

KDD011 - Material Master Numbering Alignment

Status	Approved
Owner	HANCOCK-ext, John CLARKE-ext, Steve
Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to upload Materials - Purchasing View into S/4 HANA as part of the Material Data Migration.

Link to MDS: [DD-FUN-050 Master Data Standard_2020-Material master-Purchasing data](#)

Conversion Scope

The scope of this document covers the approach for converting active Materials - Purchasing View from Legacy Source Systems into S/4HANA following the Materials Master Data Design Standard.

This object is migrated after Material Basic Data and Material General Plant, therefore only materials in scope for the object "2019 - Materials Basic Data View" and have Plants in scope as per the object "2010 - Materials - General Plant Data / S.Loc Data", are in scope for this object. Click [here to go to the Conversion Spec for 2019](#) to see the full set of relevancy rules. Furthermore, as per the MDS for 2019, materials with specific Material Types will not be extended to the Purchasing View, while all other Material Types will be. Currently the Material Types not extended are IBAU and ZBAS, but this may change. Therefore this MDS must be reviewed for changes to this rule as part of the preparation of a Syniti ADMM Transform run.

The Service Master will be loaded as Materials in the Target. The relevancy rules for this are also covered in the object "2019 - Materials Basic Data View".

List of source systems and approximate number of records

Source	Scope	Source Approx. No. of Records	Target System	Target Approx. No. of Records
PF2, WP2	<p>Materials: The Material Master Records will be extracted that meet the relevancy criteria of Material Basic Data. Material Type will further refine this list to Materials relevant for the Purchasing View.</p> <p>Services: There is no Purchase View data, therefore a DCT will be required for the records that meet the relevancy criteria to be created as Materials and Material Type will further refine this list to records relevant for the Purchasing View.</p>	<p>Materials: PF2: 115,853 ** WP2: 81,288**</p> <p>Services: PF2: 9,821** WP2: 353**</p> <p>** As per relevancy criteria</p>	S4H	207,315 **

Predecessor Object

Material Master - Basic View (2019) Materials - Additional data (2021) Materials - General Plant Data / S.Loc Data (2010) **Materials Purchasing View (2020)**.

Additional Information

Multi-language Requirement

Not Applicable

Document Management

Not Applicable

Legal Requirement

Not Applicable

Special Requirements

Not Applicable

Target Design

The technical design of the target for this conversion approach.

Table	Field	Field Description	Data Type	Length	Requirement	Updated in Predecessor Object	Updated in Another Object
MARC	MATNR	Material Number	CHAR	18	Required	2010	
MARC	WERKS	Plant	CHAR	4	Required	2010	
MARA	MEINS	Base Unit of Measure	UNIT	3	Required	2019	
MARA	BSTME	Order Unit	UNIT	3	Conditional	2019	
MARA	VABME	Variable Order Unit	CHAR	1	Conditional	2019	
MARA	MATKL	Material Group	CHAR	9	Required	2019	
MARC	EKGRP	Purchasing Group	CHAR	3	Conditional		
MARC	MMSTA	Material Status (Plant-Specific)	CHAR	2	Conditional		2005
MARC	MMSTD	Valid From	DATS	8	Conditional		2005
MLAN	TAXIM	Tax Indicator for Material	CHAR	1	Required		
MARC	MFRGR	Material Freight Group	CHAR	4	Conditional		
MARC	KAUTB	Automatic PO allowed	CHAR	1	Required		
MARC	KZKRI	Critical Part	CHAR	1	Conditional		
MARA	MFRPN	Manufacturer Part Number	CHAR	40	Conditional	2019	
MARA	MFRNR	Manufacturer	CHAR	10	Conditional	2019	
MARC	HERKL	Country of Origin	CHAR	3	Conditional		
MARC	WEBAZ	GR Processing Time	DEC	3	Conditional		2005

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System	Syniti Report Required
1	High	Purchasing Group Missing	If MARC-EKGRP is Blank and To-Be Material Type NOT IN ('IBAU', 'ZBAS') then include in the report.	MARA-MATNR, MARC-WERKS	PF2 & WP2	YES
2	Medium	Country Of Origin Missing	if MARC-HERKL is Blank AND (To-Be Material Type IN ('ZIND','UNBW','NLAG') OR (To-Be Material Type = 'ZDIR' AND T001W-LAND1 = 'BR')) then include in the report.	MARA-MATNR, MARC-WERKS	PF2 & WP2	YES
3	Medium	Validity Date Missing for Material Status (Plant-Specific)	If MARC-MMSTA contains a value and MARC-MMSTD is Blank then include in the report	MARA-MATNR, MARC-WERKS, MARC-MMSTA	PF2 & WP2	YES
4	Medium	GR Processing Time Missing	If MARC-WEBAZ is Blank AND (To-Be Material Type = 'ZDIR' OR 'ZIND') then include in the report	MARA-MATNR, MARC-WERKS, MARA-MTART	PF2 & WP2	YES

Conversion Process

The high-level process for Materials, where the source is PF2 & WP2, is represented by the diagram below:

? Unknown Attachment

The high-level process for Services, where there is no source data, is represented by the diagram below:

? Unknown Attachment

Field Governance Rules					
These governance rules apply to the individual fields within the data record.					
Rule #	Field Label	Rule Description	Validation Method	Conditional Logic	Cleansing Rule (see above)
1	MARA-MATNR & MARC-WERKS	Only records where the material or service has been loaded into the Target, i.e. it is relevant.	Upfront Automated	Fields in the Material & Plant XREFs	
2	MARA-MTART	if To-Be Material Type = 'IBAU' or 'ZBAS' then DO NOT extend Material to Purchasing View else extend Material to Purchasing View		Field in the Material Type XREF	
3	MARC-MMSTD	The field is only required to be maintained if the Plant Material Status (MARC-MMSTA) is applied to a material.	Upfront Automated	MARC-MMSTA is not Blank	Rule 3
4	MARC-HERCL	This field is only applicable for Material types associated with Spares - ZIND, UNBW and NLAG and ZDIR direct materials for Brazil.	Upfront Automated	To-Be Material Type IN ('ZIND','UNBW','NLAG') OR (To-Be Material Type = 'ZDIR' AND T001W-LAND1 = 'BR')	Rule 2
5	MARC-WEBAZ	This is only applicable for ZDIR and ZIND materials, but this is not mandatory.	Ongoing Manual	To-Be Material Type = 'ZDIR' OR 'ZIND'	Rule 4

Data Privacy and Sensitivity

Not Applicable

Extraction

The source for Purchasing data for Materials is PF2 & WP2. This will be extracted by Syniti and the Relevancy criteria, as specified in object "2019 - Materials Basic Data View" and Material Type relevant to the Purchasing View, applied to identify the records that are applicable for the Target load.

There is no source for Purchasing data for Services, therefore this data will be extracted by Syniti from a DCT (see below in the DCT section for more details).

Extraction Run Sheet

Req #	Requirement Description	Team Responsible
1	Extract data from source system based on relevancy rule	Syniti

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
Not Applicable				

Data Collection Template (DCT)

Target Ready Data Collection Template will be created for Materials - Purchasing View data with exception of some fields which require transformation as mentioned in the transformation rule.

There is no source for Purchasing data for Services, therefore this data will be extracted by Syniti from the DCT specified below. It will be populated by Business for relevant services which they want to migrate.

Materials - Purchasing View DCT Rules

Field Name	Field Description	Rule
MARC-MATNR	Material Number	Read-only field
MARC-WERKS	Plant	Exists in Plant XREF as a To-Be Plant
MARA-MEINS	Base Unit of Measure	Read-only field provided for context
MARA-BSTME	Order Unit	Read-only field provided for context
MARA-VABME	Variable Order Unit	Read-only field provided for context
MARA-MATKL	Material Group	Read-only field provided for context
MARA-MFRPN	Manufacturer Part Number	Read-only field provided for context
MARA-MFRNR	Manufacturer	Read-only field provided for context
MARC-EKGRP	Purchasing Group	Value in Check Table T024
MARC-MMSTA	Material Status (Plant-Specific)	Value in Check Table T141
MARC-MMSTD	Valid From	If MARC-MMSTA contains a value then MARC-MMSTD must have a value else Blank
MLAN-TAXIM	Tax Indicator for Material	Value in Check Table TMKM1
MARC-MFRGR	Material Freight Group	Value in Check Table TMFG
MARC-KAUTB	Automatic PO allowed	X or Blank. Default X.
MARC-KZKRI	Critical Part	X or Blank Default Blank.
MARC-HERKL	Country of Origin	Value in Check Table T005
MARC-WEBAZ	GR Processing Time	Value >= 0

Extraction Dependencies

Item #	Step Description	Team Responsible
1	Materials and Plants in scope to be loaded must be identified so that we can limit the extraction to this sub-set of data.	Syniti

Transformation

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow ADMM to make the data Target ready:

1. Perform value mapping and data transformation rules.
 - a. Legacy values are mapped to the to-be values (this could include a default value).
 - b. Values are transformed according to the rules defined in ADMM.
2. Prepare target-ready data in the structure and format that is required for loading via the prescribed Load Tool. This step also produces the load data ready for business to perform Pre-load Data Validation.

Transformation Run Sheet

Item #	Step Description	Team Responsible
--------	------------------	------------------

1	Verify that Material data is extracted from both source systems.	Syniti / S2P Data Team
2	Verify that Services data is extracted from the DCT.	Syniti / S2P Data Team
3	Verify that the Material Number XREF for both material and service data has been set up.	Syniti
4	Review the MDS for 2019 to check what Material Types must not be extended to the Purchasing View and update the rule if required	Syniti
5	Transformation jobs are ready for execution.	Syniti
6	Generate Load Files.	Syniti

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic
1	PF2 & WG2	MARC	MATNR	Material Number	S/4HANA	MARC	MATNR	Material Number	Map Source to Target using Material XREF
2	PF2 & WG2	MARC	WERKS	Plant	S/4HANA	MARC	WERKS	Plant	Map Source to Target using Plant XREF
	PF2 & WG2	MARC	EKGRP	Purchasing Group	S/4HANA	MARC	EKGRP	Purchasing Group	Map Source to Target using Purchasing Group XREF
	PF2 & WG2	MARC	MMSTA	Material Status (Plant-Specific)	S/4HANA	MARC	MMSTA	Material Status (Plant-Specific)	Copy As-Is
	PF2 & WG2	MARC	MMSTD	Valid From	S/4HANA	MARC	MMSTD	Valid From	If MARC-MMSTA contains a value then Copy As-Is else Blank
	PF2 & WG2	MLAN	TAXIM	Tax Indicator for Material	S/4HANA	MLAN	TAXIM	Tax Indicator for Material	Copy As-Is
	PF2 & WG2	MARC	MFRGR	Material Freight Group	S/4HANA	MARC	MFRGR	Material Freight Group	Copy As-Is
	PF2 & WG2	MARC	KAUTB	Automatic PO allowed	S/4HANA	MARC	KAUTB	Automatic PO allowed	Copy As-Is
	PF2 & WG2	MARC	KZKRI	Critical Part	S/4HANA	MARC	KZKRI	Critical Part	Copy As-Is
	PF2 & WG2	MARC	HERKL	Country of Origin	S/4HANA	MARC	HERKL	Manufacturer Country	Copy As-Is
	PF2 & WG2	MARC	WEBAZ	GR Processing Time	S/4HANA	MARC	WEBAZ	GR processing time	Copy As-Is

Transformation Mapping

Mapping Table Name	Mapping Table Description	Link
Material	XREF	MM Config Values - Materials
Plant	XREF	MM Config Values - Plants
Purchasing Group	XREF	MM Config Values - Purchasing Group

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Data has been extracted from sources systems	Syniti
2	Deduplication is completed	Syniti & S2P Data Team
3	Configuration should be completed - (Config documents should be complete)	S2P Functional Team
4	Ensure DCT completeness	S2P Data Team
5	Value mapping and XREF tables are ready	Syniti & S2P Data Team

Pre-Load Validation

Project Team

Completeness

Task	Action
Verify Record Count	The number of records presented after relevancy checks and validation, as well as the number of records in the DCT, needs to be correct compared to the staged data in Syniti ADMM.
Completeness check	All fields required as per mapping template rules must be completed. Syniti ADMM standard validity reports checking each field in Syniti must be built.

Accuracy

Task	Action
Conversion Accuracy	Verify that the data staged in the preload tables are correct in terms of the mapping rules. This will be done via Syniti ADMM standard reports..
Review Error Reports	Review and correct the errors. Achieve a zero-error record count as much as possible. Raise defects for data remediated and requiring a correction in the source data.

Business

Completeness

Task	Action
Completeness Check	All fields required as per mapping template rules must be completed. Syniti ADMM standard validity reports checking each field must be built.

Accuracy

Task	Action
Conversion Accuracy	Business team to verify that the data staged in the preload tables are correct in terms of the mapping rules. This will be done via Syniti ADMM reports/SAP reports.

Load

The load process includes:

1. Execute the automated data load into target system using the appropriate load tool.
2. Once the data is loaded into the target system, it will be extracted and prepared for Post Load Data Validation.

Load Run Sheet

Item #	Step Description	Team Responsible
1	Verify data extracted	Data Specialist/Functional - S2P
2	Verify data combined from both source systems and DCT	Data Specialist/Functional - S2P
3	Verify Material, Plant and Purchasing Group XREFs are ready	Data Specialist/Functional - S2P
4	Stage data for transformations	Syniti
5	Run transforms	Syniti

6	Execute pre-load report	Syniti
7	Validate preload report - release	Data Specialist/Functional - S2P
8	Prepare and simulate	Syniti
9	Pre-load verification and approval to load	Functional/Data Owner - S2P
10	Load to S4	Syniti
11	Complete Jira steps, Volumes and Timings	All - where applicable
12	Execute post-load report	Syniti
13	Post-load report verification/validation	Data Specialist/Functional/Data Owner - S2P
14	Object load completion approval	Data Owner - S2P

Load Phase and Dependencies

Configuration

Item #	Configuration Item
	Not Applicable

Conversion Objects

Object #	Preceding Object Conversion Approach
1	Material Master - Basic View (2019)
2	Materials - General Plant Data / S.Loc Data (2010)

Error Handling

Error Type	Error Description	Action Taken
Data	Source Material not linked to a Target Material	Fix incorrect data
Data	Source Plant not linked to a Target Plant	Fix incorrect data
Data	Source Purchasing Group not linked to a Target Purchasing Group	Fix incorrect data
Data	Duplicates	Fix incorrect data
Load	Authorization errors	Apply for the applicable authorization permission and retry
Load	Technical load failures - If using MC - Simulation errors, etc	Investigate error and rectify. Retry simulation and/or load

Post-Load Validation

Project Team

Post-Load Steps

Step Description	Team Responsible
Execute post-load report	Syniti

Post-load report verification/validation	Data Specialist/Functional/Data Owner - S2P
Object load completion approval	Data Owner - S2P

Completeness

Task	Action
Verify Count	The number of records presented in the post-load needs to be compared to the preload – Syniti report
Field by field check	Compare source data staged in the preload tables to target data in the load tables.

Accuracy

Task	Action
Verify Logs	Check if there is data that failed to load and perform the necessary actions (e.g. register as post load issue or attempt to load the record again, etc.).

Business

Completeness

Task	Action
Verify Count	The number of records presented in the preload needs to be compared to the post-load Syniti report.
Missing data	Check missing data which was supposed to be loaded.
Reconciliation	Participate in Post-load walkthroughs.

Accuracy

Task	Action
Conversion Accuracy	Verify that the data in S/4 HANA was loaded correctly via Syniti post-load reports.

Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.
- Materials - Purchasing Data is in scope based on data design.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 42)	Nov 05, 2025 10:05	WENNINGER-ext, Sascha	
v. 41	Oct 24, 2025 14:42	LEIGHTON-ext, Dean	
v. 40	Oct 24, 2025 10:28	LEIGHTON-ext, Dean	
v. 39	Oct 23, 2025 17:04	LEIGHTON-ext, Dean	

v. 38	Nov 04, 2024 09:08	WENNINGER-ext, Sascha
v. 37	Aug 29, 2024 15:24	NARAHARI-ext, Bhargavi
v. 36	Aug 29, 2024 15:21	NARAHARI-ext, Bhargavi
v. 35	Aug 29, 2024 15:13	NARAHARI-ext, Bhargavi
v. 34	Jul 24, 2024 16:34	MCCARTNEY-ext, Stephen
v. 33	Jul 24, 2024 16:28	WENNINGER-ext, Sascha

[Go to Page History](#)

Workflow history

Title	Last Updated By	Updated	Status
There are no pages at the moment.			

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Feb 02, 2026	Actor	Type	Activity	Version
Approved	 CHIEW-ext, Yock Sang	State	changed state to Approved at 11:34 am	v42
Pending SteerCo Review	 CHIEW-ext, Yock Sang	State	gave <i>Final Approval</i> approval at 11:34 am	
		State	changed expiry date to '16 Feb, 2026 11:34 am' at 11:34 am	
		State	changed state to Pending SteerCo Review at 11:34 am	v42
Pending Stakeholder Review	 CHIEW-ext, Yock Sang	State	gave <i>Stakeholder Review</i> approval at 11:34 am <i>Approval as attached</i>	
Nov 17, 2025				
	 WONG-ext, Oliver	State	changed expiry date to '24 Nov, 2025 02:46 pm' at 2:46 pm	
		State	changed state to Pending Stakeholder Review at 2:46 pm	v42
Pending Design Authority Review	 WONG-ext, Oliver	State	gave <i>Design Authority Endorsement</i> approval at 2:46 pm <i>DA approved (20251112)</i>	