



RELEASE
for
PRODUCTION MATERIAL

USER GUIDE
According to VDA4905 Standard

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Ford Motor Company Limited

General Introduction

The Electronic Data Interchange is business-process-driven and supports the logistic business process with the order, planning, distribution and payment cycle. The process is supported by many EDI messages.

This guideline is specifically designed to support our supplier by using the FORD subset of the VDA4905 standard message.

VDA4905 Weekly Planning Release Message

The VDA4905 is a message, which is sent from a party who is planning the use or consumption of products to a party who has to plan for the supply of the products. The message gives the requirements regarding details for medium to long scheduling for products. The schedule is used to determine raw and fabrication material authorization. This is based on the terms and conditions defined in a purchase order or contract.

Ford Customer Service Division (FCSD)

The Ford Customer Service Division works on its own internal EDI system and has different business practices to the Ford manufacturing plants. This requires different use of some of the data fields in the message layout. FCSD sends the VDA 4905 message only monthly for A-Class parts (not FCI¹-part) and for B-Class parts (slow movers) only on reorder point considering the agreed lead time.

Explanation to the Weekly Planning Release for production material and FCSD (Parts Service) material

1. Basic information of the Weekly Planning Release

1.1 Vendor code

The vendor code has been assigned centrally in the Global Supplier Data Base (GSDB).

The different vendor codes have now been communised: each vendor code consists of a four digit base, plus a fifth digit which offers an opportunity to – for example - distinguish different vendor addresses.

- Addresses of the vendors shipping plants.
- Separate addresses of the vendor for accounting purposes or recipients of the release authorisations etc.

1.2 Program Release-Number

This code which distinguishes each release program has a two fold meaning: the first three characters (e.g. 660) mark the program month which is common to Ford world-wide, and the fourth character identifies the interim release runs (660-1, 2,..) which occur within each program month weekly. The program month has no relation to the calendar month.

Production material

¹ FCI = frequently call in

The "main-run", i.e. the monthly release calculation, which adds the 6th month, gets the suffix -1, e.g. 660-1. Within this release calculation requirements will be generated for each production part.

Releases for e.g. adhesives, greases, oils (so called bulk material) will be generated only in the second release run ("-2 run).

FCSD

The main release-run, i.e. the monthly release-calculation, which adds one month requirements, gets the suffix 01, e.g. 660-01.

1.3 Part number

The Ford part number has the following structure:

Prefix	right justified	6 characters
Base	right justified	8 characters
Suffix	left justified	8 characters

Example:

Prefix						Base								Suffix									
		8	7	A	G					2	4	6	7	A	A								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		

Please enter the part number on the advice notes and in the advanced shipping note in the same structure as printed and transmitted on the releases of the destination plant.

1.4 The receiving plant / Customer Plant Code

All plants of the Ford Companies in Europe are identified by a 2-digit plant-code.

All data on the release authorisation refer to plant and part number!
 The plant is transmitted in record-type 512, field 03 as a 2-digit code.

It is absolutely essential that in every kind of documentation or data transmission the plant code and the part number are indicated!

A table of plant codes and their address information can be viewed on the Ford Supplier Portal (FSP) in the Library Services section.

1.5 Book number

The book number is a classification code for a number of parts, which are assigned to a Parts Analyst. One analyst can administer more than one book number; they can be established dependent on receiving plants or identify specific part commodities. The book number identifies your contact person at Ford for questions of material scheduling.

The book number is transmitted in record-type 512, field 12 as up to 4-digit code.

1.6 Commitment for fabrication and material authorization

The release authorization for fabrication and raw material will be generated for each production part.

- Purchase Parts

For each part it is defined in the purchase order, for how many weeks Ford will acknowledge the commitments. Generally the commitment is

3 weeks	fabrication authorization
9 weeks	material authorization

This means that the fabrication authorization of 3 weeks is included in the material authorization of totally 9 weeks (3 week plus further 6 weeks = 9 week material in total).

Deviating commitment terms must be negotiated with purchase and documented in the purchase order.

- Primary Metal

Primary Metal has usually a material authorization of the rest of the current month plus one month.

FCSD

For each part it is defined in the purchase order/release, for how many weeks FCSD will accept the commitment, e.g.

4 weeks	fabrication authorization
8 weeks	material authorization

This means that the fabrication authorization of 4 weeks is included in the material authorization of totally 12 weeks, e.g.:

- Fabrication authorization 4 weeks
- Material authorization further 8 weeks = total 12 weeks

1.7 Part related data remarks

CMMS3 allows the input of plant-part number related data by the Material Control Analyst. For this purpose 20 positions are reserved in the remarks section, which will be transmitted from 21 position of the third text string (record type 518, field 05).

FCSD

In the FCSD's parts master file the supplier's part number is maintained in a special field (record-type 512, field 09). The transmission of this supplier's part number (for which Ford will not take any responsibility) is also performed in the 3rd text-string starting from position 01 (record-type 518, pos. 05).

1.8 Plant / Supplier related remarks

With these general remarks Ford draws attention to special plant related conditions, e.g.:

- "Receiving closed at..."
- "No delivery at..."
- "Plant shut-down from...to..."

These remarks are transmitted in the second text-string (40 characters) and in the first 20 characters of the third text-string (record-type 518, field 04 and 05).

1.9 FCSD FINIS-Code

The Ford Parts Service Depots are working in their internal systems additionally to the Ford part number with a numeric identification. This is a code with a length of 7 characters. This code should also be mentioned on all delivery documents to the Parts Service Depots.

As the VDA standard does not contain a code for this, we selected a field of the standard, which is not used by Ford. It is the field order number in record-type 512, field 10. It contains data only for releases with FCSD plant codes.

1.10 Over-/Underdelivery

O/U quantities will not be transmitted in a separate field. Quantities will be accumulated in the first segment.

1.11 Quantity per load unit

Production material

The "quantity per load unit" will be transmitted in record-type 517, field 05. The packaging code cannot yet be made available.

FCSD

The detailed package conditions are subject of the purchase order, resp. the package specification. This record type 517 is currently not used by FCSD.

1.12 Data of the last delivery

The Advice Note data, Advice Note Number, date, quantity, cum shipped (cum shipped calculated in Ford CMMS3 system) will be transmitted according to the VDA-standard with record-type 513, fields 03-07.

Date, quantity, cum shipped refer to the latest recorded transaction in CMMS3; this may not always be the last receipt, as long as further material is still in transit.

1.13 Release Run

Production material

For every part and every vendor we generate releases on a weekly base.

95 % of all releases are sent straight from the Data Centre into the supplier's mailbox even though all releases are generally subject to control of the parts analyst. The parts analyst decides if he wants to control the releases prior to the transmission in order to amend them, if required.

The CMMS3 Releasing System enables the Material Control Analyst to amend supplier releases on-line on his terminal. This can happen any day. To identify amended releases the seventh position of release-numbers is added with an "A" on the suffix (e.g. 660-3 A)

FCSD

All releases are calculated automatically.

For every A-Class respectively forecast parts FCSD generates releases on a monthly base. Visteon plants and non-European suppliers get releases also on a monthly base, but the requirements within the agreed fixed leadtime are shown as weekly requirements.

1.14 Data Transmission

Weekly Planning Release

Regularly the weekly planning release will be transmitted once a week.

Occasionally we encounter problems in the process of the release calculation, which demand, that a release-run has to be repeated. In such a case of any problems which may be based on technical issues or on BoM problems we are able to issue an additional release run. The program number will show in addition to the normal program number a letter (e.g. 660-1 A).

2. The releasing system - Method of calculation

2.1 Regular calculation for production material

"Requirements" of our receiving plants are requirements for the vehicle production or requirements for components for the shipping of assemblies to other Ford plants.

All requirements are calculated related to the "off-line date" of the vehicle production. Material shipment requirements are calculated related to the "shipping date" of the Ford shipping plant.

2.1.1

As all parts have a "processing time" within our plants (In-System-Time) uplifts have to be made for this in the requirement calculation. In our Parts Master File the "In-System-Time" is expressed in "number of days float" which can contain decimal places.

2.1.2

For each part individual operational reserves are established per destination plant, which are stored on our parts master file in "daily rates". This can contain decimal places.

The method of calculation for our releases is specified so that the requirement cum in the morning of the delivery day covers the requirement until the next planned delivery and the "In-System" and the "scheduled operational reserve" are adapted to the daily rates of the time span to the next delivery ("Float-Routine").

2.1.3

Unscheduled disbursements for unexpected shipments, usages, stock (cycle count) adjustments, etc. are added to the first cum requirement.

2.1.4

As the releasing system was developed for cumulative quantities, the starting inventory (even if negative) must be considered.

2.1.5

If damage (scrap) occurred in the past requirement period, the releasing system allows the input of a scrap percentage that is controlled by the parts analyst.

2.1.6

In case of supplier changes the releasing system automatically generates adjustments of the requirements. Changes in delivery percentages can only be made for future break dates.

2.1.7

Based on the production program the releasing system calculates requirements for every part considering the delivery frequency.

Shipping requirements to cover weekend work will be advanced by the determined transit time.

2.1.8

The forecast calculation by the Releasing System is divided into 15 segments, of which the first segment is not in use. The next 10 segments normally contain the weekly requirements for the following weeks. Segment 12 completes the requirements for the third month and segments 13-15 indicate requirements for month 4-6. The codes "T" (daily) or "L" (time period according to release date) will be transmitted in field 14 of record-type 512 to indicate, whether the corresponding quantities refer to a definite date (Monday of a week) or to a certain time period (month).

FCS D

With the electronic transmission of requirements ship by dates and quantities will only be specified for months within the fixed leadtime, and for months within the variable leadtime only a monthly quantity and the month will be shown.

2.1.9

According to the releasing standard various "date-codes" are used:

Date 000000	Identifies the last requirement field of a part number; the quantity field and all other fields remain blank.
Date 222222	Identifies that for these parts there is currently no requirement or the requirement cannot be calculated electronically.
Date 444444	<p>For FCSD under (date) '444444' the arrears are shown (record 513, field 08, from 48 to 53) that identify the arrears quantity in the next field (rec. 513, field 09, from 54 to 62).</p> <p>For production material this always indicates the first requirement and thus is the immediate quantity of the current week. The format of the following weekly segments is YYMMDD. The date is always a Monday, the requirement period then refers to Monday till Sunday of the week beginning with that Monday.</p> <p>There are always 10 weekly segments followed by a segment with the date of the last day of the month of week 10, indicating the remaining quantity for month 3 after those 10 weeks.</p>
Date 555555	Indicates that the following release fields contain monthly requirements in the format YYMM00. There can be up to 10 monthly segments.

2.2 Releasing-system - "immediately required"

By the "cumulative" calculation method the releasing system considers over-/under-deliveries.

Increases of our production, shipping or FCSD programs, or cycle count adjustments will lead to an increase of the requirements in the past period or before the next scheduled delivery. For FCSD this will be shown on the release authorisation as "immediately required" (record 513, field 09, pos. 54-62), when the delivered receiving cum does not cover the requirement increase. When the production programmes lead to a reduction of the requirements, but the delivered receiving cum exceeds the cum requirements, the overshipped quantity will be transmitted in record-type 518, field 03/2, position 34 to 42.

The overdelivery (quantity) will be subtracted from the requirements of the following days until a positive requirement was calculated again.

2.3 Requirement changes to previous release

FCSD

In our printed release authorisations the newest cum requirements for the scheduling months 1-6 were compared with the cum requirements of the same months from the previous mailed release authorisation. The standard for releases does not provide the transmission of these data. Therefore they cannot be displayed on the screen currently.

2.4 Indication of the Final Release

If the field 03/4 in record type 518 is filled with a "7" for the Final Release the following text message is transmitted in record type 518 position 04 (Text Field 2 = 40 digits) and position 05/1 (Text Field 3= 20 digits) as a remark:

Line1: THIS IS A FINAL RELEASE. OBSO CLAIM FORM ON www.covisint.com
Line2: Click on Library Services and search for document "5948"

In case you would like to claim obsolete material, you are required to fill-in this form and send it via email to "oobsolet@ford.com" or in exceptional cases mail to the following address:

Obsolescence Material Control
D-NB-1025
Henry-Ford-Str.
50725 Köln
Germany

Due to VDA field size restriction this 518 record will appear multiple times!

2.5 Additional Requirements for Supplier Releases

Plant Codes –FCSD

The American plant-codes are defined with 5 digits. We therefore have translated the 5-digit code into a 2 digit plant-code in line with the rules for European Ford plant-codes.

Start of the cumulation-period

The cumulating period commences on January 1st of the year. The change of the cumulative shipping quantity, however, does not need to be in the first release-run after January 1st. It can also be later. This depends on the date when the last vehicle of the old model-year was built. In the relevant release-run we will transmit the general remark "Cum reset to 1.8." in record-type 518.

Record-Type 515

Record-type 515 contains the following data elements:

Fabrication Authority - Start Date

This is the start date of the new cumulation-period (inventory years).

Fabrication Authority - End Date

The fabrication authority is calculated in weeks. The end date is the date of the last day of the authorised week.

Fabrication Authority - Cumulative Requirement

This is the cumulative requirement reached at the end-date.

Material Authority - Start Date

This is the start date of the new cumulation period (inventory years).

Material Authority - End Date

The material authority is calculated in weeks. The end date is the date of the last day of the authorised week.

Material Authority - Cumulative Requirement

This is the cumulative requirement reached at the end-date.

FCSD Partnumber

The Service Organisation in America is using the Service Partnumber whereas FCSD-Europe is using the Engineering Partnumber as shown in WERS. The part number reflected in this record is the secondary part number. Suppliers should refer to the primary part number in record 512, field 8.

Intermediate Consignee

Deliveries to the American Plants must be routed by an intermediate consignee (e.g. packer). This is indicated by a 5-digit code in this field.

Horizon End Date

Reflect the date of the last Sunday of the overall forecast period.

Attachment 1

Record Layout of the Releasing Message
and Description of the Data Elements with Ford Requirements

Record Type	511	Ver. 01				
Description: HEADER RECORD SUPPLIER RELEASING DATA						
Field	Format	Definition	Length	C/M	Value	Notes
01	1-3	Type of Record	3	M	'511'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-14	Customer Code	9	M	'FORD'	Customer Code, usually 'FORD' but can be agreed differently for special reasons, for service part requirements 'FCSD', left justified
04	15-23	Supplier Code	9	M	'P68PA'	Supplier Code as determined by Ford, the first 4 characters identify the supplier, the 5 th character normally identifies the shipping-site of the supplier.
05	24-28	Transmission Number Old	5	M		Number of the last transmission
06	29-33	Transmission Number New	5	M		Number of this transmission; is incremented by 1 at each transmission
07	34-39	Transmission Date	6	M	020311	Format YYMMDD
08	40-45	Date for cumulative quantity received	6	K		Rollback date. Date when cumulative quantities were reset to zero.
09	46-128	Blank	83	M		Filler

Record Type		512 Ver. 01				
Description: UNIQUE DATA ELEMENTS OF THE SUPPLIER RELEASE						
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'512'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-8	Receiving Plant / Customer Plant Code	3	M	'1Y'	Left justified, see code list Ford Supplier Portal – Library Services (Procedure d-913 – GSDB Code Sequence)
04	9-17	Release Number New	9	M	'123456'	Ford length 6 characters, left justified
05	18-23	Release Date New	6	M		Format YYMMDD. Date of release generation.
06	24-32	Release Number Old	9	M	'123456'	Ford length 6 characters, number of the last release
07	33-38	Release Date Old	6	M		Format YYMMDD. Date of the last release.
08	39-60	Customer Partnumber	22	M		Ford length 22 characters, left justified, for more explanations see item 1.3 of the User Guide.
09	61-82	Supplier Partnumber	22	C		Will not be entered for Ford production material, but may be transmitted for FCSD requirements in record type 518, field 05)
10	83-94	Order Number / Finis- Code	12	C		Ford transmits in this field the FINIS-Code of the FCSD-Depots, for explanations see item 1.9 of the User Guide.
11	95-99	Receiving Location	5	M	'YS'	Ford length usually 2 characters, left justified, identifies the unloading dock of the material.
12	100-103	Book-Number	4	M		Ford length up to 4 characters, for more explanations see item 1.5 of the User Guide.
13	104-105	Unit of Measurement	2	M		"ST" = Piece
14	106	Delivery Frequency Code	1	M	'L', 'T'	"L" as release dates are transmitted; "T" for daily delivery
15	107	Manufacturing Authority incl.	1	C		Not used by Ford.
16	108	Material Authority incl.	1	C		Not used by Ford.
17	109	Requirement Indicator	1	M	'S', 'E'	"S" for production material, "E" for service requirements.
18	110-116	Account	7	C		Not used by Ford.
19	117-123	Storage Location	7	C		Market place
20	124-128	Release Planning Group	5	C		Not used by Ford.

Record Type		513 Ver. 01				
Description: RECONCILIATION AND RELEASE DATA						
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'513'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-11	Date of Last-Recorded-Receipt	6	M		Format YYMMDD. Date of the last recorded shipment. For more explanations see item 1.12 of the User Guide.
04	12-19	Advice Note Number of Last Recorded Receipt	8	M		Advice note number of the last recorded shipment. For more explanations see item 1.12 of the User Guide.
05	20-25	Shipment Date of Last Recorded Receipt	6	C		Not used by Ford.
06	26-37	Quantity of Last Recorded Receipt	12	M		Quantity of the last recorded shipment with 3 decimal places. If there are no decimal values the last 3 digits (35-37) will be shown as zeroes. For more explanations see item 1.12 of the User Guide.
07	38-47	Cumulative Quantity	10	C		The year to date quantity achieved by the last recorded shipment. For more explanations see item 1.12 of the User Guide.
08	48-53	Release Date 1	6	M		Format YYMMDD. Normally advises the date of shipment or schedule. For more explanations see item 2.1.9 of the User Guide.
09	54-62	Required Quantity 1	9	C		Quantity for fulfillment of demand
10	63-68	Release Date 2	6	M		see 08
11	69-77	Required Quantity 2	9	C		see 09
12	78-83	Release Date 3	6	M		see 08
13	84-92	Required Quantity 3	9	C		see 09
14	93-98	Release Date 4	6	M		see 08
15	99-107	Required Quantity 4	9	C		see 09
16	108-113	Release Date 5	6	M		see 08
17	114-122	Required Quantity 5	9	C		see 09
18	123-128	Blank	6	M		Filler

Record Type		514 Ver. 01				
Description: ADDITIONAL REQUIREMENT						
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'514'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-11	Release Date 6	6	M		see 08, record type 513
04	12-20	Required Quantity 6	9	C		see 09, record type 513
05	21-26	Release Date 7	6	C		see 08, record type 513
06	27-35	Required Quantity 7	9	C		see 09, record type 513
07	36-41	Release Date 8	6	C		see 08, record type 513
08	42-50	Required Quantity 8	9	C		see 09, record type 513
09	51-56	Release Date 9	6	C		see 08, record type 513
10	57-65	Required Quantity 9	9	C		see 09, record type 513
11	66-71	Release Date 10	6	C		see 08, record type 513
12	72-80	Required Quantity 10	9	C		see 09, record type 513
13	81-86	Release Date 11	6	C		see 08, record type 513
14	87-95	Required Quantity 11	9	C		see 09, record type 513
15	96-101	Release Date 12	6	C		see 08, record type 513
16	102-110	Required Quantity 12	9	C		see 09, record type 513
17	111-116	Release Date 13	6	C		see 08, record type 513
18	117-125	Required Quantity 13	9	C		see 09, record type 513
19	126-128	Blank	3	M		Filler

Record Type		515 Ver. 01				
Description: FORD DATA IN SUPPLIER RELEASE						
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'515'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-11	Manufacturing Authority, Start-Date	6	M		Format YYMMDD. For more explanations see item 2.5 of the User Guide.
04	12-17	Manufacturing Authority, End-Date	6	M		Format YYMMDD. For more explanations see item 2.5 of the User Guide.
05	18-27	Manufacturing Authority, Cum Requirement	10	C		For more explanations see item 2.5 of the User Guide.
06	28-33	Material Authority Start-Date	6	M		Format YYMMDD, For more explanations see item 2.5 of the User Guide.
07	34-39	Material Authority End-Date	6	M		Format YYMMDD, For more explanations see item 2.5 of the User Guide.
08	40-49	Material Authority Cum Requirements	10	C		For more explanations see item 2.5 of the User Guide.
09	50-71	FCSD-Partnumber	22	C		For more explanations see item 2.5 of the User Guide.
10	72-80	Intermediate Consignee	9	C		For more explanations see item 2.5 of the User Guide.
11	81-86	Horizon End Date	6	M		For more explanations see item 2.5 of the User Guide.
12	97-128	Blank	42	M		Filler

Record Type	517	Ver. 01				
Description:		PACKAGING DATA				
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'517'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-27	Packaging Code Customer	22	M		Ford length 7 characters, left justified.
04	28-49	Packaging Code Supplier	22	C		Not used by Ford
05	50-56	Number of Parts per Pallet	7	M		Quantity in a delivery unit
06	57-128	Blank	72	M		Filler

Remark: This record type is currently not used by Ford.

Record Type		518 Ver. 01				
Description: RELEASE REMARKS SECTION						
Field	Format	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'518'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03/1	6-33	Release Text 1	28	C		Part description.
03/2	34-42	Text 1	9	C		Quantity of overshipment. For more explanations see item 2.2 of the User Guide.
03/3	43	Text 1	1	C		Not used by Ford.
03/4	44	Text 1	1	C	'B'; '7', ''	"B" = Balance out part, "7" = last release, " " (Blank) = neither balance out nor last release For more explanations see item 2.4 of the User Guide.
03/5	45	Text 1	1	M	'D'; 'F'	Delivery Condition; "D" = Shipping Dates, "F" = Receiving Dates
04	46-85	Release Text 2	40	C		General remark to the release, max. 60 characters (20 characters in 05)
05/1	86-105	Release Text 3	20	C		General remark to the release, continued from 04.
05/2	106-125	Text 3	20	C		Part related remark. For more explanations see item 1.7 of the User Guide.
06	126-128	Blank	3	M		Filler

Record Type		519 Ver. 01				
Description: SUPPLIER RELEASE TRAILER RECORD						
Field	Format:	Definition	Length	C/M	Value e.g.	Notes
01	1-3	Type of Record	3	M	'519'	Constant
02	4-5	Version-Number	2	M	'01'	Constant
03	6-12	Record Counter Record Type 511	7	M		Number of transmitted records, record type 511
04	13-19	Record Counter Record Type 512	7	M		Number of transmitted records, record type 512
05	20-26	Record Counter Record Type 513	7	M		Number of transmitted records, record type 513
06	27-33	Record Counter Record Type 514	7	M		Number of transmitted records, record type 514
07	34-40	Record Counter Record Type 517	7	M		Number of transmitted records, record type 517
08	41-47	Record Counter Record Type 518	7	M		Number of transmitted records, record type 518
09	48-54	Record Counter Record Type 519	7	M		Number of transmitted records, record type 519
10	55-61	Record Counter Record Type 515	7	M		Number of transmitted records, record type 515
11	62-128	Blank	67	M		Filler