reason for the Debit. The ID qualifiers used should pass filtering, but several have different meanings, as shown in parentheses.

SLN11	235	Product/Service 1	ID Qualifier	0	ID
2/2		_			
		"F7" End-Item I	Description	(Notification	item
text)					

SLN12 234 1/40	234	Product/Service ID	0	AN
1/40		Notification Item Short Text		
SLN13 2/2	235	Product/Service ID Qualifier	0	ID
2/2		"SN" Serial Number (Notification numb	er)	
SLN14 1/12	234	Product/Service ID	0	AN
1/12		Notification Number		
SLN15	235	Product/Service ID Qualifier	0	ID
2/2		"RA" Return Code (Damage code descrip	otion)	
SLN16	234	Product/Service ID	0	AN
1/40		Damage code description		
SLN17	235	Product/Service ID Qualifier	0	ID
2/2		"TC" ID (Badge holder's name)		
SLN18	234	Product/Service ID	0	AN
1/30		Badge Holder's Name		
SLN19 2/2	235	Product/Service ID Qualifier	0	ID
2/2		"BX" Bill Credit Code (Subject text)		
SLN20	234	Product/Service ID	0	AN
1/40		Subject Text		
SLN21	235	Product/Service ID Qualifier	0	ID
2/2		"LC" Condition Code (SQE name)		
SLN22 1/25	234	Product/Service ID	0	AN
1/25		SQE Name		
SLN23	235	Product/Service ID Qualifier	0	ID
2/2		"SB" Submission number (Telephone num	mber)	
SLN24 1/16	234	Product/Service ID	0	AN
Τ/ ΤΩ		SQE Telephone Number		

SLN25 235	235	Product/Service ID Qualifier	Ο	ID
2/2		"ZZ" Mutually defined (SQE Fax number	·)	
SLN26 1/31	234	Product/Service ID	Ο	AN
1/31		SQE Fax number		

See next page for examples and notes.

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#### **Notes About the ANSI 820**

For Sequence parts, SLN09 will contain a "PR", and there will be no ASN information. A single SLN line will convey the consumed quantity.

For RAN parts, SLN09 will contain a "PO", which is the RAN number; and, in that case, an additional SLN line (with SLN09="SI") containing the ASN Number will be provided. The supplier-reported quantity is included in that second SLN, allowing you to see if there is a variance between the ASN-claimed quantity and the quantity actually received at MBUSI.

**Exception: Debit Memos will not refer to a RAN**#, as Damaged Material (DMT) tracking does not identify parts by what RAN they came from.

Suppliers providing both sequence and RAN parts will receive both types of record. Suppliers providing only sequence or only RAN parts will receive only the appropriate record type.

In rare cases, there may be some parts supplied by RAN to one plant, and sequenced to another; in such cases, the supplier would receive both types of record for the same part number. These will, as in other cases, be identified with the appropriate RAN# and Production Number.

## **Examples of SLN Segments**

```
For A Sequence Part:
SLN*5150044502*000001*I*1*EA****PR*0002175486~
```

The production number is shown as a 10-digit number, but only the low-order (rightmost) 7 digits are meaningful. No check digit is used.

```
For A RAN Part:

SLN*5150011503*000002*I*2*EA****PO*C2K4000501~
SLN*5150011503*000002*I*2*EA****SI*042804-2~
```

These two SLN lines go together: the first is the received quantity, and the second is what the supplier sent in their ASN.

```
For a Debit Memo:

SLN*5150075063**I*8*EA****PO**F7*shipping
damage*SN*000200003416*RA*FINISH / QUALITY*TC*Cindy
Johnson*BX*shipping damage*LC*Sulu*SB*867-5309*ZZ*867-5309
```

## Example of EDI Payment Order/Remittance Advice

The following is an example of an EDI Payment Order/Remittance Advice. The overall format is the same for RAN and Sequence Suppliers; for RAN parts, a second SLN segment contains the additional information of ASN# and ASN quantity.

## **Issued Daily**

Under normal circumstances, this file will be produced daily, but it will reflect the receipts that occurred one week earlier. (This is to allow time for checking and corrections between the receipt date and transmittal of the file).

```
*00*
                                          MBUS002 *01*999999999
                                *ZZ*MBUS
*971003*1550*U*00200*00000002*0*P*^~
GS*PS*MBUS002*999999999999*971003*1550*2*X*003050~
ST*820*0136~
BPR*E*206.40*C*NON*****5150044502*MBUSI~
TRN*1*0000008699999*5150044502*MBUSI~
DTM*097*050929***20~
N1*PE*ALPHA DELTA ELECTRIC*92*16546754A~
N1*PR*MERCEDES-BENZ*92*MBUSI~
ENT*1~
RMR*IK*5150044502***206.40~
IT1*000001*1*EA*104.90*PE*BP*A1645400508*PD*WIRING HARNESS FRONT DOOR~
REF*VV*5150044502~
DTM*050*050311***20~
SLN*5150044502*000001*I*1*EA***PR*0002000051~
IT1*000002*10*EA*10.15*PE*BP*A1645400530*PD*STARTER CABLE ~
REF*VV*5150044502~
DTM*050*050311***20~
SLN*5150044502*000002*I*10*EA****PO*C2K4034501~
SLN*5150044502*000002*I*10*EA****SI*3002527099~
SE*36*0136~
GE*1*2~
IEA*1*000000002~
```

For details on the header (ISA, GS, etc.) and trailer segments, refer to Appendix B.

# Application Advice(824)

## (824) Application Advice – Inbound (to MBUSI)

## THIS APPLIES ONLY TO DIRECT TO BODY SHOP JIT SUPPLIERS.

MBUSI currently uses Application Advice only in conjunction with Just-In-Time (JIT) deliveries, in support of the **Direct to Line Supply to Body Shop** process.

The purpose of this transaction (inbound to MBUSI) is for the supplier to to acknowledge receipt of the corresponding EDI 862 and to report either that it has been accepted as an order and booked, or conversely was rejected due to a problem. This differs from the standard RAN process, because it is highly time-sensitive. Automation and integration of this feedback process is intended to avoid plant shutdowns due to delays in handling transaction processing problems.

The Application Advice message must be formatted using the AIAG subset of Transaction Set 824 of the ANSI X12 Standard, Version 003050. It should be sent as soon as the supplier's manufacturing execution system is finished processing the corresponding 862, and no longer than 30 minutes after the 862 is received. MBUSI will monitor the turnaround time between sending an 862 and receiving the corresponding 824; excess elapsed time will trigger a manual problem resolution process with escalation.

The segments and elements used from the 824 Transaction set are described below by segment. Each segment is described as Mandatory, and will always be sent, or Optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a Loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database reference, and for MBUSI internal use only. An M in the option shows that the element will always be included and an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

# ST Transactions Set Header

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

Mandatory, 1 Occurrence

Element Position ST01	Element Number 143	<pre>Description Content Transaction Set Identifier Code</pre>	Option M	Type Size ID
3/3	113	824 - Application Advice		15
ST02 9/9	329	Transaction Set Control Number (000000001-999999999)	M	AN

# Example:

ST\*824\*000001234

# **BGN Beginning Segment**

# Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
BGN01	353	Transaction Set Purpose Code	M	ID 2/2
		00 - Original		
BGN03	373	Date	М	DT 6/6
		(YYMMDD - Date Issued)		
BGN04	337	Time	Х	TM 6/6
		(HHMM - Time Issued)		

# Example:

BGN\*00\*\*061115\*2345

# N1 Name(Seller)

Seller Name Information.

Mandatory, 1 Occurrence

Element Position N101 2/2	Element Number 98	Description Content Entity Identifier Code	Optio	on M	Type Size ID
-, -		SE - Selling Party			
N103 2/2	66	Identification Code Qualifier		M	ID
		92 or 93 - Assigned by Buyer or Buy	/er's	Agent	=
N104 8/10	67	Identification Code		M	AN
		(MBUSI Vendor Code)			

# Example:

N1\*SE\*\*92\*18589580

# OTI Original Transaction Identification

Additional reference information to identify the corresponding call-off.

Loop OTI

Mandatory

Element Position	Element Number	Description Content	Option	Type Size
OTI01	110	Application Acknowledgment Code 00 - Accepted/successful/booked 11 - rejected for technical reasons see TED segment for details	М	ID 2/2
OTI02	128	Reference Number Qualifier "RE" - refers to the BSS02 segment the 862 transaction	M of	ID 2/2
OTI03	127	Reference Number (JIT call-off# - from LIN07 in ANS	M I 862)	AN 10/30

## Example:

OTI\*00\*RE\*1002983355

## **Notes**

If the OTI01 field is other than "00" (meaning, transaction was rejected), it is mandatory to send a TED segment providing the reason for the rejection.

# **REF** Reference Numbers

Additional reference information to identify the corresponding call-off.

Loop: OTI/REF

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Opt	ion	Type Size
REF01	128	Reference Number Qualifier "ID" - idoc number	M	ID	2/2
REF02	127	Reference Number idoc number being acknowledged	M	AN	1/30

## TED Technical Error Description

To indicate the reason for rejection of the above transaction. This line is required if the above OTI segment indicates a non-zero return code, i.e., transaction rejected.

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
TED01	647	Application Error Condition Code 01 - unexpected part number 02 - unexpected quantity 03 - EDI data error	М	ID 3/3
TED02	3	Free-form message (Error description)	0	AN 1/60

## Examples:

TED\*01\*NO CONTRACT FOR REQUESTED PART NUMBER

TED\*02\*QUANTITY FIELD CONTAINED NON-NUMERIC CHARACTERS

TED\*03\*INVALID DATE OR TIME FIELD

## **Notes**

Additional error codes may be added as mutually agreed.

The free-form message can contain any text necessary, but should be as descriptive and specific as possible.

# **CTT** Transaction Totals

Total Number of Line Items

Element Element Description Type
Position Number Content Option Size
CTT01 354 Number of Line Items M

CTT01 354 N0 1/6

1 - Always one line item

## Example:

CTT\*1

## SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type Size	
SE01	96	Number of Included Segments	M	NO 1/10	
SE02	329	Transaction Set Control Number	M	AN 4/9	

## Example:

SE\*10\*000001234

## Example of Acknowledgement (824)

```
ISA*00* *00* *01*MGNI MGNI342 *ZZ*MBUS MBUS003
*060425*0950*U*00305*000000702*0*P*@

GS*SH*18551648*MBUS003*060425*0950*000000702*X*003050
ST*824*0000001
BGN*00**070201*0805
N1*SE**92*18551648
OTI*00*RE*1002983355
REF*ID*108714696
OTI*00*RE*1002983356
REF*ID*108714697
SE*8*0000001
GE*1*00000702
IEA*1*000000702
```

This example shows the acknowledging of 2 idocs that were originally sent in one ANSI 862 message.

# Material Release(830)

## (830) Planning Schedule with Release Capability

The Material Release at MBUSI is used for three purposes:

- To provide suppliers and carriers with short and long terms demand plans for MBUSI
- To provide suppliers and carriers with Release Authorization Numbers (RANs) for items to ship
- To update suppliers on RANs not yet received by MBUSI

The Material Release is issued using the AIAG subset of Transaction Set 830 of the ANSI X12 Standard, Version 003050. Depending on volume, supplier releases are issued weekly or daily. The 830 should be acknowledged by a Functional Acknowledgment Document (997) within 24 hours. The 997 is an acknowledgment of receipt and translation. If, for any reason, the supplier will not be able to meet the order, MBUSI should be contacted immediately. A separate material release is issued for each part number.

The segments and elements used from the 830 Transaction set are described below by segment. Each segment is described as Mandatory, and will always be sent by MBUSI, or optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a Loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database reference, and for MBUSI internal use only. An M in the option shows that the element will always be included and an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

## ST Transactions Set Header

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

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identifier Code 830 - Material Release	М	ID 3/3
ST02	329 (00000000	Transaction Set Control Number	М	AN 9/9

## Example:

ST\*830\*000001234

## BFR Beginning Segment for Planning Schedule

Mandatory, 1 Occurrence

Element Position BFR01	Element Number 353	Description Content Transaction Set Purpose Code 00 - Original	Option M	Type Size ID 2/2
BFR03	328	Release Number (Material Release Number) [not used for Service Parts orders]	X 7	AN 6/7
BFR04	675	Schedule Type Qualifier DL - Delivery Based	М	ID 2/2
BFR05	676	Schedule Quantity Qualifier A - Actual Discrete Quantities	М	ID 1/1
BFR06	373	Date (YYMMDD - Forecast Start Date)	М	DT 6/6
BFR08	373	Date (YYMMDD - Forecast Generation Date)	M )	DT 6/6

#### Example:

BFR\*00\*\*0307-2\*DL\*A\*040406\*\*040401

#### **Notes about the Release Number:**

- 1. The Release Number is of the form YYMM-RR (where R has no leading zero), indicating the year and month of the release followed by a number that is incremented with each release during that month.
- 2. The Release Number is not used for Service Parts orders. For these, forecast information is associated with a part number, and actual orders are associated with a Purchase Order number (in the RAN field).

#### PER Administrative Communications Contact

Name and phone number of MBUSI Expediter and Order Department.

Mandatory, 2 Occurrences

Element Position PER01	Element Number 366	Description Content Contact Function Code OD - Order Department ST - Ship to	Option M	Type Size ID 2/2
PER02	93	Name (MBUSI Contact Name)	М	AN 1/35
PER03	365	Communications Number Qualifier IT - International Telephone	М	ID 2/2
PER04	364	Communications Number (MBUSI contact telephone number in country code)	M cluding	AN 14/14

## Example:

PER\*ST\*Mercedes-Benz U.S. Intern. Inc\*IT\*8010

PER\*OD\*J PAGE\*IT\*1-205-507-3578

## DTM - Date and Time of Last MRP Run

Date and Time of Last MRP run; used only for JIT Suppliers

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
DTM01	374	Date/Time Qualifier "020" - indicates MRP run	M	ID 3/3
DTM02	373	Date Date of last MRP run, YYMMDD	М	DT 6/6
DTM03	337	Time Time of last MRP run, expressed as HHMMSSDD. Always in US Central Time or Daylight time; Only the first 4 digits are meaning	M gful	TM 4/8
DTM05	624	Century "20"	Ο	NO 2/2

## Example:

DTM\*020\*070220\*18000000\*\*20

## How you use it

Refer to instructions from the Logistics Department on how to use this field in your process.

## TD5 Carrier Detail (Routing Sequence/Transit Time)

Mode of Transport for Shipment.

Mandatory, 1 Occurrence

Element	Element	Description	Option	Type
Position	Number	Content		Size
TD504	91	Transportation Method/Type Code A - Air H - Customer Pickup J - Motor R - Rail S - Ocean	М	ID 1/2

#### Example:

TD5\*\*\*\*J

#### MAN Marks and Numbers

Storage Area and Lineside Location for Parts Label.

Mandatory, 1 Occurrence

Element Position MAN01	Element Number 88	Description Content Marks and Number Qualifier DZ - Receiver Assigned Storage	<b>Option</b> M Location	Type Size ID 2/2
MAN02	87	Marks and Numbers (Staging Area/Bin)	М	AN 3/9
MAN03	87	Marks and Numbers (Lineside Location / Linefeed I	M Location)	AN 5/9

#### Example:

MAN\*DZ\*STB4\*A2-C1-01L

#### **Notes:**

- The Linefeed location is of the form PlantAbbreviation-Line-Station.
- "MULTI" indicates multiple linefeed locations.

## N1 Name(Seller)

Seller Name Information

Mandatory, 1 Occurrence

Element Position N101	Element Number 98	Description Content Entity Identifier Code SE - Selling Party	tion M	Type Size ID 2/2
N102	93	Name (Seller Name)	М	AN 1/35
N103	66	Identification Code Qualifier 92 or 93 - Assigned by Buyer or Buyer	M 's Agen	ID 2/2 t
N104	67	Identification Code (MBUSI Vendor Code)	М	AN 6/10

#### Example:

N1\*SE\*SOUTH CHARLESTON STAMPING & MANUFAC\*92\*0016001010

## N3 Address Information (of Seller)

Seller Street Address

Optional, 1 Occurrence

Element Position N301	Element Number 166	Address Information	Option M	Type Size AN 1/35
N302	166	(Vendor ship-from address)  Address Information (Additional vendor ship-from address	0	AN 1/35

## Example:

N3\*3100 MACCORKLE AVENUE

## N4 Geographic Location (of Seller)

Seller City.

Mandatory, 1 Occurrence

Element Position N401	Element Number 19	Description Content City Name (Vendor ship-from city)	Option M	Type Size AN 2/30
N402	156	State or Province Code (Vendor ship-from state) NOTE: Usually only included for vendors in USA or Canada. Mexican 3-character state abbreviations wil be truncated to 2 characters if pre		ID 2/2
N403	116	Postal Code (Vendor ship-from postal code)	М	ID 3/9
N404	26	Country Code (Vendor ship-from ISO country code) NOTE: Not included for US vendors, but may indicate country of supplies headquarters.	o r's	ID 2/2

## Examples:

N4\*SOUTH CHARLSTON\*WV\*25303

N4\*MONTREAL\*PQ\*K41 5KY\*CA

N4\*BERLIN\*\*10001\*DE

## N1 Name (of Ship To)

Ship To Information

Mandatory, 1 Occurrence

Element Position N101	Element Number 98	Description Content Entity Identifier Code ST - Ship To	on M	Type Size ID 2/2
N102	93	Name (Ship To Description)	М	AN 1/35
N103	66	Identification Code Qualifier 92 or 93 - Assigned by Buyer or Buyer's	M Agen	ID 2/2 t
N104	67	Identification Code (Plant Code)	M	AN 4/10

#### Examples:

N1\*ST\*MBUSI VANCE\*92\*8010

**Note:** 8010 specifies Business Unit as the Vance, AL complex. If and when MBUSI orders materials for other major business units in the future, a different code may appear here. In SAP parlance, 8010 is the Plant Code.

N1\*ST\*MBUSI\*92\*70599-000

**Note:** This plant code indicates a Service Parts order, to be delivered to MBUSI Bessemer Consolidation Center. Only suppliers who are certified for EDI for Service Parts orders should ever receive this.

# N4 Geographic Location (of Ship To)

Ship To Information.

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
N405	309	Location Qualifier DE - Destination	М	ID 1/2
N406	310	Location Identity (Storage Location/"SLOC")	М	AN 4/35

## Example:

N4\*\*\*\*DE\*PLT2

LOOP ID-LIN 1

This loop describes each part number. In the MBUSI implementation, there is only one part per ID.

Mandatory, 1 Occurrence

## LIN Line Identification

MBUSI part number information

Element Position LIN02	Element Number 235	Description Content Product/Service ID Qualifier BP - Buyer Part Number	Option M	Type Size ID 2/2
LIN03	234	Product/Service ID (MBUSI Part Number)	М	AN <b>1/24</b>
LIN04	235	Product/Service ID Qualifier PO - Purchase Order	М	ID 2/2
LIN05	234	Product/Service ID (MBUSI Contract Number)	M	AN 1/10

#### Examples:

#### Orders for **Production** parts will look like this:

LIN\*\*BP\*A1646260133 9122\*PO\*5500000020

#### Orders for **Service** parts will look like this:

LIN\*\*BP\*A1634200334\*PO\*4500000020 LIN\*\*BP\*A1646260133 9122\*PO\*450000020

**Note:** even though a PO# is included, you must use great care as to how you use it when dealing with Service Parts orders. Each spot PO (FST line) will have its own PO#; the PO# in the LIN segment will correspond only to the first one.

LOOP ID-LIN 1

#### UIT Unit Detail

Unit of measure for quantities ordered.

Mandatory, 1 Occurrence

Element Position		Description Content	Option	Type Size
UIT01	355	Unit or Basis for Measurement Code	- M	ID 2/2
		(Any valid code may be used)		

#### Example:

UIT\*EA

# PID Product/Item Description

Part Description

Mandatory, 1 Occurrence

Element Position PID01	Element Number 349	Description Content Item Description Type F - Free Form	Option M	Type Size ID 1/1
PID05	352	Description (MBUSI part description)	М	AN 1/40

## Example:

PID\*F\*\*\*\*BATTERY SUPPORT CLAMP

#### REF Reference Number

Dock Number

Optional, 1 Occurrence

Element Position REF01	Element Number 128	<b>Description Content</b> Reference Number Qualifier DK - Dock	<b>Option</b> M	Type Size ID 2/2
REF02	127	Reference Number (Dock Number)	М	AN 2/8

#### Example:

REF\*DK\*A20

#### **Notes:**

Even though dock numbers are planned to be unique, a complete determination of delivery destination must include the Plant (which indicates which major plant area is to be delivered to), the Storage Location (which indicates which building), and the dock. That information is also used on the barcode label.

If REF02 contains "CALL" it means that the delivery dock had not been determined at the time the order was generated. You should call your Logistics contact at MBUSI to find out what dock to deliver to.

## ATH Resource Authorization (FAB)

Optional, 1 Occurrence

Element Position ATH01	Element Number 672	Description Content Resource Authorization Code FI - Finished(Labor, Material, and	Option M Overhead/	Type Size ID 2/2 Burden)
ATH02	373	Date (YYMMDD - FAB Start Date)	М	DT 6/6
ATH03	380	Quantity (FAB Quantity)	М	R 1/15
ATH05	373	Date (YYMMDD - FAB End Date)	M	DT 6/6

## Example:

ATH\*FI\*960201\*1000\*\*960229

## ATH Resource Authorization(RAW)

Optional, 1 Occurrence

Element Position ATH01	Element Number 672	Description Content Resource Authorization Code MT - Material	Option M	Type Size ID 2/2
ATH02	373	Date (YYMMDD - RAW Start Date)	М	DT 6/6
ATH03	380	Quantity (RAW Quantity)	М	R 1/15
ATH05	373	Date (YYMMDD - RAW End Date)	М	DT 6/6

## Example:

ATH\*MT\*960201\*500\*\*960229

LOOP ID-FST

## FST Forecast Schedule (Newly issued RAN)

Mandatory, Unlimited occurrences for newly issued RAN. See Appendix D for a table showing how RANs are derived.

Original RAN Quantity

Element Position FST01	Element Number 380	Description Content Quantity (Release or forecast quantity)	Option M	Type Size R 1/13
FST02	680	Forecast Qualifier H - First time reported firm	М	ID 1/1
FST03	681	Forecast Timing Qualifier D - Discrete	М	ID 1/1
FST04	373	Date (YYMMDD - Date of delivery at MBUS	M	DT 6/6
FST06	374	Date/Time Qualifier 002 - Delivery Requested	М	ID 3/3
FST07	337	Time (HHMM - Delivery time at MBUSI)	0	TM 4/4
FST08	128	Reference Number Qualifier DO - Delivery Order Number	М	ID 2/2
FST09	127	Reference Number (Release Authorization Number (RAN or Purchase Order # [Service Parts	•	AN 10/10

#### Examples:

FST\*100\*H\*D\*030519\*\*002\*0600\*DO\*C2E3000036

**Note:** notice that the part number and the RAN do not specify the engineering change level (ZGS) of the part. That is dictated by the adopt date, which is determined jointly with the supplier in a separate business process. The supplier reports the ZGS level of parts being shipped as part of the EDI856 (ASN).

FST\*15\*H\*D\*040329\*\*002\*\*DO\*4500000027

**Note:** the above is a Service Parts order. Here, the delivery time is null and the RAN field contains the Purchase Order number.

## FST Forecast Schedule (Total new RANs)

Mandatory, 1 Occurrence

Total quantity of new RANs in material release.

Element Position FST01	Element Number 380	Description Content Quantity (Release or forecast quantity)	option M	Type Size R 1/13
FST02	680	Forecast Qualifier H - First time reported firm (new RA	M AN)	ID 1/1
FST03	681	Forecast Timing Qualifier Z - Subtotal	M	ID 1/1

## Example:

FST\*1620\*H\*Z

## FST Forecast Schedule (Outstanding/Open RANs)

Quantity of RANs on previous releases and not yet received(intransit or open) at MBUSI. This segment is only issued to North American suppliers, and only if there are outstanding RANs.

Optional, Unlimited Occurrences

Element Position	Element Number	Description Content	Option	Type Size
FST01	380	Quantity Release or forecast quantity)	М	R 1/13
FST02	680	Forecast Qualifier C - Firm	М	ID 1/1
FST03	681	Forecast Timing Qualifier D - Discrete	М	ID 1/1
FST04	373	Date (YYMMDD - Date of delivery at MBUS	M SI)	DT 6/6
FST05	373	Date (YYMMDD - Date MBUSI received ASN specified RAN - Ran is in intransi or in yard status). Null if no ASN yet received.	.t	DT 6/6
FST06	374	Date/Time Qualifier 002 - Delivery Requested	М	ID 3/3
FST07	337	Time (HHMM - Delivery time at MBUSI)	М	TM 4/4
FST08	128	Reference Number Qualifier DO - Delivery Order Number	М	ID 2/2
FST09	127	Reference Number (Release Authorization Number (RAN	M	AN 10/10

#### Example:

FST\*100\*C\*D\*030519\*002\*0600\*DO\*C2E3000036

**Note:** For Service Parts, this list includes all pending open purchase orders including ones listed as new. Use care to (a)avoid duplication and(b) replace your entire backlog of orders each time.

## FST Forecast Schedule (Total outstanding RANs)

Total quantity of RANs on previous releases and not yet received (in transit or open) at MBUSI. This segment is only issued to North American suppliers, and only if there are outstanding RANs.

Optional 1 Occurrence

Element Position FST01	Element Number 380	Description Content Quantity (Release or forecast quantity)	otion M	Type Size R 1/13
FST02	680	Forecast Qualifier C - Firm	М	ID 1/1
FST03	681	Forecast Timing Qualifier Z - Subtotal (for new and outstanding	M RANs)	ID 1/1

## Example:

FST\*1620\*C\*Z

## FST Forecast Schedule (Daily Forecasts)

Optional, Unlimited Occurrences

Element Position FST01	Element Number 380	Description Content Quantity (Release or forecast quantity)	Option M	Type Size R 1/13
FST02	680	Forecast Qualifier D - Planning	М	ID 1/1
FST03	681	Forecast Timing Qualifier D - Discrete	М	ID 1/1
FST04	373	Date (YYMMDD - Date of delivery at MBUS	M <i>I)</i>	DT 6/6

## Example:

FST\*270\*D\*D\*950424

## FST Forecast Schedule(Monthly Forcast)

Optional 0-260 Occurrences

Element Position FST01	Element Number 380	Description Content Quantity (Release or forecast quantity)	Option M	Type Size R 1/13
FST02	680	Forecast Qualifier D - Planning	M	ID 1/1
FST03	681	Forecast Timing Qualifier F - Flexible Timing Period	М	ID 1/1
FST04	373	Date (YYMMDD - First date of forecast pe	M eriod)	DT 6/6
FST05	373	Date (YYMMDD - Last date of forecast per	M riod)	DT 6/6

# Example:

FST\*1350\*D\*F\*960424\*960430

Note: Not used for Service Parts orders.

End of Loop ID-FST 1
End of Loop ID-LIN 1

# **CTT** Transaction Totals

Total Number of Line Items

Element Element Description Type
Position Number Content Option Size
CTT01 354 Number of Line Items M NO 1/6
1 - Always one line item

## Example:

CTT\*1

#### SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type Size
SE01	96	Number of Included Segments	M	NO 1/10
SE02	329	Transaction Set Control Number	М	AN 4/9

## Example:

SE\*10\*000001234

# Example of Material Release (RAN Suppliers)

MERCEDES-BENZ U.S. INTERNATIONAL, INC. VENDOR MATERIAL RELEASE(RAN)								
ITEM#: A2516100114	DESCRIPTION: CROSSBEAM SUPPORT		DOCK: E32	<b>SCHEDULE#</b> 4500001010	TRANSACTION# 0002	CONTRACT# 5500000003		
UNIT OF MEASURE	мот	STORAGE LOC.	LINEFEED LOC.	SUPPLIER#	TOTAL FIRM QUANTITY (RAN)			
EA	Truck	A0125	A2-C-01L	15571995	995 1000			
			OPEN RELEASE A	UTHORIZATIONS				
RAN		C2E3000036	C2E3000038	C2E3000040	C2E3000042	C2E3000044	TOTAL	
RECEIPT DATE/TIME		5/19/03 6:00	5/20/03 6:00	5/21/03 6:00	5/22/03 6:00	5/23/03 6:00		
QUANTITY		100	100	100	100	100	500	
			NEW RELEASE AU	THORIZATIONS				
RAN		C2E3000046	C2E3000048	C2E3000099	C2E3000102	C2E3000105	TOTAL	
RECEIPT DATE/TIME		5/26/03 6:00	5/27/03 6:00	5/28/03 6:00	5/29/03 6:00	5/30/03 6:00		
QUANTITY		100	100	100	100	100	500	
			DAILY FORECAST	•				
DATE		0/0/00			0/5/00	0/0/00		
DATE		6/2/03	6/3/03	6/4/03	6/5/03	6/6/03		
QUANTITY		120	120	120	120	120		
DATE		6/9/03	6/10/03	6/11/03	6/12/03	6/13/03		
QUANTITY		120	120	120	120	120		
DATE		6/16/03	6/17/03	6/18/03	6/19/03	6/20/03		
QUANTITY		120	120	120	120	120		
DATE		6/23/03	6/24/03	6/25/03	6/26/03	6/27/03		
QUANTITY		140	140	140	140	140		
DATE		6/30/03						
QUANTITY		6/30/03						
WOANTIT		140	MONTHLY FOREC	ASTS				
MONTH		lul 00	A.v. 02	Con 00				
MONTH		Jul-03	Aug-03	Sep-03				
QUANTITY		2660	2940	3080				

## Example of EDI Material Release(RAN Suppliers)

```
*ZZ*MBUS
                                           MBUS001 *ZZ*DPH
*030523*0921*U*00200*00000002*0*P*>
GS*PS*MBUS001*DPH*030523*0921*2*X*003050
ST*830*0002
BFR*00**0307-1*DL*A*030605**030523
PER*EX*Gammons*IT*205-506-3483
PER*OD*Miles*IT*205-507-3482
TD5****J
MAN*DZ*A0125*A2-C-01L
N1*ST*MBUSI VANCE*92*8010
N4****DE*PLT2
N1*SE*JCI*92*0015571995
N3*123 MAIN ST.
N4*Cottondale*AL*35400
LIN**BP*A2516100114*PO*5500000003
UIT*EA
PID*F****CROSSBEAM SUPPORT
REF*DK*E32
FST*100*C*D*030519**002*0600*D0*C2E3000036
FST*100*C*D*030520**002*0600*D0*C2E3000038
FST*100*C*D*030521**002*0600*D0*C2E3000040
FST*100*C*D*030522**002*0600*D0*C2E3000042
FST*100*C*D*030523**002*0600*D0*C2E3000044
FST*500*C*Z*030519
FST*100*H*D*030526**002*0600*D0*C2E3000046
FST*100*H*D*030527**002*0600*D0*C2E3000048
FST*100*H*D*030528**002*1000*D0*C2E3000099
FST*100*H*D*030529**002*1000*D0*C2E3000102
FST*100*H*D*030530**002*1000*D0*C2E3000105
FST*500*H*Z*030526
FST*120*D*D*030602
FST*120*D*D*030603
FST*120*D*D*030604
FST*120*D*D*030605
FST*120*D*D*030606
FST*120*D*D*030609
FST*120*D*D*030610
FST*120*D*D*030611
FST*120*D*D*030612
FST*120*D*D*030613
FST*120*D*D*030616
FST*120*D*D*030617
FST*120*D*D*030618
FST*120*D*D*030619
FST*120*D*D*030620
FST*140*D*D*030623
FST*140*D*D*030624
FST*140*D*D*030625
FST*140*D*D*030626
FST*140*D*D*030627
FST*140*D*D*030630
FST*2660*D*F*030701*030731
FST*2940*D*F*030801*030831
FST*3080*D*F*030901*030930
CTT*1
SE*55*000001234
GE*1*1
```

IEA\*1\*00000001

# Example of Material Release (MBCC)

MERCEDES-BENZ U.S. INTERNATIONAL, INC. VENDOR MATERIAL RELEASE (MBCC)							
ITEM#: A2516100114	DESCR CROSS	IPTION: BEAM SUPPORT	DOCK: E32	<b>SCHEDULE#</b> 4500001919	TRANSACTION 0002	<b>N# CONTRACT#</b> 5500000003	
UNIT OF MEASURE	MOT Truck	STORAGE LOC. A0125	LINEFEED LOC. A2-C-01L	<b>SUPPLIER#</b> 15571995	TOTAL FIRM QUANTITY (RAN) 1000		
			NEW RELEASE AU	JTHORIZATIONS			
RAN		C2E3000046	C2E3000048	C2E3000099	C2E3000102	C2E3000105	TOTAL
RECEIPT DATE/TIN	ΙE	5/26/03 6:00	5/27/03 6:00	5/28/03 6:00	5/29/03 6:00	5/30/03 6:00	
QUANTITY		100	100	100	100	100	500
			DAILY FORECAST	·s			
DATE		6/2/03	6/3/03	6/4/03	6/5/03	6/6/03	
QUANTITY		120	120	120	120	120	
DATE		6/9/03	6/10/03	6/11/03	6/12/03	6/13/03	
QUANTITY		120	120	120	120	120	
DATE		6/16/03	6/17/03	6/18/03	6/19/03	6/20/03	
QUANTITY		120	120	120	120	120	
DATE		6/23/03	6/24/03	6/25/03	6/26/03	6/27/03	
QUANTITY		140	140	140	140	140	
DATE		6/30/03					
QUANTITY		140					
			MONTHLY FOREC	ASTS			
MONTH		Jul-03	Aug-03	Sep-03			
QUANTITY		2660	2940	3080			

#### Example of EDI Material Release (MBCC)

```
ISA*00*
                                *ZZ*MBUS
                                           MBUS001 *ZZ*DPH
*030523*0921*U*00200*00000002*0*P*>
GS*PS*MBUS001*DPH*030523*0921*2*X*003050
ST*830*0002
BFR*00**0307-1*DL*A*030605**030523
PER*EX*Gammons*IT*205-506-3483
PER*OD*Miles*IT*205-507-3482
TD5****J
MAN*DZ*A0125*A2-C-01L
N1*ST*MBUSI VANCE*92*8010
N4****DE*PLT2
N1*SE*JCI*92*0015571995
N3*123 MAIN ST.
N4*Cottondale*AL*35400
LIN**BP*A2516100114*PO*5500000003
UIT*EA
PID*F****CROSSBEAM SUPPORT
REF*DK*E32
FST*100*H*D*030526**002*0600*D0*C2E3000046
FST*100*H*D*030527**002*0600*D0*C2E3000048
FST*100*H*D*030528**002*1000*DO*C2E3000099
FST*100*H*D*030529**002*1000*D0*C2E3000102
FST*100*H*D*030530**002*1000*D0*C2E3000105
FST*500*H*Z*030526
FST*120*D*D*030602
FST*120*D*D*030603
FST*120*D*D*030604
FST*120*D*D*030605
FST*120*D*D*030606
FST*120*D*D*030609
FST*120*D*D*030610
FST*120*D*D*030611
FST*120*D*D*030612
FST*120*D*D*030613
FST*120*D*D*030616
FST*120*D*D*030617
FST*120*D*D*030618
FST*120*D*D*030619
FST*120*D*D*030620
FST*140*D*D*030623
FST*140*D*D*030624
FST*140*D*D*030625
FST*140*D*D*030626
FST*140*D*D*030627
FST*140*D*D*030630
FST*2660*D*F*030701*030731
FST*2940*D*F*030801*030831
FST*3080*D*F*030901*030930
CTT*1
SE*55*000001234
GE*1*1
IEA*1*000000001
```

# Example of Material Release (Broadcast Suppliers)

MERCEDES-BENZ U.S. INTERNATIONAL, INC. VENDOR MATERIAL RELEASE(Sequence)							
ITEM#: A2516100114	<b>DESCRI</b> CROSS	PTION: BEAM SUPPORT	DOCK: E32	<b>SCHEDULE#</b> 0305-5	TRANSACTION# 0002	CONTRACT# 5500000003	
UNIT OF MEASURE	МОТ	STORAGE LOC.	LINEFEED LOC.	SUPPLIER#	TOTAL FIRM QUANTITY (RAN)		
ĒΑ	Truck	A0125	T101L	15571995	1000		
			DAILY FORECASTS				
DATE		6/2/03	6/3/03	6/4/03	6/5/03	6/6/03	
QUANTITY		120	120	120	120	120	
DATE		6/9/03	6/10/03	6/11/03	6/12/03	6/13/03	
QUANTITY		120	120	120	120	120	
DATE		6/16/03	6/17/03	6/18/03	6/19/03	6/20/03	
QUANTITY		120	120	120	120	120	
DATE		6/23/03	6/24/03	6/25/03	6/26/03	6/27/03	
QUANTITY		140	140	140	140	140	
DATE		6/30/03					
QUANTITY		140					
			MONTHLY FORECA	STS			
MONTH		Jul-03	Aug-03	Sep-03			
QUANTITY		2660	2940	3080			

## Example of EDI Material Release (Broadcast Suppliers)

```
*ZZ*MBUS
                                           MBUS001 *ZZ*DPH
*030523*0921*U*00200*00000002*0*P*>
GS*PS*MBUS001*DPH*030523*0921*2*X*003050
ST*830*0002
BFR*00**0307-1*DL*A*030605**030523
PER*EX*Gammons*IT*205-506-3483
PER*OD*Miles*IT*205-507-3482
TD5****J
MAN*DZ*A0125*A2-C-01L
N1*ST*MBUSI VANCE*92*8010
N4****DE*PLT2
N1*SE*JCI*92*0015571995
N3*123 MAIN ST.
N4*Cottondale*AL*35400
LIN**BP*A2516100114*PO*5500000003
UIT*EA
PID*F****CROSSBEAM SUPPORT
REF*DK*E32
FST*120*D*D*030602
FST*120*D*D*030603
FST*120*D*D*030604
FST*120*D*D*030605
FST*120*D*D*030606
FST*120*D*D*030609
FST*120*D*D*030610
FST*120*D*D*030611
FST*120*D*D*030612
FST*120*D*D*030613
FST*120*D*D*030616
FST*120*D*D*030617
FST*120*D*D*030618
FST*120*D*D*030619
FST*120*D*D*030620
FST*140*D*D*030623
FST*140*D*D*030624
FST*140*D*D*030625
FST*140*D*D*030626
FST*140*D*D*030627
FST*140*D*D*030630
FST*2660*D*F*030701*030731
FST*2940*D*F*030801*030831
FST*3080*D*F*030901*030930
CTT*1
SE*55*000001234
GE*1*1
IEA*1*000000001
```

## Example of EDI Material Release (Service Parts)

```
ISA*00*
                 *00*
                               *ZZ*MBUS
                                          MBUS002 *ZZ*ARAS
                                                              ARASSA1
*040316*1938*U*00200*00000002*0*T*>
GS*PS*MBUS002S*019574323A*040316*1938*2*X*003050
ST*830*0344
BFR*00**4500000203*DL*A*040810**040810
PER*OD*Dee Smith*IT*205-507-3773
TD5****J
MAN*DZ*NONE*NONE
N1*ST*MBUSI*92*70599-000
N4****DE*MI01
N1*SE*ACME INCORPORATED*92*019515729B
N3*242 INDUSTRIAL DRIVE SW
N4*CULLMAN*AL*35055
LIN**BP*A1638801705
UIT*EA
PID*F****ESCUTCHEON
REF*DK*CALL
FST*100*C*D*040819****DO*4500000203
FST*100*C*D*040824****DO*9900102433
FST*200*C*D*040912****DO*9900103130
FST*100*C*D*041122****DO*9900103131
FST*500*C*Z*040810
FST*100*H*D*040819****DO*4500000203
FST*100*H*Z*040810
FST*1000*D*D*050502
CTT*1
SE*17*0002
GE*1*2
IEA*1*000000002
```

#### Example of Release for JIT Supplier

```
*00*
ISA*00*
                                *ZZ*MBUS
                                           MBUS002 *ZZ*EB089
EB089S1*070226*1059*U*00200*00000004*0*P*>
GS*PS*MBUS002*18589580*070226*1059*4*X*003050
ST*830*0018
BFR*00**0702-00*DL*A*070822**070222
PER*OD*Miles*IT*205-507-3482
PER*ST*Mercedes-Benz U.S. Intern. Inc*IT*8010
DTM*020*070220*18000000**20
TD5****J
MAN*DZ*HAZMAT*B2-RE010
N1*ST*MBUSI VANCE*92*8010
N4****DE*BDY2
N1*SE*GESTAMP ALABAMA INC*92*0018589580
N3*PO BOX 628
N4*McCALLA*AL*35111**DE
LIN**BP*A2516100014*PO*5500019964
UIT*EA
PID*F****CROSS MEMBER RR
REF*DK*N22
FST*140*D*D*090626
FST*140*D*D*090627
FST*140*D*D*090630
FST*420*D*F*090601*090631
CTT*1
SE*22*0022
GE*1*4
IEA*1*000000004
```

# Ship Notice (ASN)(856)

## (856) Ship Notice / Manifest (ASN)

MBUSI suppliers will be required to send MBUSI an ASN for all part orders using Release Authorization Number (RANs). This does not include sequenced parts ordered through broadcast messages.

The ASN should follow the attached specifications using the AIAG subset of Transaction Set 856 of the ANSI X12 standard, version 003050. The ASN should be sent within 15 minutes after the departure of the shipment, and in time to be received at MBUSI before the shipment arrives. MBUSI will acknowledge receipt with a Functional Acknowledgment(997), within one hour. The 997 is an acknowledgment of receipt and interpretation, and not an acceptance of delivery.

The segments and elements to be used from the 856 Transaction set are described below by segment. Each segment is described as mandatory, and will always be sent to MBUSI, or optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database reference, and for MBUSI internal use only. An M in the option shows that the element should always be included, an O that it should be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

## ST Transactions Set Header

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

Mandatory, 1 Occurrence

Element Position ST01	Element Number 143	Description Content Transaction Set Identifier Code 856 - Ship Notice/Manifest	Option M	Type Size ID 3/3
ST02	329	Transaction Set Control Number (000000000-999999999)	М	AN 4/9

## Example:

ST\*856\*000056789

# BSN Beginning Segment for Ship Notice

Header information for the Ship Notice

Mandatory, 1 Occurrence

Element Position BSN01	Element Number 353	Description Content Transaction Set Purpose Code 00 - Original 05 - Replace	Option M	Type Size ID 2/2
BSN02	396	Shipment Identification (Unique for each Shipment)	М	AN 7/7
BSN03	373	Date (YYMMDD - Ship Notice Creation Date	M e)	DT 6/6
BSN04	337	Time (HHMM - Ship Notice Creation Time)	М	TM 4/4

## Example:

BSN\*00\*1000123\*960420\*1456

## DTM Date / Time Reference

Mandatory, 1 Occurrence

Element Position DTM01	Element Number 374	Description Content Date/Time Reference 011 - Time Shipped	Option M	Type Size ID 3/3
DTM02	373	Date (YYMMDD - Shipment Date) NOTE: Date left dock for North Amer date left port for ECC	M rican su	DT 6/6
DTM03	337	Time (HHMM - Shipment time)	M	TM 4/4

## Example:

DTM\*011\*960420\*1434

# HL Hierarchical Level(Shipment Loop)

Mandatory, 1 Occurrence

Element Position HL01	Element Number 628	Description Content Hierarchical ID Number 1-Always one for shipment Loop	Option M	Type Size AN 1
HL03	735	Hierarchical Level Code S-Shipment level	М	ID 1/1

## Example:

HL\*1\*\*S

## MEA Measurement

Optional, 1 Occurrence

Element Position MEA02	Element Number 738	Description Content Measurement Reference ID Code G - Gross Weight	Option M	Type Size ID 1
MEA03	739	Measurement Value (Gross weight of shipment in pound	M Is or kilog	R 1/10 grams)
MEA04	355	Unit or Basis for Measurement Code KG - Kilogram LB - Pound	М	ID 2/2

## Example:

MEA\*\*G\*2345.5\*LB

#### MEA Measurement

Optional, 1 Occurrence

#### Required for Non-North American Suppliers.

Element Position MEA02	Element Number 738	Description Content Op Measurement Qualifier N - Actual Net Weight	tion M	Type Size ID 1
MEA03	739	Measurement Value (Net weight of shipment in pounds or NOTE: Including inside packaging, but		
MEA04	355	Unit or Basis for Measurement Code KG - Kilogram LB - Pound	M	ID 2/2

#### Example:

MEA\*\*N\*99\*KG

# TD1 Carrier Details (Quantity and Weight)

Optional, 1 Occurrence

Used to identify number of pieces in shipment.

Element Position TD101	Element Number 103	Description Content Packaging Code (PCS - Pieces)	Option M	Type Size AN 5/5
TD102	80	Lading Quantity (Number of pieces in shipment)	M	NO 1/7

#### Example:

TD1\*PCS\*100

# TD5 Carrier Detail (Routing Sequence/Transit Time)(SCAC)

Identification of originating carrier.

Mandatory, 1 Occurrence

Element Position TD502	Element Number 66	Description Content Identification Code Qualifier 2 - Standard Carrier Alpha Code	Option M	Type Size ID 1/1
TD503	67	Identification Code (Standard Carrier Alpha Code)	М	AN 2/20
TD504	91	Transportation Method/Type Code A - Air J - Motor R - Rail S - Ocean H - Customer Pickup	М	ID 1/2

#### Example:

TD5\*\*2\*CN\*R

# TD5 Carrier Detail (Routing Sequence/Transit Time)(US Port of Unlading)

Optional, 1 Occurrence

Element Position TD504	Element Number 91	Description Content Transportation Method/Type Code A - Air J - Motor R - Rail S - Ocean H - Customer Pickup	Option M	Type Size ID 1/2
TD507	309	Location Qualifier PA - Port of Arrival	М	ID 2/2
TD508	310	Location Identifier (US port of unlading)	М	AN 1/30

#### Example:

TD5\*\*\*\*S\*\*\*PA\*<US port of unlading>

# TD5 Carrier Detail (Routing Sequence/Transit Time)(Foreign Port of Lading)

Optional, 1 Occurrence

Element Position TD504	Element Number 91	Description Content Transportation Method/Type Code A - Air J - Motor R - Rail S - Ocean H - Customer Pickup	Option M	Type Size ID 1/2
TD507	309	Location Qualifier KL - Port of Loading	M	ID 2/2
TD508	310	Location Identifier (Foreign port of lading)	М	AN 1/30

#### Example:

TD5\*\*\*\*S\*\*\*KL\*<Foreign port of lading>

# TD5 Carrier Detail (Routing Sequence/Transit Time)(Port of Arrival)

Optional, 1 Occurrence

Element Position TD504	Element Number 91	Description Content Transportation Method/Type Code A - Air J - Motor R - Rail S - Ocean H - Customer Pickup	Option M	Type Size ID 1/2
TD507	309	Location Qualifier PE - Port of Entry	М	ID 2/2
TD508	310	Location Identifier (Port of arrival)	М	AN 1/30

#### Example:

TD5\*\*\*\*S\*\*\*PE\*<port of arrival>

# TD3 Carrier Detail (Equipment)

Equipment identification. Required for any movement, truckload, carload, or container, including route pickup.

Mandatory, 1 Occurrence

Element Position TD301	Element Number 40	Description Content Equipment Description Code (Any code except mutually defined)	Option M	Type Size ID 2/2
TD302	206	SCAC Code (Initial on container, trailer, or	M rail car)	AN 1/4
TD303	207	Equipment Number (Number on container, trailer or ra	M ail car)	AN 1/10

#### Example:

TD3\*TF\*NSZ\*552234

**Tip:** "LT" is not a valid value to use in TD301, even though it may be a common term in the trucking industry. You must use a valid ANSI code.

#### REF Reference Number (Air Waybill)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop

Only used for air shipments

Element	Element	Description		Type
Position	Number	Content	Option	Size
REF01	128	Reference Number Qualifier AW - Air Waybill	М	ID 2/2
REF02	127	Reference Number (Air Waybill Number)	М	AN 1/30

#### Example:

REF\*AW\*00123211232112

#### REF Reference Number (Bill of Lading)

Mandatory, 1 Occurrence, at Least One REF Segment Must be Included in the Shipment Loop

**Note:** If no Bill of Lading exists, use another shipment identifier here, such as the packing slip number.

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier BM - Bill of Lading	М	ID 2/2
REF02	127	Reference Number (Bill of Lading Number)	M	AN 1/30

#### Example:

REF\*BM\*1141231

# REF Reference Number (Carrier Reference - PRO/Invoice)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop. This segment is required if there is no equipment identification

Used primarily with less than truckload shipments.

Element Position REF01	Element Number 128	<b>Description Content</b> Reference Number Qualifier CN - Carrier Reference	Option M	Type Size ID 2/2
REF02	127	Reference Number (PRO Number)	М	AN 1/30

#### Example:

REF\*CN\*4322233

# REF Reference Number (Freight Bill Number)

Optional, 0-1 Occurrences, at least One REF segment must be included in the shipment loop

Used when freight bill exists

Element Position REF01	Element Number 128	<b>Description Content</b> Reference Number Qualifier	Option M	Type Size ID 2/2
REF02	127	FR - Freight Bill Number  Reference Number  (Freight Bill Number)	М	AN 1/30

#### Example:

REF\*FR\*432234A

# REF Reference Number (Master Bill of Lading)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop

Used when master bill of lading exists

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier MB - master Bill of Lading	М	ID 2/2
REF02	127	Reference Number (Master Bill of Lading Number)	М	AN 1/30

#### Examples:

REF\*MB\*4342342

# REF Reference Number (Packing List Number)

Optional, 0-1 occurrences, at least one REF segment must be included in the shipment loop

Used when numbered packing list exists

Element Position REF01	Element Number 128	Description Content Reference Number Qualifier PK - Packing Number	Option M	Type Size ID 2/2
REF02	127	Reference Number (Packing List Number)	M	AN 1/30

#### Examples:

REF\*PK\*55443333

#### REF Reference Number (Seal Number)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop

Used when trailer of container is sealed

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier SN - Seal Number	- M	ID 2/2
REF02	127	Reference Number (Seal Number)	М	AN 1/30

#### Examples:

REF\*SN\*55446

# REF Reference Number (Vessel Name)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop

Used for ocean shipments.

Element Position REF01	Element Number 128	Description Content Reference Number Qualifier VN - Vessel Name	<b>Option</b> M	Type Size ID 2/2
REF02	127	Reference Number (Vessel Name)	M	AN 1/30

#### Examples:

REF\*VN\*ENTERPRISE

#### FOB FOB Related Instructions

Optional, 0-1 Occurrences

Used when freight payment method is not as agreed between MBUSI and shipper

Element	Element	Description	Option	Type
Position	Number	Content		Size
FOB01	146	Shipment Method of Payment CC - Collect PP - Prepaid	М	ID 2/2

#### Example:

FOB\*PP

# N1 Name (Supplier)

Mandatory, One Occurrence

Identifies the supplier sending the ASN

Element Position N101	Element Number 98	Description Content Opt Entity Identifier Code SU - Supplier (fixed)	cion M	Type Size ID 2/2
N102	93	Name (Supplier Name)	М	AN 1/35
N103	66	Identification Code Qualifier 92 - Assigned by Buyer or Buyer's Ager	M nt	ID 2/2
N104	67	Identification Code (MBUSI-assigned Vendor Code)	M	AN 6/10

# Example:

N1\*SU\*CHARLSTON STAMPING\*92\*100101

END OF SHIPMENT LOOP

# HL Hierarchical Level (Tare Loop)

Mandatory

One item loop for each unit load or modular container in the shipment.

Identifies the Loop as a unit load (Tare Loop).

Element Position HL01	Element Number 628	Description Content Hierarchical ID Number (Sequence Number)	Option M	Type Size AN 1/12
HL02	734	Hierarchical Parent ID Number 1 - Shipment Level	М	AN 1/12
HL03	735	Hierarchical Level Code T - Tare	М	ID 1/2

#### Example:

HL\*45\*1\*T

#### REF Reference Number (Returnable Container Serial Number)

Optional, 0-1 Occurrences

Required if Tare is a Modular Container

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier RS - Returnable Container Serial Nu	M ımber	ID 2/2
REF02	127	Reference Number (Returnable Container Serial Number	M ~)	AN 1/30

#### Examples:

REF\*RS\*123442A

Note: MBUSI does not track returnable containers at this time; this segment included only for ANSI compliance. Its use is not encouraged.

# HL Hierarchical Level (Item Loop)

# Mandatory

One Item Loop for Each RAN Packed on the Tare, Regardless of Number of Packs in RAN  $\,$ 

Identifies the tare the item is shipped On

Element Position HL01	Element Number 628	Description Content Hierarchical ID Number (Sequence Number)	Option M	Type Size AN 1/12
HL02	734	Hierarchical Parent ID Number (Tare Level ID if Shipped on Tare,	M 1 if not)	AN 1/12
HL03	735	Hierarchical Level Code I - Item Level	М	ID 1/2

#### Example:

HL\*50\*45\*I

#### LIN Line Identification

Mandatory, One Occurrence

Identifies the MBUSI Part Number and Release Authorization Number (RAN) of the Item Shipped.

Element Position LIN02	Element Number 235	Description Content Product/Service ID Qualifier BP - Buyer Part Number	Option M	Type Size ID 2/2
LIN03	234	Product/Service ID (MBUSI Part Number)	М	AN 1/24
LIN04	235	Product/Service ID Qualifier ON - Customer Order Number	М	ID 2/2
LIN05	234	Product/Service ID (Receipt Authorization Number	M (RAN))	AN 10/10
LIN06	235	Product/Service ID Qualifier EC - Engineering Change Level (Not used for Service Parts)	М	ID 2/2
LIN07	234	Engineering Change Level (MBUSI Part ZGS Level) (Not used for Service Parts)	М	AN 3/3

#### **EXAMPLE:**

For production orders:

LIN\*\*BP\*A2518980196\*ON\*C2E3000046\*EC\*001

For Direct-To-Line (JIT) Orders (triggered by 862):

LIN\*\*BP\*A2518980196\*ON\*0505512777

**Note:** Comes from LIN07 segment of corresponding 862 Schedule.

For Service Parts orders:

LIN\*\*BP\*A2518980196\*ON\*4500000027

**Note:** Only suppliers who are certified for EDI for Service Parts should support or send this segment configuration. It is used only for advanced shipping notices for Service Parts.

You should send the part number just like you received it in the order. This means the format of **parts** with color codes will differ between production and Service parts; for example, the part number A2518980196 99F7 (production) would be A251898019699F7(Service).

#### SN1 Item Detail (Shipment)

Mandatory, One Occurrence

Identifies the Quantity of the Item Shipped by RAN from LIN.

Element Position SN101	Element Number 350	Description Content Op Assigned Identification (A unique number for the shipment line)	otion M	Type Size AN 1/6
SN102	382	Number of Units Shipped	M	R 1/13
SN103	355	Unit or Basis for Measurement Code (Same as on 830 - see note below)	M	ID 2/2

#### Examples:

SN1\*42\*550\*EA SN1\*42\*25.5\*GL

End of Item Loop

End of Tare Loop

**Note:** You must send the same Unit of Measure in SN103 as MBUSI sent you in the corresponding RAN, or the ASN will be rejected. In particular, "PC" and "EA" are not interchangeable.

# **CTT** Transaction Totals

Total Number of Line Items

Element Element Description Type
Position Number Content Option Size
CTT01 354 Number of Line Items M N0 1/6

#### Example:

CTT\*245

#### SE Transaction Set Trailer

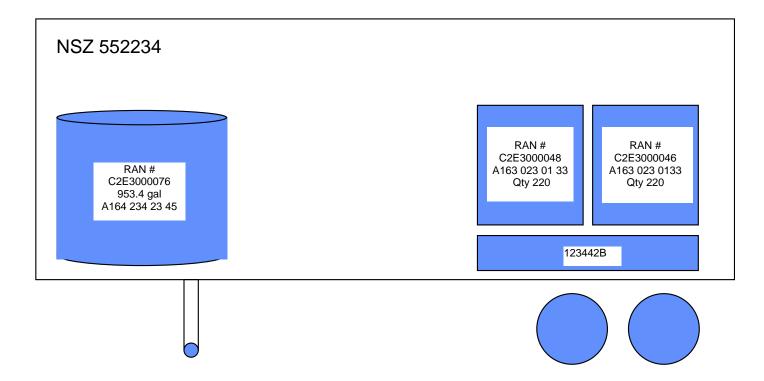
Element Position	Element Number	Description Content	Option	Type Size
SE01 96	Number of	Included Segments	_ M	NO 1/10
SE02 329	Transacti	on Set Control Number	M	AN 4/9

#### Example:

SE\*45\*1122112

# Example 1 of Ship Notice / Manifest:

For this example, we assume a trailer shipment (trailer NSZ 552234) with one tare loaded with the same part numbers, and a quantity of liquid. It is to satisfy 2 different Release Authorizations, with two different part numbers:



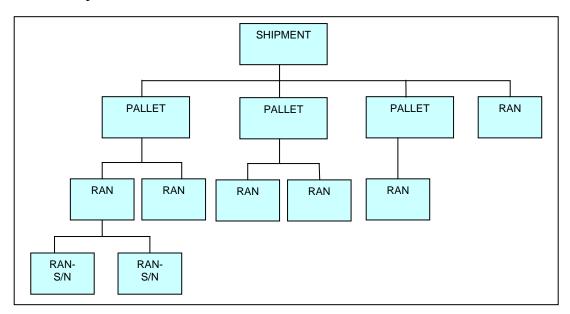
#### Example of EDI Ship Notice / Manifest:

The following is an example of an EDI Ship Notice/Manifest. Comments are in italics. For readability, segments are delimited with new lines, and elements with asterisks. MBUSI will accept any segment and element delimiter.

```
ISA*00*
                 *00*
                               *ZZ*MBUS
                                          MBUS003 *ZZ*EDIS
                                                              EDIS50
*960307*1602*U*00200*00000001*0*T*:
GS*PO*MBUS003*EDIS50*960307*1602*1*X*003050
ST*856*000056789
BSN*00*1000123*960420*1456
DTM*011*960420*1434
HL*1*S
MEA**N*2545*KG
TD1*PCS*100
TD5*2*CN*R
TD3*TF*NSZ*552234
REF*BM*1141231
REF*PK*55443333
                                         This shipment was prepaid, normal is collect
FOB*PP
N1*SU*CHARLSTON STAMPING*92*100101
HL*2*1*T
REF*RS*123442B
HT.*3*2*T
LIN**BP*A1630230133*ON*C2E3000046*EC*001
SN1*3*220*EA
HL*4*2*I
LIN**BP*A1630230133*ON*C2E3000048*EC*003
SN1*4*220*EA
                                         Parts can be shipped without a tare. The parent HL
HL*5*1*I
                                         segment is the shipment
LIN**BP*A1634234234*ON*C2E3000076*EC*001
SN1*5*953.4*GL
CTT*5
SE*33*000056789
GE*1*1
IEA*1*000000001
```

#### Handling Hierarchies of Shipped Material

A shipment may be composed of a number of pallets, each containing a number of boxes. The simplest case is one RAN to one box. If there are multiple boxes for one RAN, you must assign a serial number to each box so that the combination of RAN and serial number is a unique identification for that box. In either case, you use the hierarchical capability of the ASN (using the HL segment) to show the logical structure of the shipment.



If your shipment contains RANs consisting of multiple boxes, there is no need to include the serial numbers of the boxes in the ASN. This information is to be embedded in the barcode on the label for each box. You must also print a Master Label (for pallets of all one part number) or Mixed Load Label (for pallets of multiple part numbers) for each pallet. Be careful to coordinate the information (Pallet #, etc.) between the ASN and the labels. Refer also to the document Parts Identification Label – Barcode Standards.

# Shipping Schedule(862)

# ANSI 862 – Shipping Schedule

# THIS APPLIES ONLY TO DIRECT TO BODY SHOP JIT SUPPLIERS.

A small number of MBUSI suppliers provide parts on a true Just-In-Time (JIT) basis. This is distinct from bulk supply (RAN) and Just-In-Sequence (JIS). This process combines some of the characteristics of both RAN and JIS processing. Also known as "Direct Supply to Plant," this process involves supplying parts directly to the assembly plant (initially the Body Shop), on a triggered schedule but not in sequence.

As with the RAN process, the JIT process starts with the ANSI 830; however, in this case, the ANSI 830 contains a forecast only (similar to the 830 that a sequence supplier receives). In addition, the JIT supplier receives a series of ANSI 862 messages that provide exact shipping times and quantities. There might be slight variations between the quantities in the 862 as compared to the 830 forecast due to late-breaking changes in assembly sequence.

The segments and elements used from the 862 Transaction set are described below by segment. Each segment is described as Mandatory, and will always be sent by MBUSI, or Optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a Loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database reference, and for MBUSI internal use only. An M in the option shows that the element will always be included and an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

# ST Transactions Set Header

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

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identifier Code 856 - Ship Notice/Manifest	М	ID 3/3
ST02	329	Transaction Set Control Number (000000000-999999999)	М	AN 4/9

# Example:

ST\*862\*000056789

# BSS Beginning Segment for Shipping

Mandatory, 1 Occurrence

Element Position BSS01	Element Number 353	Description Content Transaction Set Purpose Code 00 - Original	Option M	Type Size ID 2/2
BSS02	127	Referenece Number (Acts as Release Number)	М	AN 10/12
BSS03	373	Date (YYMMDD - Date Sent)	М	DT 6/6
BSS04	675	Schedule Type Qualifier DL - Delivery Based	М	ID 2/2
BSS05	373	Date (YYMMDD - Date Sent)	М	DT 6/6
BSS06	373	Date (YYMMDD - Date Sent)	М	DT 6/6

# Example:

BSS\*00\*1002983355\*060918\*DL\*060918\*060918

# N1 Name(Seller)

Seller Name Information.

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
N101	98	Entity Identifier Code SE - Selling Party	М	ID 2/2
N103	66	Identification Code Qualifier 92 or 93 - Assigned by Buyer or B	M uyer's Agen	ID 2/2 t
N104	67	Identification Code (MBUSI Vendor Code)	M	AN 8/10

#### Example:

N1\*SE\*\*92\*18589580

LOOP ID-LIN 1

This loop describes each part number. In the MBUSI implementation, there is only one part per ID.

Mandatory, 1 Occurrence

#### LIN Line Identification

MBUSI part number information and links to related SAP objects.

Element Position LIN02	Element Number 235	Description Content Product/Service ID Qualifier BP - Buyer Part Number	Option M	Type Size ID 2/2
LIN03	234	Product/Service ID (MBUSI Part Number)	М	AN 1/24
LIN04	235	Product/Service ID Qualifier RS - Set Number	М	ID 2/2
LIN05	234	Product/Service ID (SAP idoc# of corresponding call-c	M off)	AN 8/10
LIN06	235	Product/Service ID Qualifier RN - Release Number	М	ID 2/2
LIN07	234	Product/Service ID (JIT call-off number in SAP)	М	AN 8/10

#### Example:

LIN\*\*BP\*A1646100277\*RS\*81441005\*RN\*0505512777

LOOP ID-LIN 1

#### UIT Unit Detail

Unit of measure for quantities ordered.

Mandatory, 1 Occurrence

Element Position		Description Content	Option	Type Size
UIT01	355	Unit or Basis for Measurement Code	- M	ID 2/2
		(Any valid code may be used)		

# Example:

UIT\*EA

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# **REF** Reference Number

Plant Number

Optional, 1 Occurrence

Element Position REF01	Element Number 128	Description Content Reference Number Qualifier CR - Customer Reference Number	Option M	Type Size ID 2/2
REF02	127	Reference Number (Plant Designation, corresponds to the SAP "SLOC")	М	AN 2/8

# Example:

REF\*CR\*BDY2

#### Loop ID-FST

# FST Forecast Schedule (Actual Delivery Schedule)

Optional, Unlimited Occurrences

Element Position FST01	Element Number 380	Description Content Quantity (Ship quantity)	Option M	Type Size R 1/13
FST02	680	Forecast Qualifier C - Firm	М	ID 1/1
FST03	681	Forecast Timing Qualifier D - Discrete	M	ID 1/1
FST04	373	Date (YYMMDD - Date of delivery at MBUS	M	DT 6/6
FST06	374	Date/Time Qualifier 002 - Delivery Requested	X	ID 3/3
FST07	337	Time (HHSS - Time of delivery at MBUSI)	X	DT 4/4

#### Example:

FST\*11\*C\*D\*060918\*\*002\*2335

Means the delivery is expected to arrive at the dock at this time. Remember to take transit time into account.

# **CTT** Transaction Totals

Total Number of Line Items

Element Element Description Type
Position Number Content Option Size
CTT01 354 Number of Line Items M NO 1/6
1 - Always one line item

#### Example:

CTT\*1

#### SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type Size
SE01	96	Number of Included Segments	M	NO 1/10
SE02	329	Transaction Set Control Number	М	AN 4/9

#### Example:

SE\*10\*000001234

Date Last Revision: 12 Mar 2007

#### Example of Shipping Schedule:

The following is an example of an EDI Shipping Schedule (ANSI 862). Comments are in italics. For readability, segments are delimited with new lines, and elements with asterisks. MBUSI will accept any segment and element delimiter.

ISA\*00\* \*00\* \*ZZ\*MBUS MBUS002 \* \*061115\*1328\*U\*00200\*000000000\*0\*P\*> GS\*PS\*MBUS002\*18589580\*061115\*1328\*0\*X\*003050 ST\*862\*0004 BSS\*00\*1002983355\*060918\*DL\*060918\*060918 N1\*SE\*\*92\*18589580 LIN\*\*BP\*A1646100275\*RS\*81451005\*RN\*0505512742 UIT\*EA REF\*CR\*BDY1 FST\*11\*C\*D\*060918\*\*002\*2335 CTT\*1 SE\*9\*0004 GE\*1\*0 IEA\*1\*000000000

# Functional Acknowledgment (997)

#### (997) Functional Acknowledgment

MBUSI will require Functional Acknowledgments for all transactions. It is the intent to use the lack of Functional Acknowledgments within expected maximum times of transmission to cause exception handling routines to be invoked.

MBUSI will send Functional Acknowledgments in response to all incoming messages (except incoming Functional Acknowledgments), and will expect trading partners to institute exception proceedings if they do not receive them within agreed times.

The Functional Acknowledgment is sent using the AIAG subset of Transaction Set 997 of the ANSI X12 standard, version 003050. Functional Acknowledgments are issued upon receipt of the transmission. The 997 acknowledges the receipt NOT the content of the message.

The segments and elements used from the 997 Transaction set are described below by segment. Each segment is described as Mandatory, and will always be sent by MBUSI, or optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. An M in the option shows that the element will always be included, an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

# ST Transactions Set Header

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

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identified Code 997 - Functional Acknowledgment	М	ID 3/3
ST02	329	Transaction Set Control Number (000000001-999999999)	М	AN 9/9

# Example:

ST\*997\*000000001

# AK1 Functional Group Response Header

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
AK101	479	Functional Identifier Code (Specific value of the GS01 of the functional group being acknowledge)		ID 2/2
AK102	28	Group Control Number (Specific value of the GS06 of the functional group being acknowledge)		NO 1/9

#### Example:

AK1\*PO\*1

LOOP ID-AK2 Transaction Set

# AK2 Transaction Set Response Header

Optional, 1 Occurrence

Element Position AK201	Element Number 143	Description Content Transaction Set Identifier Code (Any valid code)	Option M	Type Size ID 3/3
AK202	329	Transaction Set Control Number (Contains the value in the ST02 in the transaction set being ackno	M wledged)	AN 4/9

# Example:

AK2\*850\*1234

#### LOOP ID-AK2/AK3 Data Segment

# AK3 Data Segment Note

Optional, 1 Occurrence

Element Position AK301	Element Number 721	Description Content Segment ID Code (Any valid code)	Optio	o <b>n</b> M	Type Size ID 2/3
AK302	719	Segment Position in Transaction	Set	M	NO 1/6
AK303	447	Loop Identifier Code		0	AN 1/4
AK304	720	Segment Syntax Error Code (Any valid code)		0	ID 1/3

#### Example:

AK3\*DTM\*4

#### AK4 Data Element Note

Optional, 0-99 Occurrences

Element Position AK401	Element Number 722	Description Content Element Position in Segment (Element position)	Option M	Type Size ID 1/1
AK402	725	Data Element Reference Number	0	NO 1/4
AK403	723	Data Element Syntax Error Code	M	ID 1/3
AK404	724	Copy of Bad Data Element (Any valid code)	0	AN 1/99

#### Example:

AK4\*1\*374\*4\*92

END OF DATA SEGMENT LOOP

# AK5 Transaction Set Response Trailer

Mandatory, 1 Occurrence

Element Position AK501	Element Number 717	Description Content Transaction Set Acknowledgement Coc (Any valid code)	<b>Option</b> de M	Type Size ID 1/1
AK502	718	Transaction Set Syntax Error Code (Any valid code)	0	ID 1/3
AK503	718	Transaction Set Syntax Error Code (Any valid code)	0	ID 1/3
AK504	718	Transaction Set Syntax Error Code (Any valid code)	0	ID 1/3
AK505	718	Transaction Set Syntax Error Code (Any valid code)	0	ID 1/3
AK506	718	Transaction Set Syntax Error Code (Any valid code)	0	ID 1/3

# Examples:

AK5\*R\*5

END OF TRANSACTION SET LOOP

# AK9 Functional group Response Trailer

Mandatory, 1 Occurrence

Element Position AK901	Element Number 715	Description Content Option Functional group Acknowledge Code M (Any valid code)	
AK902	97	Number of Transaction Sets Included M (Number of transaction sets(value of GE01 in the received functional group))	NO 1/6
AK903	123	Number of Received Transaction Sets M (Receiver's count)	NO 1/6
AK904	2	Number of Accepted Transaction Sets M	NO 1/6
AK905	716	Functional Group Syntax Error Code O (Any valid code)	ID 1/3
AK906	716	Functional Group Syntax Error Code O (Any valid code)	ID 1/3
AK907	716	Functional Group Syntax Error Code O (Any valid code)	ID 1/3
AK908	716	Functional Group Syntax Error Code O (Any valid code)	ID 1/3
AK909	716	Functional Group Syntax Error Code 0 (Any valid code)	ID 1/3

# Examples:

AK9\*E\*1\*1\*0

# SE Transaction Set Trailer

Element Position	Element Number	Description Content Option		Type Size	
SE01	96	Number of Included Segments	M	NO 1/10	
SE02	329	Transaction Set Control Number	M	AN 4/9	

# Example:

SE\*45\*000001234

# **Example of EDI Functional Acknowledgment**

The following is an example of an EDI Functional Acknowledgment. For readability, segments are delimited with new lines, and elements with asterisks.

ISA\*00\* \*00\* \*ZZ\*MBUS MBUS001 \*ZZ\*EDIS EDIS50 \*960307\*1602\*U\*00200\*00000001\*0\*T\*: GS\*FA\*MBUS001\*EDIS50\*960307\*1602\*1\*X\*003050 ST\*997\*00000001 AK1\*PO\*1 AK2\*850\*1234 AK3\*DTM\*4 AK4\*1\*374\*4\*92 AK5\*R\*5 AK9\*E\*1\*1\*0 SE\*8\*00000001 GE\*1\*1 IEA\*1\*000000001

# **Appendices**

### Appendix A: DATA MAPPING

The purpose of this section is to give trading partners the understanding of MBUSI usage of the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 EDI conventions. A transmission has three components as shown in the figure below. Each component represents an envelope. The outer most envelope, called the **ISA** has information that indicates the enterprise from which the transmission came from and information where the data is being routed. The second level envelope, called the **GS** represents the department that the transmissions came from and the department that the data is going. The third level envelope, called the **ST**, represents the transaction set (Material Release, Purchase Orders, etc.).

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	
ISA DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	
Transmission Envelope	
GS 000000000000000000000000000000000000	
ST 00000000000 Functional 0	
Transaction Set 1 $\square$ Group 1 $\square$	
SE 00000000000000	
ST 00000000000 Functional 0	
Transaction Set 2 $\square$ Group 1 $\square$	
SE 000000000000000	
GE 000000000000000000000000000000000000	
IEA DODOODOODOODOODOODOODOODOODOO	

The ISA, GS, and ST are segments. A segment is made up of a segment identifier and data elements. The ANSI ASC standard has rules regarding the different types of data elements and the use of segments in each transaction.

Following is an abstract picture of the relationship between elements and segments in an EDI transmission.

```
Segment ID*Element * Element *Element
Segment ID*Element * Element * Element
Segment ID*Element * Element * Element
```

Segments are made up of elements. In computer terms elements are "fields" and segments are "records". What makes an elements different from a traditional "field", is that elements can vary in size with a minimum and maximum ranges depending on how it is defined in the element dictionary.

There are 3 dictionaries found in the ANSI standards:

- 1. The Transaction set dictionary
- 2. The Segment dictionary
- 3. The Data Element dictionary

The segments in the segment dictionary are the building blocks for a set of tables called the Transaction Set Tables, which make up the traditional Purchase Order, Invoice transactions, as well as host of other transactions.

Below in one of the segments to be found in the ANSI standards. The DTM segment is for Date/Time information. There are hundreds of different segments in the ANSI standards.

DTM <u>Date/Time Reference</u>
Syntax Notes: 1. At least one DTM02 or DTM03
must be present
□DTM01 374□ □DTM02 373□ □DTM03 337□ □DTM04 623□
DTM*\( Date / Time \( \) \( \) Time \( \)
□Qualifier□ □ □ □ □ Code □I
$\square$ M ID 3/3 $\square$ $\square$ C DT 6/6 $\square$ $\square$ C TM 4/4 $\square$ $\square$ O ID 2/2 $\square$
Figure 1.
<u>-</u>
□DTM01 374□ □DTM02 373<□□□□ <b>8</b>
$DTM*\Box Date/Time\Box*\Box$ Date $\Box$ $N/L<\Box\Box$ 9
□ □Qualifier□^□ □ □
□ □M ID 3/3□□C DT 6/6<□□□□ <b>5</b>
V 🗆 <b>4</b>
1 3
2

Figure 2.

Following is a detailed description of each component of a segment, the numbers correspond to figure 2, which show two of the four data elements that comprise the DTM segment.

- 1. Data Segment Identifier: The two or three characters assigned to identify the segment.
- **2**. Data Element Requirements Designator: There are three designators.

- 1. M = Mandatory It must be supplied.
- 2. C = Conditional The element is present based on a condition that is explained in the syntax note(s).
  - 3. O = Optional the element may or may not be used.
- **3**. Data element type: There are seven types of data elements
  - 1. AN Alphanumeric includes digits, the space, and special characters.
  - 2. ID A specific code. Maintained by the ANSI standards committee.
- 3. Nn Numeric data with an optional leading negative sign, no decimals. An N2 indicates an implied decimal of two positions (i.e. 101 = 1.10).
  - 4. DT A date in the format of YYMMDD.
  - 5. TM Time in HHMM (military) format.
- 6. R Real number A string of numbers with an optional negative sign and decimal. The size does not include the decimal or the sign. A decimal should **not** appear if it in the last position, (i.e. "1234.").
  - 7. B Binary used to send Binary files.
- **4**. The Data Element Separator: the characters that separate each element in an EDI transmission.
- **5**. Data element length: Minimum and Maximum length. For this element the minimum and maximum length are both the same.
- **6**. Data Element Title: The name of the data element.
- 7. Data Element Reference Designator: Identifies the position the element you are referring to is in the segment.
- **8**. Data Dictionary Reference Number: The ANSI standard Data Element Dictionary reference number. Looking at the ANSI ASC standard Data Element Dictionary for 374 shows the following information.

### 374 Date/Time Qualifier

Type = ID Min = 3 Max = 3

### CODE DEFINITION

001 Cancel After

002 Delivery Requested

xxx... - Additional codes and definition

The meaning of a date or a time in the segment can be found in the Data Element Dictionary. Because ANSI ASC X12 is accommodating all industries the number of codes for a given element can be extensive. What MBUSI is doing by this document is to take a subset of all the possible codes, this will facilitate the implementation of EDI standards.

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**9**. Data Segment Terminator: This is a computer readable character that designates the end of a segment. It is identified in the ISA header. With the structure of a segment being delineated, a more precise definition of a transaction set can be presented. A transaction set is composed of a specific group and order of data segments.

The Auto Industry Action Group (AIAG) has reformatted the three dictionaries within the context of a single transaction set.

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### **Interchange Control Structure**

This ISA segment marks the beginning of each transmission and provides sender/receiver identification. Each GS marks the beginning of a functional group. There may be one or more than one functional groups within each transmission. The ST segment marks the beginning of each transaction set (Electronic Document). *See Appendix B for examples*.

The Interchange control structure is common to all transaction sets.

**Transaction Set:** Interchange Control Structure

Version: 0305

Segment: ISA - Interchange Control Header

Level: Envelope

**Usage:** Mandatory

### **Purpose:**

To start and identify an interchange of one or more functional groups and interchange related control segments. *See Appendix B for examples*.

### **Comments:**

- **1.** The interchange control number value in this header must match the value in the same data element in the corresponding interchange control trailer.
- **2.** The first byte after the ISA defines the actual value of the data element separator and is graphically displayed as an asterisk "\*" in other ANSI X12 data segment documentation. The byte after the data terminator and is displayed as N\L (New Line)

Data Element Summary						
Ref.	Data					
Des.	Element	Name	Αt	tributes		
ISA01	I01	Authorization	M	ID 2/2		
		Information Qual.				
□Qualifiers: 00-No	Author,	01-UCS comm ID				

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# Information Qual.

OThis is to book of the second	pe filled with SA01 is "00"	spaces if		
ISA03  Qualifiers:	I03 00-No Security	Information Security M Info, 01-Password	ID	2/2
ISA04  This is to k qualifier IS	I04 De filled with	Security M Information spaces if	AN	10/10
ISA05  Qualifiers:	I05  01-Duns Number  ZZ-Mutually de	Interchange ID Qualifier  C, 08-Phone Number  efined	М	ID 2/2
ISA06  Definition:	I06  Sender identi See Appendix B	Interchange Sender ID  Cication number.	М	ID 15/15
	Sender identi: See Appendix I	Sender ID  Sication number.  3.  Interchange ID Qualifier  7, 12-Phone Number	M	ID 15/15  ID 2/2
Definition:  ISA07  Qualifiers:  ISA08	Sender identification of the second of the s	Sender ID  Sication number.  S.  Interchange ID Qualifier  C, 12-Phone Number  Efined  Interchange Receiver ID  Scication number.		

The date is in year - the date the ISA					
ISA10	I09	Interchange Time	M	TM	4/4
The local time the HHMM format the val					
ISA11	I10 Standard	Interchange	M	ID	1/1
OQualifier: U-U.S.					
ISA12	I11	Interchange Version ID	M	ID	5/5
Definition: 00305					
ISA13	I12	Interchange Control Number	M	NO	9/9
each new transmission to a	a Partner. 1	control number in the IEA. It will be income for example the second transmission to a transmission to that partner will have	Part	ner	should have
ISA14	I13	Acknowledgement Requested	M	ID	1/1
Qualifier: 0-No AG	CK Reques	sted 1888888888888888888888888888888888888			
MBUSI does not use TA Acknowledgement.	A1 acknowle	edgements, this is not to be confused	with	the	Functional
ISA15	I14	Test Indicator	M	ID	1/1
Definition: T-Test					
The test indication applies t	o the entire	transmission. Used to indicate a test or pro	ducti	on tr	ansaction.
ISA16	I15	Sub Element Separator	M	AN	1/1

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**Transaction Set:** Interchange Control Structure

Version: 0305

Segment: IEA - Interchange Control Trailer

Level: Envelope

**Usage:** Mandatory

### **Purpose:**

To define the end of an interchange of one or more functional groups and interchange related control segments.

### **Comments:**

- **1.** The interchange control number value in the same data element in the corresponding interchange control header.
- **2.** The value of the data element separator represented by "\*" and the data segment terminator represented by N/L are set by the interchange control header ISA for this interchange.

Data Element Summary

Ref.	Data	
Des.	Element Name	Attributes
IEA01	I16 Number of Included	M NO 1/5
	Groups	

The number of GS/GE Groups that are included in the transmission.

IEA02 Interchange M NO 9/9 Control Number

Each control number should match the control number in the ISA. It should be incremented by one with each new transmission to a partner.

**Segment: GS - Group Control Structure** 

Level: Group

**Usage:** Mandatory

**Purpose:** To indicate the beginning of a functional group and to provide control information. **See Appendix B for examples.** 

Da	ta Element	Summary		
Data	Ref.			
Element	Num.	Description	At	tributes
GG 0.1	470	Donata de de	Ъ. Г.	TD 0/0
GS01	479 1000000000	Functional Code	М	ID 2/2
		PO-Purchase Order		
		l Acknowledgment		
GS02	142	Application Sender	M	AN 2/12
		Code		
Definition. A	unique code	e to identify the $\square$		
	<del>-</del>	a Duns Number,		
□a phone numbe				
Often the sam		Ty derined.		
GS03	124	Application	M	AN 2/12
		Receiver's Code		
	_	e to identify the		
		be a Duns Number,		
□a phone numbe				
		See Appendix B.		
GS04	29	Group Date	М	DT 6/6
		- () 5		
The date is in - the date the		day (YYDDMM) format		
- the date the	: ISA Was CI	eated.		
GS05	30	Group Time	M	TM 4/4
mba lagal ±-i				
		s create it is in ges are 0000 to		
2359.	ic varra ran	geb are 0000 to		

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Mercedes-Benz U. S. Interr	nc.	Appendi	ces	
GS06	28	Group Control #	М	NO 1/9
The group control n				
GS 0 7	455	Responsible Agency Code	М	ID 1/2
Qualifier: X-X12 C	Committe	ee		
GS08	480	Version Release Industry ID Code	М	ID 1/12
□Qualifier: 003050				

EDI Implementation Guide Date Last Revision: 12 Mar 2007

Segment: GE - Group Control

Level: Group

**Usage:** Mandatory

# **Purpose:**

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

### **Comments:**

**1.** The control number is the same as that used in the corresponding header.

Data Element Summary

Data Element	Ref. Num.	Description	At	tributes
GE01	97	Number of Included Sets	M	NO 1/6
GE02	28	Group Control # It must match the Group Control Number in the GS06 Segment.	M	NO 1/9

**Segment: ST - Transaction Set Header** 

Level: Header

**Usage:** Mandatory

### **Purpose:**

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

### **Comments:**

**1.** The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition. (e.g., 830 selects the Material release transaction).

Data Element Summary						
Data Element	Ref. Num.	Description	At	tributes		
ST01	143	Transaction Set	M	ID 3/3		
		Туре				
□Definition: 810-Invoice, 850-Purchase Order □						
□ 997-Functional Acknowledgement □						
ST02	329	Control Number	M	AN 4/9		
		Assigned By Sender		·		
□Definition: (	Control Numb	per Sequential by $\square$				
	Trading Part	iner $\Box$				

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**Segment: SE - Transaction Set Trailer** 

**Level:** Summary

Usage: Mandatory

# **Purpose:**

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and the ending (SE) segments).

### **Comments:**

The SE is the last segment of each transaction set.

Data Element Summary							
Data Element	Ref. Num.	Description	At	tributes			
SE01	96	Number of Included Segments	M	NO 1/6			
SE02	329	Transaction Set Control Number	M	NO 4/9			
ODefinition: Must be the same as STO2							

# APPENDIX B: MBUSI ISA/GS Information and Examples

# Trading Partner Specific Information

□Subelement Separator:	Not used; ">"				
□Element Separator:	HEX "A1" - "~"				
□Segment Terminator:	HEX "15" - Newline				
DDDDD ID Qualifier:	"ZZ"				
DDDDD ID (Production):	"MBUS MBUS002 "				
□Your ID Qualifier*:	11 11				
□Your ID*:	11 11				
□□ Application Code (Production):	"MBUS002"				
□□ Application Code (Service Parts)					
. <b>FF</b>					
□Your Application Code*:	" "				
	Advantis				
□ □Your Value Added Network**:					
	gned by your orginization. $\Box$				
☐ Please inform MBUSI of t					
change from the specifie	<b>2</b>				
	must be capable of				
Your value added network must be capable of exchanging EDI data with Advantis (formally called					
the IBM Information Netw					

Further explanation and examples follow.

### **EDI ISA/GS Segment Examples for Production Parts**

The following are the specifications identified by MBUSI's SAP EDI team for the successful sending and receiving of 830 and 856 transactions with MBUSI's SAP system.

Mercedes OEM uses as its VAN Advantis

Mercedes EDI contact: Jill Natusch 877-280-0432

### 830 ISA/GS defined as follows:

```
ISA*00* *00* *ZZ*MBUS MBUS002 *ZZ*AAABBB *030430*1304*U*00200*00007156*0*P*>...
GS*PS*MBUS002*SUPPLIER*030430*1304*7156*X*003050...
```

### Where:

- ZZ AAABBB is your Interchange qualifier and ID
- SUPPLIER is your supplier number as defined by MBUSI

### 856 ISA/GS defined as follows:

```
ISA*00* *00* *ZZ*AAABBB *ZZ*MBUS MBUS003 *030430*2203*U*00200*000006887*0*P*~...
GS*SH*SUPPLIER*MBUS003*030430*22034100*6887*X*003050...
ST*856*68870001...
```

### Where:

- ZZ AAABBB is your Interchange qualifier and ID
- SUPPLIER is your supplier number as defined by MBUSI

### **EDI ISA/GS Segment Examples for Service Parts**

The following are the specifications identified by MBUSI's SAP EDI team for the successful sending and receiving of 830 and 856 transactions for Service Parts with MBUSI's SAP system.

Mercedes OEM uses as its VAN Advantis

Mercedes EDI contact: Jill Natusch 877-280-0432

### 830 ISA/GS defined as follows:

```
ISA*00* *00* *ZZ*MBUS MBUS002 *ZZ*AAABBB
*030430*1304*U*00200*000007156*0*P*>...
GS*PS*MBUS002S*SUPPLIER*030430*1304*7156*X*003050...
```

#### Where:

- ZZ AAABBB is your Interchange qualifier and ID
- SUPPLIER is your supplier number as defined by MBUSI

### 856 ISA/GS defined as follows:

```
ISA*00* *00* *ZZ*AAABBB *ZZ*MBUS MBUS003 *030430*2203*U*00200*00006887*0*P*~...
GS*SH*SUPPLIER*MBUS003S*030430*22034100*6887*X*003050...
ST*856*68870001...
```

### Where:

- ZZ AAABBB is your Interchange qualifier and ID
- ullet SUPPLIER is your supplier number as defined by MBUSI

### APPENDIX C: EDI Publications

There are several organizations that provide information regarding EDI. Since 1986, by approval of the American National Standards Institute (ANSI), the American Standards Committee X12 Secretariat called "The Data Interchange Standards Association" (DISA) has published a series of releases. These documents (called "Release 2", "Release 3", etc.) represent X12-approved revisions of those previously published American National Standards. As such, releases are not American National Standards, since their contents have not been subjected to the rigors of the public review process required by ANSI for such considerations. In the form provided in releases, all of the standards are considered to be Draft Standards for Trial Use (DSTU). However a de-facto standard has evolved to use the current or one release back of the DISA standard.

ASC X12's purpose in publishing these releases is to put current ASC X12 approved draft standards into the hands of users in a more frequent basis. The ANSI standards process is lengthy. The Data Interchange Standards Association (DISA) monitors the progress and oversees the publication of the draft standards.

DISA can be contacted as the following address:

Data Interchange Standards Association (DISA) Suite 355 1800 Diagonal Road Alexandria, VA 22314-2852

Phone (703) 548-7005

The Auto Industry Action Group takes the standards established by DISA and creates a subset of the EDI standard for the auto industry. When ever possible MBUSI will stay within the EDI conventions established by the AIAG. This implementation guide is base on version 3050AIAG.

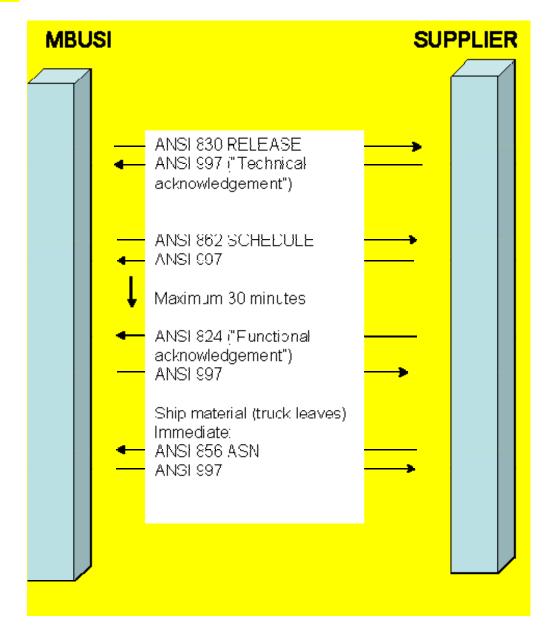
The AIAG can be contacted at the following address.

Automotive Industry Action Group P.O. Box 98 Royal Oak, MI 48068-0098

Phone: (810) 358-3003 Fax: (810) 358-3253

### **APPENDIX D: JIT Process**

The Just-In-Time process (that uses the ANSI messages 830, 862, and 824) has a set of timed interactions that are important for monitoring. Quick detection of problems is key to preventing line downtime. The following chart shows how messages flow back and forth between partners in this process.



### APPENDIX E: RAN Format

The following table shows how the RAN is formed.

RAN Type	Ship-to Point	Month Code	Year	Sequential number
(1 char)	(1 digit)	(1 char)	(1 digit)	(6 digits)
<pre>'C': Calculated 'M': Manual 'E': Emergency 'T': Trial 'S': Sample 'P': PPS</pre>	1: Plant 1 2: Plant 2 3: Consolidated	A: January B: February C: March D: April E: May F: June G: July H: August J: September K: October L: November M: December	3: 2003 4: 2004 5: 2005 6: 2006 7: 2007 8: 2008 9: 2009 0: 2010 1: 2011 2: 2012 etc.	Starting with 000001 each time the month code changes per RAN type
Notes				
Process dependent	Should match other information in the header.	'I' has been eliminated. Indicates when RAN was calculated.	Archiving required within each decade (will repeat in 10 years)	e.g., March 2003: C2C3000001 M2C3000001

RANs are never reused (except if one should happen to be repeated after 10 years). They can be used as a unique key to identify an order (much like a Purchase Order Number).

When storing a RAN into a database, the RAN should be the only key. It is unique. It should not be concatenated with other fields (such as due date, part number, shipping location, etc.) as that is likely to cause duplication of demand.

Since a RAN# is a unique identifier of an order, it should be the only thing you use to identify the order. If, instead, you use the part number, shipping destination, storage location, due date, or combinations thereof, you will usually be causing overwriting of orders, loss of information, and general inventory inaccuracy.

# **END OF DOCUMENT**