CNV-2016 Service Master record (Lean Services) - DESCOPE

Status	In Progress
Owner	BUOSI-ext, Angelo HANCOCK-ext, John MADHOK-ext, Jasleen
Stakeholders	@Cabrita, Rui

Purpose

The purpose of this document is to define the conversion approach to create Service Master records in S/4HANA. It follows the Procurement Master Data Design Standard and is based on data being migrated from legacy SAP ECC systems (PF2, WP2) into SAP S/4HANA.

The purpose of this document is to define the conversion approach to upload data in S/4 HANA.

This file is aligned with the Conversion Specification Guidelines

---CHECKLIST - DATA TEAM---

- [x] 1) Legacy systems (Logical Source and Target Systems are identified)
- [x] 2) Extraction methods and file types
- [x] 3) Scope relevancy criteria
- [ ] 4) Target structure/ Rules
- [x] 5) MDS links
- [ ] 6) Cleansing rules
  - [x] 6a) Cleansing reports with technical information
  - [ ] 6b) Profiling
  - [x] 6c) Deduplication (with technical details of Table-Fields, Conditions)
  - [x] 6d) Frequency of running reports
- [x] 7) Transformation - and for this DOMD template must be populate and final version of DOMD template should be copied to Transformation section in CSpecs
- [x] 8) Configuration/Value mapping file link
- [x] 9) Value Mappings (Data Mapping is provided for mappings which are not obvious to a suitably-skilled and experienced developer)
- [x] 10) Load template link
- [x] 11) Loading method (Processing Type is specified, i.e. Direct Input, BAPI, IDoc, Web Service, OData API, etc.)
- [x] 12) Loading sequence or dependency
- [x] 13Error handling requirements are specified / including alerting requirement / expected action on failure.
- [x] 13) Data Analysis
- [ ] 14) Pre load validation
- [ ] 15) Post load validation
- [ ] 16) any Exceptions (Data Mapping is provided for mappings which are not obvious to a suitably-skilled and experienced developer)
- [ ] 17)Application log requirement if applicable to be specified.
- [ ] 18) Signoff

Conversion Scope

Both object types (ASMD / MARA) are currently used in parallel to support service procurement. While they may sometimes represent similar business needs, they are maintained and processed independently in the legacy systems.

In the **target system (S/4HANA)**, all services will be represented exclusively as Lean Services within the Material Master (Material Type = SERV or ZSER), in line with the Procurement Master Data Design Standard. This approach eliminates the need for separate Service Master objects and service material types, providing:

- A **single master data object** for all services.
- **Standardized naming, classification, and valuation**.
- Harmonized Material Groups for enterprise-wide reporting and spend analysis.

The conversion scope includes:

- Extracting both Service Master (ASMD) and Materials-as-Services records (MARA).
- Cleansing, harmonizing, and deduplicating entries across both object types.
- Mapping legacy keys to new Lean Service material numbers for traceability.
- Excluding obsolete, incomplete, or unused records.

List of source systems and approximate number of records

Source	Scope	Source Approx No. of Records	Target System	Target Approx No. of Records
PF2 - 020	The Service Master Records (ASMD) and the Material Master Records created as Services (MARA with Service Material Types (**PF2** = DIEN, Z710, Z720, Z732, or **WP2** = DIEN, ZDIE) will be extracted. An initial extract of the relevant data will be provided in Google Sheet format to support the business in reviewing and deciding which records should be included in scope for migration from the Source Systems. A data review, harmonization, and standardization exercise will be carried out across both Service Master and Service-as-Material records. This includes: -Consolidation of overlapping entries.-Standardization of descriptions, units of measure, and language usage. - Identification and removal of obsolete or redundant Services. - Ensuring consistency in classification and purchasing-related fields. - The final, validated dataset will represent the merged and standardized Services to be migrated into SAP S/4HANA Lean Services.	924 Materials (MARA) 127.066 Services (ASMD) ~~34.756~~	S4H	**Lean Service Materials:** 131.238
WP2 - 400		355 Materials (MARA) 2.892 Services (ASMD) ~~624~~	S4H	

MDS Documents

Date	Situation	Current Link
20250918		

Relevancy Rules

Service Master (ASMD) - Relevancy Rule (meeting 20251015 1733)

Service Master to Material Master Conversion:

- Not All Service Masters Migrated: Only a fixed, business-validated subset of active service masters (with activity in past three years and not marked for deletion) is considered relevant for migration.
- Service Masters Become Material Masters: Migrated service masters are converted to material masters (product type 2).
- No Info Records in Legacy for Services: Generally, info records don't exist for services. Pricing for services will come from either contracts or is to be collected as part of the master data process (DCT).
- If Service Becomes Material: Once converted, the same PIR relevancy rule applies: if info records are needed (i.e., there is no contract), info record can be created; otherwise, contract is prioritized.
- Price Collection: When collecting service master data, price information is also collected so it can be used to create either an info record or contract in the target system based on business need/decision.
- Further Business Confirmation Needed: Approach is to check feasibility of creating info records for converted service masters and verify with business if their processes require it.
- Summary and DCT instructions:
    - List of Service master records will be provided by functional leads (Dean and Anjali) after validation with Business and all pods.

- Pricing data for service masters will be collected in DCT and will be created as contracts or info records based on business confirmation.
- Data will be captured in DCT(Data collection template)

⚙ ***SERVICES AS MATERIALS (MARA TABLE) - System PF2/WP2

Relevant Tables for the Extraction

Groups	Table	Purpose	Key fields (core)	Linkage	Typical filters / notes
Group A	**MARA**	Central Material Master (type, base UoM, dimensions, weights, creation date, status flags).	MANDT, MATNR	--- Root Table	Filter by client (MANDT), material type (MTART), deletion flag (LVORM), etc. In ECC MATNR is 18-char (leading zeros).
	MAKT	Language-dependent short descriptions (MAKTX).	MANDT, MATNR, SPRAS	Link to MARA: MAKT. MATNR = MARA.MATNR	Filter SPRAS (e.g., 'E', 'F'…), or pick "best language". MARA MAKT: MAKT.MANDT = MARA. MANDT and MAKT.MATNR = MARA. MATNR (1 material : many language texts).
	MARM	Alternative UoMs and conversion factors.	MANDT, MATNR, MEINH	Link to MARA:MARM. MATNR = MARA.MATNR	Base UoM is MARA.MEINS; conversions via UMREZ/UMREN. MARA MARM: MARM.MANDT = MARA. MANDT and MARM.MATNR = MARA. MATNR (1 : many UoMs).
	MEAN	EAN/UPC/GTINs for a material (often per UoM).	MANDT, MATNR, EAN11 *(+ MEINH)*	Link to MARA:MEAN. MATNR = MARA.MATNR	Join to MARM on MATNR+MEINH when you need UoM-specific GTINs. MARA MEAN: MEAN.MANDT = MARA. MANDT and MEAN.MATNR = MARA. MATNR (1 : many GTINs). Optional: if MEAN.MEINH is populated, it also corresponds to MARM.MEINH for that material.
	STXH	SAPscript long-text header for material texts.	TDOBJECT, TDNAME, TDID, TDSPRAS	Link to MARA: TDOBJECT='MATERIAL' and TDNAME = MATNR (padded)	Typical TDIDs: 'GRUN' (Basic Data), 'SALES', 'PURCH'. MARA STXH/STXL (long texts): STXH.TDOBJECT = 'MATERIAL' and STXH. TDNAME = MARA.MATNR (padded); STXL holds the lines for the same (TDOBJECT, TDNAME, TDID, TDSPRAS) key. Common TDIDs for Basic Data: GRUN (basic), SALES, PURCH.
	STXL	SAPscript long-text lines (content).	(cluster key matching STXH)	via STXH keys	Read/display via text functions; storage is clustered. MARA STXH/STXL (long texts): STXH.TDOBJECT = 'MATERIAL' and STXH. TDNAME = MARA.MATNR (padded); STXL holds the lines for the same (TDOBJECT, TDNAME, TDID, TDSPRAS) key. Common TDIDs for Basic Data: GRUN (basic), SALES, PURCH.
	ZZM_GPS_MATKL				

Group B	**CABN**	Characteristic definitions (metadata: name ATNAM, data type, length, value domain).	ATINN (internal), ATNAM	via ATINN (through KSML /AUSP)	Use to resolve internal ATINN external ATNAM. KSML CABN (characteristic catalog): KSML. ATINN = CABN.ATINN (characteristic technical definition).
	CABNT	Characteristic texts (language-dependent).	ATINN, SPRAS	via CABN.ATINN	Bring characteristic descriptions by language. CABN CABNT (characteristic texts): CABNT. ATINN = CABN.ATINN (language-dependent).
	CAWN	Predefined values for a characteristic (for value-lists).	ATINN, ATZHL (+ ATWRT)	via CABN.ATINN	One row per allowed value; position ATZHL is the value key. CABN CAWN CAWNT (value lists and texts): CAWN.ATINN = CABN.ATINN; each allowed value is keyed by ATZHL. CAWNT provides texts per (ATINN, ATZHL, SPRAS).
	CAWNT	Texts for the predefined values.	ATINN, ATZHL, SPRAS	via CAWN(ATINN,ATZHL)	Language-dependent value labels. Use the same logic of CAWN
	KLAH	Class header (e.g., class type 001 for material classes).	CLINT (internal), KLART, CLASS	via CLINT (to KSML/KSSK)	Filter KLART='001' for material classification. KSSK KLAH (class header): KSSK.CLINT = KLAH.CLINT and KLAH.KLART = '001'.
	KLAT	Class texts (language-dependent).	CLINT, SPRAS	via KLAH.CLINT	Get the class description. KLAH KLAT (class texts): KLAT.CLINT = KLAH.CLINT (language-dependent class names).
	KSML	Class Characteristic assignments.	CLINT, ATINN	via KLAH.CLINT & CABN. ATINN	Which characteristics belong to a class. KLAH KSML (class characteristic): KSML. CLINT = KLAH.CLINT (which characteristics the class contains).
	KSSK	Object (material) Class assignments.	OBJEK, CLINT, KLART	Link to MARA: KSSK. OBJEK = MARA.MATNR (padded)	Filter OBTAB='MARA', KLART='001'. OBJEK = material number with leading zeros (ECC: 18 chars). MARA KSSK (object class): KSSK.OBJEK = padded(MARA.MATNR) and KSSK.KLART = '001'; each row links a material to a class (KSSK.CLINT).
	AUSP	Assigned characteristic values for an object.	OBJEK, ATINN, KLART (+ ATWRT/ATFLV)	Link to MARA: AUSP. OBJEK = MARA.MATNR (padded)	MARA AUSP (assigned values): AUSP.OBJEK = padded(MARA.MATNR) and AUSP.KLART = '001'; AUSP.ATINN = CABN.ATINN; value stored in AUSP.ATWRT (char) or AUSP.ATFLV (numeric).
Group C	**EKKO**	Purchase Order header (dates; organizational scope: BUKRS, EKORG).	MANDT, EBELN, BUKRS, EKORG, AEDAT/BEDAT	Via EKPO ESLL to reach ASMD	Filter by client. Dates used for “last 3 years” window. Org scope checked against in-scope BUKRS/EKORG lists.
	EKPO	PO item lines (service items, open/closed flags, optional plant).	MANDT, EBELN/EBELP, PSTYP, ELIKZ, LOEKZ, WERKS, PACKNO	EKPO.PACKNO ESLL. PACKNO ESLL.SRVPOS = ASMD.ASNUM	PSTYP = ‘9’ (service). Open item = ELIKZ ‘X’ and LOEKZ ‘X’. WERKS used only if plant scoping is enforced.

Execution Logic:

>>>==========

SINGLE

- All materials created in the previous 6 months will be included unless flagged for deletion.

GLOBAL
Will only include materials that are extended to the following:
- only include POs that have Purch Org and Plants in scope

==========

TO BE EXCLUDED

Evaluated in this exact order; first match wins:

Scope prerequisites

- Client: MANDT = (**PF2** = '020' or **WP2** = '400')
- Material types in scope (MARA-MTART): (**PF2** = DIEN, Z710, Z720, Z732, or **WP2** = DIEN, ZDIE)
- Plant in scope (MARC-WERKS): Material must be extended to at least one plant in
- Exclusion indicator (MARA-MSTAE)**:** exclude materials with the following status (**PF2** = Z3/Z4/ZZ; **WP2** = Z0).

1) EXCLUDED (No activity, when >= 6m and <=3y) targeted recency rule

2) EXCLUDED (Obsolete text)
If MAKT-MAKTX indicates obsolescence:
  - contains word OBSOLETE or DELETED, or
  - after removing * and spaces, contains OBS, or
  - one of those acronyms mentioned in this file

3) EXCLUDED (MSTAE)
System-specific status code (PF2: Z3/Z4/ZZ; WP2: Z0).

4) EXCLUDED (LVORM)
If LVORM = 'X' **and** there is **no** open order **within the last 3 years** across SO/PO/PP:
HasOpenSO3Y = 0 AND HasOpenPO3Y = 0 AND HasOpenPP3Y = 0 exclude entry

5) EXCLUDED (No plant in scope)
If HasInScopePlant = 0 (and @RequirePlantExtension = 1).

6) EXCLUDED (No activity, 6m-3y) targeted recency rule
Exclude when **all** are true:
  - **Created window:** ERSDA_date <= @From6Months **and** ERSDA_date >= @From3Years, **and**
  - **No 3y activity:** HasSO3Y = 0 AND HasPO3Y = 0 AND HasPP3Y = 0.

~~**7) EXCLUDED Material Group Mapping (ZZM_GPS_MATKL)**~~
~~Match MARAMATKL to ZZM_GPS_MATKLMATKL with ZZMGOODSER='S'. If a match exists and LOEVM is not initial, the record is excluded.~~

~~If none of the above exclusions apply, the material is included (see topic 4 for more details).~~

==========

TO BE INCLUDED

Scope prerequisites

- Client: MANDT = (**PF2** = '020' or **WP2** = '400')
- Material types in scope (MARA-MTART): (**PF2** = (**PF2** = DIEN, Z710, Z720, Z732, or **WP2** = DIEN, ZDIE)
- Plant in scope (MARC-WERKS): Material must be extended to at least one plant in
- Exclusion indicator (MARA-MSTAE)**:** exclude materials with the following status (**PF2** = Z3/Z4/ZZ; **WP2** = Z0).

2) Time windows (used everywhere)

- Materials with <= 6 month since its creation, don't need to have any activity (PurchOrder, SalesOrder, Production)
- **Materials with up to 3 years**

3) Activity & Open definitions (last 3 years)

Sales Orders (SO)
- Activity (HasSO3Y): exists VBAP line joined to VBAK with VBAK.ERDAT >= @From3Years.
- **Open (HasOpenSO):** line is open if **any**:
-VBAK-VBELN = VBAP-VBELN
- VBAK-VBELN = VBUK-VBELN and
- VBUK.GBSTK = ('A','B')

Purchase Orders (PO)

- Activity (HasPO3Y): E**KKO-LOEKZ <> 'X' and EKPO.LOEKZ <> 'X' and** EKPO COALESCE(AEDAT) >= @From3Years on a matching EKPO.
- Open: EKKO-LOEKZ <> 'X' and EKPO.**EREKZ** <> 'X' and EKPO.**LOEKZ** <> 'X'.

Production Orders (PP)
- Activity (HasPP3Y): COALESCE(AUFK.ERDAT) >= @From3Years on a matching AFPO AND AUFK.LOEKZ <> 'X'
- Open (HasOpenPP): AUFK.LOEKZ <> 'X' **AND** Use AUFK for checking Open Process orders. Link field OBJNR to JEST.OBNR to get status codes not equal to TECO AND JEST.INACT=''. Table TJ02 for status descriptions.

4) Inclusion triggers (exceptional list)

- An exception list should be available, and if the material is in the manual table, it must be included.

6) Final filters before output

Even if a row/material has an INCLUDED reason, it must still pass all of these steps:

- IsObsoleteText = 0
- ExcludeByMSTAE = 0
- **Not** (LVORM='X' AND HasOpenSO3Y=0 AND HasOpenPO3Y=0 AND HasOpenPP3Y=0)
- And (IsForceIncluded = 1 OR EligibilityReason LIKE 'INCLUDED%')

==========<<<

⚙ ***SERVICES MASTER DATA (ASMD TABLE) - System PF2/WP2

Relevant Tables for the Extraction

Groups	Table	Purpose	Key fields (core)	Link to ASMD	Typical filters / notes
Group A	**ASMD**	Core Service Master under evaluation (creation date, deletion flag, basic attributes).	MANDT, **ASNUM**, ERDAT (ERSDA), AEDAT, **LVORM** (LOEKZ), **MATKL**, **MEINS**	— Root table	Filter by client (MANDT); deletion flag is later overridden if there is open activity within 3 years.
	ASMDT	Language-dependent short descriptions (used for “obsolete/deleted” text heuristic).	MANDT, **ASNUM**, **SPRAS**, KTEXT	**ASMDT.ASNUM = ASMD.ASNUM**	Choose “best language” (e.g., E). Detect “OBSOLETE/DELETED/OBS” (case-insensitive; trim spaces/asterisks).
Group B	**EKKO**	Purchase Order header (dates; organizational scope: **BUKRS**, **EKORG**).	MANDT, **EBELN**, **BUKRS**, **EKORG**, AEDAT/BEDAT	Via **EKPO ESLL** to reach ASMD	Filter by client. Dates used for “last 3 years” window. Org scope checked against in-scope **BUKRS/EKORG** lists.
	EKPO	PO item lines (service items, open/closed flags, optional plant).	MANDT, **EBELN/EBELP**, **PSTYP**, **ELIKZ**, **LOEKZ**, WERKS, **PACKNO**	**EKPO.PACKNO ESLL.PACKNO ESLL.SRVPOS = ASMD.ASNUM**	**PSTYP = ‘9’** (service). Open item = ELIKZ ‘X’ and LOEKZ ‘X’. WERKS used only if plant scoping is enforced.

	ESLL	Service package lines; bridges PO/SES packages to **ASMD** (service number).	MANDT, **PACKNO**, **SRVPOS** (service number)	**ESLL.SRVPOS = ASMD. ASNUM**; **ESLL.PACKNO** links to EKPO/ESSR	Essential link table; no direct date filters here.
	ESSR	Service Entry Sheet header (evidence of recent/open SES activity).	MANDT, **PACKNO**, **BUDAT**, **LOEKZ**, EBELN, EBELP	**ESSR.PACKNO ESLL. PACKNO ESLL. SRVPOS = ASMD. ASNUM**	"Recent" if **BUDAT Today 3 years**. Open if **L OEKZ 'X'**. Org scope derived via EKKO /EKPO on EBELN/EBELP (LEFT JOIN).

Execution Logic:

>>>==========

SINGLE

- All materials created in the previous 6 months will be included unless flagged for deletion.

GLOBAL
We will only include materials that are extended to the following:
- only include plants that are in-scope
- only include company codes that are in-scope
- only include purchasing orgs that are in-scope
- only include sales orgs that are in-scope
- only include POs that have Purch Org and Plants in scope
- only include SOs that have Sales Org and Plants in scope
- only include PPs that have Plants in scope

==========

SINGLE

- All services created in the previous 6 months (ASMD-ERDAT >= @From6Months) are included unless excluded by LVORM/MSTAE/text rules. (Services are client-level; no plant extension applies.)

GLOBAL

- Client: MANDT IN (PF2-020, WP2-400)

- Company codes / purchasing orgs in scope: restrict via your in-scope lists, applied through the documents that reference the service (POs/Entry Sheets).

- Purchasing Organization in scope: restrict via your in-scope lists, applied through the documents that reference the service (POs/SOs/Entry Sheets).

==========

TO BE EXCLUDED

Evaluated in this exact order; first match wins:

1) EXCLUDED (No activity, when >= 6m and <=3y) targeted recency rule

2) EXCLUDED (Obsolete text)
Obsolete text detected in ASMDT (OBSOLETE / DELETED / (OBS) / " obs ").

3) EXCLUDED (MSTAE)
System-specific status code (PF2: Z3/Z4/ZZ; WP2: Z0/Z5).

4) EXCLUDED (LVORM)
Deletion flag (LVORM=X) and no open PO/SES in the last 3 years.

5) EXCLUDED No activity and AEDAT between 6 months and 3 years ago.

6) EXCLUDED Material Group Mapping (ZZM_GPS_MATKL)

~~Match ASMDMATKL to ZZM_GPS_MATKLMATKL with ZZMGOODSER='S'. If a match exists and LOEVM is not initial, the record is excluded. The solution publishes MAPPED/UNMAPPED reports for governance visibility.~~

~~If none of the above exclusions apply, the material is included (see topic 4 for more details).~~

==========

TO BE INCLUDED

1) INCLUDED Any entry based on the SES spec path (even in case the service is marked for deletion but the SES remains open)

- Pass ASMD.ASNUM to ESLL.SRVPOS and get ESLL.PACKNO
- Pass ESLL.PACKNO to ESLH.PACKNO and get ESLH.HPACKNO
- Pass ESLH.HPACKNO to EKPO.PACKNO, to get PO document number for the Service Number

2) INCLUDED Default pass (no negatives matched).

==========<<<

*** Canonical Key & Deduplication

Current status Production extraction

Dedup	Combined	PF2	WP2
Total Records	10174	9821	353
Unique Records	7811	7523	288
Duplicate records	2363	2298	65

Deduplication of records from Material as Service (MARA) and Service Master (ASMD) tables. Evaluated in this exact order; first match wins:

Sequency	Table	International Version	Description
1	**ASMD x MARA**	**Text /Description Matching**	Compare ASMD-KTEXT (service description) vs. MAKT-MAKTX (material description). Normalize description strings (remove stop-words, punctuation, upper/lowercase).
2	**ASMD x MARA**	**Unit of Measure Harmonization**	ASMD-MEINS vs. MARA-MEINS (ensure consistency). Must work together with **Text/Description Matching**
	Table - MARA Oriented	**International Version**	**Description**
1	**MARA**	Canonical Key & Core Attributes	Use MATNR (normalized/padded), MTART=DIEN, MEINS, MATKL, BISMT (old material no.). Build canonical keys and compare base UoM, material group, and legacy numbers across systems.
2	**MAKT**	Text/Description Matching	Compare short descriptions across languages; pick best language (e.g., EN > FR > DE > …), normalize text (case, punctuation, stop-words), and apply fuzzy/exact thresholds to detect duplicates.
3	**STXH/STXL**	Long-Text Alignment	Retrieve material long texts (TDOBJECT='MATERIAL', TDNAME=MATNR padded). Normalize and compare paragraphs to consolidate duplicates with different short texts but same detailed content.
4	**MARM**	Unit-of-Measure Harmonization	Align base/alternate UoMs and conversion factors; deduplicate only if UoM sets are compatible (UMREZ /UMREN); flag conflicts for review. The verification of this table must be combined with
5	**MEAN**	GTIN/EAN Cross-Check	Use EAN11/GTIN as high-confidence match key (often per UoM). Detect 1:n GTIN-to-material issues and reconcile where GTINs collide across systems.
8	**AUSP / INOB / CABN / CAWN / CAWNT***(if used)*	Classification Fingerprint	If classification is used, compare class/characteristic values as a strong dedup signal (same class & equal value set higher confidence). Helps separate near-synonyms.
9	**EINA / EINE**	Vendor Catalog Signals	Vendor material numbers/descriptions in Info Records can corroborate duplicates (same vendor ref across systems).

10	**MVKE**	Sales View Consistency	If sales data exists, use product hierarchy and status as soft features; avoid merging items intentionally separated for commercial reasons.
11	**MARC**	Plant Extension Overlap	Plant assignments can be used as a weak feature (same service used in same plants) and for post-merge impact checks.
	Table - ASMD Oriented	**International Version**	**Description**
1	**ASMD**	Canonical Key & Core Attributes	Use **ASNUM** (normalized), **MEINS**, **MATKL**, ERDAT/AEDAT, LVORM. Build canonical keys and compare base UoM and service group across systems. Compare ASMD-KTEXT (service description) vs. MAKT-MAKTX (material description).
2	**ASMDT**	Text/Description Matching	Compare language-dependent short descriptions (**KTEXT**) across locales; pick a “best language” (e.g., EN), normalize text (case, punctuation, stop-words), then run exact/fuzzy thresholds to detect duplicates.
3	**STXH / STXL**	Long-Text Alignment	Retrieve service long texts (SAPscript **TDOBJECT = 'SERV'**; typical TDIDs like *GRUN*). Normalize and compare paragraphs to catch duplicates with similar detailed content but differing short texts.
6	**AUSP / INOB / CABN / CAWN / CAWNT** *(if used)*	Classification Fingerprint	When services are classified, compare class/characteristic values (class type for services per your template) as a strong dedup signal—same class & equal value set higher confidence.
7	**EINA / EINE** *(optional)*	Vendor Catalog Signals	Vendor service numbers/descriptions in Info Records can corroborate duplicates across systems when texts differ or UoMs are inconsistent.
8	**ASMD / ESLL / EKPO / EKKO**		Based on the ASMD entries selected, create the mentioned query to identify the valid Purchase Orders to be considered

Deduplication ASMD Table

Dedup	Combined	PF2	WP2
Total Records	10.174	9.821	353
Unique Records	7.811	7.523	288
Duplicate records	2.363	2.298	65

Additional Information

Extraction/Transformation Methods and File Types

Data is Extracted and Transformed by Syniti ADM, the stagging area of the Migration Cockpit is updated.

Loading Template

Template	Loading File (.XML)
	Source data for Service product.xml
	Source data for Product (1).xml
	Source data for Product - extend existing record with long text.xml

Loading Methods

Migration Cockpit has been elected to execute the data loading of Materials Lean Services. The Loading Method has been defined as **Product**.

Multi-language Requirement

For all Lean Services in the target S/4HANA system, the default description will be maintained in English.

Where available in the source systems (PF2, WP2), additional language-dependent descriptions will also be migrated. This applies to both:

- Service Master records (ASMD)
- Materials-as-Services (MARA)

Data Cleansing is necessary, entries exist for EN however it's content concerns another language.

Migration rules:

- Only languages available and supported in the target S/4HANA system will be migrated.
- If a description exists in a custom or unsupported language key in the source, that language entry will be skipped.
- The migration will preserve the link between the Lean Service material number and each language-specific description.
- Where the same service exists in multiple languages in the source, all valid language versions will be migrated together with the default English text.

This approach ensures that Lean Services are available in multiple languages for purchasing, reporting, and user interaction, while maintaining compliance with the target system's supported language set.

Languages to be extracted (available on Source Systems)

SAP standard supports all ISO languages, ensure that all standard languages are considered in scope.

Languages to don't be extracted

The Z9 language code represents "Multilingual / Other," which is a generic placeholder rather than a specific language. It does not correspond to a standard ISO language code and therefore cannot be mapped reliably to a target language in the S/4HANA environment. Including Z9 would result in ambiguous or duplicate entries, making data validation, reporting, and translation maintenance inconsistent. To ensure data quality and consistency, records with Z9 will be excluded from the extraction scope.

International Version	Description
Z9	Multilingual / Other

Document Management

N/A.

Legal Requirement

Minor efforts with taxation are foreseen for some specific countries having specific taxations, the topic is limited to have the tax codes mapping (from Old to New tax code).

Special Requirements

Processing Type ETL:

- **Transformation (T):** Syniti will be responsible for cleansing, transforming, and merging the data, as well as updating the staging areas of the SAP Migration Cockpit.
- **Extraction (E):** Data will be extracted from at least two source systems. This activity will be performed by Syniti.
- **Loading (L):** The final data load into the target SAP system will be carried out using the standard functionalities of the SAP Migration Cockpit.
    - The decided loading tool is called 'Service Product' and is available on the migration cockpit

Deduplication Rules

Ensure that Lean Service Materials (stored in MARA and related tables) are unique and free of redundancies prior to migration into S/4HANA. The rules mentioned below validate duplicates across standardized descriptions, language, material group, and units of measure, while also considering long texts for confirmation.

Additionally, unsupported or custom languages (such as Z9) are excluded unless explicitly required, ensuring alignment with SAP standard language configurations. This prevents proliferation of redundant Lean Service materials and supports a harmonized catalog in the target system.

SYSTEM	Rule ID	Semantic Rule
PF2	SR 01	Deduplication of Services Master (table ASMD) from PF2 & WP2: - DEDUP 1: Exclude from the deduplication rule services where the Deletion Flag is set ASMD-LOEKZ <> "" (marked for deletion) - DEDUP 2: In case the Short Text (ASMD-KTEXT) + Language Key (ASMD-SPRAS) are identical, this is an indication of a duplicated entry - DEDUP 3: In case the Material Group (ASMD-MATKL) or two or more records are identical, this is an indication of a duplicated entry - DEDUP 4: In case the Base Unit of Measure (ASMD-MEINS) in combination of the Topics 2 & 3 are identical, this is an indication of a duplicated entry - DEDUP 5: In case the Long Text / Additional Descriptions (STXL/STXB) are exactly the same, this is an indication of a duplicated entry
	SR 02	Deduplication of Services Materials (table MARA) from PF2 & WP2: - DEDUP 1: Drop any record technically blocked or marked for deletion in source. Check field MARA-LOEKZ (or equivalent for Lean Services). - DEDUP 2: A duplicate exists if the following four attributes are exactly the same between two records (MAKT-MAKTX / MAKT-SPRAS / MARA-MATKL / MARM-MEINH) - DEDUP 3: A duplicate exists if the long texts (such as Purchase Order Texts or Basic Texts stored in STXL/STXB) are exactly the same (or at least 98% similar), then borderline duplicates can be promoted to confirmed duplicates. - DEDUP 4: Exclude any records that are only in custom or unsupported languages (e.g., Z9) unless explicitly required by the business.
	SR 03	Deduplication of Services between Material Master - Service (MARA oriented) X Service Master (ASMD oriented) In order to proceed with this step, apply the selection criteria below: • **If same service exists in both tables (MARA and ASMD)**: Keep one representation (normally the Material as Lean Service) and retire ASMD. ◦ Check using the fields MAKTX and MEINS • **If service exists only in MARA:** Retain and convert as Lean Service (if material type = in-scope). • **If service exists only in ASMD:** Assess usage — migrate as Lean Service Material or exclude if obsolete. • **If neither is used in recent years:** Exclude.

Frequency of running reports

- Preload Reports
  - Run before every load execution (Mock Loads, Dress Rehearsals, Cutover).
  - Purpose: to validate source-to-target transformations, business rules, and check for data quality issues before pushing into the Migration Cockpit.
  - Typically executed each time you release a wave or object for load.

- Postload Reports
  - Run immediately after each load execution.
  - Purpose: to reconcile and confirm that what was loaded into SAP matches the expected records (counts, key fields, value checks, etc.).
  - Typically executed after every migration cycle (mock, dress rehearsal, final cutover).

Target Design

The technical design of the target for this conversion approach.

Value Mappings: Transformation DOMD

The complete file is available on this LINK

From Service-Material (MARA) to Service-Material (MARA)

Source Field Information							Transform Rules				Target Field Information												
Sequence	Technical Source Table	Field Name	Technical Source Field	Field Format	Field Length	Comments	Mapping Type	Transform Rule or Default Value	Validation Rule	Comments	Dataload Template	Sheet Name	Group	Field Description	Business Description	Check Table	Business Mandatory Y/N/C	System Mandatory Y/N/C	Type	Length	Decimal	SAP Staging Table Name	Sap Field Name
	MARA - Material Basic Data																					MARA - Material Basic Data	
	MARA	MATNR	Product Number	Text (CHAR)	18	Required				**TO BE CONFIRMED**				Product Number	Material Number		YES	YES	Text (CHAR)	18		S_MARA	MATNR
	MARA	MTART	Product Type	Text (CHAR)	80	Required	Fixed Value	Default Value = 'ZSER'		Use default value				Product Type	Product Type		YES	YES	Text (CHAR)	80		S_MARA	MTART
	MARA	ATTYP	Product Category	Text (CHAR)	80	Required		Target field is equal to EMPTY						Product Category	Product Category		YES	YES	Text (CHAR)	80		S_MARA	ATTYP
	MARA	SATNR	Configuration Product for Retail Variant	Text (CHAR)	80					N/A				Configuration Product for Retail Variant	Configuration Product for Retail Variant		YES	YES	Text (CHAR)	80		S_MARA	SATNR
	MARA	MATKL	Product Group (material group)	Text (CHAR)	80	Required	Conversion	Use the mapping table to apply the proper data conversion		Subjected to Data Conversion				Product Group	Product Group		YES	YES	Text (CHAR)	80		S_MARA	MATKL
	MARA	MBRSH	Industry Sector	Text (CHAR)	80	Required	Fixed Value	Default Value = 'M'		Use default value				Industry Sector	Industry Sector		YES	YES	Text (CHAR)	80		S_MARA	MBRSH
	MARA	MAKTX	Description	Text (CHAR)	40	Required		All texts should be converted to UPPER CASE		**Copy 1:1 value**				Description	Description		YES	YES	Text (CHAR)	40		S_MARA	MAKTX
	MARA	SPRAS	Language Key	Text (CHAR)	80	Required				Only ISO Languages are allowed (SAP standard)				Language Key	Language Key		YES	YES	Text (CHAR)	80		S_MARA	SPRAS
	MARA	MEINS	Base Unit of Measure (ISO Format)	Text (CHAR)	80	Required	Conversion	Use the mapping table to apply the proper data conversion						Base Unit of Measure (ISO Format)	Base Unit of Measure (ISO Format)		YES	YES	Text (CHAR)	80		S_MARA	MEINS
	MARA	AENNR	Change Number	Text (CHAR)	80					N/A				Change Number	Change Number		NO	NO	Text (CHAR)	80		S_MARA	AENNR
	MARA	REVLV	Revision Level	Text (CHAR)	80					N/A				Revision Level	Revision Level		NO	NO	Text (CHAR)	80		S_MARA	REVLV
	MARA	EAN11	GTIN	Text (CHAR)	18					N/A				GTIN	GTIN		NO	NO	Text (CHAR)	18		S_MARA	EAN11
	MARA	NUMTP	GTIN Category	Text (CHAR)	80					N/A				GTIN Category	GTIN Category		NO	NO	Text (CHAR)	80		S_MARA	NUMTP
	MARA	SPART	Division	Text (CHAR)	80					Subjected to Data Conversion				Division	Division		NO	NO	Text (CHAR)	80		S_MARA	SPART
	MARA	BISMT	Old Product Number	Text (CHAR)	40					<EMPTY> Since we have a n:1 source the data cannot be updated				Old Product Number	Old Product Number		NO	NO	Text (CHAR)	40		S_MARA	BISMT
	MARA	PRDHA	Product Hierarchy	Text (CHAR)	80					**TO CONFIRM**				Product Hierarchy	Product Hierarchy		NO	NO	Text (CHAR)	80		S_MARA	PRDHA
	MARA	BRAND_ID	Brand	Text (CHAR)	80					N/A				Brand	Brand		NO	NO	Text (CHAR)	80		S_MARA	BRAND_ID
	MARA	XCHPF	Batch Management Required Ind.	Text (CHAR)	1					N/A				Batch Management Required Ind.	Batch Management Required Ind.		NO	NO	Text (CHAR)	1		S_MARA	XCHPF
	MARA	MLGUT	Has Empties	Text (CHAR)	1					N/A				Has Empties	Has Empties		NO	NO	Text (CHAR)	1		S_MARA	MLGUT
	MARA	DATAB	Valid From	Date	10					Copy 1:1 value				Valid From	Valid From		NO	NO	Date	10		S_MARA	DATAB
	MARA	LIQDT	Deletion Date	Date	10					N/A				Deletion Date	Deletion Date		NO	NO	Date	10		S_MARA	LIQDT
	MARA	KUNNR	Competitor	Text (CHAR)	80					N/A				Competitor	Competitor		NO	NO	Text (CHAR)	80		S_MARA	KUNNR

	MARA	NORMT	Industry Standard Description	Text (CHAR)	18					N/A				Industry Standard Description	Industry Standard Description		NO	NO	Text (CHAR)	18		S_MARA	NORMT
	MARA	GROES	Size/Dimensions	Text (CHAR)	32					N/A				Size/Dimensions	Size /Dimensions		NO	NO	Text (CHAR)	32		S_MARA	GROES
	MARA	LABOR	Laboratory / Design Office	Text (CHAR)	80					N/A				Laboratory / Design Office	Laboratory / Design Office		NO	NO	Text (CHAR)	80		S_MARA	LABOR
	MARA	INHAL	Net Contents	Number (NUMC)	13					N/A				Net Contents	Net Contents		NO	NO	Number (NUMC)	13		S_MARA	INHAL
	MARA	INHME	Net Contents Unit (ISO Format)	Text (CHAR)	80					N/A				Net Contents Unit (ISO Format)	Net Contents Unit (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	INHME
	MARA	INHBR	Gross Content	Number (NUMC)	13					N/A				Gross Contens	Gross Contens		NO	NO	Number (NUMC)	13		S_MARA	INHBR
	MARA	VPREH	Comparison Price Unit	Number (NUMC)	5					N/A				Comparison Price Unit	Comparison Price Unit		NO	NO	Number (NUMC)	5		S_MARA	VPREH
	MARA	EXTWG	External Product Group	Text (CHAR)	80					N/A				External Product Group	External Product Group		NO	NO	Text (CHAR)	80		S_MARA	EXTWG
	MARA	MTPOS_MARA	General Item Category Group	Text (CHAR)	80					N/A				General Item Category Group	General Item Category Group		NO	NO	Text (CHAR)	80		S_MARA	MTPOS_MARA
	MARA	BEGRU	Authorization Group	Text (CHAR)	4					N/A				Authorization Group	Authorization Group		NO	NO	Text (CHAR)	4		S_MARA	BEGRU
	MARA	MSTAE	Cross-Plant Product Status	Text (CHAR)	80					Subjected to Data Conversion				Cross-Plant Product Status	Cross-Plant Product Status		NO	NO	Text (CHAR)	80		S_MARA	MSTAE
	MARA	MSTDE	Valid-From Date	Date						Copy 1:1 value				Valid-From Date	Valid-From Date		NO	NO	Date	10		S_MARA	MSTDE
	MARA	SERLV	Level of Explicitness for Serial Number	Text (CHAR)	80					N/A				Level of Explicitness for Serial Number	Level of Explicitness for Serial Number		NO	NO	Text (CHAR)	80		S_MARA	SERLV
	MARA	QMPUR	Quality Manag. in Procurement Is Active	Text (CHAR)	1					N/A				Quality Manag. in Procurement Is Active	Quality Manag. in Procurement Is Active		NO	NO	Text (CHAR)	1		S_MARA	QMPUR
	MARA	ANIMAL_ORIGIN	Animal Origin	Text (CHAR)	1					N/A				Animal Origin	Animal Origin		NO	NO	Text (CHAR)	1		S_MARA	ANIMAL_ORIGIN
	MARA	ANP	ANP Code	Text (CHAR)	80					Copy 1:1 value				ANP Code	ANP Code		NO	NO	Text (CHAR)	80		S_MARA	ANP
	MARA	BRGEW	Gross Weight	Number (NUMC)	13					N/A				Gross Weight	Gross Weight		NO	NO	Number (NUMC)	13		S_MARA	BRGEW
	MARA	NTGEW	Net Weight	Number (NUMC)	13					N/A				Net Weight	Net Weight		NO	NO	Number (NUMC)	13		S_MARA	NTGEW
	MARA	GEWEI	Unit of Weight (ISO Format)	Text	80					N/A				Unit of Weight (ISO Format)	Unit of Weight (ISO Format)		NO	NO	Text	80		S_MARA	GEWEI
	MARA	LAENG	Length	Number (NUMC)	13					N/A				Length	Length		NO	NO	Number (NUMC)	13		S_MARA	LAENG
	MARA	BREIT	Width	Number (NUMC)	13					N/A				Width	Width		NO	NO	Number (NUMC)	13		S_MARA	BREIT
	MARA	HOEHE	Height	Number (NUMC)	13					N/A				Height	Height		NO	NO	Number (NUMC)	13		S_MARA	HOEHE
	MARA	MEABM	Unit for Length /Width/Height(ISO Format)	Text (CHAR)	80					N/A				Unit for Length /Width/Height(ISO Format)	Unit for Length /Width /Height (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	MEABM

	MARA	VOLUM	Volume	Number (NUMC)	13					N/A				Volume	Volume		NO	NO	Number (NUMC)	13		S_MARA	VOLUM
	MARA	VOLEH	Volume Unit	Text (CHAR)	80					N/A				Volume Unit	Volume Unit		NO	NO	Text (CHAR)	80		S_MARA	VOLEH
	MARA	CAPAUSE	Capacity Usage	Number (NUMC)	15					N/A				Capacity Usage	Capacity Usage		NO	NO	Number (NUMC)	15		S_MARA	CAPAUSE
	MARA	CHML_CMPLNC_RLVNCE_IND	Compliance Relevant	Text (CHAR)	80					N/A				Compliance Relevant	Compliance Relevant		NO	NO	Text (CHAR)	80		S_MARA	CHML_CMPLNC_RLVNCE_IND
	MARA	KZKFG	Product Is Configurable	Text (CHAR)	1					N/A				Product Is Configurable	Product Is Configurable		NO	NO	Text (CHAR)	1		S_MARA	KZKFG
	MARA	BSTME	Order Unit of Measure (ISO Format)	Text (CHAR)	80					Copy 1:1 value				Order Unit of Measure (ISO Format)	Order Unit of Measure (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	BSTME
	MARA	EKWSL	Purchasing Value Key	Text (CHAR)	80					N/A				Purchasing Value Key	Purchasing Value Key		NO	NO	Text (CHAR)	80		S_MARA	EKWSL
	MARA	VABME	State of Variable Purchase Order Unit	Text (CHAR)	80					N/A				State of Variable Purchase Order Unit	State of Variable Purchase Order Unit		NO	NO	Text (CHAR)	80		S_MARA	VABME
	MARA	BMATN	Internal Product Number	Text (CHAR)	80					N/A				Internal Product Number	Internal Product Number		NO	NO	Text (CHAR)	80		S_MARA	BMATN
	MARA	MFRPN	Manufacturer Part Number	Text (CHAR)	40					N/A				Manufacturer Part Number	Manufacturer Part Number		NO	NO	Text (CHAR)	40		S_MARA	MFRPN
	MARA	MFRNR	Manufacturer Number	Text (CHAR)	80					N/A				Manufacturer Number	Manufacturer Number		NO	NO	Text (CHAR)	80		S_MARA	MFRNR
	MARA	MPROF	Manufacturer Part Profile	Text (CHAR)	80					N/A				Manufacturer Part Profile	Manufacturer Part Profile		NO	NO	Text (CHAR)	80		S_MARA	MPROF
	MARA	TRAGR	Transportation Group	Text (CHAR)	80					N/A				Transportation Group	Transportation Group		NO	NO	Text (CHAR)	80		S_MARA	TRAGR
	MARA	MSTAV	Cross-Distribution Chain Product Status	Text (CHAR)	80					N/A				Cross-Distribution Chain Product Status	Cross-Distribution Chain Product Status		NO	NO	Text (CHAR)	80		S_MARA	MSTAV
	MARA	MSTDV	Valid From Date for Status	Date	10					N/A				Valid From Date for Status	Valid From Date for Status		NO	NO	Date	10		S_MARA	MSTDV
	MARA	PMATA	Pricing Reference Product	Text (CHAR)	80					N/A				Pricing Reference Product	Pricing Reference Product		NO	NO	Text (CHAR)	80		S_MARA	PMATA
	MARA	SPROF	Pricing Profile for Variants	Text (CHAR)	80					N/A				Pricing Profile for Variants	Pricing Profile for Variants		NO	NO	Text (CHAR)	80		S_MARA	SPROF
	MARA	ALLOW_PMAT_IGNO	Variant Price Allowed	Text (CHAR)	1					N/A				Variant Price Allowed	Variant Price Allowed		NO	NO	Text (CHAR)	1		S_MARA	ALLOW_PMAT_IGNO
	MARA	SOM_CYCLE	Billing Cycle	Text (CHAR)	80					N/A				Billing Cycle	Billing Cycle		NO	NO	Text (CHAR)	80		S_MARA	SOM_CYCLE
	MARA	SOM_CYCLE_RULE	Billing Cycle Determination Rule	Text (CHAR)	80					N/A				Billing Cycle Determination Rule	Billing Cycle Determination Rule		NO	NO	Text (CHAR)	80		S_MARA	SOM_CYCLE_RULE
	MARA	SOM_TC_SCHEMA	Assignment Schema	Text (CHAR)	80					N/A				Assignment Schema	Assignment Schema		NO	NO	Text (CHAR)	80		S_MARA	SOM_TC_SCHEMA
	MARA	BBTYP	Assortment List Type	Text (CHAR)	80					N/A				Assortment List Type	Assortment List Type		NO	NO	Text (CHAR)	80		S_MARA	BBTYP
	MARA	SERVV	Service Agreement	Text (CHAR)	80					Copy 1:1 value				Service Agreement	Service Agreement		NO	NO	Text (CHAR)	80		S_MARA	SERVV
	MARA	MAGRV	Product Group: Packaging Materials	Text (CHAR)	80					N/A				Product Group: Packaging Materials	Product Group: Packaging Materials		NO	NO	Text (CHAR)	80		S_MARA	MAGRV
	MARA	VHIART	Packaging Product Type	Text (CHAR)	80					N/A				Packaging Product Type	Packaging Product Type		NO	NO	Text (CHAR)	80		S_MARA	VHIART
	MARA	ERGEW	Allowed Packaging Weight	Number (NUMC)	13					N/A				Allowed Packaging Weight	Allowed Packaging Weight		NO	NO	Number (NUMC)	13		S_MARA	ERGEW

	MARA	ERGEI	Unit of Allowed Packaging Weight	Text (CHAR)	80					N/A				Unit of Allowed Packaging Weight	Unit of Allowed Packaging Weight		NO	NO	Text (CHAR)	80		S_MARA	ERGEI
	MARA	GEWTO	Excess Weight Tolerance for HU	Number (NUMC)	3					N/A				Excess Weight Tolerance for HU	Excess Weight Tolerance for HU		NO	NO	Number (NUMC)	3		S_MARA	GEWTO
	MARA	ERVOL	Allowed Packaging Volume	Number (NUMC)	13					N/A				Allowed Packaging Volume	Allowed Packaging Volume		NO	NO	Number (NUMC)	13		S_MARA	ERVOL
	MARA	ERVOE	Unit of Allowed Packaging Volume	Text (CHAR)	80					N/A				Unit of Allowed Packaging Volume	Unit of Allowed Packaging Volume		NO	NO	Text (CHAR)	80		S_MARA	ERVOE
	MARA	KZGVH	Packaging Product Is Closed Packaging	Text (CHAR)	1					N/A				Packaging Product Is Closed Packaging	Packaging Product Is Closed Packaging		NO	NO	Text (CHAR)	1		S_MARA	KZGVH
	MARA	VOLTO	Excess Volume Tolerance for HU	Number (NUMC)	3					N/A				Excess Volume Tolerance for HU	Excess Volume Tolerance for HU		NO	NO	Number (NUMC)	3		S_MARA	VOLTO
	MARA	IPRKZ	Period Indicator for Shelf Life	Text (CHAR)	80					N/A				Period Indicator for Shelf Life	Period Indicator for Shelf Life		NO	NO	Text (CHAR)	80		S_MARA	IPRKZ
	MARA	RAUBE	Storage Conditions	Text (CHAR)	80					N/A				Storage Conditions	Storage Conditions		NO	NO	Text (CHAR)	80		S_MARA	RAUBE
	MARA	TEMPB	Temperature Conditions Indicator	Text (CHAR)	80					N/A				Temperature Conditions Indicator	Temperature Conditions Indicator		NO	NO	Text (CHAR)	80		S_MARA	TEMPB
	MARA	BEHVO	Container Requirements	Text (CHAR)	80					N/A				Container Requirements	Container Requirements		NO	NO	Text (CHAR)	80		S_MARA	BEHVO
	MARA	STOFF	Hazardous Product Number	Text (CHAR)	40					N/A				Hazardous Product Number	Hazardous Product Number		NO	NO	Text (CHAR)	40		S_MARA	STOFF
	MARA	ETIAR	Label Type	Text (CHAR)	80					N/A				Label Type	Label Type		NO	NO	Text (CHAR)	80		S_MARA	ETIAR
	MARA	ETIFO	Label Form	Text (CHAR)	80					N/A				Label Form	Label Form		NO	NO	Text (CHAR)	80		S_MARA	ETIFO
	MARA	WESCH	Number of Goods Receipt/Issue Slips	Number (NUMC)	13					N/A				Number of Goods Receipt/Issue Slips	Number of Goods Receipt /Issue Slips		NO	NO	Number (NUMC)	13		S_MARA	WESCH
	MARA	XGCHP	Indicator: Approved Batch Rec. Required	Text (CHAR)	1					N/A				Indicator: Approved Batch Rec. Required	Indicator: Approved Batch Rec. Required		NO	NO	Text (CHAR)	1		S_MARA	XGCHP
	MARA	MHDHB	Total Shelf Life	Number (NUMC)	4					N/A				Total Shelf Life	Total Shelf Life		NO	NO	Number (NUMC)	4		S_MARA	MHDHB
	MARA	MHDRZ	Minimum Remaining Shelf Life	Number (NUMC)	4					N/A				Minimum Remaining Shelf Life	Minimum Remaining Shelf Life		NO	NO	Number (NUMC)	4		S_MARA	MHDRZ
	MARA	SLED_BBD	Indi. for the Shelf Life Expiration Date	Text (CHAR)	80					N/A				Indi. for the Shelf Life Expiration Date	Indi. for the Shelf Life Expiration Date		NO	NO	Text (CHAR)	80		S_MARA	SLED_BBD
	MARA	MHDLP	Storage Percentage	Number (NUMC)	3					N/A				Storage Percentage	Storage Percentage		NO	NO	Number (NUMC)	3		S_MARA	MHDLP
	MARA	RDMHD	Rounding Rule for Calculation of SLED	Text (CHAR)	80					N/A				Rounding Rule for Calculation of SLED	Rounding Rule for Calculation of SLED		NO	NO	Text (CHAR)	80		S_MARA	RDMHD
	MARA	HNDLCODE	Handling Indicator	Text (CHAR)	80					N/A				Handling Indicator	Handling Indicator		NO	NO	Text (CHAR)	80		S_MARA	HNDLCODE
	MARA	WHMATGR	Warehouse Product Group	Text (CHAR)	80					N/A				Warehouse Product Group	Warehouse Product Group		NO	NO	Text (CHAR)	80		S_MARA	WHMATGR
	MARA	WHSTC	Warehouse Storage Condition	Text (CHAR)	80					N/A				Warehouse Storage Condition	Warehouse Storage Condition		NO	NO	Text (CHAR)	80		S_MARA	WHSTC
	MARA	HUTYP_DFLT	Standard Handling Unit Type	Text (CHAR)	80					N/A				Standard Handling Unit Type	Standard Handling Unit Type		NO	NO	Text (CHAR)	80		S_MARA	HUTYP_DFLT

	MARA	SERIAL	Serial Number Profile	Text (CHAR)	80					N/A				Serial Number Profile	Serial Number Profile		NO	NO	Text (CHAR)	80		S_MARA	SERIAL
	MARA	PILFERABLE	Pilferable	Text (CHAR)	1					N/A				Pilferable	Pilferable		NO	NO	Text (CHAR)	1		S_MARA	PILFERABLE
	MARA	HAZMAT	Relevant for Hazardous Substances	Text (CHAR)	1					N/A				Relevant for Hazardous Substances	Relevant for Hazardous Substances		NO	NO	Text (CHAR)	1		S_MARA	HAZMAT
	MARA	QQTIME	Quarantine Period	Number (NUMC)	3					N/A				Quarantine Period	Quarantine Period		NO	NO	Number (NUMC)	3		S_MARA	QQTIME
	MARA	QQTIMEUOM	Time Unit for Quarantine Period	Text (CHAR)	80					N/A				Time Unit for Quarantine Period	Time Unit for Quarantine Period		NO	NO	Text (CHAR)	80		S_MARA	QQTIMEUOM
	MARA	QGRP	Quality Inspection Group	Text (CHAR)	80					N/A				Quality Inspection Group	Quality Inspection Group		NO	NO	Text (CHAR)	80		S_MARA	QGRP
	MARA	HUTYP	Handling Unit Type	Text (CHAR)	80					N/A				Handling Unit Type	Handling Unit Type		NO	NO	Text (CHAR)	80		S_MARA	HUTYP
	MARA	MAXC	Maximum Capacity	Number (NUMC)	15					N/A				Maximum Capacity	Maximum Capacity		NO	NO	Number (NUMC)	15		S_MARA	MAXC
	MARA	MAXC_TOL	Overcapacity Tolerance	Number (NUMC)	3					N/A				Overcapacity Tolerance	Overcapacity Tolerance		NO	NO	Number (NUMC)	3		S_MARA	MAXC_TOL
	MARA	TARE_VAR	Variable Tare Weight	Text (CHAR)	1					N/A				Variable Tare Weight	Variable Tare Weight		NO	NO	Text (CHAR)	1		S_MARA	TARE_VAR
	MARA	MAXL	Max. Pack. Length	Number (NUMC)	15					N/A				Max. Pack. Length	Max. Pack. Length		NO	NO	Number (NUMC)	15		S_MARA	MAXL
	MARA	MAXDIM_UOM	UoM for Max. Pack. Length (ISO Format)	Text (CHAR)	80					N/A				UoM for Max. Pack. Length (ISO Format)	UoM for Max. Pack. Length (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	MAXDIM_UOM
	MARA	MAXB	Max. Pack. Width	Number (NUMC)	15					N/A				Max. Pack. Width	Max. Pack. Width		NO	NO	Number (NUMC)	15		S_MARA	MAXB
	MARA	MAXH	Max. Pack. Height	Number (NUMC)	15					N/A				Max. Pack. Height	Max. Pack. Height		NO	NO	Number (NUMC)	15		S_MARA	MAXH
	MARA	RBNRM	Catalog Profile	Text (CHAR)	80					N/A				Catalog Profile	Catalog Profile		NO	NO	Text (CHAR)	80		S_MARA	RBNRM
	MARA	SSTUF	Assortment Grade	Text (CHAR)	80					N/A				Assortment Grade	Assortment Grade		NO	NO	Text (CHAR)	80		S_MARA	SSTUF
	MARA	LSTVZ	Listing Procedure	Text (CHAR)	80					N/A				Listing Procedure	Listing Procedure		NO	NO	Text (CHAR)	80		S_MARA	LSTVZ
	MARA	LDVZL	Listing Period Start Date	Date	10					N/A				Listing Period Start Date	Listing Period Start Date		NO	NO	Date	10		S_MARA	LDVZL
	MARA	LDBZL	Listing Period End Date	Date	10					N/A				Listing Period End Date	Listing Period End Date		NO	NO	Date	10		S_MARA	LDBZL
	MARA	LSTFL	Listing Procedure	Text (CHAR)	80					N/A				Listing Procedure	Listing Procedure		NO	NO	Text (CHAR)	80		S_MARA	LSTFL
	MARA	LDVFL	Listing Period Start Date	Date	10					N/A				Listing Period Start Date	Listing Period Start Date		NO	NO	Date	10		S_MARA	LDVFL
	MARA	LDBFL	Listing Period End Date	Date	10					N/A				Listing Period End Date	Listing Period End Date		NO	NO	Date	10		S_MARA	LDBFL
	MARA	VDVZL	Sales Period Start Date	Date	10					N/A				Sales Period Start Date	Sales Period Start Date		NO	NO	Date	10		S_MARA	VDVZL
	MARA	VDBZL	Sales Period End Date	Date	10					N/A				Sales Period End Date	Sales Period End Date		NO	NO	Date	10		S_MARA	VDBZL
	MARA	VDVFL	Sales Period Start Date	Date	10					N/A				Sales Period Start Date	Sales Period Start Date		NO	NO	Date	10		S_MARA	VDVFL
	MARA	VDBFL	Sales Period End Date	Date	10					N/A				Sales Period End Date	Sales Period End Date		NO	NO	Date	10		S_MARA	VDBFL

	MARA	WAUSM	Delivery Unit of Measure (ISO Format)	Text (CHAR)	80					N/A				Delivery Unit of Measure (ISO Format)	Delivery Unit of Measure (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	WAUSM
	MARA	WVRKM	Sales Unit of Measure (ISO Format)	Text (CHAR)	80									Sales Unit of Measure (ISO Format)	Sales Unit of Measure (ISO Format)		NO	NO	Text (CHAR)	80		S_MARA	WVRKM
	MARA	WMAAB	ABC Indicator	Text (CHAR)	80					N/A				ABC Indicator	ABC Indicator		NO	NO	Text (CHAR)	80		S_MARA	WMAAB
	MARA	WBKLA	Valuation Class	Text (CHAR)	80									Valuation Class	Valuation Class		NO	NO	Text (CHAR)	80		S_MARA	WBKLA
	MARA	WHERL	Country/Region of Origin	Text (CHAR)	80					N/A				Country/Region of Origin	Country /Region of Origin		NO	NO	Text (CHAR)	80		S_MARA	WHERL
	MARA	WHERR	Region of Origin	Text (CHAR)	80					N/A				Region of Origin	Region of Origin		NO	NO	Text (CHAR)	80		S_MARA	WHERR
	MARA	WEKGR	Purchasing Group	Text (CHAR)	80									Purchasing Group	Purchasing Group		NO	NO	Text (CHAR)	80		S_MARA	WEKGR
	MARA	BWSCL	Source of Supply	Text (CHAR)	80									Source of Supply	Source of Supply		NO	NO	Text (CHAR)	80		S_MARA	BWSCL
	MARA	TAKLV	Tax Classification	Text (CHAR)	80									Tax Classification	Tax Classification		NO	NO	Text (CHAR)	80		S_MARA	TAKLV
	MARA	WLADG	Loading Group	Text (CHAR)	80					N/A				Loading Group	Loading Group		NO	NO	Text (CHAR)	80		S_MARA	WLADG
	MARA	WBWSP	Valuation Margin	Number (NUMC)	6					N/A				Valuation Margin	Valuation Margin		NO	NO	Number (NUMC)	6		S_MARA	WBWSP
	MARA	PSTATQ	Indicator: Quality	Text (CHAR)	1					N/A				Indicator: Quality	Indicator: Quality		NO	NO	Text (CHAR)	1		S_MARA	PSTATQ
	MARA	PSTATV	Indicator: Sales	Text (CHAR)	1					**TO CONFIRM**				Indicator: Sales	Indicator: Sales		NO	NO	Text (CHAR)	1		S_MARA	PSTATV
	MARA	PSTATL	Indicator: Storage	Text (CHAR)	1					N/A				Indicator: Storage	Indicator: Storage		NO	NO	Text (CHAR)	1		S_MARA	PSTATL
	MARA	PSTATE	Indicator: Purchasing	Text (CHAR)	1					**TO CONFIRM**				Indicator: Purchasing	Indicator: Purchasing		NO	NO	Text (CHAR)	1		S_MARA	PSTATE
	MAKT - Material Descriptions																					MAKT - Material Descriptions	
	MAKT	MATNR	Product Number	Text (CHAR)	18	Required								Product Number	Material Number		YES	YES	Text (CHAR)	18		S_MAKT	MATNR
	MAKT	SPRAS	Language Key	Text (CHAR)	2	Required								Language Key	Language Key		YES	YES	Text (CHAR)	2		S_MAKT	SPRAS
	MAKT	MAKTX	Product Description	Text (CHAR)	40	Required								Product Description	Product Description		YES	YES	Text (CHAR)	40		S_MAKT	MAKTX
	MARM - Units of Measure for Material																					MARM - Units of Measure for Material	
	MARM	PRODUCT	Product Number	Text (CHAR)	80	Required								Product Number	Material Number		YES	YES	Text (CHAR)	80		S_MARM	MATNR
	MARM	MEINH	Alternative Unit of Measure (ISO Format)	Text (CHAR)	80	Required								Alternative Unit of Measure (ISO Format)	Alternative Unit of Measure (ISO Format)			YES	Text (CHAR)	80		S_MARM	MEINH
	MARM	UMREN	Denominator for Conversion to Base Unit	Number (NUMC)	5	Required								Denominator for Conversion to Base Unit	Denominator for Conversion to Base Unit		YES	YES	Number (NUMC)	5		S_MARM	UMREN
	MARM	UMREZ	Numerator for Conversion to Base Unit	Number (NUMC)	5	Required								Numerator for Conversion to Base Unit	Numerator for Conversion to Base Unit		YES	YES	Number (NUMC)	5		S_MARM	UMREZ

	MARM	EAN11	GTIN	Text (CHAR)	18										GTIN	GTIN		NO	NO	Text (CHAR)	18		S_MARM	EAN11
	MARM	NUMTP	GTIN Category	Text (CHAR)	80										GTIN Category	GTIN Category		NO	NO	Text (CHAR)	80		S_MARM	NUMTP
	MARM	LAENG	Length	Number (NUMC)	13										Length	Length		NO	NO	Number (NUMC)	13		S_MARM	LAENG
	MARM	BREIT	Width	Number (NUMC)	13										Width	Width		NO	NO	Number (NUMC)	13		S_MARM	BREIT
	MARM	HOEHE	Height	Number (NUMC)	13										Height	Height		NO	NO	Number (NUMC)	13		S_MARM	HOEHE
	MARM	MEABM	Unit for Length /Width/Height(ISO Format)	Text (CHAR)	80										Unit for Length /Width/Height(ISO Format)	Unit for Length /Width /Height (ISO Format)		NO	NO	Text (CHAR)	80		S_MARM	MEABM
	MARM	BRGEW	Gross Weight	Number (NUMC)	13										Gross Weight	Gross Weight		NO	NO	Number (NUMC)	13		S_MARM	BRGEW
	MARM	GEWEI	Unit of Weight (ISO Format)	Text (CHAR)	80										Unit of Weight (ISO Format)	Unit of Weight (ISO Format)		NO	NO	Text (CHAR)	80		S_MARM	GEWEI
	MARM	VOLUM	Volume	Number (NUMC)	13										Volume	Volume		NO	NO	Number (NUMC)	13		S_MARM	VOLUM
	MARM	VOLEH	Volume Unit (ISO Format)	Text (CHAR)	80										Volume Unit (ISO Format)	Volume Unit (ISO Format)		NO	NO	Text (CHAR)	80		S_MARM	VOLEH
	MARM	CAPAUSE	Capacity Usage	Number (NUMC)	15										Capacity Usage	Capacity Usage		NO	NO	Number (NUMC)	15		S_MARM	CAPAUSE
	MLAN - Tax Classification for Material																						S_MLAN - Tax Classification for Material	
	MLAN	PRODUCT	Product Number	Text (CHAR)	80	Mandatory									Product Number	Material Number		YES	YES	Text (CHAR)	80		S_MLAN	MATNR
	MLAN	ALAND	Country/Region	Text (CHAR)	80	Mandatory									Country/Region	Country /Region		YES	YES	Text (CHAR)	80		S_MLAN	ALAND
	MLAN	TATYP1	Tax Category 1	Text (CHAR)	80	Mandatory									Tax Category 1	Tax Category 1		YES	YES	Text (CHAR)	80		S_MLAN	TATYP1
	MLAN	TAXM1	Tax Classification 1	Text (CHAR)	80	Mandatory									Tax Classification 1	Tax Classification 1		YES	YES	Text (CHAR)	80		S_MLAN	TAXM1
	MLAN	TATYP2	Tax Category 2	Text (CHAR)	80										Tax Category 2	Tax Category 2		NO	NO	Text (CHAR)	80		S_MLAN	TATYP2
	MLAN	TAXM2	Tax Classification 2	Text (CHAR)	80										Tax Classification 2	Tax Classification 2		NO	NO	Text (CHAR)	80		S_MLAN	TAXM2
	MLAN	TATYP3	Tax Category 3	Text (CHAR)	80										Tax Category 3	Tax Category 3		NO	NO	Text (CHAR)	80		S_MLAN	TATYP3
	MLAN	TAXM3	Tax Classification 3	Text (CHAR)	80										Tax Classification 3	Tax Classification 3		NO	NO	Text (CHAR)	80		S_MLAN	TAXM3
	MLAN	TATYP4	Tax Category 4	Text (CHAR)	80										Tax Category 4	Tax Category 4		NO	NO	Text (CHAR)	80		S_MLAN	TATYP4
	MLAN	TAXM4	Tax Classification 4	Text (CHAR)	80										Tax Classification 4	Tax Classification 4		NO	NO	Text (CHAR)	80		S_MLAN	TAXM4
	MLAN	TATYP5	Tax Category 5	Text (CHAR)	80										Tax Category 5	Tax Category 5		NO	NO	Text (CHAR)	80		S_MLAN	TATYP5

	MLAN	TAXM5	Tax Classification 5	Text (CHAR)	80										Tax Classification 5	Tax Classification 5		NO	NO	Text (CHAR)	80		S_MLAN	TAXM5
	MLAN	TATYP6	Tax Category 6	Text (CHAR)	80										Tax Category 6	Tax Category 6		NO	NO	Text (CHAR)	80		S_MLAN	TATYP6
	MLAN	TAXM6	Tax Classification 6	Text (CHAR)	80										Tax Classification 6	Tax Classification 6		NO	NO	Text (CHAR)	80		S_MLAN	TAXM6
	MLAN	TATYP7	Tax Category 7	Text (CHAR)	80										Tax Category 7	Tax Category 7		NO	NO	Text (CHAR)	80		S_MLAN	TATYP7
	MLAN	TAXM7	Tax Classification 7	Text (CHAR)	80										Tax Classification 7	Tax Classification 7		NO	NO	Text (CHAR)	80		S_MLAN	TAXM7
	MLAN	TATYP8	Tax Category 8	Text (CHAR)	80										Tax Category 8	Tax Category 8		NO	NO	Text (CHAR)	80		S_MLAN	TATYP8
	MLAN	TAXM8	Tax Classification 8	Text (CHAR)	80										Tax Classification 8	Tax Classification 8		NO	NO	Text (CHAR)	80		S_MLAN	TAXM8
	MLAN	TATYP9	Tax Category 9	Text (CHAR)	80										Tax Category 9	Tax Category 9		NO	NO	Text (CHAR)	80		S_MLAN	TATYP9
	MLAN	TAXM9	Tax Classification 9	Text (CHAR)	80										Tax Classification 9	Tax Classification 9		NO	NO	Text (CHAR)	80		S_MLAN	TAXM9
	CLASS - Class Header Data (KLAH)																						CLASS - Class Header Data (KLAH)	
	CLASS	PRODUCT	Product Number	Text (CHAR)	18	Mandatory									Product Number	Material Number		YES	YES	Text (CHAR)	18		S_CLASS	MATNR
	CLASS	CLASS	Class	Text (CHAR)	80	Mandatory									Class			YES	YES	Text (CHAR)	80		S_CLASS	CLASS
	CLASS	CLASSTYPE	Class Type	Text (CHAR)	80	Mandatory									Class Type			YES	YES	Text (CHAR)	80		S_CLASS	CLASSTYPE
	CHARACT - Characteristic (CABN)																						S_CHARACT - Characteristic (CABN)	
	CHARACT	PRODUCT	Product Number	Text (CHAR)	80	Mandatory									Product Number	Material Number		YES	YES	Text (CHAR)	80		S_CHARACT	MATNR
	CHARACT	CLASS	Class	Text (CHAR)	80	Mandatory									Class			YES	YES	Text (CHAR)	80		S_CHARACT	CLASS
	CHARACT	CLASSTYPE	Class Type	Text (CHAR)	80	Mandatory									Class Type			YES	YES	Text (CHAR)	80		S_CHARACT	CLASSTYPE
	CHARACT	ATNAM	Characteristic Name	Text (CHAR)	80	Mandatory									Characteristic Name			YES	YES	Text (CHAR)	80		S_CHARACT	ATNAM
	CHARACT	POSNR	Item	Text (CHAR)	3										Item			NO	NO	Text (CHAR)	3		S_CHARACT	POSNR
	CHARACT	VALUE_CHAR	Character Value	Text (CHAR)	70										Character Value			NO	NO	Text (CHAR)	70		S_CHARACT	VALUE_CHAR
	CHARACT	VALUE_NUMC	Numeric Value	Number (NUMC)	16										Numeric Value			NO	NO	Number (NUMC)	16		S_CHARACT	VALUE_NUMC
	CHARACT	VALUE_DATE	Date	Date											Date			NO	NO	Date	10		S_CHARACT	VALUE_DATE
	CHARACT	VALUE_TIME	Time	Time											Time			NO	NO	Time	8		S_CHARACT	VALUE_TIME
	CHARACT	VALUE_CURR	Currency Value	Number (NUMC)	23										Currency Value			NO	NO	Number (NUMC)	23		S_CHARACT	VALUE_CURR

	STXH - SAPscript Text Header																					STXH - SAPscript Text Header	
	STXH	TDOBJECT	Text Object (e.g., MATERIAL, VENDOR, etc.)	CHAR	10	Mandatory									Text Object (e.g., MATERIAL, VENDOR, etc.)			NO	NO	CHAR	10		STXH	TDOBJECT
	STXH	TDNAME	Text Name (object key, e.g., material number, PO number)	CHAR	70	Mandatory									Text Name (object key, e.g., material number, PO number)			NO	NO	CHAR	70		STXH	TDNAME
	STXH	TDID	Text ID (text type, e.g., F01 = Header Text, L01 = Item Text)	CHAR	4	Mandatory									Text ID (text type, e.g., F01 = Header Text, L01 = Item Text)			NO	NO	CHAR	4		STXH	TDID
	STXH	TDSPRAS	Language Key	LANG	1	Mandatory									Language Key			NO	NO	LANG	1		STXH	TDSPRAS
	STXH	TDTITLE	Title of the text (optional short description)	CHAR	60	Mandatory									Title of the text (optional short description)			NO	NO	CHAR	60		STXH	TDTITLE
	STXH	TDFUSER	Last Changed by (user)	CHAR	12										Last Changed by (user)			NO	NO	CHAR	12		STXH	TDFUSER
	STXH	TDFDATE	Date of Last Change	DATS	8										Date of Last Change			NO	NO	DATS	8		STXH	TDFDATE
	STXH	TDFTIME	Time of Last Change	TIMS	6										Time of Last Change			NO	NO	TIMS	6		STXH	TDFTIME
	STXH	TDVERSION	Version Number of Text	NUMC	4										Version Number of Text			NO	NO	NUMC	4		STXH	TDVERSION
	STXH	TDLOCK	Lock Indicator	CHAR	1										Lock Indicator			NO	NO	CHAR	1		STXH	TDLOCK
	STXH	TDTRANSTAT	Translation Status	CHAR	1										Translation Status			NO	NO	CHAR	1		STXH	TDTRANSTAT
	STXH	TDOSPRAS	Original Language	LANG	1										Original Language			NO	NO	LANG	1		STXH	TDOSPRAS
	STXL - SAPscript Text File (Cluster)																					STXL - SAPscript Text File (Cluster)	
	STXL	RELID	Cluster Area (ID of cluster; for texts usually "TX")	Text (CHAR)	2	Mandatory									Cluster Area (ID of cluster; for texts usually "TX")			NO	NO	Text (CHAR)	2		STXL	RELID
	STXL	TDOBJECT	Text Object (e.g., MATERIAL, VENDOR, etc.)	Text (CHAR)	10	Mandatory									Text Object (e.g., MATERIAL, VENDOR, etc.)			NO	NO	Text (CHAR)	10		STXL	TDOBJECT
	STXL	TDNAME	Text Name (object key, e.g., material number, purchase order)	Text (CHAR)	70	Mandatory									Text Name (object key, e.g., material number, purchase order)			NO	NO	Text (CHAR)	70		STXL	TDNAME
	STXL	TDID	Text ID (text type, e.g., F01 = header text, L01 = item text)	Text (CHAR)	4	Mandatory									Text ID (text type, e.g., F01 = header text, L01 = item text)			NO	NO	Text (CHAR)	4		STXL	TDID
	STXL	TDSPRAS	Language Key	Language (LANG)	1	Mandatory									Language Key			NO	NO	Language (LANG)	1		STXL	TDSPRAS
	STXL	SRTF2	Sort number (used to split large texts across several cluster entries)	Numeric (NUMC)	3										Sort number (used to split large texts across several cluster entries)			NO	NO	Numeric (NUMC)	3		STXL	SRTF2
	STXL	CLUSTR	Length field for cluster (internal, technical)	Integer (INT2)	5										Length field for cluster (internal, technical)			NO	NO	Integer (INT2)	5		STXL	CLUSTR
	STXL	CLUSTD	Length field for cluster (internal, technical)	Integer (INT2)	5										Length field for cluster (internal, technical)			NO	NO	Integer (INT2)	5		STXL	CLUSTD
	STXL	VARTEXT	Compressed text data (the actual long text, stored in cluster format)	(RAW)	255										Compressed text data (the actual long text, stored in cluster format)			NO	NO	(RAW)	255		STXL	VARTEXT

Loading Sequence and Dependencies

Seq	Object / Task	SAP Tables/Config	Tool / Load Object	Key Data Checks	Notes/Risks
1	CONFIG: Company Codes, Plants, Storage Locs(?)	T001, T001K, T001W, T001L	SPRO config; not migrated via MM object	Unique codes, timezone /currency, address completeness.	Changing valuation level later is disruptive.
2	CONFIG: Define Material Types & Number Ranges	T134, T134M, T134G, NRIV	SPRO config	No overlaps; external ranges open if legacy codes kept.	Misaligned MTART causes posting failures and governance issues.
3	CONFIG: Units of Measure & ISO Codes	T006, T006A, T006I	SPRO config	Dimensional consistency; no duplicate ISO codes.	Bad UoMs break conversions and pricing.
4	CONFIG: Material Groups / Product Hierarchy /	T023/T023T, T179 /T179T, TBEWEXTMATGRP	SPRO config (hierarchies); master data via Material load if needed	Trees complete, no orphans; unique keys.	Hierarchy changes post-load cascade to SD/MM reporting.
11	DATA LOADING: Materials Basic Data	MARA, MAKT, MARM...	Migration Cockpit – Material	Error-free import; sampling in MM03; duplicates prevented.	Use a small but representative subset.

Data Cleansing

All data cleansing should take place in the data source system as defined in this document, unless system limitations prevent it.

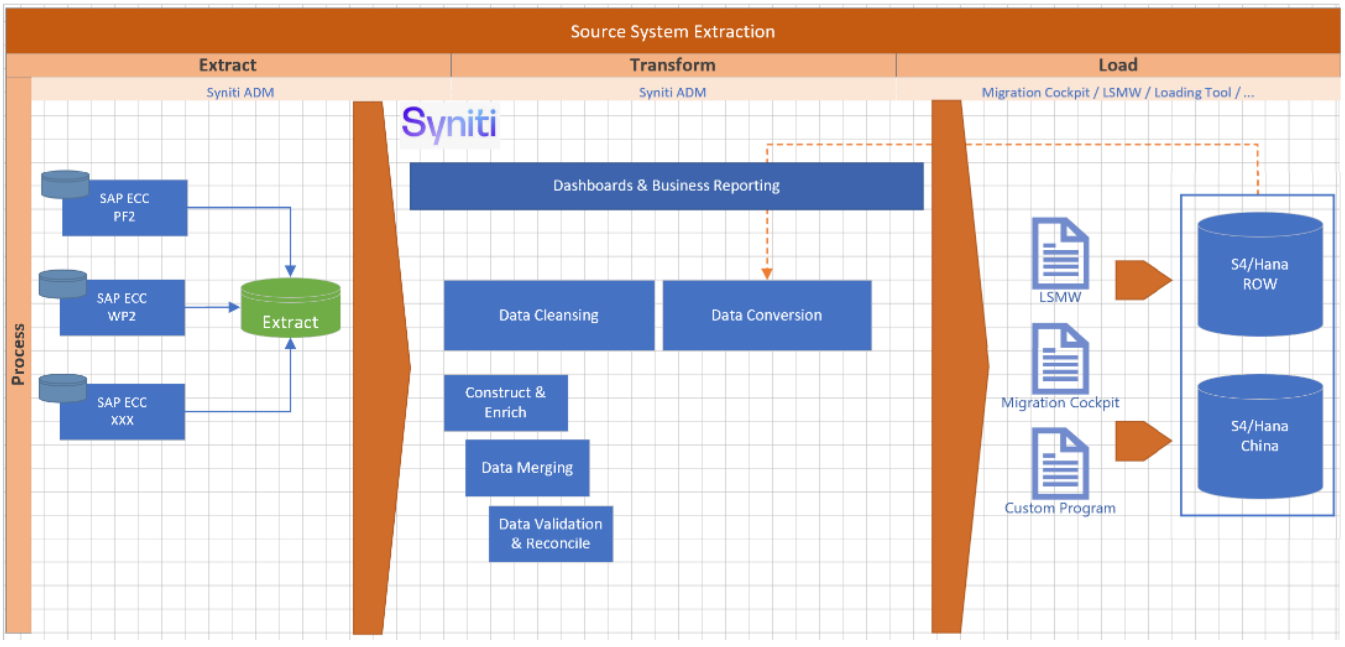
If data cleansing is managed outside of the source system (e.g. Syniti Migrate, 3rd Party Vendor), the necessary documentation must be produced and appended to this deliverable for sign-off.

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
001	High	Remove Duplicated Entries - Services	Remove duplicates based on Service Description + UoM + Service Group (?)		PF2 / WP2

002	High	Remove Duplicated Entries - Materials	Check for materials with same Long/Short Description Check Old Material Number field Check Materials with same Manufacturer Part Number Check Source List/PIR for identical set ups Check BOMs for identical components Where duplicates found, check if either has no activity		PF2 / WP2
003	Medium	Validation of Service Group, UoM, and active status in target config	Validate existence of Service Group, UoM, and active status in target config		PF2 / WP2
004	High	English description missing or EN description not English language	All materials require English description by default, so need to be provided if missing. Current EN descriptions not in English language need to be translated. The field details for description are the following: Field Name / Data Element / Domain: MAKTX		PF2 / WP2
005	High	Description format	Material descriptions must adhere to S4 standardization so no special characters, and must not exceed character limit		PF2 / WP2
006	High	UoM alignment	All material UoMs to adhere to S4 standardization. Confirmation regarding EA /PC format.		PF2 / WP2

Conversion Process

The high-level process is represented by the diagram below:

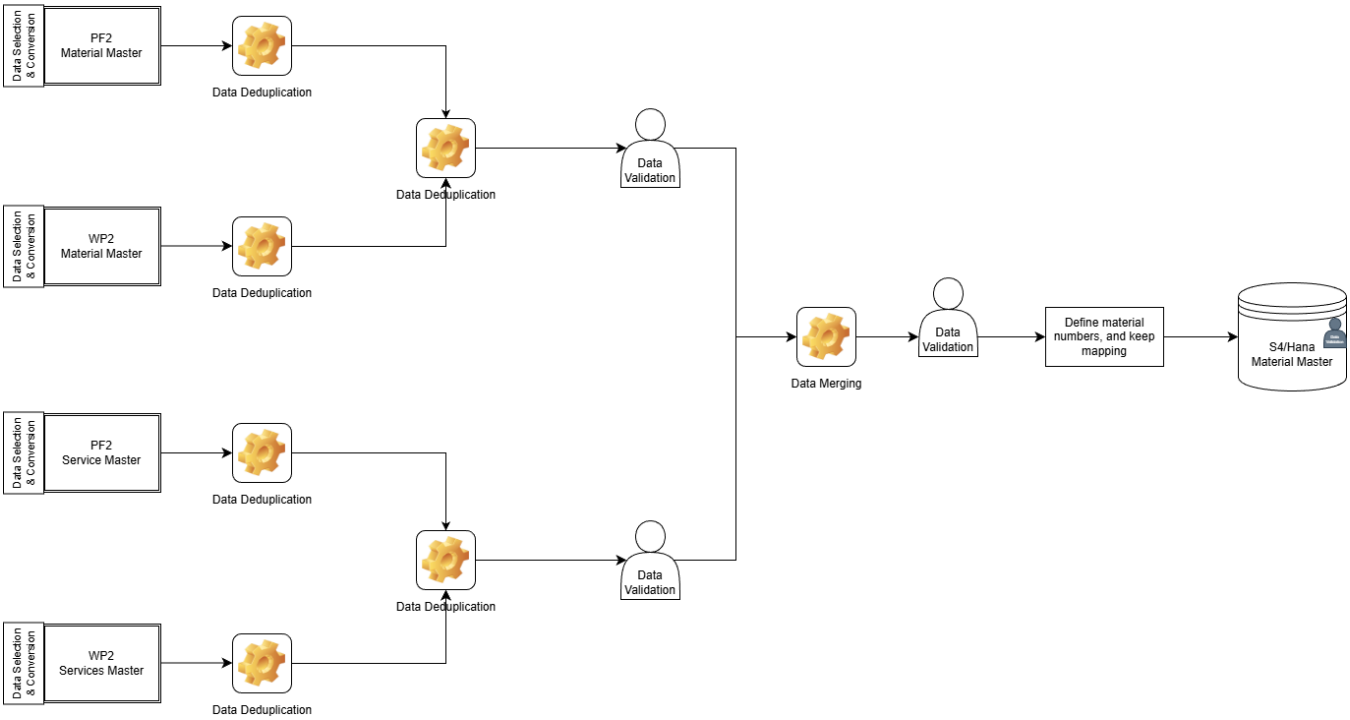


Data Privacy and Sensitivity

N/A

Data Merging / Data Consolidation

The data merging is restricted to the Materia Types **Z720 / ZB20 / ZDIE** being Deduplicated/Merged into ZSER in combination with the Service Master.



Extraction

The agreed Relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target loads

Extraction Run Sheet

Req #	Requirement Description	Team Responsible
001	Do not extract records where ASMD-MATKL (Material Group) is set as out of scope	Syniti Team
002	Do not extract records where ASMD-MLANG (Main Language) is set as out of scope	Syniti Team
003	Do not extract records where ASMD-BKLAS (Valuation Class) is set as out of scope	Syniti Team
004	Do not extract records where ASMD-ASBGR (Service Group) is set as out of scope	Syniti Team
005	Extract all Services that are NOT set as ASMD-LVORM = X (record deleted)	Syniti Team
006	All Services that have been created on the last 36 months are relevant to be migrated	
007	All Services (defined as services) that have a Purchase Order created in the last 6 months or has a goods receipt on the last 6 months, must be included	Syniti Team
008	All Services that are marked for Deletion should be excluded	Syniti Team
009	Additional data selection based on Purchase Order 1. Pass ASMD.ASNUM to ESLL.SRVPOS and get ESLL.PACKNO 2. Pass ESLL.PACKNO to ESLH.PACKNO and get ESLH.HPACKNO 3. Pass ESLH.HPACKNO to EKPO.PACKNO, to get PO document number for the Service Number 4. EKPO.AEDAT should ne on the last 3 Years AND EKPO.LOEKZ <> 'X'	Syniti Team

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set

Data Collection Template (DCT)

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

DCT Rules

Field Name	Field Description	Rule

Extraction Dependencies

Item #	Step Description	Team Responsible

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 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
2. Prepare target-ready data in the structure and format that is required for loading via 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	Obtain Sign-off from Business	SyWay S2P Data Team

3	Review and Validate Error and Preload Reports All Preload and Postload reports are available here:	SyWay S2P Data Team
4	Generate Load Files	SyWay S2P Data Team

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic
001	PF2 - MATERIAL	MARA	MATNR	Product Number	S4/HANA	S_MARA	MATNR	Product Number	Generate a new material code and keep the mapping of Old Material and New Material in a dedicated table
002	PF2 - MATERIAL	MARA	ATTYP	Product Category	S4/HANA	S_MARA	ATTYP	Product Category	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
003	PF2 - MATERIAL	MARA	SATNR	Configuration Product for Retail Variant	S4/HANA	S_MARA	SATNR	Configuration Product for Retail Variant	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
004	PF2 - MATERIAL	MARA	MATKL	Product Group	S4/HANA	S_MARA	MATKL	Product Group	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
005	PF2 - MATERIAL	MARA	MBRSH	Industry Sector	S4/HANA	S_MARA	MBRSH	Industry Sector	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
006	PF2 - MATERIAL	MARA	SPRAS	Language Key	S4/HANA	S_MARA	SPRAS	Language Key	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
007	PF2 - MATERIAL	MARA	MEINS	Base Unit of Measure (ISO Format)	S4/HANA	S_MARA	MEINS	Base Unit of Measure (ISO Format)	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
008	PF2 - MATERIAL	MARA	NUMTP	GTIN Category	S4/HANA	S_MARA	NUMTP	GTIN Category	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.
009	PF2 - MATERIAL	MARA	SPART	Division	S4/HANA	S_MARA	SPART	Division	Apply Data Conversion from OLD to NEW value. The 1:1 relation is expected.

Transformation Mapping

Mapping Table Name	Mapping Table Description
Material Number	Mapping of legacy Material Number to target system value
Material Type	Mapping of legacy Material Types to target system value
Material Group	Mapping of legacy Material Groups to target system value
Product Hierarchy	Mapping of legacy Product Hierarchies to target system value
Language Key	Mapping of legacy Language Key to target system value
Unit of Measure	Mapping of legacy Unit of Measure to target system value

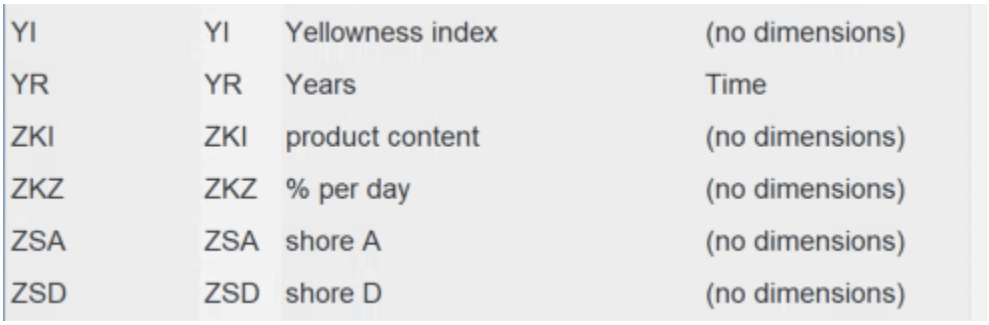
Transformation - Special Requirements

Custom Fields - to be identified the usage of those and whether they will be moved into S4/Hana

Tables: MARA / MAKT

Legacy Table-Field	Data Type	Length	Description
MARA-ZEINR	CHAR	22	Document number (without DMS)
MARA-ZEIAR	CHAR	3	Document type (without DMS)
MARA-ZEIVR	CHAR	2	Document version (without DMS)
MARA-ZEIFQ	CHAR	4	Page format of document (without DMS)
MARA-ZSORT1	CHAR	10	Sort 1
MARA-ZSORT2	CHAR	10	Sort 2
MARA-ZSORT3	CHAR	10	Sort 3
MARA-ZSORT4	CHAR	10	Sort 4
MARA-ZSORT5	CHAR	10	Sort 5
MARA-ZCOLOR	CHAR	6	Color code
MARA-ZFIEL1	CHAR	10	With SCE MATY
MARA-ZFIEL2	CHAR	10	Material description in MF50
MARA-ZFIEL3	CHAR	10	Field 3 for further usage
MARA-ZFIEL4	CHAR	10	Field 4 for further usage
MARA-ZFIEL5	CHAR	10	Field 5 for further usage
MAKT-ZZM_TXTLG	CHAR	186	Material long text

Custom Unit of Measures: to be identified the usage of those and whether they will be moved into S4/Hana



YI	YI	Yellowness index	(no dimensions)
YR	YR	Years	Time
ZKI	ZKI	product content	(no dimensions)
ZKZ	ZKZ	% per day	(no dimensions)
ZSA	ZSA	shore A	(no dimensions)
ZSD	ZSD	shore D	(no dimensions)

Data Mapping: Account Group

Account Group		
Source System	**OLD: Legacy Account Group**	**NEW: S4/Hana Account Group**
PF2	DIEN	ZSER
PF2	Z710	ZSER
PF2	Z720	ZSER
PF2	Z732	ZSER
PF2	ZB10	ZSER
PF2	ZB20	ZSER
PF2	ZESE	ZSER
PF2	ZFS1	ZSER
PF2	ZPSE	ZSER
PF2	ZU10	ZSER
PF2	ZU20	ZSER
WP2	DIEN	ZSER
WP2	ZDIE	ZSER

* some materials were originally created under type ZNLA (e.g., electricity). However, these must be converted to type ZSER. An exception list table should be created to capture all relevant materials, ensuring they are flagged as in-scope for migration.

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Ensure tables are available to be read by Syniti	SyWay S2P Data Team
2	Value Mappings are according to the latest design - <List of Value Mappings>	SyWay S2P Data Team
3	Mapping Tables must be properly updated	Syensqo Data Team

Pre-Load Validation

Project Team

Completeness

Task	Action
Verify Record Count	SyWay S2P Data Team to verify that the total number of relevant records to be migrated equal to the total number of records in the Preload and Load Sheets.
Mandatory Fields	Check mandatory fields for completeness
Field Format	Validate field formats (text length, data types)
Service Group and UOM	Confirm Service Group and UoM exist in target system
Duplicated Records	Check for duplicates before load
Description Multilanguage	Identify whether some examples are being properly loaded. Take few examples to be checked according to the data volume purchased.

Accuracy

Task	Action
Description	Check whether the description matches the with the same value from Legacy System
Legacy Code	Check whether the Legacy code is maintained as expected. The rule is valid for all legacy systems.
UOM Maintained	Check whether the Unit of Measure was respected
Conversion Accuracy	SyWay S2P Data Team to verify that all fields below meet pass the checks: 1. Mandatory Fields 2. Field and Value Mapping Correctness 3. Null Checks 4. Text Length Checks
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
Verify Record Count	Business Data Owner/s to verify that the total number of relevant records from the Preload / Postload / Load sheets are the same

Accuracy

Task	Action
Conversion Accuracy	Business Data Owner/s to verify that all the data in the load table/file is accurate as per endorsed transformation/mapping rules.

Load

The load process includes:

1. Execute the automated data load into target system using load tool or product the load file if the load must be done manually
2. Once the data is loaded to the target system, it will be extracted and prepared for Post Load Data Validation

Load Run Sheet

Item #	Step Description	Team Responsible
001	Go to <Load Tool>	SyWay S2P Data Team
002	Load 3 records for < > to validate if data is loaded successfully without errors	SyWay S2P Data Team
003	Load 3 records for < > to validate if data is loaded successfully without errors	SyWay S2P Data Team
004	Proceed with full load if steps 2 and 3 are validated	SyWay S2P Data Team
005	The data is saved into the staging areas of Migration Cockpit	SyWay S2P Data Team
006	Data Load is executed by Migration Cockpit respecting the proper sequence	SyWay S2P Data Team
007	Validate few records loaded by accessing standard transactions from S/4HNA eg. MM03	SyWay S2P Data Team
008	Generate post load report if step 5 is validated	SyWay S2P Data Team

Load Phase and Dependencies

N/A

Configuration

List the Configurations required before loading can commence

Item #	Configuration Item
001	Company Codes (T001-BUKRS)
002	Plants (T024-WERKS)

003	Material Group (T023-MATKL)
004	EAN Category (MARA-NUMTP)
005	Unit of Measures (T006-MSEHI) Volume Unit Weight Unit
006	Division (MARA-SPART)
007	Lab / Office (MARA-LABOR)
008	Authorization Group (MARA-BEGRU)
009	Product Allocation (MARA-KOSCH)
010	Product Hierarchy (MARA-PRDHA)
012	Material Status (MARA-MSTAE)
013	General Item Category Group (MTPOS_MARA)
014	Dangerous Goods Indicator Profile (MARA-PROFL)
015	Dangerous Goods Packaging Status (MARA-DG_PACK_STATUS)
016	Packaging Code (MARA-PACKCODE)
017	ANP Code - Brazil (MARA-ANP)
018	Material Type (MARA-MTART)

Conversion Objects

Object #	Preceding Object Conversion Approach

Error Handling

Errors encountered during extraction, transformation, or load will be logged in the project's Defect Management tool (JIRA). Each error will be classified (Critical/High/Medium/Low), assigned to the responsible team (Data, Functional, or Technical), and resolved through re-extraction, mapping updates, or re-load as required. All corrections and re-runs will be tracked until closure. The table below depicts some possible system errors for this data object during data load. All data load error is to be logged as defect and managed within the Defect Management

Error Type	Error Description	Action Taken
Extraction Error	Missing records due to incorrect filters (e.g., wrong client MANDT or exclusion by mistake).	Validate extraction queries; re-run extraction; compare counts with expected totals; log defect if mismatch persists.
Transformation Error	Value mapping not found (e.g., UoM, Material Group, Tax Code, Language Z9).	Update mapping tables; reprocess failed records; raise defect for missing mappings.
Data Quality Error	Invalid or missing mandatory fields (e.g., no English description, MAKTX > 40 chars, UoM misaligned).	Correct source data or apply cleansing rules; reload corrected records; document remediation.
Deduplication Conflict	Same Service/Material exists in MARA and ASMD, or duplicates detected in descriptions/UoMs.	Apply deduplication rules; retain canonical record; mark duplicates as excluded; raise defect for business decision if unclear.
Load Error	Migration Cockpit rejects records (template format error, number range collision, missing config).	Correct load file; align with configuration (e.g., Material Type/Number Range); reload subset; log defect.
Post-Load Validation Error	Count mismatch between source and target, or long-texts /language entries missing.	Execute reconciliation report; reload missing records; document exceptions; raise defect for sustained inconsistencies.

Post-Load Validation

Project Team

Completeness

Task	Action
Verify Count	Check record count
	Verify random samples in S/4 using transaction AC03.
	Ensure data appears in standard search helps (e.g., ML81N).
	Log any mismatches or errors for remediation.

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	Download Post Load Reports from dspMigrate and verify that the record count loaded in the target S/4 HANA is the same count as of the endorsed load file.

Accuracy

Task	Action
Conversion Accuracy	Verify that the Material data in target S/4 HANA were loaded correctly via dspMigrate post load reports or standard reports from S/4 HANA.

Syniti Reports

#	Topic	Jira Ticket	Creation Date	Resolution Date	
001	Total Number of Records (RAW) in WP2 and QP2				
003	Total Number of Records after applying data selection in WP2 and QP2				

004	Reports per Eligibility Reason ▪ Included and reason ▪ Excluded and reason				
005	Create a report with the following eligibility reason, and should be provided the elected materials: IsNew6M: New materials created in the past 6 months HasSO3Y: Sales Order created in the past 3 Years HasPO3Y: Purchase Order created in the past 3 Years HasPP3Y: Production Document created in the past 3 Years HasOpenPO: Open Purchase Order HasOpenSO: Open Sales Order HasOpenPP: Open Production Order IsObsoleteText: Obsolete Text (OBS) HasNoInScopePlant: Has NO In Scope Plant ExcludeByMSTAE: Excluded by Material Status ExcudedByLOEKZ: Excluded by Deletion Indicator				

To be decided what to do with the Z Fields below:

Source System	Source Table	Source Field	Long Description	Expectation
PF2	ASMD	ZZMBISMT	This fields regards the Old Service Number	To be decided what to do with the source field

Open Questions

#	Topic	Jira Ticket	Creation Date	Resolution Date	Solution provided	Status
001	PF2-020: Please confirm the usage of field ASMD-ZZMBISMT and whether it should be included in the Data Migration to the target system.	PDM-622 ~~PDM-600~~	19 Sept 2025			
002	PF2-020: confirm the usage of field MARA-ZZM_TXTLG and whether it should be included in the Data Migration to the target system.	PDM-622 ~~PDM-601~~ ~~PDM-600~~	19 Sept 2025			
003	For the Data Selection, we are currently considering ALL Service Category (ASMD-ASTYP) as being relevant to be used (including the ones marked as OLD),	PDM-622 ~~PDM-602~~ ~~PDM-600~~	19 Sept 2025			
004	TARGET SYSTEM: Inform the Number Ranges in MDS for the proposed per Material Type	PDM-622	23 Sept 2025			
005	S2P-DATA: Multiple tickets consolidated in a unique one	PDM-622	22 Sept 2025			
006	The field ASMD-ZZMBISMT regards the Old Service Number. Pending a decision of what has to be done with this source field	PDM-622	23 Sept 2025			
007	Some of the items are currently classified as Services (ASMD), however they could in fact be non-stockable materials. If that's the case, the Business can be involved to decide which material type is most appropriate to be used. For the moment, we keep them as they are until further clarification.	PDM-691	02 Oct 2025			
008	Action from Data Cleansing team is needed (already mentioned by John); some Materials and Services have the Local Language (IT, ES, PT, DE etc) defined as ENGLISH	PDM-691	02 Oct 2025			

Key Assumptions

- Master Data Standard (MDS) is up to date as on the date of documenting this conversion approach and data load.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 369)	**Nov 20, 2025 09:12**	**BUOSI-ext, Angelo**	
v. 368	Nov 18, 2025 15:25	**BUOSI-ext, Angelo**	
v. 367	Nov 13, 2025 08:54	**BUOSI-ext, Angelo**	
v. 366	Oct 30, 2025 09:18	**BUOSI-ext, Angelo**	
v. 365	Oct 21, 2025 10:43	**BUOSI-ext, Angelo**	
v. 364	Oct 21, 2025 10:43	**BUOSI-ext, Angelo**	
v. 363	Oct 20, 2025 10:43	**BUOSI-ext, Angelo**	
v. 362	Oct 20, 2025 10:42	**BUOSI-ext, Angelo**	
v. 361	Oct 17, 2025 13:53	**BUOSI-ext, Angelo**	
v. 360	Oct 17, 2025 13:36	**BUOSI-ext, Angelo**	

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.

From Jun 20, 2025 to Nov 20, 2025	Actor	Type	Activity	Version
	BUOSI-ext, Angelo	Edit	updated the page at 11:14 am	
	BUOSI-ext, Angelo	Edit	created the page at 10:23 am	