



PUBLIC

How-To: Extend Master Data Governance for Material with Defense Forces & Public Security (DFPS) Specific Fields

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1. BUSINESS SCENARIO

SAP Master Data Governance provides business processes to find, create, change, and mark master data for deletion. It supports the governance of master data in a central hub and the distribution to connected operational and business intelligence systems.

The processes are workflow-driven and can include several approval and revision phases, and the collaboration of all users participating in the master data maintenance.

This How-To Guide describes step-by-step how to extend the standard MDG Material data model in order to bring under governance some DFPS specific fields.

2. BACKGROUND INFORMATION

If you want to use SAP Master Data Governance (MDG) together with an industry solution on SAP ECC, see SAP Note [1690202 - MDG & Industry Solutions](#).

If you want to use SAP Master Data Governance on SAP S/4HANA (central governance) in combination with certain business functions for industries, see SAP Note [2392135 - SAP Master Data Governance on SAP S/4HANA \(central governance\) in combination with certain business functions for industries](#).

The Defense Forces & Public Security (DFPS) solution brings a set of industry-specific fields in the ERP material master. MDG material objects need to be enhanced to bring these additional fields under governance. For more information, see SAP Note [2242412 - MDG together with SAP for Defense Forces and Public Security \(DFPS\)](#)

3. STEP BY STEP EXPLANATION

The DFPS industry solution brings a set of industry-specific fields in the ERP material master. MDG material objects need to be enhanced to bring these additional fields under governance.

This document covers in particular the following additional fields of table MARA:

Field	Data Element	Description	Data Type	Length	Decimal
MCOND	DFPS_MCOND	Material Condition Management	CHAR	1	0
RETDEL	DFPS_RETDEL	Return Code	CHAR	1	0
LOGLEV_RETO	DFPS_LOGLEV_RETO	Return to Logistics Level	CHAR	1	0
NSNID	DFPS_NSNID	NATO Stock Number	CHAR	9	0
PICNUM	PIC_PICNUM_SUS	Supersession chain number	CHAR	18	0
IMATN	IMATN	FFF class	CHAR	18	0

Note: Fields PICNUM and IMATN are not DFPS-specific, they belong to the software component ECC-DIMP, but they are often used in Defense & Security organization processes. They are therefore included in this guide as well. As a prerequisite, all the steps reported in SAP Note [1885436](#) must be implemented in the system.

The guide *How-To: Extend MDG-M content by new attributes for customer Z-fields in standard table* (<https://www.sap.com/documents/2015/07/76525357-5b7c-0010-82c7-eda71af511fa.html>) explains in detail the extension procedure. Please use this guide as a reference for your extension.

3.1. BACKEND EXTENSION (ACTIVE AREA)

3.1.1. Backend Table Extension

Table MARA already contains all the industry-specific fields in scope for this guide so there is no need to extend any table in the ERP active area.

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description
MCOND	<input type="checkbox"/>	<input type="checkbox"/>	DFPS_MCOND	CHAR	1	0	Material Condition Management
RETDEL	<input type="checkbox"/>	<input type="checkbox"/>	DFPS_RETDEL	CHAR	1	0	Return Code
LOGLEV_RETO	<input type="checkbox"/>	<input type="checkbox"/>	DFPS_LOGLEV_RETO	CHAR	1	0	Return to Logistics Level
NSNID	<input type="checkbox"/>	<input type="checkbox"/>	DFPS_NSNID	CHAR	9	0	NATO Stock Number

Dictionary: Display Table

Transp. Table: MARA Active

Short Description: General Material Data

Attributes: Delivery and Maintenance Fields Entry help/check Currency/Quantity Fields

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description
.APPEND	<input type="checkbox"/>	<input type="checkbox"/>	PIC_MARA	STRU	0	0	PIC: Additional Fields for Parts Interch
.INCLUDE	<input type="checkbox"/>	<input type="checkbox"/>	PICST003	STRU	0	0	PIC Additional Fields for Parts Intercha
IMATN	<input type="checkbox"/>	<input type="checkbox"/>	IMATN	CHAR	18	0	FFF class
PICNUM	<input type="checkbox"/>	<input type="checkbox"/>	PIC_PICNUM_SUS	CHAR	18	0	Supersession chain number

3.1.2. Backend Structure Extension

All the required structures of the active area already incorporate the new fields; it is possible to verify it using transaction code *SE11* displaying the following structures:

- MDG_BS_MAT_S_MARA
- CMD_BS_MAT_S_MARA

- MDG_BS_MAT_S_MARA_UI
- CMD_BS_MAT_S_MARA_UI

- MDG_BS_MAT_S_MARA_X
- CMD_BS_MAT_S_MARA_X

3.1.3. Backend Customizing: Assign Fields to Field Selection Groups

All the fields in scope of this guide are already assigned to field selection group 147. This can be verified using the transaction code *OMSR* or accessing the customizing table T130F.

Change View "Field Selection for Data Screens": Overview

Field sel. group: 147

Fields (Field selection group 147)

Field name	Short Description
MARA-IMATN	FFF class
MARA-LOGLEV_RETO	Return to Logistics Level
MARA-MCOND	Material Condition Management
MARA-NSNID	NATO Stock Number
MARA-PICNUM	Supersession chain number

Field selection (Field selection group 147)

Field ref.	Hide	Display	Reqd Entry	Opt. entry
0001	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
0002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CAD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2. MDG Data Model Extension (Staging)

The standard data model MM must be extended. Since the fields in scope of this guide belong to table MARA, it's reasonable to add these attributes to the pre-delivered entity type MATERIAL.

Display View "Attributes": Overview

Dialog Structure: Inactive Data Models > Entity Types > Attributes

Data Model: MM
Entity Type: MATERIAL

Attribute	Key Field	Data Element	Req. Entry ...	Curr./UoM...	Search Help	No Existen...	Description
VOLEHMARA	<input type="checkbox"/>	VOLEH	<input type="checkbox"/>		VOLEH_F4_VOLUME	<input type="checkbox"/>	Volume unit
VOLUMMARA	<input type="checkbox"/>	VOLUM	<input type="checkbox"/>	VOLEHMARA		<input type="checkbox"/>	Volume
WRKST	<input type="checkbox"/>	WRKST	<input type="checkbox"/>			<input checked="" type="checkbox"/>	Basic Material
XCHPFMARA	<input type="checkbox"/>	XCHPF	<input type="checkbox"/>			<input type="checkbox"/>	Batch management requirement indicator
XGCHFMARA	<input type="checkbox"/>	XGCHP	<input type="checkbox"/>			<input type="checkbox"/>	Indicator: Approved batch record required
ZZIMAIN	<input type="checkbox"/>	IMAIN	<input type="checkbox"/>			<input type="checkbox"/>	FFF class
ZZLOG_RTO	<input type="checkbox"/>	DFPS_LOGLEV_RETO	<input type="checkbox"/>			<input type="checkbox"/>	Return to Logistics Level
ZZMCOND	<input type="checkbox"/>	DFPS_MCOND	<input type="checkbox"/>			<input type="checkbox"/>	Material Condition Mgmt
ZZNSNID	<input type="checkbox"/>	DFPS_NSNID	<input type="checkbox"/>			<input type="checkbox"/>	NATO Stock Number
ZZPICNUM	<input type="checkbox"/>	PIC_PICNUM_SUS	<input type="checkbox"/>			<input type="checkbox"/>	Supersession chain number
ZZREIDELC	<input type="checkbox"/>	DFPS_REIDELC	<input type="checkbox"/>			<input type="checkbox"/>	Return Code

3.3. SMT Mapping

Mappings to and from the active area have to be enhanced in order to handle the set of new fields. The following mapping steps need to be extended with new transformations.

Mapping	Mapping Step
MDG_BS_MAT_MAP_2PP	MDG_BS_MAT_MATERIAL
MDG_BS_MAT_MAP_2STA	MDG_BS_MAT_MARA

Display Mapping: MDG_BS_MAT_MAP_2PP (Extension Mode)

No Messages

Save Close Edit Copy Delete Mapping External

Mapping

* Name: MDG_BS_MAT_MAP_2PP
 Description: Map MM Model from Staging Aerea to PP
 Package Group: MDG_BS_MM
 Multiple Contexts:

Mapping Steps

Details Add Remove Copy Import Change Structure Keys Additional Input Structures Assign Service Information

*Mapping Step	Description	*Source Structure	*Target Structure	Change Structure
MDG_BS_MAT_MARDSTOR	Storage Location General Data for Material	/MDGMM/_S_MM_PP_MARDSTOR	MDG_BS_MAT_S_MARD	MDG_BS_MAT_S_MARD_X
MDG_BS_MAT_MATERIAL	Material Root	/MDGMM/_S_MM_PP_MATERIAL	MDG_BS_MAT_S_MARA	MDG_BS_MAT_S_MARA_X

Extension
 * Owner: Customer Enhancement
 Switch:

Field Checks **Transformations**

Add Remove Copy Move Up Move Down

Order	Transformation Type	Conditional	Chain to Preceding	Switch	Description
00001	Field Mapping	<input type="checkbox"/>	<input type="checkbox"/>		
00001	Field Mapping	<input type="checkbox"/>	<input type="checkbox"/>		
00002	Complex Transformation	<input type="checkbox"/>	<input type="checkbox"/>		

Details for Transformation Order 00001

Field Mapping

Add Remove

*FIELD	Source Structure	Source Field	Fixed Value	Conversion Class	Reference Type	Field type	Data Type	Number of Characters	Decimal Places	Description
IMATN	/MDGMM/_S_MM_PP_MATERIAL	ZZIMATN			<input type="checkbox"/>	IMATN	CHAR	18		FFF class
LOGLEV_RETO	/MDGMM/_S_MM_PP_MATERIAL	ZZLOG_RTO			<input type="checkbox"/>	DFPS_LOGLEV_RETO	CHAR	1		Return to Logistics Level
MCOND	/MDGMM/_S_MM_PP_MATERIAL	ZZMCOND			<input type="checkbox"/>	DFPS_MCOND	CHAR	1		Material Condition Management
NSNID	/MDGMM/_S_MM_PP_MATERIAL	ZZNSNID			<input type="checkbox"/>	DFPS_NSNID	CHAR	9		NATO Stock Number
PICNUM	/MDGMM/_S_MM_PP_MATERIAL	ZZPICNUM			<input type="checkbox"/>	PIC_PICNUM_SUS	CHAR	18		Supersession chain number

Display Mapping: MDG_BS_MAT_MAP_2STA (Extension Mode)

No Messages

Save Close Edit Copy Delete Mapping External

Mapping

* Name: MDG_BS_MAT_MAP_2STA

Description: Map MM Model from PP to Staging Aerea

Package Group: MDG_BS_MM

Multiple Contexts:

Mapping Steps

Details Add Remove Copy Import Change Structure Keys Additional Input Structures Assign Service Information

*Mapping Step	Description	*Source Structure	*Target Structure	Change Structure
MDG_BS_MAT_MAKT	Material Description	MDG_BS_MAT_S_MAKT	/MDGMM/_ST_MM_PP_MATERIAL	
MDG_BS_MAT_MARA	Material Root	MDG_BS_MAT_S_MARA	/MDGMM/_S_MM_PP_MATERIAL	
MDG_BS_MAT_MARBURSU	Material Production Date	MDG_BS_MAT_S_MARBURSU	/MDGMM/_S_MM_PP_MARBURSU	

Display Mapping Step: MDG_BS_MAT_MARA (Extension Mode) Personalize Help

Mapping MDG_BS_MAT_MAP_2STA > Mapping Step MDG_BS_MAT_MARA
 Mapping Description Map MM Model from PP to Staging Area Package Group MDG_BS_MM

No Messages

Save Close Edit Copy Delete Mapping External You Can Also

Extension
 *Owner: Customer Enhancement
 Switch:

Field Checks Transformations

Add Remove Copy Move Up Move Down

Order	Transformation Type	Conditional	Chain to Preceding	Switch	Description
00001	Field Mapping	<input type="checkbox"/>	<input type="checkbox"/>		
00001	Field Mapping	<input type="checkbox"/>	<input type="checkbox"/>		

Details for Transformation Order 00001

Field Mapping

Add Remove

*FIELD	Source Structure	Source Field	Fixed Value	Conversion Class	Reference Type	Field type	Data Type	Number of Characters	Decimal Places	Description
ZZIMATN	MDG_BS_MAT_S_MARA	IMATN			<input type="checkbox"/>	IMATN	CHAR	18		FFF class
ZZLOG_RTO	MDG_BS_MAT_S_MARA	LOGLEV_RETO			<input type="checkbox"/>	DFPS_LOGLEV_RETO	CHAR	1		Return to Logistics Level
ZZMCOND	MDG_BS_MAT_S_MARA	MCOND			<input type="checkbox"/>	DFPS_MCOND	CHAR	1		Material Condition Management
ZZNSNID	MDG_BS_MAT_S_MARA	NSNID			<input type="checkbox"/>	DFPS_NSNID	CHAR	9		NATO Stock Number
ZZPICNUM	MDG_BS_MAT_S_MARA	PICNUM			<input type="checkbox"/>	PIC_PICNUM_SUS	CHAR	18		Supersession chain number

3.4. User Interface

The industry specific fields can be added, for example, to the Basic Data section of the MDG-M single processing screen (BS_MAT_OVP_*).

Enhancement Z_MDG_BS_MAT_MAT_FORM_06_DFPS

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

Form UIBB Schema Element Up Down

Element	Display Type	Button Type	Text	Tooltip	Label Text
Group: (4)			General Data		
Group: (8)			Dimension		
Group: (6)			ATP		
Group: (3)			DFPS Specific Fields		
Element: IMATN	Text View			FFF Class	
Element: IMATN_...	Input Field			FFF Class	
Element: PICNUM	Text View			Superchain Session Nr.	
Element: MCOND	Input Field			Superchain Session Nr.	
Element: MCOND...	Input Field			Material Cond. Management	
Element: RETDEL	Input Field			Return Code	
Element: LOGLEV...	Input Field			Return to Logistic Level	
Element: NSNID	Input Field			NATO Stock Nr.	
Group: (1)			Grouping		

Basic Data
Edit

General Data

* Material: #119

Base Unit of Measure:

* Material Type:

* Industry Sector:

Material Group:

Old Material Number:

Authorization Group:

Cross-Plant Material Status:

Batch Management: No

Serialization Level: Serialization within the stock material number

Approved Batch Record Required Indicat... No

Division:

Dimension

Net Weight: 0,000

Gross Weight: 0,000

Length: 0,000

Width: 0,000

Height: 0,000

Volume: 0,000

Size/Dimensions:

ATP

Product Allocation:

DFPS Specific Fields

Form-Fit-Function class:

Supersession chain number:

Material Condition Mgmt: No Condition Management

Return Code:

Return to Logistics Level:

NATO Stock Number:

Grouping

External Material Group:

Product Hierarchy:

Generic Item Group Category:

Material Group Packaging Materials:

Design Data

Lab/Office:

Industry Standard Description:

Basic Material:

Production/Inspection Memo:

Page Format of Production Memo:

CAD Indicator: No

Configuration

Cross-Plant Configurable Material:

Material Configurable: No

Environment

Environmentally Relevant: No

Dangerous Goods Indicator Profile:

GTIN/EAN

EAN/UPC:

EAN Category:

EAN Variant:

4. ADDITIONAL INFORMATION

4.1. Further Reading

Manufacturer Part Number

The field Manufacturer Part Number (MARA-MPROF) must be populated for material type FFFC. However, due to field maintenance status, the field cannot be visible in MDG single processing screens.

For this particular problem, please refer to point 4.3 of *MDG-M Best Practice for Maintenance Status* guide (<http://scn.sap.com/docs/DOC-53567>).

Material Planning Object

The field Material Planning Object (PNODID-PNAME), normally available as display-only field in *MM0x* screens of the DFPS backend system, is not part of the standard MDG MM data model. If this particular field needs to be under governance, it should be considered as part of the extension project.

4.2. SAP Notes

In addition to the detailed explanations written in this document, please see the following SAP Notes for further important information.

[1690202 - MDG & Industry Solutions.](#)

[2392135 - SAP Master Data Governance on SAP S/4HANA \(central governance\) in combination with certain business functions for industries.](#)

[2242412 - MDG together with SAP for Defense Forces and Public Security \(DFPS\)](#)

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