CNV-9065 Open Sales Orders - Standard/Rush/FOC /Consignment/Intercompany/Thirdparty/Returns/Credit Memo/Debit Memo

Status	Approved
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Stakeholders	

Purpose

The purpose of this document is to define the conversion approach to create Open Sales Order in S/4 HANA.

Open sales orders are orders that are not fully delivered or billed and still require fulfillment or financial processing. This conversion ensures business continuity and data consistency for ongoing customer transactions. It should be a seamless migration, and business is able to continue working with open Sales Order in S/4 HANA.

Conversion Scope

The scope of this document covers the approach for converting Open Sales Orders, including relevant schedule lines and partner data, from legacy source systems into SAP S/4HANA.

From the current system landscape, open sales order data resides separately across legacy systems (WP2 and PF2), often with inconsistent formatting, incomplete references, and varying document structures. It is required to harmonize, cleanse, and validate the sales order data to ensure that only business-relevant, open orders are migrated to S/4HANA.

While WP2 and PF2 serve as the primary source systems, various transformation and mapping logic will be applied to generate load templates that conform to the target S/4HANA order structure, including header, item, schedule line, pricing, and partner functions. The conversion scope specifically includes order items that are not fully delivered or billed, with open quantities, future delivery dates, or billing schedules, and which remain critical to business continuity post go-live.

The data from legacy system includes:

1. Documents where the document category (VBAK-VBTYP) is either
    a. "C" Standard order
    b. "I" Order without charge
    c. "K" Credit memo request
    d. "L" Debit memo request
    e. "H" Return order
2. Sales Order items with Open Quantities:
    a. Delivery relevant order items with undelivered items, i.e., delivery quantity < order quantity.
    b. Non delivery relevant order items (Credit/Debit Memo etc) with unbilled items, i.e., billed quantity < order quantity.
    c. Order items where the delivery status is not marked as complete.
3. The Sales Area of the Sales Order are within the scope of S4 HANA.
4. Sales Orders created for the Customers and Materials in scope.

The data from legacy system excludes:

1. Fully Delivered and Billed Sales Order items:
    a. Order items where all items are delivered (delivery complete) and invoiced (billing complete).
    b. Order items archived in legacy system and no longer used operationally.
2. Orders Without Business or Legal Justification:
    a. Orders with no meaningful transactional history, or created erroneously.
    b. Orders flagged by business for exclusion due to redundancy.
3. M2 and M3 (VBAK-AUART) orders, these will be migrated as contract instead of Sales order.
4. Sales Orders listed in 9065_Drop_List (The list will include the open SO that shall not be migrated to S4). If the effort is too much to close the SO in the legacy, the business can list the SO number here to be excluded from migration.

The following table illustrating the possible legacy sales scenarios and it's corresponding S4 sales scenarios. The SAP documents might change due to re-design of the system landscape or system process.

Definition of documents :

- Standard Sales Orders and Customer Orders: Normal Sales Order
- Direct Delivery Sales Orders: Where a sales org is selling, but delivering from a plant that belongs to another affiliate
- IC SO : Sales Order created for another affiliate
- IC PO : Purchase Order created for another affiliate (Not in 9065 scope)
- IC STO : Intercompany Stock Transport Order

- Third Party Sales Orders : A purchase requisition (and subsequently a purchase order) is automatically triggered from the sales order. The vendor delivers the goods directly to the customer. No physical goods movement occurs in the Syensqo system, as the delivery is managed externally by the vendor. Generated PO in the legacy shall be closed if the SO is in the migration scope.
- Individual Purchase Order Sales Orders : A purchase requisition (and subsequently a purchase order) is automatically triggered from the sales order. The vendor delivers the goods to the Syensqo plant as Sales Order Special Stock (E-stock). The stock is reserved specifically for that sales order, and actual goods receipt and goods issue are recorded and managed within the system. Generated PO in the legacy shall be closed if the SO is in the migration scope.
- Credit / Debit Memo Request : Credit / Debit request created to reduce / increase customer account payable
- Return Order : A standard SAP ERP document created to process and manage the return of goods from a customer

Scenario No	Source	Scope (Legacy Scenario)	Supplying Entity Target System	Receiving Entity Target System	Source Approx No. of Records	Target System	Target Approx No. of Records
1	WP2	Standard Open Sales Orders	S/4HANA ROW	S/4HANA ROW	29500	S/4HANA ROW	29500
2	PF2	Standard Open Sales Orders	S/4HANA ROW	S/4HANA ROW	5500	S/4HANA ROW	5500
3	WP2	Standard Open Sales Orders	S/4HANA China	S/4HANA China	1500	S/4HANA China	1500
4	PF2	Standard Open Sales Orders	S/4HANA China	S/4HANA China	1500	S/4HANA China	1500
7	WP2	Direct Delivery Open Sales Orders	S/4HANA ROW	S/4HANA ROW	2500	S/4HANA ROW	2500
8	PF2	Direct Delivery Open Sales Orders	S/4HANA ROW	S/4HANA ROW	500	S/4HANA ROW	500
9	WP2	Direct Delivery Open Sales Orders	S/4HANA China	S/4HANA China	50	S/4HANA China	50
10	PF2	Direct Delivery Open Sales Orders	S/4HANA China	S/4HANA China	500	S/4HANA China	500
11	WP2	Direct Delivery Open Sales Orders	S/4HANA ROW	S/4HANA China	0	S/4HANA China - Customer SO S/4HANA China- IC PO (Out of Scope) S/4HANA ROW - IC SO (O ut of Scope)	0
12	PF2	Direct Delivery Open Sales Orders	S/4HANA ROW	S/4HANA China	200	S/4HANA China - Customer SO S/4HANA China- IC PO (Out of Scope) S/4HANA ROW - IC SO (Out of Scope)	200
13	WP2	Direct Delivery Open Sales Orders	S/4HANA China	S/4HANA ROW	350	S/4HANA ROW - Customer SO S/4HANA ROW - IC PO (Out of Scope) S/4HANA China - IC SO (Out of Scope)	350
14	PF2	Direct Delivery Open Sales Orders	S/4HANA China	S/4HANA ROW	20	S/4HANA ROW - Customer SO S/4HANA ROW - IC PO (Out of Scope) S/4HANA China - IC SO (Out of Scope)	20
15	WP2 PF2	WP2 IC Purchase Order PF2 IC Sales Order	S/4HANA ROW	S/4HANA ROW	N/A	S/4HANA ROW - IC STO (Out of Scope)	N/A
16	WP2 PF2	PF2 IC Purchase Order WP2 IC Sales Order	S/4HANA ROW	S/4HANA ROW	N/A	S/4HANA ROW - IC STO (Out of Scope)	N/A
17	WP2 PF2	WP2 IC Purchase Order PF2 IC Sales Order	S/4HANA China	S/4HANA China	N/A	S/4HANA China - IC STO (Out of Scope)	N/A
18	WP2 PF2	PF2 IC Purchase Order WP2 IC Sales Order	S/4HANA China	S/4HANA China	N/A	S/4HANA China - IC STO (Out of Scope)	N/A
19	WP2 PF2	WP2 IC Purchase Order PF2 IC Sales Order	S/4HANA ROW	S/4HANA China	N/A	S/4HANA China -IC PO (Out of Scope) S/4HANA ROW - IC SO (Out of Scope)	N/A
20	WP2 PF2	PF2 IC Purchase Order WP2 IC Sales Order	S/4HANA ROW	S/4HANA China	N/A	S/4HANA China -IC PO (Out of Scope) S/4HANA ROW - IC SO (Out of Scope)	N/A

21	WP2 PF2	WP2 IC Purchase Order PF2 IC Sales Order	S/4HANA China	S/4HANA ROW	N/A	S/4HANA ROW - IC PO (Out of Scope) S/4HANA China - IC SO (O ut of Scope)	N/A
22	WP2 PF2	PF2 IC Purchase Order WP2 IC Sales Order	S/4HANA China	S/4HANA ROW	N/A	S/4HANA ROW - IC PO (Out of Scope) S/4HANA China - IC SO (O ut of Scope)	N/A
23	WP2	WP2 STO	S/4HANA ROW	S/4HANA ROW	N/A	S/4HANA ROW - IC STO (Out of Scope)	N/A
24	PF2	PF2 STO	S/4HANA ROW	S/4HANA ROW	N/A	S/4HANA ROW - IC STO (Out of Scope)	N/A
25	WP2	WP2 STO	S/4HANA China	S/4HANA China	N/A	S/4HANA China - IC STO (Out of Scope)	N/A
26	PF2	PF2 STO	S/4HANA China	S/4HANA China	N/A	S/4HANA China - IC STO (Out of Scope)	N/A
27	WP2	WP2 STO	S/4HANA ROW	S/4HANA China	N/A	S/4HANA China -IC PO (O ut of Scope) S/4HANA ROW - IC SO (Out of Scope)	N/A
28	PF2	PF2 STO	S/4HANA ROW	S/4HANA China	N/A	S/4HANA China -IC PO (O ut of Scope) S/4HANA ROW - IC SO (Out of Scope)	N/A
29	WP2	WP2 STO	S/4HANA China	S/4HANA ROW	N/A	S/4HANA ROW -IC PO (Out of Scope) S/4HANA China - IC SO (Out of Scope)	N/A
30	PF2	PF2 STO	S/4HANA China	S/4HANA ROW	N/A	S/4HANA ROW -IC PO (Out of Scope) S/4HANA China - IC SO (Out of Scope)	N/A
31	WP2	Third Party Open Sales Orders	S/4HANA ROW	S/4HANA ROW	100	S/4HANA ROW *PO will be created automatically	100
32	PF2	Third Party Open Sales Orders	S/4HANA ROW	S/4HANA ROW	100	S/4HANA ROW *PO will be created automatically	100
33	WP2	Third Party Open Sales Orders	S/4HANA China	S/4HANA China	0	S/4HANA China *PO will be created automatically	0
34	PF2	Third Party Open Sales Orders	S/4HANA China	S/4HANA China	0	S/4HANA China *PO will be created automatically	0
35	WP2	Individual Purchase Order Open Sales Orders	S/4HANA ROW	S/4HANA ROW	0	S/4HANA ROW *PO will be created automatically	0
36	PF2	Individual Purchase Order Open Sales Orders	S/4HANA ROW	S/4HANA ROW	0	S/4HANA ROW *PO will be created automatically	0
37	WP2	Individual Purchase Order Open Sales Orders	S/4HANA China	S/4HANA China	50	S/4HANA China *PO will be created automatically	50
38	PF2	Individual Purchase Order Open Sales Orders	S/4HANA China	S/4HANA China	0	S/4HANA China *PO will be created automatically	0
39	WP2	Credit / Debit Memo Request	S/4HANA ROW	S/4HANA ROW		S/4HANA ROW	
40	PF2	Credit / Debit Memo Request	S/4HANA ROW	S/4HANA ROW		S/4HANA ROW	
41	WP2	Credit / Debit Memo Request	S/4HANA China	S/4HANA China		S/4HANA China	
42	PF2	Credit / Debit Memo Request	S/4HANA China	S/4HANA China		S/4HANA China	
43	WP2	Return Order	S/4HANA ROW	S/4HANA ROW		S/4HANA ROW	
44	PF2	Return Order	S/4HANA ROW	S/4HANA ROW		S/4HANA ROW	

45	WP2	Return Order	S/4HANA China	S/4HANA China		S/4HANA China	
46	PF2	Return Order	S/4HANA China	S/4HANA China		S/4HANA China	

Additional Information

Multi-language Requirement

Document Management

Open Sales Orders attachment will be managed under CNV-9067 Attachment for open sales transaction

Legal Requirement

Special Requirements

Target Design

The technical design of the target for this conversion approach.

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
VBAK	AUART	AUART	Sales Document Type	CHAR	8	Mandatory
VBAK	VKORG	VKORG	Sales Organization	CHAR	8	Mandatory
VBAK	VTWEG	VTWEG	Distribution Channel	CHAR	4	Mandatory
VBAK	SPART	SPART	Division	CHAR	4	Mandatory
VBAK	VKGRP	VKGRP	Sales Group	CHAR	6	Optional
VBAK	VKBUR	VKBUR	Sales Office	CHAR	8	Optional
VBAK	VDATU	EDATU_VBAK	Requested Delivery Date	DATS	16	Mandatory
VBKD	BSTDK	BSTDK	Customer Reference Date	DATS	16	Optional
VBKD	BSARK	BSARK	Customer Purchase Order Type	CHAR	8	Optional
VBKD	IHREZ	IHREZ	Your Reference	CHAR	24	Optional
VBAK	BNAME	BNAME_V	Name of orderer	CHAR	70	Optional
VBAK	TELF1	TELF1_VP	Telephone Number	CHAR	32	Optional
VBKD	KONDA	KONDA	Customer Price Group	CHAR	4	Optional
VBKD	KDGRP	KDGRP	Customer Group	CHAR	4	Optional
VBKD	BZIRK	BZIRK	Sales District	CHAR	12	Optional
VBKD	PLTYP	PLTYP	Price List Type	CHAR	4	Optional
VBKD	INCO1	INCO1	Incoterms (Part 1)	CHAR	6	Optional
VBKD	INCO2	INCO2	Incoterms (Part 2)	CHAR	56	Optional
VBKD	ZTERM	DZTERM	Terms of Payment Key	CHAR	8	Optional
VBAK	LIFSK	LIFSK	Delivery Block (Document Header)	CHAR	4	Optional
VBAK	FAKSK	FAKSK	Billing Block in SD Document	CHAR	4	Optional
VBAK	AUGRU	AUGRU	Order Reason (Reason for the Business Transaction)	CHAR	6	Optional
VBAK	AUTLF	AUTLF	Complete Delivery Defined for Each Sales Order	CHAR	2	Optional
VBKD	PRSDT	PRSDT	Date for Pricing and Exchange Rate	DATS	16	Mandatory
VBAK	KVGR1	KVGR1	Customer Group 1	CHAR	6	Optional
VBAK	KVGR2	KVGR2	Customer Group 2	CHAR	6	Optional
VBAK	KVGR3	KVGR3	Customer Group 3	CHAR	6	Optional

VBAK	KVGR4	KVGR4	Customer Group 4	CHAR	6	Optional
VBAK	KVGR5	KVGR5	Customer Group 5	CHAR	6	Optional
VBKD	BSTKD	BSTKD	Customer Reference	CHAR	70	Optional
VBKD	BSTKD_E	BSTKD_E	Ship-to Party's Customer Reference	CHAR	70	Optional
VBKD	BSARK_E	BSARK_E	Ship-to Party Purchase Order Type	CHAR	8	Optional
VBKD	IHREZ_E	IHREZ_E	Ship-to Party Character	CHAR	24	Optional
VBAK	AUDAT	AUDAT	Document Date (Date Received/Sent)	DATS	16	Optional
VBAK	VSBED	VSBED	Shipping Conditions	CHAR	4	Optional
VBAK	MAHZA	MAHZA	Number of Contacts from the Customer	DEC	2	Optional
VBAK	VGBEL	VGBEL	Document Number of Reference Document	CHAR	20	Optional
VBAK	BUKRS_VF	BUKRS_VF	Company Code to Be Billed	CHAR	8	System
VBAK	TAXK1	TAXK1_AK	Alternative Tax Classification	CHAR	2	Optional
VBAK	TAXK2	TAXK2	Tax Classification 2 for Customer	CHAR	2	Optional
VBAK	TAXK3	TAXK3	Tax Classification 3 for Customer	CHAR	2	Optional
VBAK	TAXK4	TAXK4	Tax Classification 4 for Customer	CHAR	2	Optional
VBAK	TAXK5	TAXK5	Tax Classification 5 for Customer	CHAR	2	Optional
VBAK	TAXK6	TAXK6	Tax Classification 6 for Customer	CHAR	2	Optional
VBAK	TAXK7	TAXK7	Tax Classification 7 for Customer	CHAR	2	Optional
VBAK	TAXK8	TAXK8	Tax Classification 8 for Customer	CHAR	2	Optional
VBAK	XBLNR	XBLNR_V1	Reference Document Number	CHAR	32	Optional
VBAK	ZUONR	ORDNR_V	Assignment Number	CHAR	36	Optional
VBKD	KZAZU	KZAZU_D	Order Combination Indicator	CHAR	2	Optional
VBKD	PERFK	PERFK	Invoice Dates (Calendar Identification)	CHAR	4	Optional
VBKD	PERRL	PERRL	Invoice List Schedule (calendar identification)	CHAR	4	Optional
VBKD	MRNKZ	MRNKZ	Manual Invoice Maintenance	CHAR	2	Optional
VBKD	VALTG	VALTG	Additional Value Days	NUMC	4	Optional
VBKD	VALDT	VALDT	Fixed Value Date	DATS	16	Optional
VBKD	ZLSCH	SCHZW_BSEG	Payment Method	CHAR	2	Optional
VBKD	KTGRD	KTGRD	Account Assignment Group for Customer	CHAR	4	Optional
VBKD	FKDAT	FKDAT	Billing Date	DATS	16	Optional
VBKD	FBUDA	FBUDA	Date on which services are rendered	DATS	16	Optional
VBKD	ABSSC	ABSSCHE_CM	Payment Guarantee Procedure	CHAR	12	Optional
VBKD	EMPST	EMPST	Receiving Point	CHAR	50	Optional
VBKD	LCNUM	LCNUM	Financial doc. processing: Internal financial doc. number	CHAR	20	Optional
VBKD	KDKG1	KDKG1	Customer condition group 1	CHAR	4	Optional
VBKD	KDKG2	KDKG2	Customer condition group 2	CHAR	4	Optional
VBKD	KDKG3	KDKG3	Customer condition group 3	CHAR	4	Optional
VBKD	KDKG4	KDKG4	Customer condition group 4	CHAR	4	Optional
VBKD	KDKG5	KDKG5	Customer condition group 5	CHAR	4	Optional
VBAK	WAERK	WAERK	SD Document Currency	CUKY	10	Optional
VBAK	LANDTX	LANDTX	Tax Departure Country/Region	CHAR	6	Optional
VBAK	STCEG_L	LAND1TX	Tax Destination Country/Region	CHAR	6	Optional
VBAK	XEGDR	XEGDR	Indicator: Triangular Deal Within the EU	CHAR	2	Optional
VBKD	VSART	VSARTTR	Shipping Type	CHAR	4	Optional
VBKD	SDABW	SDABW	Special Processing Indicator	CHAR	8	Optional
VBAP	VBELN	VBELN_VA	Sales Document	CHAR	20	Mandatory
VBAP	POSNR	POSNR_VA	Sales Document Item	NUMC	12	Mandatory

VBAP	UEPOS	UEPOS	Higher-Level Item in Bill of Material Structures	NUMC	12	Optional
VBAP	POSEX	POSEX	Item Number of the Underlying Purchase Order	CHAR	12	Optional
VBAP	GRPOS	GRPOS	Item for Which this Item is an Alternative	NUMC	12	Optional
VBAP	CHARG	CHARG_D	Batch Number	CHAR	20	Optional
VBAP	GRKOR	GRKOR	Delivery Group (Items are delivered together)	NUMC	6	Optional
VBAP	KZTLF	KZTLF	Partial delivery at item level	CHAR	2	Optional
VBAP	FAKSP	FAKSP_AP	Billing Block for Item	CHAR	4	Optional
VBKD	FKDAT	FKDAT	Billing Date	DATS	16	Optional
VBAP	WERKS	WERKS_EXT	Plant (Own or External)	CHAR	8	Optional
VBAP	LGORT	LGORT_D	Storage Location	CHAR	8	Optional
VBAP	ZMENG	DZMENG	Target Quantity in Sales Units	QUAN	7	Optional
VBAP	ZIEME	DZIEME	Target Quantity UoM	UNIT	6	Optional
VBAP	PSTYV	PSTYV	Sales Document Item Category	CHAR	8	Optional
VBAP	ARKTX	ARKTX	Short text for sales order item	CHAR	80	Optional
VBAP	MVGR1	MVGR1	Material Group 1	CHAR	6	Optional
VBAP	MVGR2	MVGR2	Material Group 2	CHAR	6	Optional
VBAP	MVGR3	MVGR3	Material Group 3	CHAR	6	Optional
VBAP	MVGR4	MVGR4	Material Group 4	CHAR	6	Optional
VBAP	MVGR5	MVGR5	Material Group 5	CHAR	6	Optional
VBAP	PRODH	PRODH_D	Product Hierarchy	CHAR	36	Optional
VBAP	MATKL	MATKL	Material Group	CHAR	18	Optional
VBKD	BSTKD	BSTKD	Customer Reference	CHAR	70	Mandatory
VBKD	BSTDK	BSTDK	Customer Reference Date	DATS	16	Optional
VBKD	BSARK	BSARK	Customer Purchase Order Type	CHAR	8	Optional
VBKD	IHREZ	IHREZ	Your Reference	CHAR	24	Optional
VBKD	BSTKD_E	BSTKD_E	Ship-to Party's Customer Reference	CHAR	70	Optional
VBKD	BSARK_E	BSARK_E	Ship-to Party Purchase Order Type	CHAR	8	Optional
VBKD	IHREZ_E	IHREZ_E	Ship-to Party Character	CHAR	24	Optional
VBKD	KONDA	KONDA	Customer Price Group	CHAR	4	Optional
VBKD	KDGRP	KDGRP	Customer Group	CHAR	4	Optional
VBKD	BZIRK	BZIRK	Sales District	CHAR	12	Optional
VBKD	PLTYP	PLTYP	Price List Type	CHAR	4	Optional
VBKD	INCO1	INCO1	Incoterms (Part 1)	CHAR	6	Optional
VBKD	INCO2	INCO2	Incoterms (Part 2)	CHAR	56	Optional
VBKD	KZAZU	KZAZU_D	Order Combination Indicator	CHAR	2	Optional
VBKD	PERFK	PERFK	Invoice Dates (Calendar Identification)	CHAR	4	Optional
VBKD	PERRL	PERRL	Invoice List Schedule (calendar identification)	CHAR	4	Optional
VBKD	MRNKZ	MRNKZ	Manual Invoice Maintenance	CHAR	2	Optional
VBKD	VALTG	VALTG	Additional Value Days	NUMC	4	Optional
VBKD	VALDT	VALDT	Fixed Value Date	DATS	16	Optional
VBKD	ZTERM	DZTERM	Terms of Payment Key	CHAR	8	Optional
VBKD	ZLSCH	SCHZW_BSEG	Payment Method	CHAR	2	Optional
VBKD	KTGRD	KTGRD	Account Assignment Group for Customer	CHAR	4	Optional
VBKD	PRSDT	PRSDT	Date for Pricing and Exchange Rate	DATS	16	Optional
VBKD	FBUDA	FBUDA	Date on which services are rendered	DATS	16	Optional
VBKD	ABSSC	ABSSCHE_CM	Payment Guarantee Procedure	CHAR	12	Optional
VBKD	LCNUM	LCNUM	Financial doc. processing: Internal financial doc. number	CHAR	20	Optional

VBKD	EMPST	EMPST	Receiving Point	CHAR	50	Optional
VBKD	KDKG1	KDKG1	Customer condition group 1	CHAR	4	Optional
VBKD	KDKG2	KDKG2	Customer condition group 2	CHAR	4	Optional
VBKD	KDKG3	KDKG3	Customer condition group 3	CHAR	4	Optional
VBKD	KDKG4	KDKG4	Customer condition group 4	CHAR	4	Optional
VBKD	KDKG5	KDKG5	Customer condition group 5	CHAR	4	Optional
VBAP	VRKME	VRKME	Sales Unit	UNIT	6	Mandatory
VBAP	FMENG	FMENG	Quantity is fixed	CHAR	2	Optional
VBAP	UEBTK	UEBTK_V	Unlimited Overdelivery Allowed	CHAR	2	Optional
VBAP	UEBTO	UEBTO	Overdelivery Tolerance	DEC	2	Optional
VBAP	UNTTO	UNTTO	Underdelivery Tolerance	DEC	2	Optional
VBAP	SPART	SPART	Division	CHAR	4	Optional
VBAP	UMVKZ	UMVKZ	Numerator (factor) for conversion of sales quantity into SKU	DEC	3	Optional
VBAP	UMVKN	UMVKN	Denominator (divisor) for conversion of sales Qty into SKU	DEC	3	Optional
VBAP	BRGEW	BRGEW_AP	Gross Weight of the Item	QUAN	8	Optional
VBAP	NTGEW	NTGEW_AP	Net Weight of the Item	QUAN	8	Optional
VBAP	GEWEI	GEWEI	Unit of Weight	UNIT	6	Optional
VBAP	VOLUM	VOLUM_AP	Volume of the item	QUAN	8	Optional
VBAP	VOLEH	VOLEH	Volume Unit	UNIT	6	Optional
VBAP	LPRIO	LPRIO	Delivery Priority	NUMC	4	Optional
VBAP	VSTEL	VSTEL	Shipping Point / Receiving Point	CHAR	8	Optional
VBAP	ROUTE	ROUTE	Route	CHAR	12	Optional
VBAP	TAXM1	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM2	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM3	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM4	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM5	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM6	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM7	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM8	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	TAXM9	TAXMT	Tax Classification for Material	CHAR	2	Optional
VBAP	KONDM	KONDM	Material Price Group	CHAR	4	Optional
VBAP	BWTAR	BWTAR_D	Valuation Type	CHAR	20	Optional
VBAP	FIXMG	FIXMG	Delivery Date and Quantity Fixed	CHAR	2	Optional
VBAP	BEDAE	BEDAE	Requirements type	CHAR	8	Optional
VBAP	EXART	EXART	Business Transaction Type	CHAR	4	Optional
VBAP	MFRGR	MFRGR	Material Freight Group	CHAR	16	Optional
VBAP	PMATN	PMATN	Pricing Reference Material	CHAR	80	Optional
VBAP	ANTLF	ANTLF	Maximum Number of Partial Deliveries Allowed Per Item	DEC	1	Optional
VBAP	J_1BTAXLW1	J_1BTAXLW1	Tax law: ICMS	CHAR	6	Optional
VBAP	J_1BTAXLW2	J_1BTAXLW2	Tax law: IPI	CHAR	6	Optional
VBAP	J_1BTXSDC	J_1BTXSDC_	SD tax code	CHAR	4	Optional
VBAP	KMPMG	KMPMG	Component Quantity	QUAN	7	Optional
VBAP	WAERK	WAERK	SD Document Currency	CUKY	10	Optional
VBAP	PRCTR	PRCTR	Profit Center	CHAR	20	Optional
			Depreciation percentage for financial document			

VBKD	AKPRZ	AKPRZ	processing	DEC	3	Optional
VBAP	VGBEL	VGBEL	Document Number of Reference Document	CHAR	20	Optional
VBAP	VGPOS	VGPOS	Item number of the reference item	NUMC	12	Optional
VBAP	KDMAT	MATNR_KU	Material Number Used by Customer	CHAR	70	Optional
VBKD	VSART	VSARTTR	Shipping Type	CHAR	4	Optional
VBKD	SDABW	SDABW	Special Processing Indicator	CHAR	8	Optional
VBAP	J_1BCFOP	J_1BCFOP	CFOP Code and Extension	CHAR	20	Optional
VBAP	MATWA	MATWA	Material Entered	CHAR	80	Optional
VBKD	J_1AFITP	J_1AFITP_D	Tax Type	CHAR	4	Optional
VBKD	J_1ARFZ	J_1ARFZVAT	Reason for Zero VAT	CHAR	2	Optional
VBAP	J_1BTAXLW4	J_1BTAXLW4	COFINS Tax Law	CHAR	6	Optional
VBAP	J_1BTAXLW5	J_1BTAXLW5	PIS Tax Law	CHAR	6	Optional
VBAP	PMATN	PMATN	Pricing Reference Material	CHAR	80	Optional
VBAP	MATWA	MATWA	Material Entered	CHAR	80	Optional
VBPA	PARVW	PARVW	Partner Function	CHAR	4	Optional
VBPA	KUNNR	KUNNR	Customer Number	CHAR	20	Optional
ADRC	TITLE	AD_TITLE	Form-of-Address Key	CHAR	8	Optional
ADRC	NAME1	AD_NAME1	Name 1	CHAR	80	Optional
ADRC	NAME2	AD_NAME2	Name 2	CHAR	80	Optional
ADRC	NAME3	AD_NAME3	Name 3	CHAR	80	Optional
ADRC	NAME4	AD_NAME4	Name 4	CHAR	80	Optional
ADRC	STREET	AD_STREET	Street	CHAR	120	Optional
VBPA	LAND1	LAND1	Country/Region Key	CHAR	6	Optional
ADRC	COUNTRY	LAND1	Country/Region Key	CHAR	6	Optional
ADRC	POST_CODE1	AD_PSTCD1	City postal code	CHAR	20	Optional
ADRC	PO_BOX	AD_POBX	PO Box	CHAR	20	Optional
ADRC	PO_BOX_LOC	AD_POBXLOC	PO Box city	CHAR	80	Optional
ADRC	CITY1	AD_CITY1	City	CHAR	80	Optional
ADRC	CITY2	AD_CITY2	District	CHAR	80	Optional
ADRC	REGIO	REGIO	Region (State, Province, County)	CHAR	6	Optional
ADRC	PO_BOX	AD_POBX	PO Box	CHAR	20	Optional
ADR2	TELNR_LONG	AD_TELNRLG	Complete Number: Dialing Code+Number+Extension	CHAR	60	Optional
ADR3	FAXNR_LONG	AD_FXNRLNG	Complete Number: Dialing Code+Number+Extension	CHAR	60	Optional
STXH	TDSPRAS	SPRAS	Language Key	LANG	2	Optional
ADRC	LANGU	SPRAS	Language Key	LANG	2	Optional
VBPA	ABLAD	ABLAD	Unloading Point	CHAR	50	Optional
VBPA	LZONE	LZONE	Transportation zone to or from which the goods are delivered	CHAR	20	Optional
ADRC	TAXJURCODE	AD_TXJCD	Tax Jurisdiction	CHAR	30	Optional
VBAP	EQART	EQART	Type of Technical Object	CHAR	20	Not used
STXH	LOGSYS	LOGSYS	Logical system	CHAR	20	Optional
VBPA	STCEG	STCEG	VAT Registration Number	CHAR	40	Optional
VBAP	POSNR	POSNR_VA	Sales Document Item	NUMC	12	Mandatory
VBEP	ETENR	ETENR	Schedule Line Number	NUMC	8	Mandatory
VBEP	EDATU	EDATU	Schedule Line Date	DATS	16	Mandatory
VBEP	WMENG	WMENG	Order Quantity in Sales Units	QUAN	7	Mandatory
VBEP	LIFSP	LIFSP_EP	Schedule Line Blocked for Delivery	CHAR	4	Optional

VBEP	ETTYP	ETTYP	Schedule Line Category	CHAR	4	Optional
PRCD_ELEMENTS	KPOSN	KPOSN	Condition item number	NUMC	12	Optional
PRCD_ELEMENTS	KSCHL	KSCHA	Condition Type	CHAR	8	Optional
PRCD_ELEMENTS	WAERS	WAERS	Currency Key	CUKY	10	Optional
PRCD_ELEMENTS	KPEIN	KPEIN	Condition Pricing Unit	DEC	3	Optional
PRCD_ELEMENTS	KDATU	VFPRC_TIMESTAMP	Timestamp for Pricing	CHAR	28	Optional
PRCD_ELEMENTS	KKURS	KKURS	Condition exchange rate for conversion to local currency	DEC	5	Optional
PRCD_ELEMENTS	KWERT	VFPRC_ELEMENT_VALUE	Condition Value	CURR	8	Optional
VBAK	WAERK	WAERK	SD Document Currency	CUKY	10	Optional
VBAK	VBELN	VBELN_VA	Sales Document	CHAR	20	Mandatory
VBAP	POSNR	POSNR_VA	Sales Document Item	NUMC	12	Mandatory
STXH	TDID	TDID	Text ID	CHAR	8	Optional
STXH	TDSPRAS	SPRAS	Language Key	LANG	2	Optional
SRXL	READ_TEXT	TEXT	Text	LONG TEXT	99999	Optional
VBKD	INCO2_L	INCO2_L	Incoterms Location 1	CHAR	70	Optional
VBKD	RR_RELTYP	RRREL	Revenue recognition category	CHAR	1	Optional

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
9065-001	C-1	Sales order open for more than 3 years.	If Orders created (VBAK-ERDAT) for more than 3 years ago.	List of affected Sales Order with items	PF2/WP2
9065-002	C-1	Missing sold-to data	If the sold-to is not in scope for object 3003	List of affected Sales Order with items	PF2/WP2
9065-003	C-1	Missing ship-to data	If the ship-to is not in scope for object 3003	List of affected Sales Order with items	PF2/WP2
9065-004	C-1	Missing bill-to data	If the bill-to is not in scope for object 3003	List of affected Sales Order with items	PF2/WP2
9065-005	C-1	Missing payer data	If the payer-to is not in scope for object 3003	List of affected Sales Order with items	PF2/WP2
9065-006	C-1	Missing material master	If the material is not in scope for object 2003	List of affected Sales Order with items	PF2/WP2
9065-007	C-3	Delivery note with planned PGI date beyond go-live date	If the DN PGI (VBEP-WADAT) is beyond go-live date.	List of affected Sales Order with items	PF2/WP2
9065-008	C-3	Open Credit / Debit Memo Request	If the document is not fully billed *Refer to the Credit / Debit Memo Request source data extraction criteria	List of open Credit / Debit Memo Request with items	PF2/WP2
9065-009	C-3	Open Return Order	If the Return Order is not processed completely *Refer to the Return Order source data extraction criteria	List of open Return Order with items	PF2/WP2
9065-010	C-3	Purchase order generated from "Third Party / Individual Purchase Order" with planned delivery date beyond go-live date.	If the PO planned delivery date is beyond go-live date, delete the PO. *Refer to the Individual Purchase Order / Third Party Open Sales Order extraction criteria	List of affected Purchase Order	PF2/WP2
9065-011	C-3	Delivered completed with tolerance.	If the SO is not fully delivered, and there is no plan to delivery the remainders.	List of affected Sales Order with items	PF2/WP2

Fields required in the report

List of Sales Orders and Return Orders

Table	Field	Field Description
Source System		
VBAK	AUART	Sales Document Type
VBAK	VKORG	Sales Organization
VBAK	VTWEG	Distribution Channel
VBAK	SPART	Division
VBAK	ERDAT	Creation date
VBAP	VBELN	Sales Document
VBAK	KUNNR	Customer Number
ADRC	NAME1	Name 1
VBAP	POSNR	Sales Document Item
VBAP	WERKS	Plant (Own or External)
VBAP	MATNR	Material Entered
VBAP	ARKTX	Material description

List of Purchase Order

Table	Field	Field Description
Source System		
EKKO	EBELN	Purchase Order number
EKKO	AEDAT	Creation Date

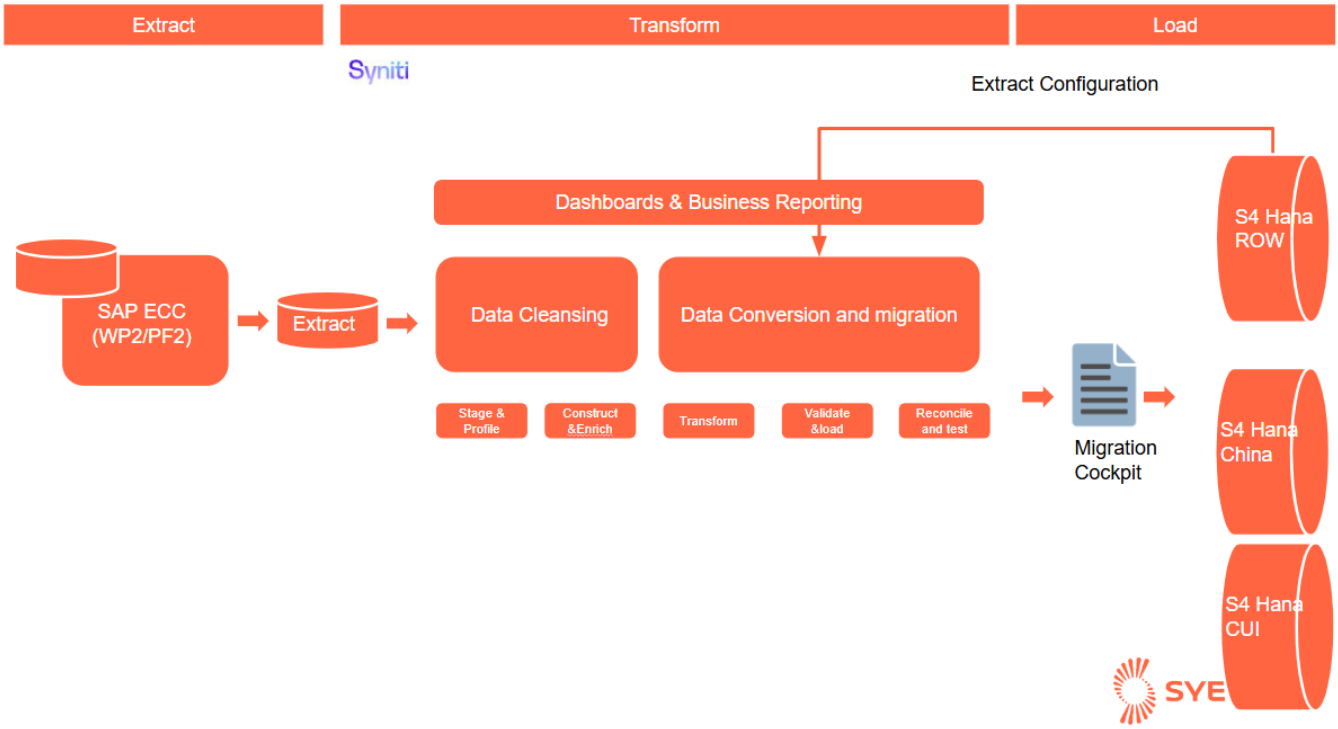
Conversion Process

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

The ETL (Extract, Transform, Load) process is a structured approach to data migration and management, ensuring high-quality data is seamlessly transferred across systems. Here's a breakdown of its key components:
1. **Extraction**
The process begins with extracting metadata and raw data from source systems, such as Syensqo ECC system (i.e., WP2/PF2) periodically. The extracted data is then staged for transformation.

2. **Transformation**
Once extracted, the data undergoes cleansing, consolidation, and governance. This step ensures data integrity, consistency, and compliance with business rules. The transformation process includes:
- Data validation to remove inconsistencies.
- Standardization to align formats across datasets.
- Business rule application to refine data for operational use.

3. **Loading**
The transformed data is then loaded into the target S4 Hana system.



Data Privacy and Sensitivity

N/A

Extraction

Extract data from a source into Syniti Migrate. There are 2 possibilities:

1. The data exists. Syniti Migrate connects to the source and loads the data into Syniti Migrate. There are 3 methods:
    a. Perform full data extraction from relevant tables in the source system(s).
    b. Perform extraction through the application layer.
    c. Only if Syniti Migrate cannot connect to the source, data is loaded to the repository from the provided source system extract/report.
2. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in Syniti Migrate. This is to be conducted using DCT (Data Collection Template) in Syniti Migrate

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
1	**Extraction Scope Definition** - Identify the source systems and databases involved. - Define the data objects (tables, fields, records) to be extracted. - Establish business rules for data selection.	LTC Data team
2	**Extraction Methodology** - Specify the extraction approach (full, incremental, or delta extraction). - Determine the tools and technologies used. - Define data filtering criteria to exclude irrelevant records.	Syniti
3	**Extraction Execution Plan** - Establish execution timelines and batch processing schedules. - Assign responsibilities for extraction monitoring. - Document dependencies on other migration tasks.	Syniti
4	**Data Quality and Validation**	Syniti

	- Define error handling mechanisms for extraction failures.	

Selection Screen*If applicable, this section will give the details on any selection screen parameters, including the parameter type, that are required to be entered to ensure consistent data extracts.*

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
SE16N	Standard Open Sales Order Direct Delivery Open Sales Orders Individual Purchase Order Sales Order	To select: • Standard or FOC Sales Order that is not fully delivered	Scenario 1-14, 31-34 under conversion scope This is to extract standard sales order and FOC sales order with open quantity. As long as the order is having open quantity, be it full or partially open, and it is not rejected, the order should be included in the migration. * The IC SO will be automatically created even though it is cross instance in S4 Hana. This is the design now, but yet to officially confirm	SELECT * FROM VBAK a inner join VBAP b on a.vbeln = b.VBELN and a.sourcedb = b.sourcedb LEFT JOIN vbup d ON b.vbeln = d.vbeln AND b.posnr = d.posnr and b.sourcedb = d.sourcedb inner join kna1 f on a.kunnr = f.kunnr and a.sourcedb = f.sourcedb inner join knvv g on a.kunnr = g.kunnr and a.vkorg = g.vkorg and a.vtweg = g.vtweg and a.spart = g.spart and a.sourcedb = g.sourcedb where a.vkorg in-scope and d.absta <> 'C' -- rejection status and f.loevm <> 'X' and g.loevm <> 'X' AND (a.VBTYP ='C' OR a.VBTYP ='I') and a.auart <> 'M3' and d.lfsta <> 'C' and d.lfsta <> ''
	IC STO (Out of scope)	To select: • IC PO/SO from legacy, converting to IC STO scenario	Scenario 15-18 under conversion scope	Situation : IC PO/SO in legacy will be converted to Intercompany STO if the buying and selling entities are from the same S4 Hana system
	IC Open Sales Order (Out of scope)	To select: • IC PO/SO from legacy, converting to IC PO/SO scenario	Scenario 19-22 under conversion scope * The IC SO will be automatically created even though it is cross instance in S4 Hana. This is the design now, but yet to officially confirm	Situation : IC PO/SO in legacy will be converted to Purchase Order and Sales Order if the buying and selling entities are from different S4 Hana system To-be : 1. Open PO quantity will be converted into a Purchase Order under buying entity 2. The Purchase Order will be the base for the IC Sales order in the selling entity
	IC STO (Out of scope)	To select: • STO from legacy, converting to STO scenario	Scenario 23-26 under conversion scope	Situation : Intercompany STO in legacy will be converted to Intercompany STO if the buying and selling entities are from the same S4 Hana system
	IC Open Sales Order (Out of scope)	To select: • STO from legacy, converting to IC PO/SO scenario	Scenario 27-29 under conversion scope * The IC SO will be automatically created even though it is cross instance in S4 Hana. This is the design now, but yet to officially confirm	Situation : Stock Transport Order in legacy will be converted to Purchase Order and Sales Order if the buying and selling entities are from different S4 Hana system To-be : 1. Open STO quantity will be converted into a Purchase Order under buying entity 2. The STO will be the base for the IC Sales order in the selling entity
	Third Party Sales Order	To select: • Third Party Sales Order that is not fully billed	Scenario 35-38 under conversion scope This is to extract Third Party Sales Order sales order with open quantity. As long as the order is having open quantity, be it full or partially open, and it is not rejected, the order should be included in the migration. There is no delivery created for this case, hence, the open quantity is equal to the SO quantity minus the billed quantity.	SELECT * VBAK a inner join VBAP b on a.vbeln = b.VBELN and a.sourcedb = b.sourcedb LEFT JOIN vbup d ON b.vbeln = d.vbeln AND b.posnr = d.posnr and b.sourcedb = d.sourcedb inner join kna1 f on a.kunnr = f.kunnr and a.sourcedb = f.sourcedb inner join knvv g on a.kunnr = g.kunnr and a.vkorg = g.vkorg and a.vtweg = g.vtweg and a.spart = g.spart and a.sourcedb = g.sourcedb where a.vkorg in-scope and d.absta <> 'C' -- rejection status and f.loevm <> 'X' and g.loevm <> 'X' AND (a.VBTYP ='C' OR a.VBTYP ='I') and a.auart <> 'M3' and d.lfsta = '' and d.fksaa <> 'C'
	Credit / Debit Memo Request	To select:	Scenario 39-42 under conversion scope	SELECT * FROM VBAK a inner join VBAP b on a.vbeln = b.VBELN and a.sourcedb = b.sourcedb LEFT JOIN vbup d ON b.vbeln = d.vbeln AND b.posnr = d.

		• Credit / Debit Memo Request tha t is not fully billed		posnr and b.sourcedb = d.sourcedb inner join kna1 f on a.kunnr = f.kunnr and a.sourcedb = f. sourcedb inner join knvv g on a.kunnr = g.kunnr and a.vkorg = g.vkorg and a.vtweg = g.vtweg and a.spart = g.spart and a.sourcedb = g.sourcedb where a.vkorg in-scope and d.absta <> 'C' -- rejection status and f.loevm <> 'X' and g.loevm <> 'X' AND (a.VBTYP ='K' OR a.VBTYP ='L') and d.lfsta = '' and d. fksaa <> 'C'
	Return Order	To select: • Return Order that is not fully processed	Scenario 43-46 under conversion scope	SELECT * FROM VBAK a inner join VBAP b on a.vbeln = b.VBELN and a.sourcedb = b. sourcedb LEFT JOIN vbup d ON b.vbeln = d.vbeln AND b.posnr = d. posnr and b.sourcedb = d.sourcedb inner join kna1 f on a.kunnr = f.kunnr and a.sourcedb = f. sourcedb inner join knvv g on a.kunnr = g.kunnr and a.vkorg = g.vkorg and a.vtweg = g.vtweg and a.spart = g.spart and a.sourcedb = g.sourcedb where a.vkorg in-scope and d.absta <> 'C' -- rejection status and f.loevm <> 'X' and g.loevm <> 'X' AND (a.VBTYP ='H') and d.lfsta <> 'C' and d.lfsta <> ''

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
1	**Source System Availability** • Ensure that the source database or application is accessible. • Confirm that necessary credentials and permissions are granted	Syensqo IT
2	**Data Structure** • Identify relationships between tables, views, and stored procedures.	Syniti
3	**Referential Integrity** • Ensure dependent records are extracted together.	Syniti
4	**Extraction Methodology** • Define whether extraction is full, incremental, or delta-based. • Establish batch processing schedules for large datasets.	Syniti
5	**Performance and Scalability Considerations** • Optimize extraction queries to prevent system overload. • Ensure network bandwidth supports data transfer volumes.	Syniti

6	**Security and Compliance** • Adhere to regulatory standards for sensitive information if applicable	Syniti
7	**Close all Credit / Debit Memo Request and Return Order** • All Credit / Debit Memo Request and Return Order has to be completely billed or rejected	Data team and Business
8	**Close all Delivery Note** • Once a delivery note is created, the corresponding quantity is deducted from the open quantity in the sales order. • To ensure accurate reflection of open sales order quantities, all delivery notes must be closed. • During migration, each delivery note should be completed through to the billing document posted to accounting. If a delivery note cannot be completed, it should be deleted.	Data team and Business

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 Syniti Migrate 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 Syniti Migrate
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	Transformation Scope Definition - Identify the source and target data structures. - Define business rules for data standardization. - Establish data cleansing requirements to remove inconsistencies.	Data Team, Functional Team
2	Data Mapping and Standardization - Align source fields with target fields. - Ensure unit consistency (e.g., currency, measurement units)	Data Team, Functional Team
3	Business Rule Application - Implement data enrichment/collection if applicable - Apply conditional transformations based on predefined logic/business rules	Data Team, Functional Team
4	Transformation Execution Plan - Define batch processing schedules. - Assign responsibilities for monitoring execution. - Establish error-handling mechanisms	Syniti
5	Configure transformation rules in Syniti Migrate (including calculated fields, formatting rules, etc.)	Syniti
6	Review transformation logic and mappings with Business for confirmation	Business Team + Functional Team (L2C)
7	Perform initial transformation run and generate draft target-ready dataset	Data Team (Syniti),
8	Review draft target-ready data for structure and completeness	Data Team (L2C), Functional Team (L2C)
9	Share transformed data with Business for Pre-load Validation	Business Team
10	Incorporate feedback from Business and refine mappings or transformation logic as needed	Data Team (L2C)
11	Finalize and approve transformed data as Target Ready Load File	Business + Functional (L2C) + Data Team (L2C)
12	Handover final file to Load Team or trigger the load via Syniti Load Workbench	Data Team (Syniti), Data Load Team

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic	Mapping Table
Header										
1	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
2	WP2 & PF2	VBAK	AUART	Sales Document Type	S/4 HANA	VBAK	AUART	Sales Document Type	Mapping	MAP_AUART
3	WP2 & PF2	N/A	N/A		S/4 HANA	VBAK	VKORG	Sales Organization	Rule	CHECK MAP_VKORG IF 1 legacy is mapped to only 1 target VKORG, take the target VKORG ELSE -- More than 1 target VKORG, derive with below logic The assumption is that the material has derived the right sales org based on the profit center. The SO will be created to the sales org that the material has been extended to. Refer to material master sales view (MVKE), take the Sales Org extended the company code. The assumption is that the same material should be extended to only 1 GBU within the same company code Select VKORG from MVKE A, TVKO B where A.MATNR = VBAP-MATNR and B.BUKRS = VBAK-BUKRS_VF If there are materials from several sales orgs, the Sales Order need to be split accordingly by sales org

4	WP2 & PF2	N/A	N/A		S/4 HANA	VBAK	VTWEG	Distribution Channel	Rule	Definition of Distribution Channel
										When the ship-to party/Delivery plant are in the same country, it is 20 -Domestic DC
										When the ship-to party/Delivery plant are in the Different country, it is 10 Export DC
										When the sold-to is Intercompany BP, it is always 30 - Intercompany DC
										
										Select VBUND from KNA1 (S4) where KNA1. KUNNR = VBAK-KUNNR
										
										If VBUND Not Blank Then
										VTWEG = "30"
										Else
										
										*If the item Ship-to is provided, take the Target Country from the item ship-to, otherwise, take from the header ship-to
										If VBPA-PARVW = SH AND VBPA-POSNR = VBAP-POSNR for the item is not blank then -- Taking item ship-to
										T_Country = VBPA-LAND1
										Else
										T_Country = VBPA-PARVW where VBPA-PARVW = SH and VBPA-POSNR = BLANK - Taking header ship-to
										EndIf
										
										Select LAND1 from as S_Country T001W where VBAP-WERKS= T001W-WERKS
										
										If S_Country Not Equal T_Country then
										VTCEG = "10" Else
										VTCEG = "20"
										EndIf
										
										If there are 2 differrenct VTCEG determined, 2 Sales orders need to be split accordingly by VTCEG.

5	WP2 & PF2	VBAK	SPART	Division	S/4 HANA	VBAK	SPART	Division	Default : 01	
6	WP2 & PF2	VBAK	VKGRP	Sales Group	S/4 HANA	VBAK	VKGRP	Sales Group	Rule	Default : Blank
7	WP2 & PF2	VBAK	VKBUR	Sales Office	S/4 HANA	VBAK	VKBUR	Sales Office	Mapping	MAP_VKBUR
8	WP2 & PF2	VBAK	VDATU	Requested Delivery Date	S/4 HANA	VBAK	VDATU	Requested Delivery Date	Copy 1:1	
9	WP2 & PF2	VBKD	BSTDK	Customer Reference Date	S/4 HANA	VBKD	BSTDK	Customer Reference Date	Copy 1:1	
10	WP2 & PF2	VBKD	BSARK	Customer Purchase Order Type	S/4 HANA	VBKD	BSARK	Customer Purchase Order Type	Mapping	MAP_BSARK
11	WP2 & PF2	VBKD	IHREZ	Your Reference	S/4 HANA	VBKD	IHREZ	Your Reference	Copy 1:1	
12	WP2 & PF2	VBAK	BNAME	Name of orderer	S/4 HANA	VBAK	BNAME	Name of orderer	Copy 1:1	
13	WP2 & PF2	VBAK	TELF1	Telephone Number	S/4 HANA	VBAK	TELF1	Telephone Number	Copy 1:1	
14	WP2 & PF2	VBKD	KONDA	Customer Price Group	S/4 HANA	VBKD	KONDA	Customer Price Group	Mapping	MAP_KONDA
15	WP2 & PF2	VBKD	KDGRP	Customer Group	S/4 HANA	VBKD	KDGRP	Customer Group	Mapping	MAP_KDGRP
16	WP2 & PF2	VBKD	BZIRK	Sales District	S/4 HANA	VBKD	BZIRK	Sales District	Mapping	MAP_BZIRK
17	WP2 & PF2	VBKD	PLTYP	Price List Type	S/4 HANA	VBKD	PLTYP	Price List Type	Mapping	MAP_PLTYP
				Incoterms (Part				Incoterms (Part		

18	WP2 & PF2	VBKD	INCO1	1)	S/4 HANA	VBKD	INCO1	1)	Mapping	MAP_INCO1
19	WP2 & PF2	VBKD	INCO2	Incoterms (Part 2)	S/4 HANA	VBKD	INCO2	Incoterms (Part 2)	Copy 1:1	
20	WP2 & PF2	VBKD	ZTERM	Terms of Payment Key	S/4 HANA	VBKD	ZTERM	Terms of Payment Key	Mapping	MAP_ZTERM
21	WP2 & PF2	VBAK	LIFSK	Delivery Block (Document Header)	S/4 HANA	VBAK	LIFSK	Delivery Block (Document Header)	Mapping	MAP_LIFSK
22	WP2 & PF2	VBAK	FAKSK	Billing Block in SD Document	S/4 HANA	VBAK	FAKSK	Billing Block in SD Document	Mapping	MAP_FAKSK
23	WP2 & PF2	VBAK	AUGRU	Order Reason (Reason for the Business Transaction)	S/4 HANA	VBAK	AUGRU	Order Reason (Reason for the Business Transaction)	Mapping	MAP_AUGRU
24	WP2 & PF2	VBAK	AUTLF	Complete Delivery Defined for Each Sales Order	S/4 HANA	VBAK	AUTLF	Complete Delivery Defined for Each Sales Order	Copy 1:1	
25	WP2 & PF2	VBKD	PRSDT	Date for Pricing and Exchange Rate	S/4 HANA	VBKD	PRSDT	Date for Pricing and Exchange Rate	Copy 1:1	
26	WP2 & PF2	VBAK	KVGR1	Customer Group 1	S/4 HANA	VBAK	KVGR1	Customer Group 1	Mapping	MAP_KVGR1
27	WP2 & PF2	VBAK	KVGR2	Customer Group 2	S/4 HANA	VBAK	KVGR2	Customer Group 2	Mapping	MAP_KVGR2
28	WP2 & PF2	VBAK	KVGR3	Customer Group 3	S/4 HANA	VBAK	KVGR3	Customer Group 3	Mapping	MAP_KVGR3
29	WP2 & PF2	VBAK	KVGR4	Customer Group 4	S/4 HANA	VBAK	KVGR4	Customer Group 4	Mapping	MAP_KVGR4
30	WP2 & PF2	VBAK	KVGR5	Customer Group 5	S/4 HANA	VBAK	KVGR5	Customer Group 5	Mapping	MAP_KVGR5
31	WP2 & PF2	VBKD	BSTKD	Customer Reference	S/4 HANA	VBKD	BSTKD	Customer Reference	Copy 1:1	
32	WP2 & PF2	VBKD	BSTKD_E	Ship-to Party's Customer Reference	S/4 HANA	VBKD	BSTKD_E	Ship-to Party's Customer Reference	Copy 1:1	
33	WP2 & PF2	VBKD	BSARK_E	Ship-to Party Purchase Order Type	S/4 HANA	VBKD	BSARK_E	Ship-to Party Purchase Order Type	Mapping	MAP_BSARK
34	WP2 & PF2	VBKD	IHREZ_E	Ship-to Party Character	S/4 HANA	VBKD	IHREZ_E	Ship-to Party Character	Copy 1:1	
35	WP2 & PF2	VBAK	AUDAT	Document Date (Date Received /Sent)	S/4 HANA	VBAK	AUDAT	Document Date (Date Received /Sent)	Copy 1:1	
36	WP2 & PF2	VBAK	VSBED	Shipping Conditions	S/4 HANA	VBAK	VSBED	Shipping Conditions	Mapping	MAP_VSBED
37	WP2 & PF2	VBAK	MAHZA	Number of Contacts from the Customer	S/4 HANA	VBAK	MAHZA	Number of Contacts from the Customer	Copy 1:1	
38	WP2 & PF2	VBAK	VGBEL	Document Number of Reference Document	S/4 HANA	VBAK	VGBEL	Document Number of Reference Document	Mapping	SO_XREF
39					S/4 HANA	VBAK	BUKRS_VF	Company Code to Be Billed	Auto derive	
40	WP2 & PF2	VBAK	TAXK1	Alternative Tax Classification	S/4 HANA	VBAK	TAXK1	Alternative Tax Classification	Mapping	MAP_TAXKD
41	WP2 & PF2	VBAK	TAXK2	Tax Classification 2 for Customer	S/4 HANA	VBAK	TAXK2	Tax Classification 2 for Customer	Mapping	MAP_TAXKD
42	WP2 & PF2	VBAK	TAXK3	Tax Classification 3 for Customer	S/4 HANA	VBAK	TAXK3	Tax Classification 3 for Customer	Mapping	MAP_TAXKD
43	WP2 & PF2	VBAK	TAXK4	Tax Classification 4 for Customer	S/4 HANA	VBAK	TAXK4	Tax Classification 4 for Customer	Mapping	MAP_TAXKD
44	WP2 & PF2	VBAK	TAXK5	Tax Classification 5 for Customer	S/4 HANA	VBAK	TAXK5	Tax Classification 5 for Customer	Mapping	MAP_TAXKD
45	WP2 & PF2	VBAK	TAXK6	Tax Classification 6 for Customer	S/4 HANA	VBAK	TAXK6	Tax Classification 6 for Customer	Mapping	MAP_TAXKD
46	WP2 & PF2	VBAK	TAXK7	Tax Classification 7 for Customer	S/4 HANA	VBAK	TAXK7	Tax Classification 7 for Customer	Mapping	MAP_TAXKD
47	WP2 & PF2	VBAK	TAXK8	Tax Classification 8 for Customer	S/4 HANA	VBAK	TAXK8	Tax Classification 8 for Customer	Mapping	MAP_TAXKD
48	WP2 & PF2	VBAK	XBLNR	Reference Document Number	S/4 HANA	VBAK	XBLNR	Reference Document Number	Copy 1:1	
49	WP2 & PF2	VBAK	ZUONR	Assignment Number	S/4 HANA	VBAK	ZUONR	Assignment Number	Copy 1:1	
50	WP2 & PF2	VBKD	KZAZU	Order Combination Indicator	S/4 HANA	VBKD	KZAZU	Order Combination Indicator	Copy 1:1	
51	WP2 & PF2	VBKD	PERFK	Invoice Dates (Calendar Identification)	S/4 HANA	VBKD	PERFK	Invoice Dates (Calendar Identification)	Mapping	MAP_PERFK

52	WP2 & PF2	VBKD	PERRL	Invoice List Schedule (calendar identification)	S/4 HANA	VBKD	PERRL	Invoice List Schedule (calendar identification)	Mapping	MAP_PERFK
53	WP2 & PF2	VBKD	MRNKZ	Manual Invoice Maintenance	S/4 HANA	VBKD	MRNKZ	Manual Invoice Maintenance	Copy 1:1	
54	WP2 & PF2	VBKD	VALTG	Additional Value Days	S/4 HANA	VBKD	VALTG	Additional Value Days	Copy 1:1	
55	WP2 & PF2	VBKD	VALDT	Fixed Value Date	S/4 HANA	VBKD	VALDT	Fixed Value Date	Copy 1:1	
56	WP2 & PF2	VBKD	ZLSCH	Payment Method	S/4 HANA	VBKD	ZLSCH	Payment Method	Mapping	MAP_ZLSCH
57	WP2 & PF2	VBKD	KTGRD	Account Assignment Group for Customer	S/4 HANA	VBKD	KTGRD	Account Assignment Group for Customer	Mapping	MAP_KTGRD
58	WP2 & PF2	VBKD	FKDAT	Billing Date	S/4 HANA	VBKD	FKDAT	Billing Date	Copy 1:1	
59	WP2 & PF2	VBKD	FBUDA	Date on which services are rendered	S/4 HANA	VBKD	FBUDA	Date on which services are rendered	Copy 1:1	
60	WP2 & PF2	VBKD	ABSSC	Payment Guarantee Procedure	S/4 HANA	VBKD	ABSSC	Payment Guarantee Procedure	Mapping	MAP_ABSSC
61	WP2 & PF2	VBKD	EMPST	Receiving Point	S/4 HANA	VBKD	EMPST	Receiving Point	Copy 1:1	
62	WP2 & PF2	VBKD	LCNUM	Financial doc. processing: Internal financial doc. number	S/4 HANA	VBKD	LCNUM	Financial doc. processing: Internal financial doc. number	Copy 1:1	
63	WP2 & PF2	VBKD	KDKG1	Customer condition group 1	S/4 HANA	VBKD	KDKG1	Customer condition group 1	Mapping	MAP_KDKGX
64	WP2 & PF2	VBKD	KDKG2	Customer condition group 2	S/4 HANA	VBKD	KDKG2	Customer condition group 2	Mapping	MAP_KDKGX
65	WP2 & PF2	VBKD	KDKG3	Customer condition group 3	S/4 HANA	VBKD	KDKG3	Customer condition group 3	Mapping	MAP_KDKGX
66	WP2 & PF2	VBKD	KDKG4	Customer condition group 4	S/4 HANA	VBKD	KDKG4	Customer condition group 4	Mapping	MAP_KDKGX
67	WP2 & PF2	VBKD	KDKG5	Customer condition group 5	S/4 HANA	VBKD	KDKG5	Customer condition group 5	Mapping	MAP_KDKGX
68	WP2 & PF2	VBAK	WAERK	SD Document Currency	S/4 HANA	VBAK	WAERK	SD Document Currency	Copy 1:1	
69	WP2 & PF2	VBAK	LANDTX	Tax Departure Country/Region	S/4 HANA	VBAK	LANDTX	Tax Departure Country/Region	Mapping	MAP_LAND1
70	WP2 & PF2	VBAK	STCEG_L	Tax Destination Country/Region	S/4 HANA	VBAK	STCEG_L	Tax Destination Country/Region	Mapping	MAP_LAND1
71	WP2 & PF2	VBAK	XEGDR	Indicator: Triangular Deal Within the EU	S/4 HANA	VBAK	XEGDR	Indicator: Triangular Deal Within the EU	Copy 1:1	
72					S/4 HANA	VBKD	VSART	Shipping Type	Auto derive	
73	WP2 & PF2	VBKD	SDABW	Special Processing Indicator	S/4 HANA	VBKD	SDABW	Special Processing Indicator	Mapping	MAP_SDABW
74					S/4 HANA	VBKD	INCO2_L	Incoterms Location 1	Auto derive	
75					S/4 HANA	VBKD	RRREL	Revenue recognition category	Auto derive	
Item										
76	WP2 & PF2	VBAP	VBELN	Sales Document	S/4 HANA	VBAP	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
77	WP2 & PF2	VBAP	POSNR	Sales Document Item	S/4 HANA	VBAP	POSNR	Sales Document Item	Copy 1:1	
78	WP2 & PF2	VBAP	UEPOS	Higher-Level Item in Bill of Material Structures	S/4 HANA	VBAP	UEPOS	Higher-Level Item in Bill of Material Structures	Copy 1:1	
79	WP2 & PF2	VBAP	POSEX	Item Number of the Underlying Purchase Order	S/4 HANA	VBAP	POSEX	Item Number of the Underlying Purchase Order	Copy 1:1	
80	WP2 & PF2	VBAP	GRPOS	Item for Which this Item is an Alternative	S/4 HANA	VBAP	GRPOS	Item for Which this Item is an Alternative	Copy 1:1	
81	WP2 & PF2	VBAP	CHARG	Batch Number	S/4 HANA	VBAP	CHARG	Batch Number	Copy 1:1	
82	WP2 & PF2	VBAP	GRKOR	Delivery Group (Items are delivered together)	S/4 HANA	VBAP	GRKOR	Delivery Group (Items are delivered together)	Copy 1:1	
83	WP2 & PF2	VBAP	KZTLF	Partial delivery at item level	S/4 HANA	VBAP	KZTLF	Partial delivery at item level	Copy 1:1	
84	WP2 & PF2	VBAP	FAKSP	Billing Block for Item	S/4 HANA	VBAP	FAKSP	Billing Block for Item	Mapping	MAP_FAKSK
85	WP2 & PF2	VBKD	FKDAT	Billing Date	S/4 HANA	VBKD	FKDAT	Billing Date	Copy 1:1	
86	WP2 & PF2	VBAP	WERKS	Plant	S/4 HANA	VBAP	WERKS	Plant	Mapping	MAP_WERKS

87	WP2 & PF2	VBAP	LGORT	Storage Location	S/4 HANA	VBAP	LGORT	Storage Location	Mapping	MAP_LGORT

88	WP2 & PF2				S/4 HANA	VBAP	ZMENG	Target Quantity in Sales Units	Rule	**Business Logic**:
										
										If VBEP-LFREL is NULL (no delivery schedule for the sales order item):
										
										• order_qty = VBAP-ZMENG (order quantity)
										• billed_qty = Total billed quantity from billing items (VBRP), linked via VGBEL /VGPOS, excluding billing documents where VBRK.FKSTO = 'X' (cancelled)
										• ZMENG (unbilled quantity) = order_qty - billed_qty
										
										SQL Query :
										
										SELECT vbap.vbeln, -- Sales order number vbap.posnr, -- Sales order item vbap.zmeng AS order_qty, -- Order quantity COALESCE(b.billed_qty, 0) AS billed_qty, -- Billed quantity (default 0 if none) vbap.zmeng - COALESCE(b.billed_qty, 0) AS zmeng -- Unbilled quantity FROM vbap LEFT JOIN (SELECT vbrp.vgbel AS order_vbeln, vbrp.vgpos AS order_posnr, SUM(vbrp.fkimg) AS billed_qty FROM vbrp INNER JOIN vbrk ON vbrp.vbeln = vbrk.vbeln WHERE vbrk.fksto != 'X' -- Exclude cancelled billing documents GROUP BY vbrp.vgbel, vbrp.vgpos) b ON b.order_vbeln = vbap.vbeln AND b.order_posnr = vbap.posnr LEFT JOIN vbep ON vbep.vbeln = vbap.vbeln AND vbep.posnr = vbap.posnr WHERE vbep.lfrel IS NULL -- Only select items with no VBEP entry (LFREL is NULL)
										
										Sales Order and Billing Type Pairing
										
										• Only include billing documents where the sales order type and billing document type match as follows:
										  ◦ **Sales Order:** VBAK-VBTYP in ('C', 'I') and VBRK-VBTYP = 'M'
										  ◦ **Return:** VBAK-VBTYP = 'H' and VBRK-VBTYP = 'O'
										  ◦ **Debit Memo:** VBAK-VBTYP = 'L' and VBRK-VBTYP = 'P'
										  ◦ **Credit Memo:** VBAK-VBTYP = 'K' and VBRK-VBTYP = 'O'
										• For each sales order item, check the type of the sales order (VBAK-VBTYP).
										• When summing up the billed quantity from billing documents, only include those billing documents where the type (VBRK-VBTYP) matches the allowed type for that sales order.
										• This ensures that, for example, a credit memo is not counted as billed quantity for a standard sales order, and vice versa.

89	WP2 & PF2	VBAP	ZIEME	Target Quantity UoM	S/4 HANA	VBAP	ZIEME	Target Quantity UoM	Mapping	MAP_MEINS
90	WP2 & PF2	VBAP	PSTYV	Sales Document Item Category	S/4 HANA	VBAP	PSTYV	Sales Document Item Category	Mapping	MAP_PSTYV
91	WP2 & PF2	VBAP	ARKTX	Short text for sales order item	S/4 HANA	VBAP	ARKTX	Short text for sales order item	Copy 1:1	
92	WP2 & PF2	VBAP	MVGR1	Material Group 1	S/4 HANA	VBAP	MVGR1	Material Group 1	Mapping	MAP_MVGR1
93	WP2 & PF2	VBAP	MVGR2	Material Group 2	S/4 HANA	VBAP	MVGR2	Material Group 2	Mapping	MAP_MVGR2
94	WP2 & PF2	VBAP	MVGR3	Material Group 3	S/4 HANA	VBAP	MVGR3	Material Group 3	Mapping	MAP_MVGR3
95	WP2 & PF2	VBAP	MVGR4	Material Group 4	S/4 HANA	VBAP	MVGR4	Material Group 4	Mapping	MAP_MVGR4
96	WP2 & PF2	VBAP	MVGR5	Material Group 5	S/4 HANA	VBAP	MVGR5	Material Group 5	Mapping	MAP_MVGR5
97					S/4 HANA	VBAP	PRODH	Product Hierarchy	Auto derive	
98	WP2 & PF2	VBAP	MATKL	Material Group	S/4 HANA	VBAP	MATKL	Material Group	Mapping	MAP_MATKL
99	WP2 & PF2	VBKD	BSTKD	Customer Reference	S/4 HANA	VBKD	BSTKD	Customer Reference	Copy 1:1	
100	WP2 & PF2	VBKD	BSTDK	Customer Reference Date	S/4 HANA	VBKD	BSTDK	Customer Reference Date	Copy 1:1	
101	WP2 & PF2	VBKD	BSARK	Customer Purchase Order Type	S/4 HANA	VBKD	BSARK	Customer Purchase Order Type	Mapping	MAP_BSARK
102	WP2 & PF2	VBKD	IHREZ	Your Reference	S/4 HANA	VBKD	IHREZ	Your Reference	Copy 1:1	
103	WP2 & PF2	VBKD	BSTKD_E	Ship-to Party's Customer Reference	S/4 HANA	VBKD	BSTKD_E	Ship-to Party's Customer Reference	Copy 1:1	
104	WP2 & PF2	VBKD	BSARK_E	Ship-to Party Purchase Order Type	S/4 HANA	VBKD	BSARK_E	Ship-to Party Purchase Order Type	Mapping	MAP_BSARK
105	WP2 & PF2	VBKD	IHREZ_E	Ship-to Party Character	S/4 HANA	VBKD	IHREZ_E	Ship-to Party Character	Copy 1:1	
106	WP2 & PF2	VBKD	KONDA	Customer Price Group	S/4 HANA	VBKD	KONDA	Customer Price Group	Mapping	MAP_KONDA
107	WP2 & PF2	VBKD	KDGRP	Customer Group	S/4 HANA	VBKD	KDGRP	Customer Group	Mapping	MAP_KDGRP
108	WP2 & PF2	VBKD	BZIRK	Sales District	S/4 HANA	VBKD	BZIRK	Sales District	Mapping	MAP_BZIRK
109	WP2 & PF2	VBKD	PLTYP	Price List Type	S/4 HANA	VBKD	PLTYP	Price List Type	Mapping	MAP_PLTYP

110	WP2 & PF2	VBKD	INCO1	Incoterms (Part 1)	S/4 HANA	VBKD	INCO1	Incoterms (Part 1)	Mapping	MAP_INCO1
111	WP2 & PF2	VBKD	INCO2	Incoterms (Part 2)	S/4 HANA	VBKD	INCO2	Incoterms (Part 2)	Copy 1:1	
112	WP2 & PF2	VBKD	KZAZU	Order Combination Indicator	S/4 HANA	VBKD	KZAZU	Order Combination Indicator	Copy 1:1	
113	WP2 & PF2	VBKD	PERFK	Invoice Dates (Calendar Identification)	S/4 HANA	VBKD	PERFK	Invoice Dates (Calendar Identification)	Mapping	MAP_PERFK
114	WP2 & PF2	VBKD	PERRL	Invoice List Schedule (calendar identification)	S/4 HANA	VBKD	PERRL	Invoice List Schedule (calendar identification)	Mapping	MAP_PERFK
115	WP2 & PF2	VBKD	MRNKZ	Manual Invoice Maintenance	S/4 HANA	VBKD	MRNKZ	Manual Invoice Maintenance	Copy 1:1	
116	WP2 & PF2	VBKD	VALTG	Additional Value Days	S/4 HANA	VBKD	VALTG	Additional Value Days	Copy 1:1	
117	WP2 & PF2	VBKD	VALDT	Fixed Value Date	S/4 HANA	VBKD	VALDT	Fixed Value Date	Copy 1:1	
118	WP2 & PF2	VBKD	ZTERM	Terms of Payment Key	S/4 HANA	VBKD	ZTERM	Terms of Payment Key	Mapping	MAP_ZTERM
119	WP2 & PF2	VBKD	ZLSCH	Payment Method	S/4 HANA	VBKD	ZLSCH	Payment Method	Mapping	MAP_ZLSCH
120	WP2 & PF2	VBKD	KTGRD	Account Assignment Group for Customer	S/4 HANA	VBKD	KTGRD	Account Assignment Group for Customer	Mapping	MAP_KTGRD
121	WP2 & PF2	VBKD	PRSDT	Date for Pricing and Exchange Rate	S/4 HANA	VBKD	PRSDT	Date for Pricing and Exchange Rate	Copy 1:1	
122	WP2 & PF2	VBKD	FBUDA	Date on which services are rendered	S/4 HANA	VBKD	FBUDA	Date on which services are rendered	Copy 1:1	
123	WP2 & PF2	VBKD	ABSSC	Payment Guarantee Procedure	S/4 HANA	VBKD	ABSSC	Payment Guarantee Procedure	Mapping	MAP_ABSSC
124	WP2 & PF2	VBKD	LCNUM	Financial doc. processing: Internal financial doc. number	S/4 HANA	VBKD	LCNUM	Financial doc. processing: Internal financial doc. number	Copy 1:1	
125	WP2 & PF2	VBKD	EMPST	Receiving Point	S/4 HANA	VBKD	EMPST	Receiving Point	Copy 1:1	
126	WP2 & PF2	VBKD	KDKG1	Customer condition group 1	S/4 HANA	VBKD	KDKG1	Customer condition group 1	Mapping	MAP_KDKGX
127	WP2 & PF2	VBKD	KDKG2	Customer condition group 2	S/4 HANA	VBKD	KDKG2	Customer condition group 2	Mapping	MAP_KDKGX
128	WP2 & PF2	VBKD	KDKG3	Customer condition group 3	S/4 HANA	VBKD	KDKG3	Customer condition group 3	Mapping	MAP_KDKGX
129	WP2 & PF2	VBKD	KDKG4	Customer condition group 4	S/4 HANA	VBKD	KDKG4	Customer condition group 4	Mapping	MAP_KDKGX
130	WP2 & PF2	VBKD	KDKG5	Customer condition group 5	S/4 HANA	VBKD	KDKG5	Customer condition group 5	Mapping	MAP_KDKGX
131	WP2 & PF2	VBAP	VRKME	Sales Unit	S/4 HANA	VBAP	VRKME	Sales Unit	Mapping	MAP_MEINS
132	WP2 & PF2	VBAP	FMENG	Quantity is fixed	S/4 HANA	VBAP	FMENG	Quantity is fixed	Copy 1:1	
133	WP2 & PF2	VBAP	UEBTK	Unlimited Overdelivery Allowed	S/4 HANA	VBAP	UEBTK	Unlimited Overdelivery Allowed	Copy 1:1	
134	WP2 & PF2	VBAP	UEBTO	Overdelivery Tolerance	S/4 HANA	VBAP	UEBTO	Overdelivery Tolerance	Copy 1:1	
135	WP2 & PF2	VBAP	UNTTO	Underdelivery Tolerance	S/4 HANA	VBAP	UNTTO	Underdelivery Tolerance	Copy 1:1	
136	WP2 & PF2	VBAP	SPART	Division	S/4 HANA	VBAP	SPART	Division	Default : 01	
137	WP2 & PF2	VBAP	UMVKZ	Numerator (factor) for conversion of sales quantity into SKU	S/4 HANA	VBAP	UMVKZ	Numerator (factor) for conversion of sales quantity into SKU	Copy 1:1	
138	WP2 & PF2	VBAP	UMVKN	Denominator (divisor) for conversion of sales Qty into SKU	S/4 HANA	VBAP	UMVKN	Denominator (divisor) for conversion of sales Qty into SKU	Copy 1:1	
139	WP2 & PF2	VBAP	BRGEW	Gross Weight of the Item	S/4 HANA	VBAP	BRGEW	Gross Weight of the Item	Copy 1:1	
140	WP2 & PF2	VBAP	NTGEW	Net Weight of the Item	S/4 HANA	VBAP	NTGEW	Net Weight of the Item	Copy 1:1	
141	WP2 & PF2	VBAP	GEWEI	Unit of Weight	S/4 HANA	VBAP	GEWEI	Unit of Weight	Copy 1:1	
142	WP2 & PF2	VBAP	VOLUM	Volume of the item	S/4 HANA	VBAP	VOLUM	Volume of the item	Copy 1:1	
143	WP2 & PF2	VBAP	VOLEH	Volume Unit	S/4 HANA	VBAP	VOLEH	Volume Unit	Copy 1:1	
144	WP2 & PF2	VBAP	LPRIO	Delivery Priority	S/4 HANA	VBAP	LPRIO	Delivery Priority	Mapping	MAP_LPRIO
145	WP2 & PF2	VBAP	VSTEL	Shipping Point / Receiving Point	S/4 HANA	VBAP	VSTEL	Shipping Point / Receiving Point	Mapping	MAP_VSTEL
146	WP2 & PF2	VBAP	ROUTE	Route	S/4 HANA	VBAP	ROUTE	Route	Mapping	MAP_ROUTE

147	WP2 & PF2	VBAP	TAXM1	Tax Classification for Material	S/4 HANA	VBAP	TAXM1	Tax Classification for Material	Mapping	MAP_TAXKM
148	WP2 & PF2	VBAP	TAXM2	Tax Classification for Material	S/4 HANA	VBAP	TAXM2	Tax Classification for Material	Mapping	MAP_TAXKM
149	WP2 & PF2	VBAP	TAXM3	Tax Classification for Material	S/4 HANA	VBAP	TAXM3	Tax Classification for Material	Mapping	MAP_TAXKM
150	WP2 & PF2	VBAP	TAXM4	Tax Classification for Material	S/4 HANA	VBAP	TAXM4	Tax Classification for Material	Mapping	MAP_TAXKM
151	WP2 & PF2	VBAP	TAXM5	Tax Classification for Material	S/4 HANA	VBAP	TAXM5	Tax Classification for Material	Mapping	MAP_TAXKM
152	WP2 & PF2	VBAP	TAXM6	Tax Classification for Material	S/4 HANA	VBAP	TAXM6	Tax Classification for Material	Mapping	MAP_TAXKM
153	WP2 & PF2	VBAP	TAXM7	Tax Classification for Material	S/4 HANA	VBAP	TAXM7	Tax Classification for Material	Mapping	MAP_TAXKM
154	WP2 & PF2	VBAP	TAXM8	Tax Classification for Material	S/4 HANA	VBAP	TAXM8	Tax Classification for Material	Mapping	MAP_TAXKM
155	WP2 & PF2	VBAP	TAXM9	Tax Classification for Material	S/4 HANA	VBAP	TAXM9	Tax Classification for Material	Mapping	MAP_TAXKM
156	WP2 & PF2	VBAP	KONDM	Material Price Group	S/4 HANA	VBAP	KONDM	Material Price Group	Mapping	MAP_KONDM
157	WP2 & PF2	VBAP	BWTAR	Valuation Type	S/4 HANA	VBAP	BWTAR	Valuation Type	Mapping	MAP_BWTAR
158	WP2 & PF2	VBAP	FIXMG	Delivery Date and Quantity Fixed	S/4 HANA	VBAP	FIXMG	Delivery Date and Quantity Fixed	Copy 1:1	
159	WP2 & PF2	VBAP	BEDAE	Requirements type	S/4 HANA	VBAP	BEDAE	Requirements type	Mapping	MAP_BEDAE
160	WP2 & PF2	VBAP	EXART	Business Transaction Type	S/4 HANA	VBAP	EXART	Business Transaction Type	Mapping	MAP_EXART
161	WP2 & PF2	VBAP	MFRGR	Material Freight Group	S/4 HANA	VBAP	MFRGR	Material Freight Group	Mapping	MAP_MFRGR
162	WP2 & PF2	VBAP	PMATN	Pricing Reference Material	S/4 HANA	VBAP	PMATN	Pricing Reference Material	Mapping	Material_XREF
163	WP2 & PF2	VBAP	ANTLF	Maximum Number of Partial Deliveries Allowed Per Item	S/4 HANA	VBAP	ANTLF	Maximum Number of Partial Deliveries Allowed Per Item	Copy 1:1	
164	WP2 & PF2	VBAP	J_1BTAXLW1	Tax law: ICMS	S/4 HANA	VBAP	J_1BTAXLW1	Tax law: ICMS	Mapping	MAP_J_1BTAXLW1
165	WP2 & PF2	VBAP	J_1BTAXLW2	Tax law: IPI	S/4 HANA	VBAP	J_1BTAXLW2	Tax law: IPI	Mapping	MAP_J_1BTAXLW2
166	WP2 & PF2	VBAP	J_1BTXSDC	SD tax code	S/4 HANA	VBAP	J_1BTXSDC	SD tax code	Mapping	MAP_J_1BTXSDC
167	WP2 & PF2	VBAP	KMPMG	Component Quantity	S/4 HANA	VBAP	KMPMG	Component Quantity	Copy 1:1	
168	WP2 & PF2	VBAP	WAERK	SD Document Currency	S/4 HANA	VBAP	WAERK	SD Document Currency	Copy 1:1	
169	WP2 & PF2	VBAP	PRCTR	Profit Center	S/4 HANA	VBAP	PRCTR	Profit Center	Mapping	MAP_PRCTR
170	WP2 & PF2	VBKD	AKPRZ	Depreciation percentage for financial document processing	S/4 HANA	VBKD	AKPRZ	Depreciation percentage for financial document processing	Copy 1:1	
171	WP2 & PF2	VBAP	VGBEL	Document Number of Reference Document	S/4 HANA	VBAP	VGBEL	Document Number of Reference Document	Mapping	SO_XREF
172	WP2 & PF2	VBAP	VGPOS	Item number of the reference item	S/4 HANA	VBAP	VGPOS	Item number of the reference item	Copy 1:1	
173	WP2 & PF2	VBAP	KDMAT	Customer Material	S/4 HANA	VBAP	KDMAT	Customer Material	Copy 1:1	
174					S/4 HANA	VBKD	VSART	Shipping Type	Auto derive	
175	WP2 & PF2	VBKD	SDABW	Special Processing Indicator	S/4 HANA	VBKD	SDABW	Special Processing Indicator	Mapping	MAP_SDABW
176	WP2 & PF2	VBAP	J_1BCFOP	CFOP code and extension	S/4 HANA	VBAP	J_1BCFOP	CFOP code and extension	Mapping	MAP_J_1BCFOP
177	WP2 & PF2	VBAP	MATWA	Material entered	S/4 HANA	VBAP	MATWA	Material entered	Mapping	Material_XREF
178	WP2 & PF2	VBKD	J_1AFITP	Tax Type	S/4 HANA	VBKD	J_1AFITP	Tax Type	Mapping	MAP_1AFITP
179	WP2 & PF2	VBKD	J_1ARFZ	Reason for Zero VAT	S/4 HANA	VBKD	J_1ARFZ	Reason for Zero VAT	Mapping	MAP_1ARFZ
180	WP2 & PF2	VBAP	J_1BTAXLW4	COFINS Tax Law	S/4 HANA	VBAP	J_1BTAXLW4	COFINS Tax Law	Mapping	MAP_J_1BTAXLW4
181	WP2 & PF2	VBAP	J_1BTAXLW5	PIS Tax Law	S/4 HANA	VBAP	J_1BTAXLW5	PIS Tax Law	Mapping	MAP_J_1BTAXLW5
				Pricing Reference				Pricing Reference		

182	WP2 & PF2	VBAP	PMATN	Material	S/4 HANA	VBAP	PMATN	Material	Mapping	Material_XREF
183					S/4 HANA	VBKD	INCO2_L	Incoterms Location 1	Auto derive	
Partner										
184	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
185	WP2 & PF2	VBPA	PARVW	Partner Function	S/4 HANA	VBPA	PARVW	Partner Function	Mapping	MAP_PARVW
186	WP2 & PF2	VBPA	KUNNR	Customer Number	S/4 HANA	VBPA	KUNNR	Customer Number	Mapping	Customer_XREF
187	WP2 & PF2	ADRC	TITLE	Form of address	S/4 HANA	ADRC	TITLE	Form of address	Copy 1:1	
188	WP2 & PF2	ADRC	NAME1	Name 1	S/4 HANA	ADRC	NAME1	Name 1	Copy 1:1	
189	WP2 & PF2	ADRC	NAME2	Name 2	S/4 HANA	ADRC	NAME2	Name 2	Copy 1:1	
190	WP2 & PF2	ADRC	NAME3	Name 3	S/4 HANA	ADRC	NAME3	Name 3	Copy 1:1	
191	WP2 & PF2	ADRC	NAME4	Name 4	S/4 HANA	ADRC	NAME4	Name 4	Copy 1:1	
192	WP2 & PF2	ADRC	STREET	Street and House Number	S/4 HANA	ADRC	STREET	Street and House Number	Copy 1:1	
193	WP2 & PF2	VBPA	LAND1	Country/Region Key	S/4 HANA	VBPA	LAND1	Country/Region Key	Rule	If source VBPA-ADRDA = "E", THEN MAP_LAND1
194	WP2 & PF2	ADRC	COUNTRY	Country/Region Key in ISO Code	S/4 HANA	ADRC	COUNTRY	Country/Region Key in ISO Code	Rule	If source VBPA-ADRDA = "E", THEN MAP_LAND1
195	WP2 & PF2	ADRC	POST_CODE1	Postal Code	S/4 HANA	ADRC	POST_CODE1	Postal Code	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
196	WP2 & PF2	ADRC	PO_BOX	P.O. Box Postal Code	S/4 HANA	ADRC	PO_BOX	P.O. Box Postal Code	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
197	WP2 & PF2	ADRC	PO_BOX_LOC	PO Box city	S/4 HANA	ADRC	PO_BOX_LOC	PO Box city	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
198	WP2 & PF2	ADRC	CITY1	City	S/4 HANA	ADRC	CITY1	City	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
199	WP2 & PF2	ADRC	CITY2	District	S/4 HANA	ADRC	CITY2	District	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
200	WP2 & PF2	ADRC	REGIO	Region (State, Province, County)	S/4 HANA	ADRC	REGIO	Region (State, Province, County)	Rule	If source VBPA-ADRDA = "E", THEN MAP_REGIO
201	WP2 & PF2	ADRC	PO_BOX	PO Box	S/4 HANA	ADRC	PO_BOX	PO Box	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
202	WP2 & PF2	ADR2	TELNR_LONG	First telephone number	S/4 HANA	ADR2	TELNR_LONG	First telephone number	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
203	WP2 & PF2	ADR2	TELNR_LONG	Second telephone number	S/4 HANA	ADR2	TELNR_LONG	Second telephone number	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
204	WP2 & PF2	ADR3	FAXNR_LONG	Fax Number	S/4 HANA	ADR3	FAXNR_LONG	Fax Number	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
205	WP2 & PF2	ADRC	LANGU	Language Key	S/4 HANA	ADRC	LANGU	Language Key	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
206	WP2 & PF2	ADRC	LANGU	2-Character SAP Language Code	S/4 HANA	ADRC	LANGU	2-Character SAP Language Code	Rule	If source VBPA-ADRDA = "E", THEN Copy 1:1
207	WP2 & PF2	VBPA	ABLAD	Unloading Point	S/4 HANA	VBPA	ABLAD	Unloading Point	Copy 1:1	
208	WP2 & PF2	VBPA	LZONE	Transportation zone to or from which the goods are delivered	S/4 HANA	VBPA	LZONE	Transportation zone to or from which the goods are delivered	Copy 1:1	
209	WP2 & PF2	VBPA	STCEG	VAT Reg. No.	S/4 HANA	VBPA	STCEG	VAT Reg. No.	Copy 1:1	
210	WP2 & PF2	ADRC	TAXJURCODE	Tax Jurisdiction	S/4 HANA	ADRC	TAXJURCODE	Tax Jurisdiction	Copy 1:1	
Schedule line										
211	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
212	WP2 & PF2	VBAP	POSNR	Sales Document Item	S/4 HANA	VBAP	POSNR	Sales Document Item	Copy 1:1	
213	WP2 & PF2	VBEP	ETENR	Schedule Line Number	S/4 HANA	VBEP	ETENR	Schedule Line Number	Copy 1:1	
214	WP2 & PF2	VBEP	EDATU	Schedule Line Date	S/4 HANA	VBEP	EDATU	Schedule Line Date	Copy 1:1	
										Business Logic: **Situation A: Delivery-Related Sales Order Item -** Condition: VBEP-LFREL = 'X' (Delivery-related) • Calculation: Order Quantity: order_qty = VBAP-KWMENG • Delivered Quantity: Sum of delivered quantity from delivery items (LIPS), mapped via VGBEL/VGPOS: • WMENG = order_qty - delivered_qty **Situation B: Non-Delivery-Related Sales Order Item -** Condition: VBEP-LFREL IS BLANK (Non-delivery-related) • Order Quantity: order_qty = VBAP-KWMENG

										• Billed Quantity: Use the billed quantity as defined in your transformation rule 88 (which includes the correct pairing of sales order and billing document types). • WMENG= order_qty - billed_qty **SQL Query to get delivered quantity** SELECT vbap.vbeln, -- Sales order number vbap.posnr, -- Sales order item vbap.kwmeng AS order_qty, -- Order quantity COALESCE(del.delivered_qty, 0) AS delivered_qty, -- Delivered quantity (default 0 if none) vbap.kwmeng - COALESCE(del.delivered_qty, 0) AS open_qty -- Open quantity FROM vbap LEFT JOIN vbep ON vbep.vbeln = vbap.vbeln AND vbep.posnr = vbap.posnr LEFT JOIN (SELECT vgbel AS order_vbeln, vgpos AS order_posnr, SUM(lfimg) AS delivered_qty FROM lips GROUP BY vgbel, vgpos) del ON del.order_vbeln = vbap.vbeln AND del.order_posnr = vbap.posnr WHERE vbep.lfrel = 'X' -- Only delivery-related items **Distribution rule to VBEP** Distribute the **open_qty** according to legacy VBEP-BMENG, sort by legacy VBEP_EDATU the greatest to the lowest date. During sales order migration, the **open_qty** must be redistributed among the existing confirmed schedule lines quantity (VBEP-BMENG). The distribution shall follow a descending order of schedule line dates (VBEP-VDATU) — i.e., allocate to the latest (greatest) schedule date first, then progressively to earlier dates, until the total open quantity is fully distributed.
215	WP2 & PF2	N/A	N/A		S/4 HANA	VBEP	WMENG	Order Quantity in Sales Units	Rule	
216	WP2 & PF2	VBEP	LIFSP	Schedule Line Blocked for Delivery	S/4 HANA	VBEP	LIFSP	Schedule Line Blocked for Delivery	Mapping	MAP_LIFSD
217	WP2 & PF2	VBEP	ETTYP	Schedule Line Category	S/4 HANA	VBEP	ETTYP	Schedule Line Category	Mapping	MAP_ETTYP
Header Conditions										
218	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
219	WP2 & PF2	KONV	KSCHL	Condition Type	S/4 HANA	PRCD_ELEMENTS	KSCHL	Condition Type	Mapping	MAP_KSCHL_A-V
220	WP2 & PF2	KONV	WAERS	Currency Key	S/4 HANA	PRCD_ELEMENTS	WAERS	Currency Key	Mapping	MAP_WAERS
221	WP2 & PF2	KONV	KPEIN	Condition Pricing Unit	S/4 HANA	PRCD_ELEMENTS	KPEIN	Condition Pricing Unit	Copy 1:1	
222	WP2 & PF2	KONV	KDATU	Condition Pricing Date	S/4 HANA	PRCD_ELEMENTS	KDATU	Condition Pricing Date	Copy 1:1	
223	WP2 & PF2	KONV	KKURS	Condition exchange rate for conversion to local currency	S/4 HANA	PRCD_ELEMENTS	KKURS	Condition exchange rate for conversion to local currency	Copy 1:1	
224	WP2 & PF2	KONV	KWERT	Condition value	S/4 HANA	PRCD_ELEMENTS	KWERT	Condition value	Copy 1:1	
225	WP2 & PF2	VBAK	WAERK	SD Document Currency	S/4 HANA	VBAK	WAERK	SD Document Currency	Mapping	MAP_WAERS
Item Conditions										
226	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
227	WP2 & PF2	KONV	KPOSN	Condition item number	S/4 HANA	PRCD_ELEMENTS	KPOSN	Condition item number	Copy 1:1	
228	WP2 & PF2	KONV	KSCHL	Condition Type	S/4 HANA	PRCD_ELEMENTS	KSCHL	Condition Type	Mapping	MAP_KSCHL_A-V
229	WP2 & PF2	KONV	WAERS	Currency Key	S/4 HANA	PRCD_ELEMENTS	WAERS	Currency Key	Mapping	MAP_WAERS
230	WP2 & PF2	KONV	KPEIN	Condition Pricing Unit	S/4 HANA	PRCD_ELEMENTS	KPEIN	Condition Pricing Unit	Copy 1:1	
231	WP2 & PF2	KONV	KDATU	Condition Pricing Date	S/4 HANA	PRCD_ELEMENTS	KDATU	Condition Pricing Date	Copy 1:1	
				Condition exchange rate				Condition exchange rate		

232	WP2 & PF2	KONV	KKURS	for conversion to local currency	S/4 HANA	PRCD_ELEMENTS	KKURS	for conversion to local currency	Copy 1:1	
233	WP2 & PF2	KONV	KWERT	Condition value	S/4 HANA	PRCD_ELEMENTS	KWERT	Condition value	Copy 1:1	
234	WP2 & PF2	KONV	WAERS	SD Document Currency	S/4 HANA	PRCD_ELEMENTS	WAERS	SD Document Currency	Mapping	MAP_WAERS
Header Text										
235	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
236	WP2 & PF2	VBAP	POSNR	Sales Document Item	S/4 HANA	VBAP	POSNR	Sales Document Item	Copy 1:1	
237	WP2 & PF2	STXH	TDID	Text ID	S/4 HANA	STXH	TDID	Text ID	Mapping	MAP_TDID
238	WP2 & PF2	STXH	TDSPRAS	Language Key	S/4 HANA	STXH	TDSPRAS	Language Key	Copy 1:1	
239	WP2 & PF2	SRXL	READ_TEXT	Text Line	S/4 HANA	SRXL	READ_TEXT	Text Line	Copy 1:1	
Item Text										
240	WP2 & PF2	VBAK	VBELN	Sales Document	S/4 HANA	VBAK	VBELN	Sales Document	Copy 1:1	The value in the load file of this field is from souce system, once it is loaded, the SO number will not be same in the target S4. The mapping will be provided in SO_XREF
241	WP2 & PF2	VBAP	POSNR	Sales Document Item	S/4 HANA	VBAP	POSNR	Sales Document Item	Copy 1:1	
242	WP2 & PF2	STXH	TDID	Text ID	S/4 HANA	STXH	TDID	Text ID	Mapping	MAP_TDID
243	WP2 & PF2	STXH	TDSPRAS	Language Key	S/4 HANA	STXH	TDSPRAS	Language Key	Copy 1:1	
244	WP2 & PF2	SRXL	READ_TEXT	Text Line	S/4 HANA	SRXL	READ_TEXT	Text Line	Copy 1:1	

Transformation Mapping

Mapping Table Name	Mapping Table Description
MAP_VKORG	Sales Organization
MAP_VTWEG	Distribution Channel
MAP_SPART	Division
MAP_VKBUR	Sales Office
MAP_VKGRP	Sales Group
MAP_FAKSK	Sales Document Billing Block
MAP_AUGRU	Order Reason
MAP_ZTERM	Payment terms
MAP_PS_PSP_PNR	WBS Element Number
MAP_TDID	Text ID
MAP_MEINS	Unit of Measure
MAP_WERKS	Plant
MAP_LGORT	Storage Location
MAP_PSTYV	Sales Document Item Category
MAP_PARVW	Partner function
MAP_AUART	Sales Document Type
MAP_BSARK	Customer Purchase Order Type
MAP_KONDA	Customer Price Group
MAP_KDGRP	Customer Group
MAP_BZIRK	Sales District
MAP_PLTYP	Price List Type
MAP_INCO1	Incoterms (Part 1)
MAP_LIFSK	Delivery Block (Document Header)

MAP_KVGR1	Customer Group 1
MAP_KVGR2	Customer Group 2
MAP_KVGR3	Customer Group 3
MAP_KVGR4	Customer Group 4
MAP_KVGR5	Customer Group 5
MAP_VSBED	Shipping Conditions
SO_XREF	Sales Order XREF
MAP_TAXKD	Tax Classification for Customer
MAP_PERFK	Invoice Dates (Calendar Identification)
MAP_ZLSCH	Payment Method
MAP_KTGRD	Account Assignment Group for Customer
MAP_ABSSC	Payment Guarantee Procedure
MAP_KDKGX	Customer condition group
MAP_LAND1	Country Key
MAP_SDABW	Special Processing Indicator
MAP_MVGR1	Material Group 1
MAP_MVGR2	Material Group 2
MAP_MVGR3	Material Group 3
MAP_MVGR4	Material Group 4
MAP_MVGR5	Material Group 5
MAP_PRODH	Product Hierarchy
MAP_MATKL	Material Group
MAP_LPRIO	Delivery Priority
MAP_VSTEL	Shipping Point / Receiving Point
MAP_ROUTE	Route
MAP_TAXKM	Tax Classification for Material
MAP_KONDM	Material Price Group
MAP_BWTAR	Valuation Type
MAP_BEDAE	Requirements type
MAP_EXART	Business Transaction Type
MAP_MFRGR	Material Freight Group
Material_XREF	Material XREF
MAP_1AFITP	Tax Type
MAP_1ARFZ	Reason for Zero VAT
MAP_J_1BTAXLW1	Tax law: ICMS
MAP_J_1BTAXLW2	Tax law: IPI
MAP_J_1BTXSDC	SD tax code
MAP_PRCTR	Profit Centre
MAP_J_1BCFOP	CFOP code and extension
MAP_J_1BTAXLW4	COFINS Tax Law
MAP_J_1BTAXLW5	PIS Tax Law

Customer_XREF	Customer Number
MAP_LZONE	Transportation zone to or from which the goods are delivered
MAP_LIFSD	Schedule Line Blocked for Delivery
MAP_ETTYP	Schedule Line Category
MAP_KSCHL_A-V	Condition Type
MAP_WAERS	Currency

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Source Data Integrity - Ensure extracted data is complete, accurate, and consistent. - Validate that data types and formats align with transformation requirements.	Syniti
2	Referential Integrity - Ensure dependent records are transformed together or in advance	Syniti
3	Transformation Logic and Mapping - Define data mapping rules between source and target schemas.	Data Team
4	Performance and Scalability Considerations - Optimize transformation processes for large datasets. - Ensure system resources can handle transformation workloads	Syniti
5	Logging and Error Handling - Maintain detailed logs of transformation activities. - Define error-handling procedures for failed transformations	Syniti

Pre-Load Validation

Project Team

Completeness

Task	Action
Validate mandatory and key fields	**Mandatory field check.** Based on S/4HANA target design fields, sales order type configuration, item category determination and schedule line category. • Check if records have all mandatory fields filled and mapped (e.g. Sales Document Type, Sales Organization, Distribution Channel, Division, Sold-to Party, Ship-to Party, Material, Quantity, Requested Delivery Date, Pricing Conditions, etc.). • Records missing any mandatory fields must be flagged as error. **Check Business Partners Master Data** • Verify that Sold-to Party, Ship-to Party, Bill-to Party, and Payer exist as Business Partners in S/4HANA (tables: BUT000, KNA1, KNVV). • Ensure the BP is extended to the required Sales Organization, Distribution Channel, and Division. • Check BP deletion flags: KNVV-LOEVM (Deletion flag for sales area data) must not be set. **Check Material Master Data** • Confirm that Material Numbers exist in S/4HANA Material Master (MARA, MVKE and MARC). • Validate that materials are extended to relevant Sales Org and Distribution Channel. • Check that the material is not flagged for deletion (MARA-LVORM must not be set). **Check Sales Order Item Consistency** • Validate item category and schedule line category are mapped accordingly • Ensure quantity fields are populated and non-zero. • Check schedule lines have valid requested delivery dates. **Check Currency and Pricing Data** • Validate pricing conditions are correctly mapped and exist in condition master data.

	• Check currency fields: Sales Order currency and pricing currency must be populated and valid (against TCURC / currency customizing). • Ensure that net values and tax amounts are correctly calculated and populated.

Reconciliation check	**Record Count**
	
	• Check that the total number of open sales order records in the load file matches the source system.
	• The record count will be reconciled on a group basis. The grouping fields are:
	  ◦ Sales Organization
	  ◦ Sales Document Type
	  ◦ Sold-to Party
	  ◦ Sales Document Number
	• Any mismatch in record count between source and load file must be flagged for investigation.
	
	Check Amount in Document Currency and Local Currency
	
	• Sum the total Net Value (Document Currency) for Sales Orders in the load file and compare with the total from the source system.
	• Sum the Tax (Document Currency) for Sales Orders in the load file and compare with the total from the source system.
	• Any difference in sum between source and load file must be flagged as an error.
	
	Check Total Quantity
	
	• Sum the ordered quantity matching with open quantities in the source system.
	• If there is a UOM changes, the quantity must be converted with the correct conversion rate.
	• Compare aggregated quantities per Material and Sales Organization to ensure data consistency.
	• Any mismatches must be flagged for investigation.

Accuracy

Task	Action
Validate the transformation	Make sure all fields with transformation are populated with S/4 HANA values according to the mapping file.

Check Data Consistency	1. **Sold-to Party**
	  • Verify that the Sold-to Party (Customer Number) in the pre-load file matches the corresponding value in the legacy system.
	  • Validate customer master mapping if applicable.
	2. **Ship-to Party**
	  • Verify that the Ship-to Party in the pre-load file matches the corresponding value in the legacy system.
	  • Validate partner function assignments if applicable.
	3. **Customer PO Date**
	  • Verify that the Customer Purchase Order Date (VBAK-BSTDK) matches between legacy system and pre-load file.
	4. **Pricing**
	  • Validate that key pricing condition values (e.g. base price, discounts, surcharges) are consistent between legacy system and pre-load file.
	  • Compare condition type values (e.g. KONV-KBETR) where feasible.
	5. **Number of Line Items**
	  • Verify that the total number of open line items per sales order matches between legacy system and pre-load file.
	6. **Open Quantities**
	  • Validate that open quantities (Ordered Quantity minus Delivered Quantity) match between legacy system and pre-load file.

Business

Completeness

Task	Action

Conversion check	In legacy system, execute report Open Sales Orders List (e.g. via transaction code VA05 or equivalent custom report). Group the output of the report by Sales Organization and Sold-to Party using the subtotal function and compare the count in this report against the Open Sales Orders count in the pre-load file. The record count for Open Sales Orders may also be done at a more granular level. The recommended granular level or subtotal fields can consist of: • Sales Organization • Sales Document Type • Sold-to Party • Material Number If any of the count is different, raise a defect and flag the relevant record as error.

Accuracy

Task	Action

Key fields check	Perform the following checks on a selected sample of open sales orders:
	
	1. Total Net Value Check
	  • Compare the total Net Value (VBAK-NETWR) per Sales Organization and Sold-to Party between legacy system and pre-load file. The Net Value should be migrated proportionally according to the open order quantities.
	2. Total Tax Amount Check
	  • Compare the total Tax Amount (if applicable, e.g. from pricing conditions or summarized tax amount) between legacy system and pre-load file.
	3. Material Number and Open Quantity Check
	  • For each Sales Order Item (VBAP):
	  ◦ Verify that Material Numbers match between legacy system and pre-load file.
	  ◦ Verify that Open Quantities (Ordered Quantity minus Delivered Quantity) are accurate.

Validate the transformation	Make sure all fields with transformation are populated with S/4 HANA values according to the mapping file.

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
1	Load Scope Definition - Identify the target system and database structure. - Define data objects (tables, fields, records) to be loaded. - Establish business rules for data validation.	Data team
2	Load Methodology - Specify the loading tools and technologies (Migration Cockpit, LSMW, custom loading program).	Syniti
3	Data Quality and Validation - Ensure data integrity checks (null values, duplicates, format validation). - Perform pre-load validations to verify completeness. - Define error handling mechanisms for load failures	Syniti
4	Load Execution Plan - Establish execution timelines and batch processing schedules. - Assign responsibilities for monitoring execution.	Syniti

	- Document dependencies on other migration tasks	
5	Logging and Reporting - Maintain detailed logs of loading activities. - Generate summary reports on loaded data volume and quality. - Define escalation procedures for errors	Syniti

Load Phase and Dependencies

Open Sales Orders will be loaded in the **pre-cutover** or **cutover** phase, depending on business cut-off.

Configuration

Item #	Configuration Item
1	Order type
2	Item categories
3	Schedule lines categories
4	Pricing procedure
5	Number range settings for orders

Conversion Objects

Object #	Preceding Object Conversion Approach
1034	Sales Pricing Conditions
1036	Customer Material Information Records(CMIR)
1042	TM - Transportation Lanes
1046	Classes Type: 023 (Batch)
1047	Batch Characteristics of Class Type: 023
1048	Batch Master
1051	TM - Locations
1052	TM - Transportation Zones
1053	TM - Default Routes
1058	Batch Classification Data
1062	Batch Search Strategy
1134	Output determination for application V1/V3
1135	Z tables (variant table)
2001	Material Listing and Exclusions
2002	Material Substitution
2003	Materials - Sales view with sales long text
2005	Materials - MRP view (4 views)
2011	Materials - WM Execution (EWM)
2012	Materials - Accounting 1
2013	Materials - Costing 1
2014	Materials - Accounting 2
2015	Materials - Costing 2

2019	Materials - Basic View
2027	Materials - Foreign Trade Views
3003	Business Partners - Customer (Sales and Service) - FLCU01
3007	Business Partners - General (Role 000000)
3010	Business Partners - Relationship for contact person
3011	Business Partners - Contact Persons (BUP001)
3017	Business Partners - FI Customer (FLCU00)
3019	Business Partners - Credit Management (UKM000)
3022	Business Partners - Collection Management (UDM000)
3027	Business Partners - Plants/Intercompany Suppliers
3039	Business Partners - GTS Master
3040	Business Partners - Treasury
9011	Stock Balance

Error Handling

Error Type	Error Description	Action Taken
Configuration / Data Transformation	The value XXX for field XXX doesn't exist	1. Check the mapping/conversion is done properly in the loading file 2. Validate the target value is configured/transported in the target system 3. Reach out to function team to validate the configuration
Configuration	There is mandatory field XXX missing	1. Validate MDS if the fields are set as mandatory 2. Validate if there is value in the pre-loading file 3. Validate if the configuration for the mandatory fields are done properly
Obsolete Master Data	Customer or material master data no longer exists in target system	Replaced or removed based on business input

Post-Load Validation

Project Team

The following post-load validations will be performed by the Project Team.

Completeness

Task	Action

Validate Record count	Total number of records loaded for Open Sales Orders will be generated in the post-load reports in the tool based on the target tables and fields mentioned in section target design.
	
	The reconciliation needs to be executed on the total number of 'valid' records and amounts per Sales Organization in the source compared to total number of records and amounts in S/4HANA.
	
	Record Count
	
	• Check that the total record count of Open Sales Orders in the pre-load file matches the number of records loaded into S /4HANA.
	• The record count will be validated on a group basis. The recommended grouping fields are:
	  ◦ Sales Organization
	  ◦ Sold-to Party
	  ◦ Sales Document Type
	• Any mismatch in record count between pre-load file and S/4HANA must be flagged for investigation.

	Check Amount in Document Currency and Local Currency • At the line item level, sum the Net Value amounts in both Document Currency and Local Currency from the pre-load file and compare to the values posted in S/4HANA. • Any mismatches in totals must be flagged as errors for investigation.

Accuracy

Task	Action
Validate Key Fields	1. Post-load reports will have the same structure as the Open Sales Order load file, with additional columns as required to support post-load validation. 2. Utilize the migration tool to generate a Post-Load Report that displays S/4HANA loaded records alongside the corresponding legacy system values. This side-by-side comparison will enable a 100% field-level validation of all key fields in the shortest possible time. 3. Key fields for comparison include (but are not limited to): a. Sales Document Number b. Sales Document Type c. Sales Organization d. Sold-to Party e. Ship-to Party f. Customer PO Number and PO Date g. Material Number h. Ordered Quantity and Open Quantity i. Pricing values (Net Value, Tax, Conditions) j. Document Currency and Local Currency amounts 4. Any mismatches identified will be captured in the **Post Load - Error Report** for further investigation and resolution.

Business

Post-load validation is a critical step in data migration, ensuring that transferred data is accurate, complete, and functional within the target system.

1. Ensuring Data Integrity
After migration, data must be consistent with its original structure. Post-load validation checks for missing records, incorrect mappings, and formatting errors to prevent discrepancies.
2. Business Continuity
Faulty data can disrupt operations, leading to financial losses and inefficiencies. Validating post-load data ensures that applications function as expected, preventing downtime.
3. Error Detection and Resolution
By validating data post-migration, businesses can detect anomalies early, reducing the cost and effort required for corrections

Completeness

Task	Action
Review Loaded Condition Records	Access the S/4HANA system (via transactions like VA05 or custom reports) to view loaded sales order

Accuracy

Task	Action
Display Records	Pick up few random sales document number numbers, display with Tcode VA03 and validate the details

Key Assumptions

- Adapting S4 cross instances direct delivery solutions, where a plant from a different S4 instance can be entered in the Sales Order.
- Adapting S4 cross instances inter-company Purchase Order solution. The subsequent Sales Order will be automatically created even though it's in a separate instance.
- Credit / Debit memo request and return order can be created without preceding reference document in S4.

See also

Change log

Version	Published	Changed By	Comment
CURRENT (v. 87)	**May 06, 2026 12:28**	**LEW-ext, Chun Ming**	Update MAP table JIRA 1781
v. 86	May 04, 2026 05:58	**LEW-ext, Chun Ming**	IHREZ_E (2)
v. 85	May 04, 2026 05:57	**LEW-ext, Chun Ming**	Update heaader IHREZ_E logic
v. 84	Apr 20, 2026 06:39	**LEW-ext, Chun Ming**	Update VTWEG logic to derive from Sales Org country
v. 83	Apr 14, 2026 12:45	**LEW-ext, Chun Ming**	Update report 9065-010 to not applicable
v. 82	Apr 02, 2026 17:33	**LEW-ext, Chun Ming**	
v. 81	Apr 02, 2026 16:36	**LEW-ext, Chun Ming**	Update EQART to not used
v. 80	Apr 01, 2026 19:04	**LEW-ext, Chun Ming**	fine tune rule 215
v. 79	Apr 01, 2026 18:01	**LEW-ext, Chun Ming**	Fine tune rule 88
v. 78	Mar 30, 2026 08:06	**LEW-ext, Chun Ming**	Update transformation rule 88 to consider VBRK-VBTYP

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 Apr 02, 2026 to May 06, 2026	Actor	Type	Activity	Version
Approved	LEW-ext, Chun Ming	Edit	updated the page at 4:36 pm	
	TAMRAKAR-ext, Pooja	State	changed state to Approved at 4:19 pm	v82
Revision under Review	TAMRAKAR-ext, Pooja	State	gave *Minor change* approval at 4:19 pm	

Apr 01, 2026				
	LEW-ext, Chun Ming	Edit	updated the page at 6:01 pm	
Mar 30, 2026				
	LEW-ext, Chun Ming	State	changed state to Revision under Review at 10:13 am	v78