



MATERIAL PLANNING SCHEDULE

ANSI X12 - 830 v.002040

Document History

Revision	Date	Responsible	Description of Revision
A	06-06-2003	Carlos GALICIA	Document creation
B	03-10-2004	Carlos GALICIA	Modifications (Pg. 9, 10, 13, 22)
C	09-21-2004	Vicente ROSAS	Modifications (Pg. 5, 19)

1. THE MATERIAL PLANNING SCHEDULE MESSAGE

1.1 INTRODUCTION

This document provides the format definition and establishes the data contents of the material planning schedule transaction set. The planning schedule transaction set provides all the information required by Valeo to fully express its material requirements forecast to our supplier base.

The EDI guideline here included is intended to fully explain the parameters and rules required for the implementation of the ANSI X12 830 transaction without the necessity of any additional documentation.

1.1 STANDARD

Standard: ANSI X12
Transaction: 830
Version Release: 002040

2. DATA SEGMENT STRUCTURE

TABLE 1 – HEADING AREA

<u>SEG</u>	<u>SEGMENT NAME</u>	<u>REQ</u>	<u>MAX USE</u>	<u>LOOP</u>	<u>VALEO USE</u>
ST	Transaction Set Header	M	1		YES
BFR	Beginning Segment for Planning Schedule	M	1		YES
NTE	Note/Special Instruction	F	100		NO
CUR	Currency	O	1		NO
REF	Reference Numbers	O	12		NO
PER	Administrative Communications Contact	O	3		NO
TAX	Sales Tax Reference	O	3		NO
FOB	F.O.B. Related Instructions	O	1		NO
N1	Name	O	1	N1/200	YES
N2	Additional Name Information	O	2		NO
N3	Address Information	O	2		NO
N4	Geographic Location	O	1		NO
REF	Reference Numbers	O	12		NO
PER	Administrative Communications Contact	O	3		YES
FOB	F.O.B. Related Instructions	O	1		NO
CTP	Pricing Information	O	25		NO
SSS	Special Services	O	25		NO
CSH	Header Sale Condition	O	1		NO
ITD	Terms of Sale/Deferred Terms of Sale	O	2	NO	
DTM	Date/Time Reference	O	10		NO
PID	Product/Item Description	O	200		NO
MEA	Measurements	O	40		NO
PWK	Paperwork	O	25		NO
PKG	Marking, Packaging, Loading	O	25		NO
TD1	Carrier Details (Quantity and Weight)	O	2		NO
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO
TD3	Carrier Details (Equipment)	O	12		NO
TD4	Carrier Details (Special Handling/Hazardous Materials)	O	5		NO
MAN	Marks and Numbers	O	10		NO

TABLE 2 – DETAIL AREA

<u>SEG</u>	<u>SEGMENT NAME</u>	<u>REQ</u>	<u>MAX USE</u>	<u>LOOP</u>	<u>VALEO USE</u>
LIN	Item Identification Detail	M	1	LIN/10000	YES
UIT	Unit Detail	M	1		YES
CUR	Currency	O	1		NO
SLN	Subline Item Detail	O	1	SLN/100	NO
PID	Product/Item Description	O	1000		NO
PO3	Additional Item Detail	O	25		NO
CTP	Pricing Information	O	25		NO
PID	Product/Item Description	O	1000		NO
MEA	Measurements	O	40		NO
PWK	Paperwork	O	25		NO
PKG	Marking, Packaging, Loading	O	25		NO
PO4	Item Physical Details	O	1		NO
PRS	Part Release Status	O	1		NO
REF	Reference Numbers	O	12		YES
PER	Administrative Communications Contact	O	3		NO
SSS	Special Services	O	25		NO
ITA	Allowance, Charge or Service	O	10		NO
ITD	Terms of Sale/Deferred Terms of Sale	O	2		NO
TAX	Sales Tax Reference	O	3		NO
FOB	F.O.B. Related Instructions	O			NO
N1	Name	O	1	N1/200	NO
N2	Additional Name Information	O	2		NO
N3	Address Information	O	2		NO
N4	Geographic Location	O	1		NO
REF	Reference Numbers	O	12		NO
PER	Administrative Communications Contact	O	3		NO
FOB	F.O.B. Related Instructions	O	1		NO
FST	Forecast Schedule	O	260		NO
SDP	Ship/Delivery Pattern	O	1	SDP/260	NO
FST	Forecast Schedule	O	200		YES
SDQ	Destination Quantity	O	50		NO
ATH	Resource Authorization	O	20		NO
SHP	Shipped/Received Information	O	1	SHP/25	YES
REF	Reference Numbers	O	5		YES
TD1	Carrier Detail (Quantity & Weight)	O	1		YES
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO
TD3	Carrier Details (Equipment)	O	12		NO
TD4	Carrier Details (Special Handling/Hazardous Materials)	O	5		NO
MAN	Marks and Numbers	O	10		NO

TABLE 3 – SUMMARY AREA

<u>SEG</u>	<u>SEGMENT NAME</u>	<u>REQ</u>	<u>MAX USE</u>	<u>LOOP</u>	<u>VALEO USE</u>
CTT	Transaction Totals	M	1		YES
SE	Transaction Set Trailer	M	1		YES

3. SEGMENTS LAYOUT

This section describes each segment used in the Valeo Material Planning Schedule message. The original ANSI X12 segment layout is listed. The appropriate comments relevant to the Valeo subset are indicated.

Notes:

1. The segments are presented in the sequence in which they appear in the message.
2. In the left column, the data description is found, then to the right, information describing the segment. Each segment will contain the following data:
 - 2.1 Segment Header Information:
 - SEGMENT: Segment abbreviation and description
 - LEVEL: the message level where the segment will be located.
 - MAX USAGE/LOOPS: Number of incidences the segment can be found or number of loops a group can be allowed.
 - PURPOSE: Brief definition of the segment.
 - GENERAL INFORMATION.
 - 2.2 In the element definition, the standard features of each element will be found. It will also include the specific Valeo requirements for this message.

SEGMENT: ST - Transaction Set Header

LEVEL: Heading

MAX USAGE/LOOPS: 1/None

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

GENERAL INFORMATION: The transaction set control number (ST02) in this header must match the transaction set control number (SE02) in the transaction set trailer (SE).

EXAMPLES: ST*830*100048721

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
ST01	143	Transaction Set ID Code	M ID 03/03	YES	Use "830".
ST02	329	Transaction Set Control Number	M AN 04/09	YES	A unique control number.

SEGMENT: BFR - Beginning Segment
LEVEL: Heading
MAX USAGE/LOOPS: 1/None
PURPOSE To indicate the beginning of a planning schedule transaction set.

GENERAL INFORMATION: Element BFR04 indicates whether the planning schedule is shipment or delivery based.

EXAMPLES: BFR*05**994-5*SH*A*040209*040628*040209

<u>ELEM ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
BFR01	353	Transaction set Purpose Code	M ID 02/02	YES	Use "05" = Replace.
BFR02	127	Forecast Order Number	C AN 01/30	NO	
BFR03	328	Release Number	M AN 03/08	YES	Program number.
BFR04	675	Forecast Type Qualifier	M ID 02/02	YES	"SH" = Shipment based "DL" = Delivery based
BFR05	676	Forecast Quantity Qualifier	M ID 01/01	YES	"A" = Actual Discrete Quantities
BFR06	373	Forecast Horizon Start	M DT 06/06	YES	Start Horizon Date
BFR07	373	Forecast Horizon End	O DT 06/06	YES	End Horizon Date
BFR08	373	Forecast Generation Date	M DT 06/06	YES	Release Issue Date
BFR09	373	Forecast Updated Date	C DT 06/06	NO	
BFR10	367	Contract Number	O AN 01/30	NO	
BFR11	324	Purchase Order Number	O AN 01/22	NO	

SEGMENT: N1 - Name

LEVEL: Heading

MAX USAGE/LOOPS: 1/N1/200

PURPOSE To identify a party by type of organization, name, and code.

GENERAL INFORMATION: The N1 segment in the heading area is used to identify the release issuer, the supplier, and the intermediate consignee by their corresponding id codes.

EXAMPLES:
 N1*MI**92*W013
 N1*ST**92*W020
 N1*SU**92*918
 N1*IC**92*EC01

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
N101	98	Organization Identifier	M ID 02/02	YES	"MI" = Material Issuer "ST" = Ship-to "SU" = Supplier "IC" = Intermediate Consignee
N102	93	Name	C AN 01/35	YES	
N103	66	ID Code Qualifier	M ID 02/02	YES	"92" = Assigned by Buyer
N104	67	ID Code	M ID 04/07	YES	If N101 = "MI" it would contain the plant code issuing the release. If N101 = "ST" it would contain the Ship-to code of the final destination. If N101 = "SU" it would contain the supplier code assigned by the Valeo organization identified with N101 = "MI". If N101 = "IC" it would contain a Valeo assigned platform, broker, or consignee code.

SEGMENT: PER - Administrative Communication Contact

LEVEL: Heading

MAX USAGE/LOOPS: 1/N1

PURPOSE To identify a person or office to whom administrative communications should be directed.

GENERAL INFORMATION: This segment is used by Valeo to provide the buyer name.

EXAMPLES: PER*EX*DON LAWES*TE*3139561107

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
PER01	366	Contact Function Code	M ID 02/02	YES	"BY" = Buyer "MP" = Material planner
PER02	93	Name	O AN 01/35	YES	If PER01 = "BY" it would contain a purchasing contact. If PER01 = "MP" it would contain a logistics contact.
PER03	365	Communication Number Qualifier	O ID 02/02	YES	Use "TE" = Telephone
PER04	364	Communication Number	C AN 07/21	YES	Telephone number of the contact person.

SEGMENT: LIN - Item Identification Detail

LEVEL: Detail

MAX USAGE/LOOPS: 1/LIN/10000

PURPOSE To specify basic item identification data.

GENERAL INFORMATION: This segment is used for part number information.

EXAMPLES: LIN**BP*54118857*PO*4100000025

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
LIN01	350	Assigned Identification	O AN 01/06	NO	
LIN02	235	Product ID Qualifier	M ID 02/02	YES	"BP" = Buyer part
LIN03	234	Product ID	M AN 01/30	YES	Valeo part number
LIN04	235	Product ID Qualifier	M ID 02/02	YES	"PO" = Purchase Order Number
LIN05	234	Product ID	M AN 01/13	YES	Purchase order number
LIN06	235	Product ID qualifier	O ID 02/02	NO	"EC" = Engineering Control Number
LIN07	234	Product ID	C AN 01/03	NO	Engineering control number

Note: LIN08 through LIN31 provide 12 additional pairs of Product ID qualifier and ID. **Not used by Valeo.**

SEGMENT: UIT - Unit Detail

LEVEL: Detail

MAX USAGE/LOOPS: 10/LIN

PURPOSE To specify item unit data

GENERAL INFORMATION: UIT indicates the unit of measure for the quantities related to the previous LIN.

EXAMPLES: UIT*EA

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
UIT01	355	Unit of Measure Code	M ID 02/03	YES	
UIT02	212	Unit Price	C R 01/14	NO	
UIT03	639	Basis of Unit Price Code	O ID 02/02	NO	

SEGMENT: REF - Reference Numbers

LEVEL: Detail

MAX USAGE/LOOPS: 100/LIN

PURPOSE To communicate identifying numbers related to a specific party.

GENERAL INFORMATION: Segment used to transmit the dock location (if applicable) of the release issuing plant.

EXAMPLES: REF*DK*VWS01

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
REF01	128	Reference Number Qualifier	M ID 02/02	YES	"DK" = Dock Code
REF02	127	Reference Number	M AN 01/08	YES	Plant's receiving Dock Code
REF03	352	Description	O AN 01/80	NO	

SEGMENT: FST - Forecast Schedule

LEVEL: Detail

MAX USAGE/LOOPS: 260/SDP

PURPOSE To specify forecasted dates and quantities

GENERAL INFORMATION: This segment will specify the dates and quantities required by Valeo.

EXAMPLES: FST*10*B*D*031125
 FST*1366*C*W*030715
 FST*1366*D*M*040103
 FST*0*Z*Z*031007 (There exist no forecast quantities)

<u>ELEM</u>			<u>VALEO</u>			
<u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>	
FST01	380	Quantity	M R 01/08	YES	Actual discrete quantity	
FST02	680	Forecast Qualifier	M ID 01/01	YES	"A" = Pilot "B" = Firm "C" = Planning "Z" = No release quantity	
FST03	681	Forecast Timing Qualifier	M ID 01/01	YES	"W" = Weekly "D" = Discrete "M" = Monthly "Z" = No release quantity	
FST04	373	Date	M DT 06/06	YES	If FST02 <> "Z", the date the material is due. If FST02 = "Z", the date the release was created.	
FST05	373	Date	O DT 06/06	NO		
FST06	374	Date/Time Qualifier	O ID 03/03	NO		
FST07	337	Time	C TM 04/04	NO		
FST08	128	Reference Number Qualifier	O ID 02/02	NO		
FST09	127	Reference Number	C AN 01/30	NO		

SEGMENT: SHP - Shipped/Received Information

LEVEL: Detail

MAX USAGE/LOOPS: 1/SHP/2/LIN

PURPOSE To specify shipment and/or receipt information.

GENERAL INFORMATION: This segment is used to provide information on the last shipped quantity and/or the cumulative shipped quantity.

EXAMPLES: SHP*01*512*011*021104
 SHP*02*23456*051*020101

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
SHP01	673	Quantity Qualifier	M ID 02/02	YES	"01" = Last shipped quantity "02" = Cumulative shipped quantity
SHP02	380	Quantity	M R 01/08	YES	Quantity qualified by SHP01
SHP03	374	Date/Time Qualifier	M ID 03/03	YES	If SHP01 = "01" use "011" = Ship date If SHP01 = "02" use "051" = Cumulative quantity end date
SHP04	373	Date	M DT 06/06	YES	If SHP01 = "01" this is the supplier last ship date. If SHP01 = "02" this is the ending date for current cumulative period.
SHP05	337	Time	O TM 04/04	NO	
SHP06	373	Date	O DT 06/06	NO	
SHP07	337	Time	O TM 04/04	NO	

SEGMENT: REF - Reference Numbers

LEVEL: Detail

MAX USAGE/LOOPS: 1/SHP

PURPOSE To communicate identifying numbers related to a specific party.

GENERAL INFORMATION: Segment used to transmit the last supplier shipment number when SHP01 = "01".

EXAMPLES: REF*SI*17842

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
REF01	128	Reference Number Qualifier	M ID 02/02	YES	"SI" = Shipment identification number
REF02	127	Reference Number	M AN 01/13	YES	Actual shipment identification number
REF03	352	Description	O AN 01/80	NO	

SEGMENT: TD1 - Carrier Details (Quantity and Weight)

LEVEL: Detail

MAX USAGE/LOOPS: 1/LIN

PURPOSE To specify the transportation details relative to commodity, weight and quantity.

GENERAL INFORMATION: Segment used to transmit the packaging type to be used on the 856 message.

EXAMPLES: TD1*PLT71

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
TD101	103	Packaging Code	M AN 05/15	YES	Packaging Type

SEGMENT: CTT - Transaction Totals

LEVEL: Trailer

MAX USAGE/LOOPS: 1/none

PURPOSE To transmit a hash total for the Forecast Quantity (FST01) within the transaction set.

GENERAL INFORMATION: With this segment, the transaction set completeness can be checked.

EXAMPLES: CTT*19*75090

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
CTT01	354	Number of Line Items	M N0 01/04	YES	Number of LIN segments
CTT02	347	Quantity Hash Totals	M R 01/10	NO	
CTT03	81	Weight	O R 01/08	NO	
CTT04	355	Unit of Measure Code	O ID 02/02	NO	
CTT05	183	Volume	O R 01/08	NO	
CTT06	355	Unit of Measure Code	O ID 02/02	NO	
CTT07	352	Description	O AN 01/80	NO	

SEGMENT: SE - Transaction Set Trailer

LEVEL: Trailer

MAX USAGE/LOOPS: 1/none

PURPOSE To indicate the end of the transaction set and provide the count of the transmitted segments, including the Transaction Set Header (ST) and Trailer (SE) segments.

GENERAL INFORMATION: The transaction set control number value in this trailer will match the control number value in the transaction set header (ST02).

EXAMPLES: SE*51*100048721

<u>ELEM</u> <u>ID</u>	<u>Num</u>	<u>NAME</u>	<u>VALEO</u> <u>FEATURES</u>	<u>USE</u>	<u>COMMENTS</u>
SE01	96	Number of Included Segments	M NO 01/06	YES	Number of segments including ST and SE.
SE02	329	Transaction Set Control Number	M AN 04/09	YES	Same as ST02

4. EXAMPLES

4.1 EXAMPLE 1 – PLANNING SCHEDULE WITH SHIPPING DATES BASED FORECAST

```

ISA*00*      *00*      *ZZ*VWSNAJUA  *ZZ*SUPPL-MAILBOX *040318*1922*U*00204*000000004*0*P*>~
GS*PS*VWSNAJUA*SUPP_CODE*040318*1922*03181922*X*002040~
ST*830*0001~
BFR*05**2*SH*A*040318*040621*040318~
N1*MI*VALEO SITE NAME *92*W020~
N1*SU*SUPPLIER NAME*92*3040~
N1*ST*VALEO SITE NAME*92*W020~
PER*MP*Adriana Pulido*TE*526566496878~
LIN**BP*12345678*PO*9900001234~
UIT*PC~
FST*19000*B*W*040308~
FST*15000*B*W*040315~
FST*10800*C*W*040322~
FST*9000*C*W*040329~
FST*9000*C*W*040405~
FST*11400*C*W*040412~
FST*12000*C*W*040419~
FST*12600*C*W*040426~
FST*10200*C*W*040503~
FST*11400*C*W*040510~
FST*12000*C*W*040517~
FST*11400*C*W*040524~
FST*3600*C*W*040531~
FST*5400*C*W*040607~
FST*6000*C*W*040614~
FST*3600*C*W*040621~
SHP*01*7200*011*040311~
REF*SI*543210~
SHP*02*64800*051*040311~
TD1*PLT71~
CTT*1~
SE*30*0001~
GE*1*03181922~
IEA*1*000000004~
    
```

4.2 EXAMPLE 2 – PLANNING SCHEDULE WITH DELIVERY DATES BASED FORECAST

Using example no. 1, consider a transit time of 7 days. Then the 830 message will look as follows:

```

ISA*00*      *00*      *ZZ*VWSNAJUA  *ZZ*SUPPL-MAILBOX *040318*1922*U*00204*000000004*0*P*>~
GS*PS*VWSNAJUA*SUPP_CODE*040318*1922*03181922*X*002040~
ST*830*0001~
BFR*05**2*DL*A*040318*040621*040318~
N1*MI*VALEO SITE NAME *92*W020~
N1*SU*SUPPLIER NAME*92*3040~
N1*ST*VALEO SITE NAME*92*W020~
PER*MP*Adriana Pulido*TE*526566496878~
LIN**BP*12345678*PO*9900001234~
UIT*PC~
FST*19000*B*W*040315~
FST*15000*B*W*040322~
FST*10800*C*W*040329~
FST*9000*C*W*040405~
FST*9000*C*W*040412~
FST*11400*C*W*040419~
FST*12000*C*W*040426~
FST*12600*C*W*040503~
FST*10200*C*W*040510~
FST*11400*C*W*040517~
FST*12000*C*W*040524~
FST*11400*C*W*040531~
FST*3600*C*W*040607~
FST*5400*C*W*040614~
FST*6000*C*W*040621~
FST*3600*C*W*040621~
SHP*01*7200*011*040311~
REF*SI*543210~
SHP*02*64800*051*040311~
TD1*PLT71~
CTT*1~
SE*30*0001~
GE*1*03181922~
IEA*1*000000004~
    
```