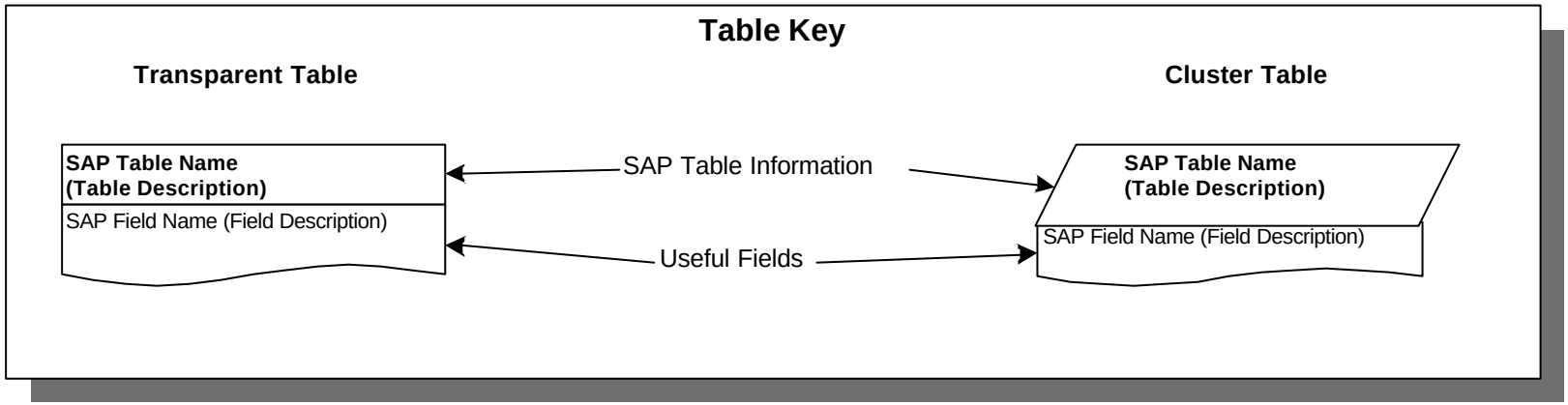
# SAP Table Relations

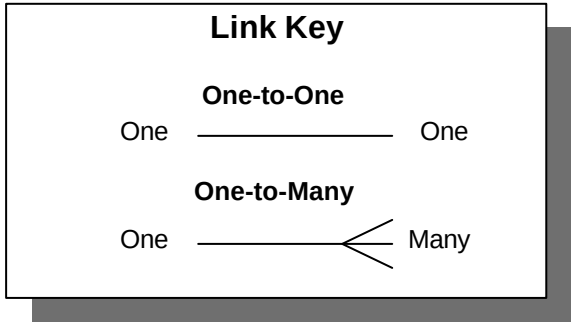
**version 1.0.0**

compiled by
Christopher Solomon
with
contributions by
various SAP Professionals

## How to use this document?

This document displays and describes the relationships and links between the various SAP database tables. These relationships are displayed graphically as described below:

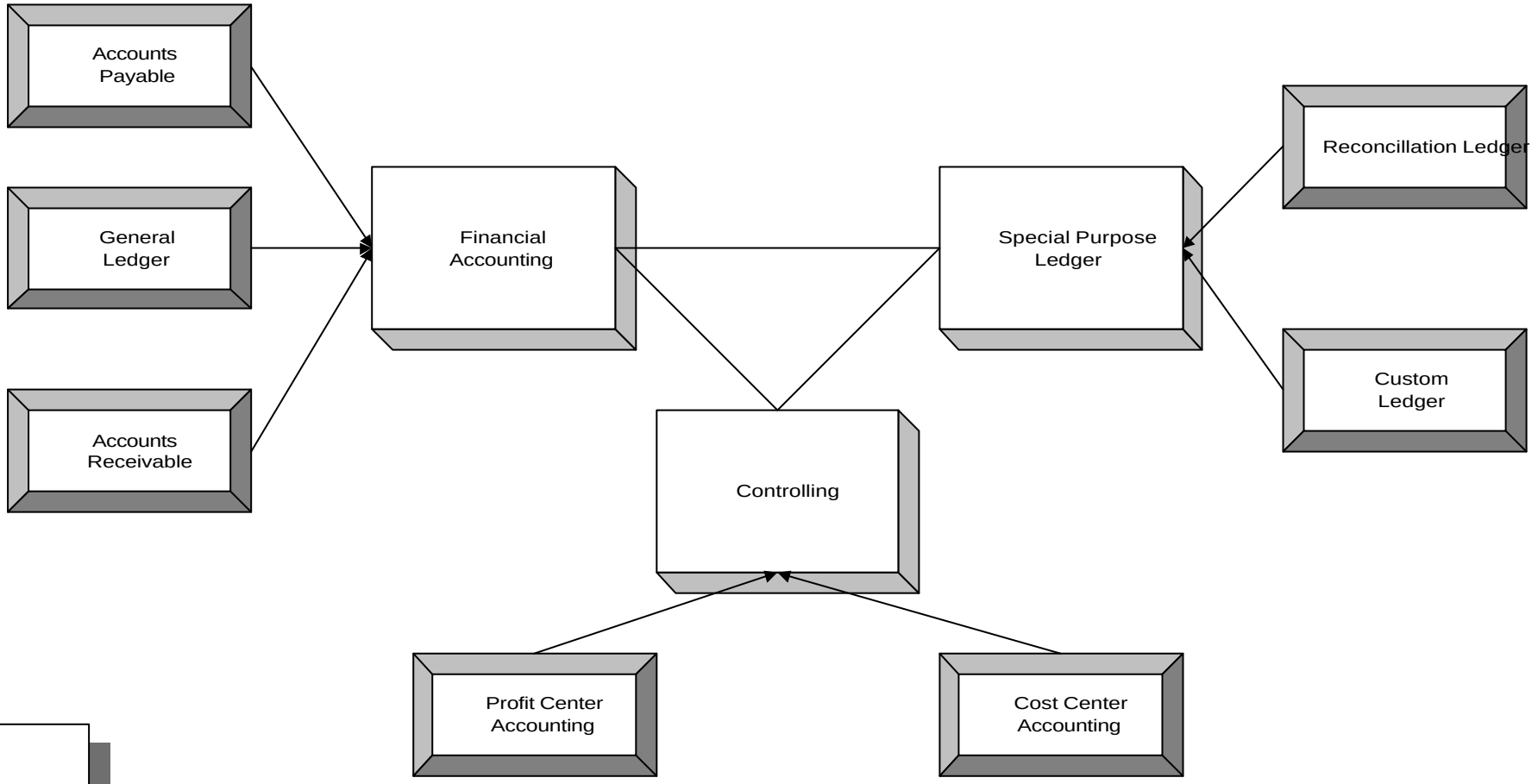


Master Data Tables

CEPC = Profit Center Master Data Table
CSKS = Cost Center Master
KNA1 = Cutomer Master (General Data)
LFA1 = Vendor Master (General Data)
MARA = Material Master (General Data)
SKB1 = G/L Account Master (Company Code)
T001W = Plants/Branches
T001 = Company Codes

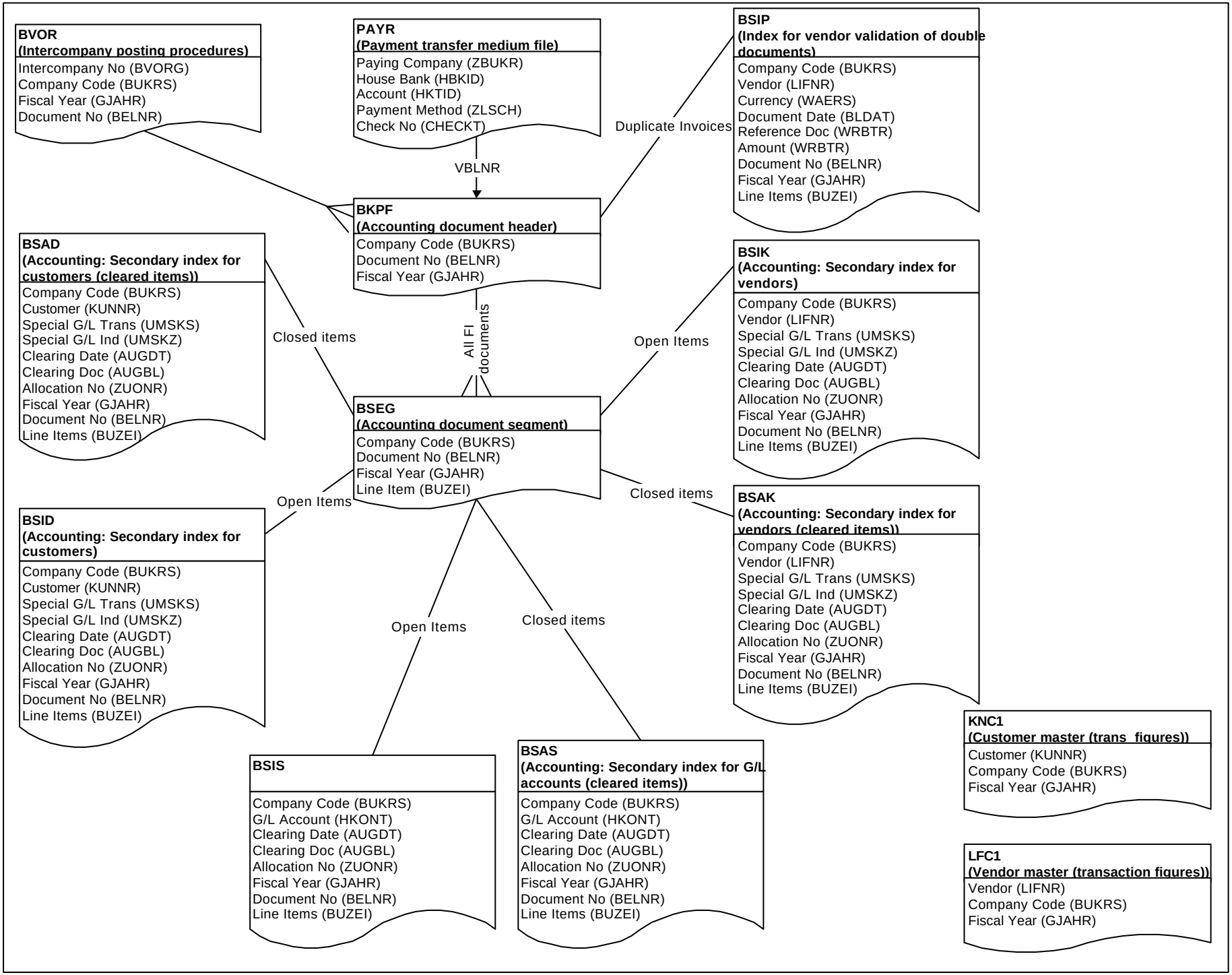
# SAP - FI/CO




**Tables:**
BSAD
BSAS
BSEG
BSES
BSIK
BSIS

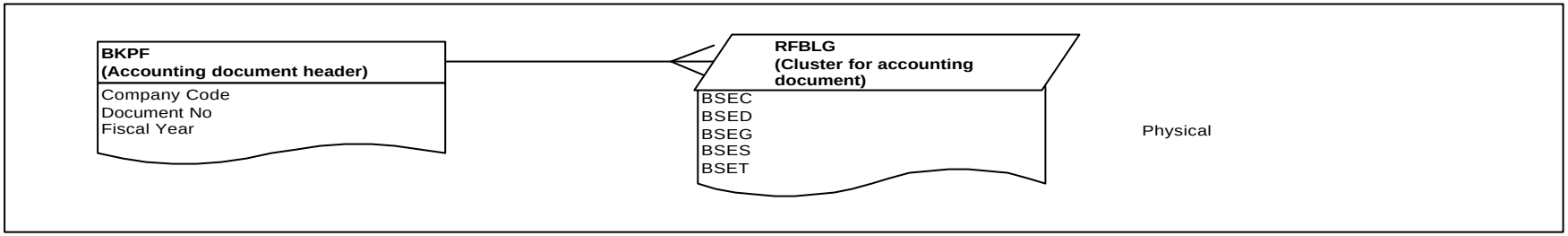
# FI/CO

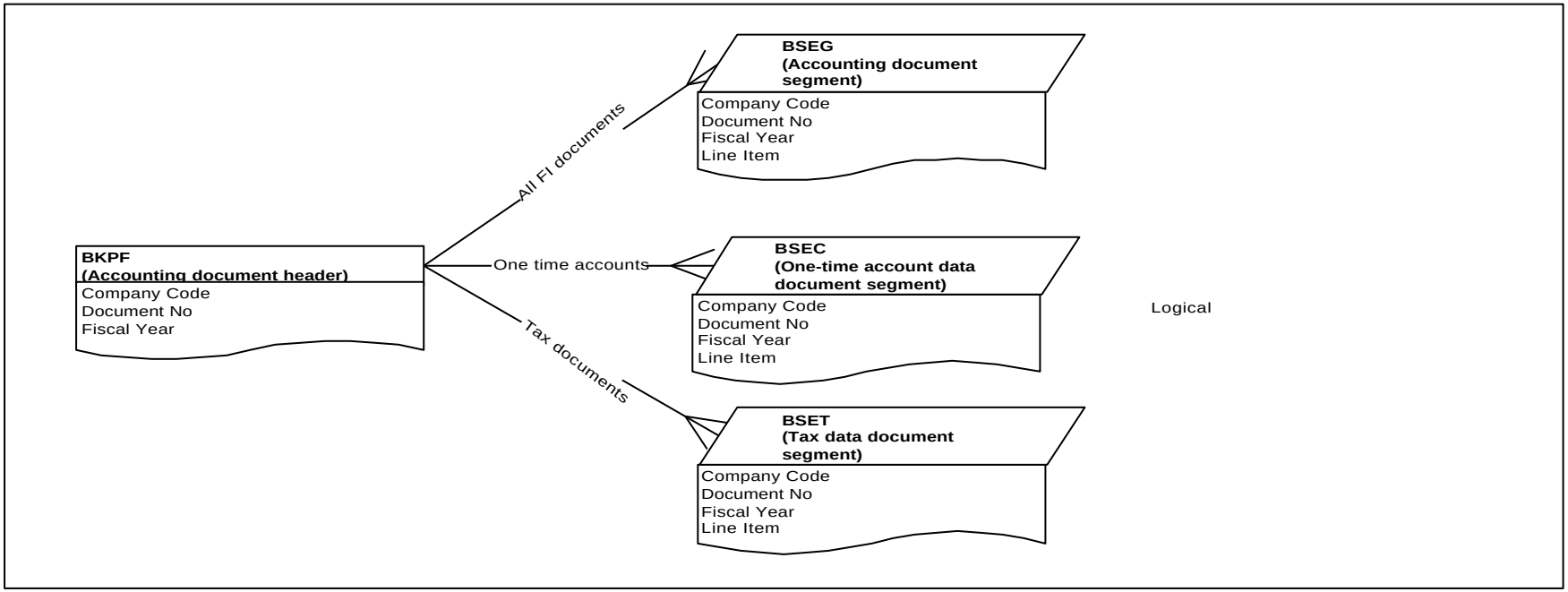
Table Mapping


BVOR
(Intercompany posting procedures)
Intercompany No (BVORG)
Company Code (BUKRS)
Fiscal Year (GJAHR)
Document No (BELNR)
PAYR
(Payment transfer medium file)
Paying Company (ZBUKR)
House Bank (HBKID)
Account (HKTID)
Payment Method (ZLSCH)
Check No (CHECKT)
VBLNR
BSIP
(Index for vendor validation of double documents)
Company Code (BUKRS)
Vendor (LIFNR)
Currency (WAERS)
Document Date (BLDAT)
Reference Doc (WRBTR)
Amount (WRBTR)
Document No (BELNR)
Fiscal Year (GJAHR)
Line Items (BUZEI)
Duplicate Invoices
BKPF
(Accounting document header)
Company Code (BUKRS)
Document No (BELNR)
Fiscal Year (GJAHR)
BSAD
(Accounting: Secondary index for customers (cleared items))
Company Code (BUKRS)
Customer (KUNNR)
Special G/L Trans (UMSKS)
Special G/L Ind (UMSKZ)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
Closed items
All FI documents
BSIK
(Accounting: Secondary index for vendors)
Company Code (BUKRS)
Vendor (LIFNR)
Special G/L Trans (UMSKS)
Special G/L Ind (UMSKZ)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
Open Items
BSEG
(Accounting document segment)
Company Code (BUKRS)
Document No (BELNR)
Fiscal Year (GJAHR)
Line Item (BUZEI)
Open Items
Closed items
BSAK
(Accounting: Secondary index for vendors (cleared items))
Company Code (BUKRS)
Vendor (LIFNR)
Special G/L Trans (UMSKS)
Special G/L Ind (UMSKZ)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
BSID
(Accounting: Secondary index for customers)
Company Code (BUKRS)
Customer (KUNNR)
Special G/L Trans (UMSKS)
Special G/L Ind (UMSKZ)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
Open Items
Closed items
KNC1
(Customer master (trans_figures))
Customer (KUNNR)
Company Code (BUKRS)
Fiscal Year (GJAHR)
BSIS
Company Code (BUKRS)
G/L Account (HKONT)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
BSAS
(Accounting: Secondary index for G/L accounts (cleared items))
Company Code (BUKRS)
G/L Account (HKONT)
Clearing Date (AUGDT)
Clearing Doc (AUGBL)
Allocation No (ZUONR)
Fiscal Year (GJAHR)
Document No (BELNR)
Line Items (BUZEI)
LFC1
(Vendor master (transaction figures))
Vendor (LIFNR)
Company Code (BUKRS)
Fiscal Year (GJAHR)

# SAP FI/CO

## Financial Accounting



# SAP FI/CO

## Controlling

### Profit Center Accounting

**GLPCT**
**(EC-PCA: Totals Table)**
Ledger(RLDNR)
Record Type (RRCTY)
Plan Version (RVERS)
Fiscal Year (GJAHR)
Object (ROBJNR)
Object (COBJNR)
Object (SOBJNR)
Currency (RTCUR)
UOM (RUNIT)
Debit/Credit Ind (DRCRX)
Period (RPMAX)

ROBJNR

COBJNR

**GLPCA**
**(EC-PCA: Actual Line Items)**
Record No (GL_SIRID)

**GLPCO**
**(EC-PCA: Object Table for Account Assignment Elements)**
Object (OBJNR)

**GLPCC**
**(EC-PCA: Transaction Attributes)**
Object (OBJNR)

### Cost Center Accounting

**COSP**
**(CO Object: Cost Totals - External Postings)**
Ledger (LEDNR)
Object (J_OBJNR)
Fiscal Year (GJAHR)
Value Type (WRTTP)
Version (VERSN)
Cost Element (KSTAR)
CO Key (HRKFT)
CO Trans (VRGNG)
Trading Part ID (VBUND)
Trading Part BA (PARGB)
Debit/Credit Ind (BEKNZ)
Currency (TWAER)
Period Block (PERBL)

**COEP**
**(CO object: period-related line items)**
Controlling Area (KOKRS)
Document No (BELNR)
Line Item (BUZEI)

**COBK**
Controlling Area (KOKRS)
Document No (BELNR)

## Special Purpose Ledger

### Example of a Custom Ledger

**ZZGLO**
Object (OBJNR)

**ZZGLO**
Record No (GL_SIRID)

ROBJNR

**ZZGLT**
Ledger(RLDNR)
Record Type (RRCTY)
Version (RVERS)
Fiscal Year (GJAHR)
Object (ROBJNR)
Object (SOBJNR)
Currency (RTCUR)
UOM (RUNIT)
Debit/Credit Ind (DRCRX)
Period (RPMAX)

### Reconcillation Ledger

**COFIT**
**(Totals records - reconciliation ledger)**
Ledger(RLDNR)
Record Type (RRCTY)
Version (RVERS)
Fiscal Year (GJAHR)
Object (ROBJNR)
Object (COBJNR)
Object (SOBJNR)
Currency (RTCUR)
UOM (RUNIT)
Debit/Credit Ind (DRCRX)
Period (RPMAX)

COBJNR

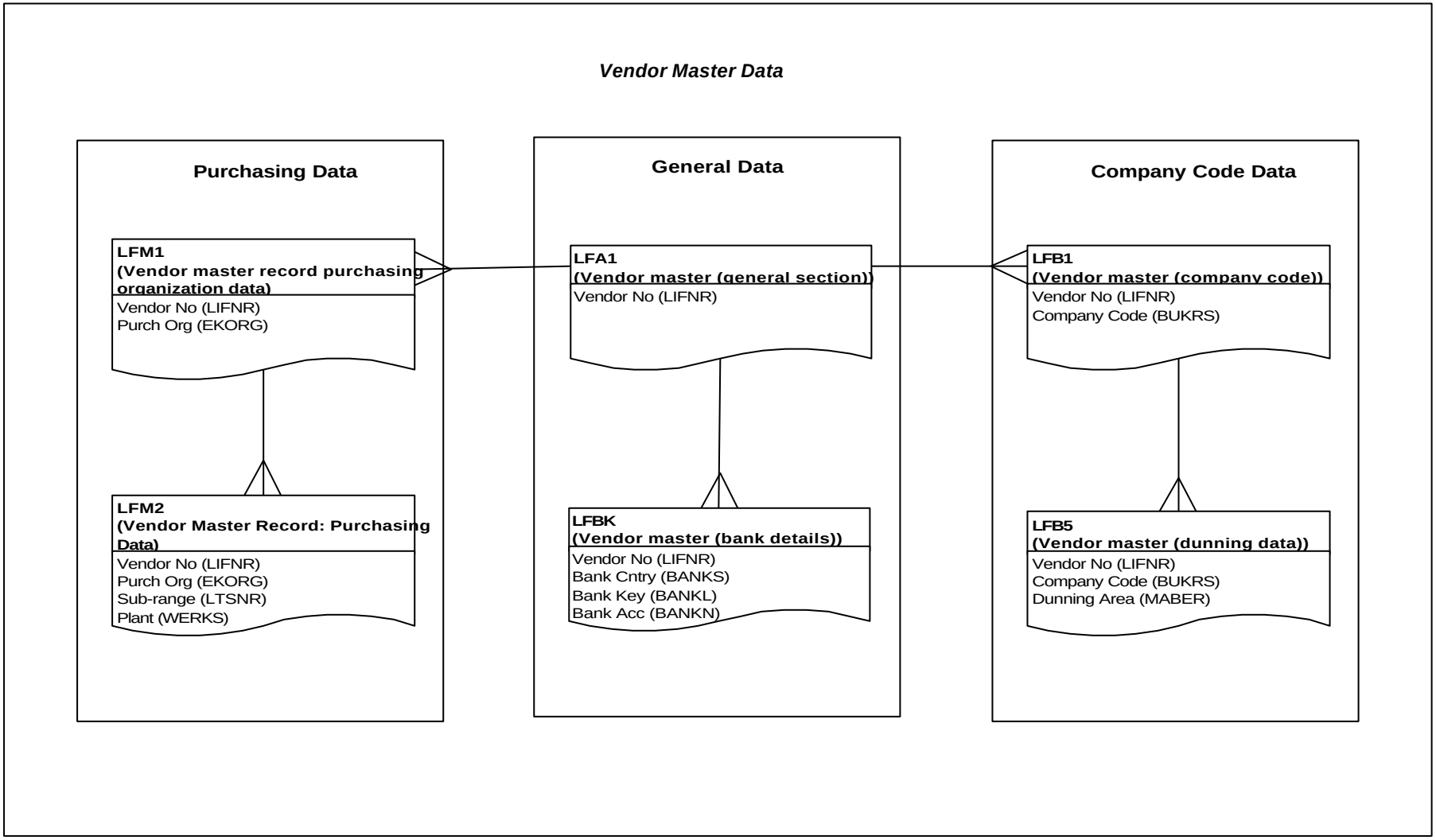
ROBJNR

**COFIO2**
**(Transaction-dependent fields for reconciliation ledger)**
Object (OBJNR)

**COFIO1**
**(Object Table for Reconciliation Ledger COFIT)**
Object (OBJNR)

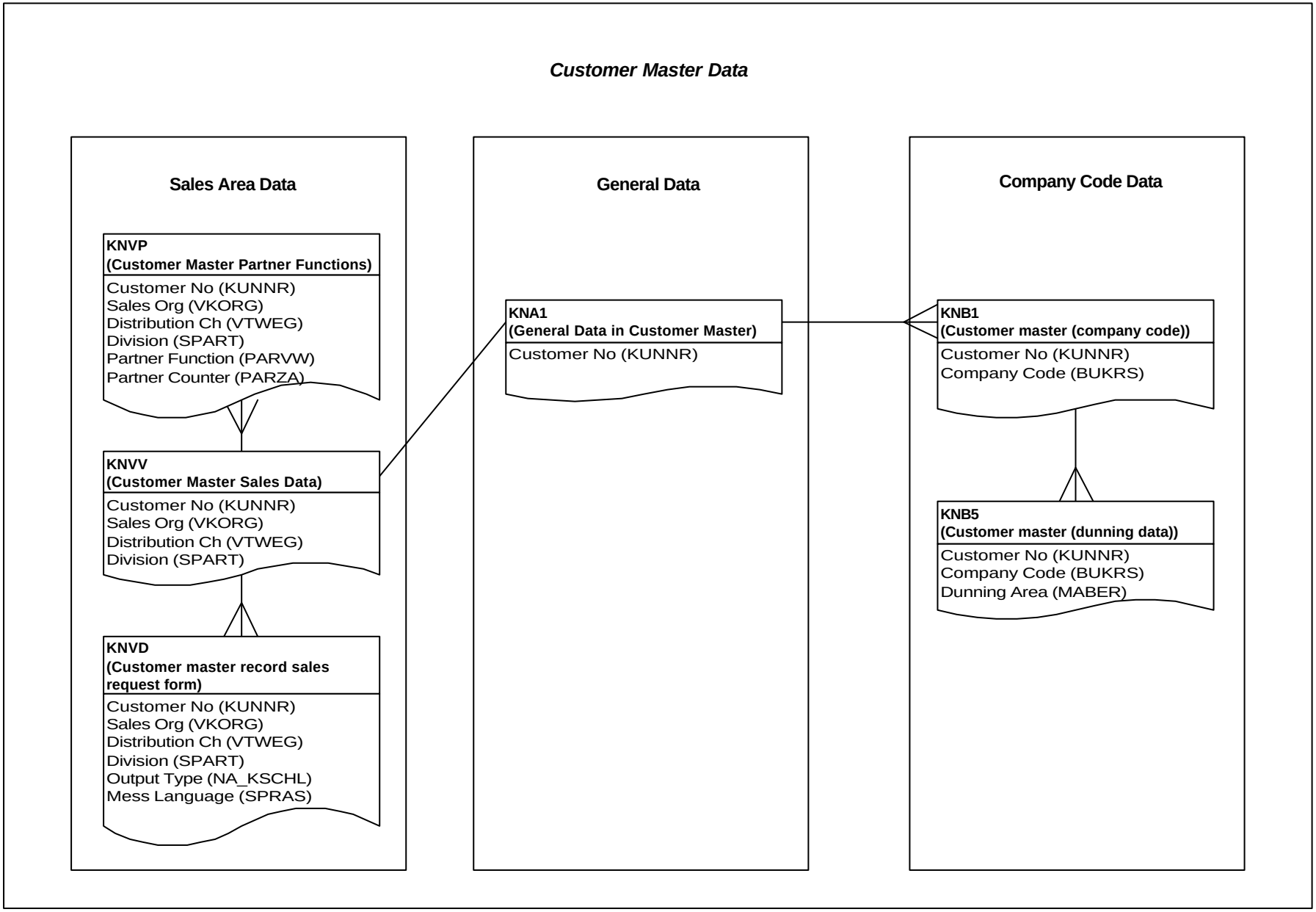
# SAP FI/CO

## Accounts Payable



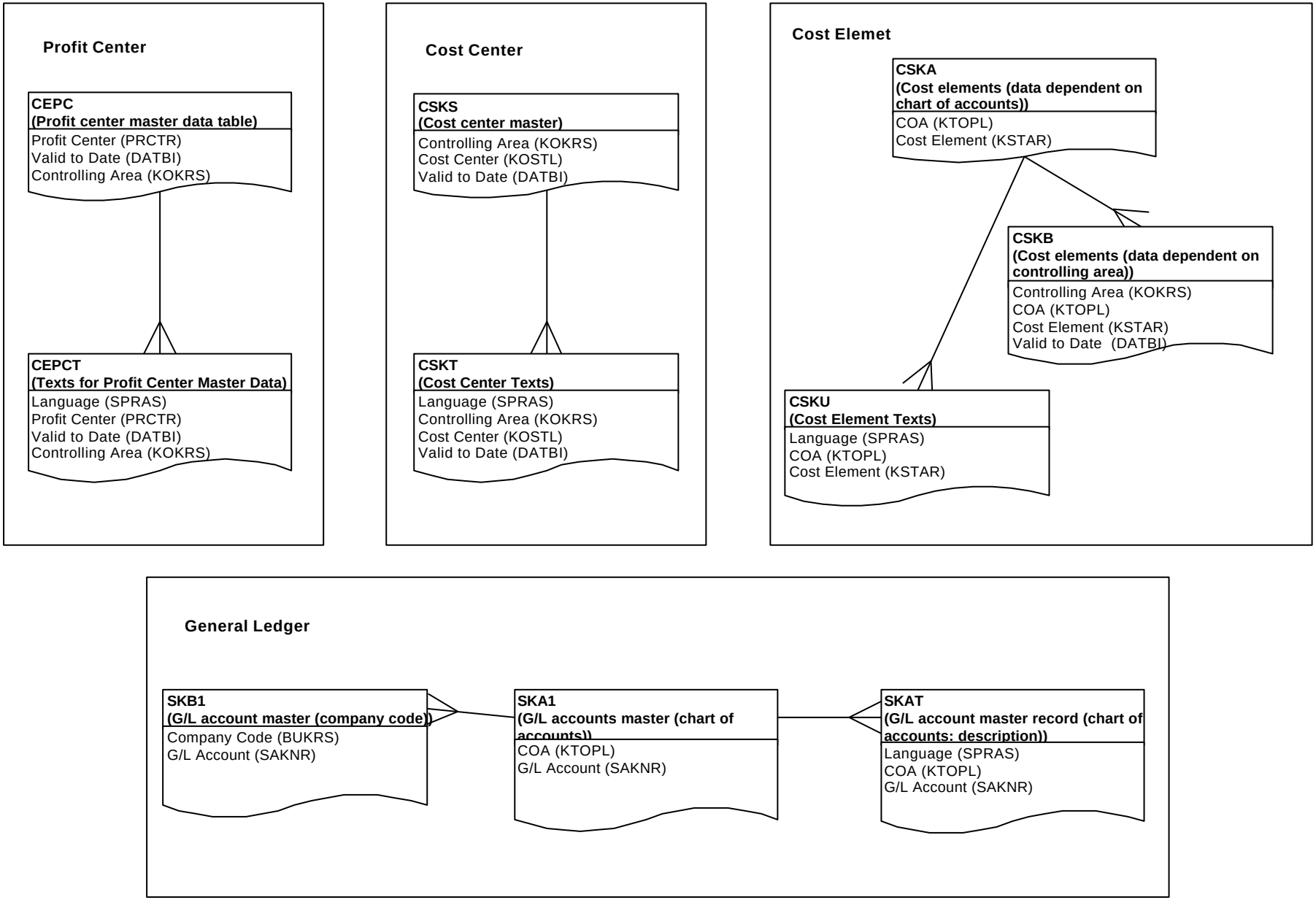
# SAP FI/CO

## Accounts Receivable

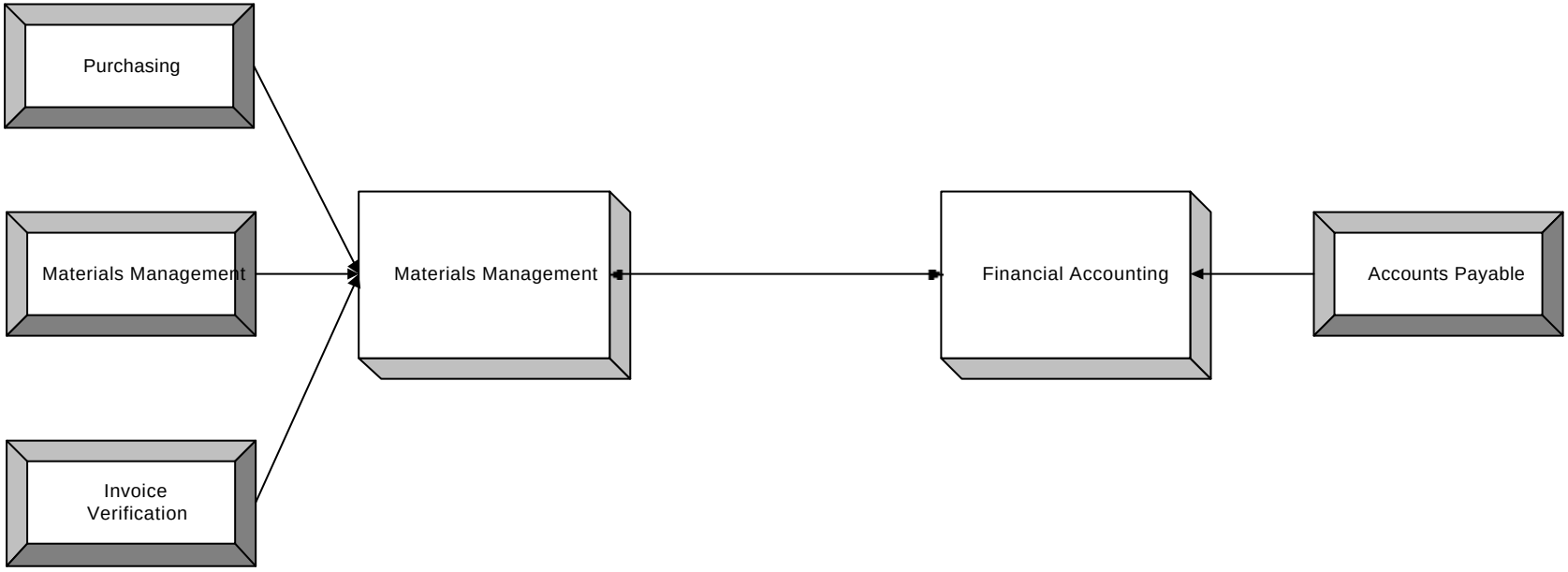


# SAP FI/CO

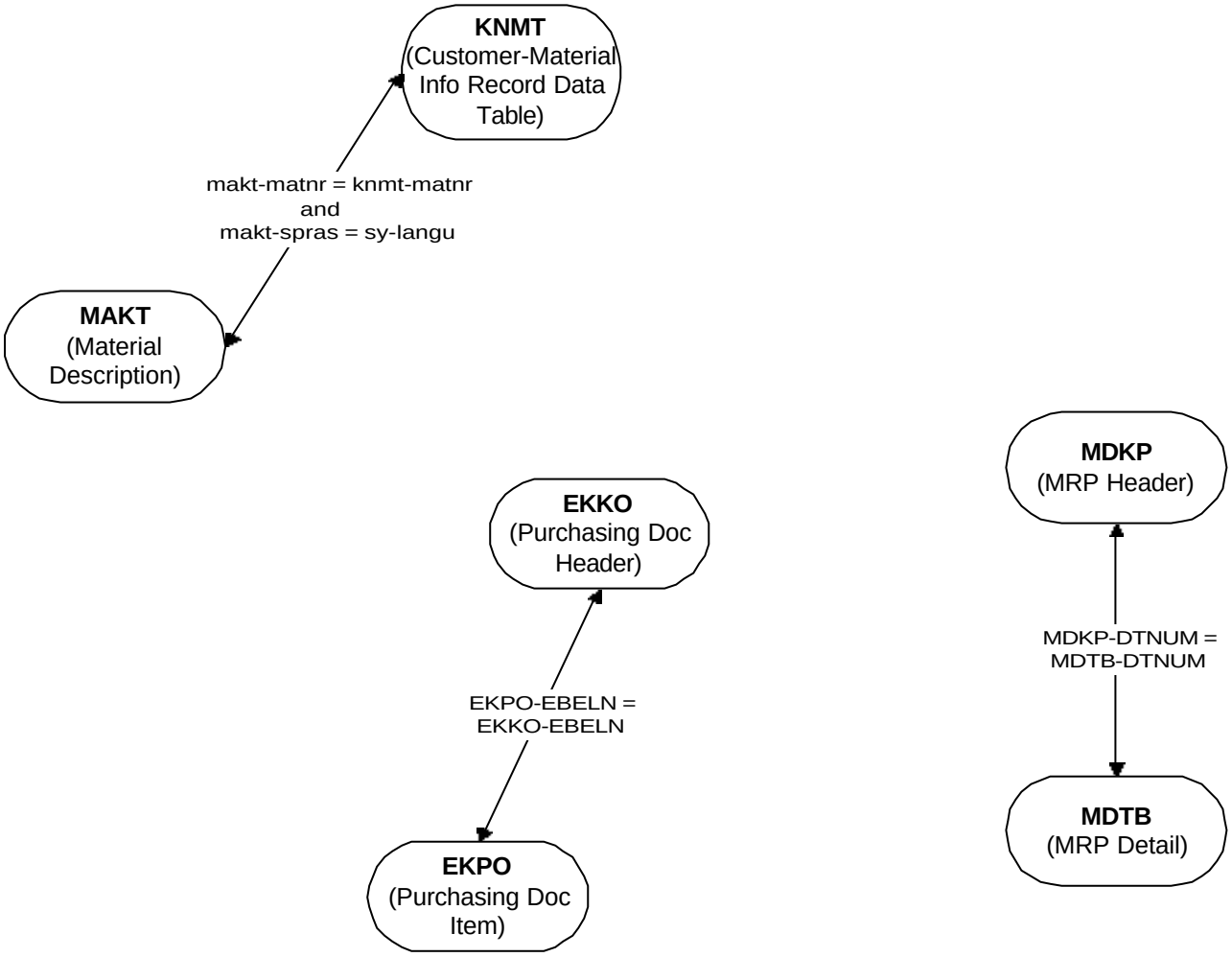
## Master Data



# SAP - Materials Management




**Tables:**
EKKO
EKPO
KNMT
MAKT

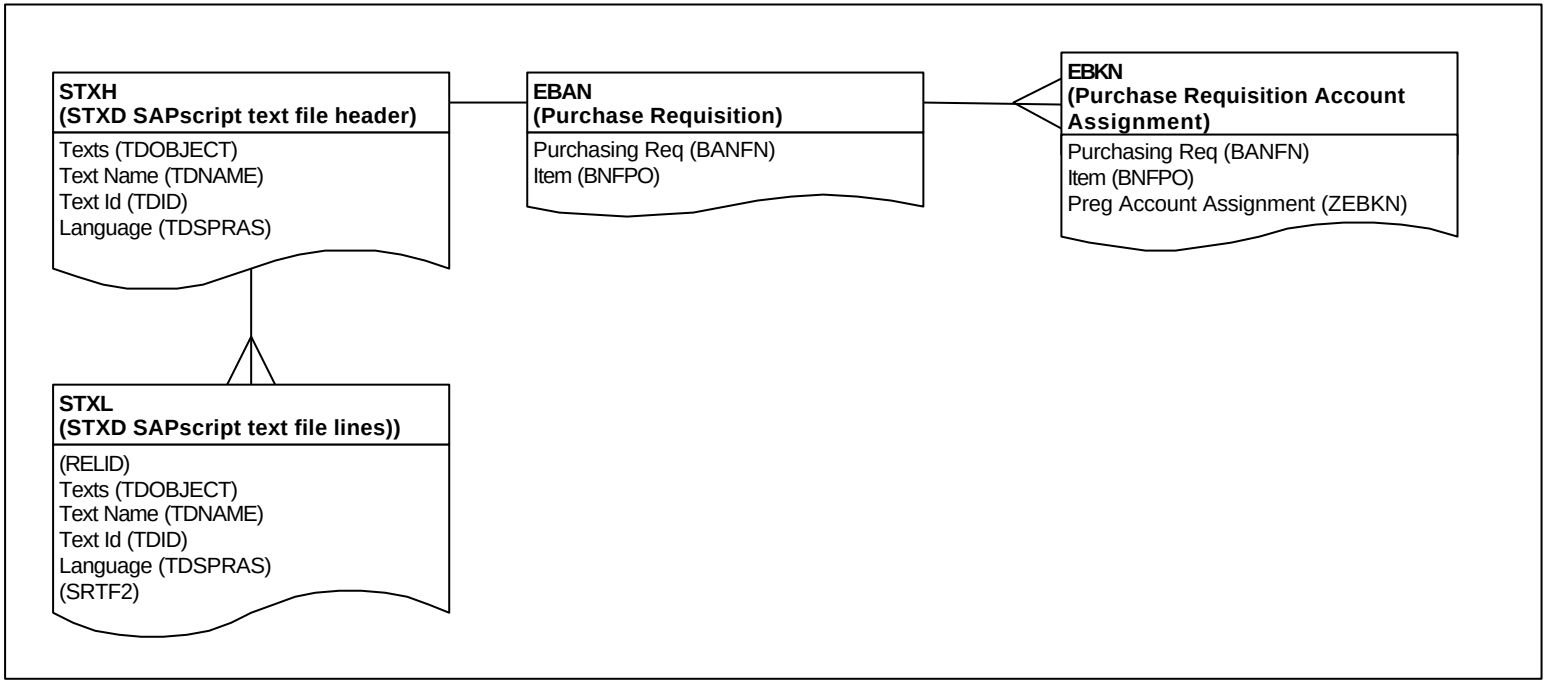



# MM

Table Mapping

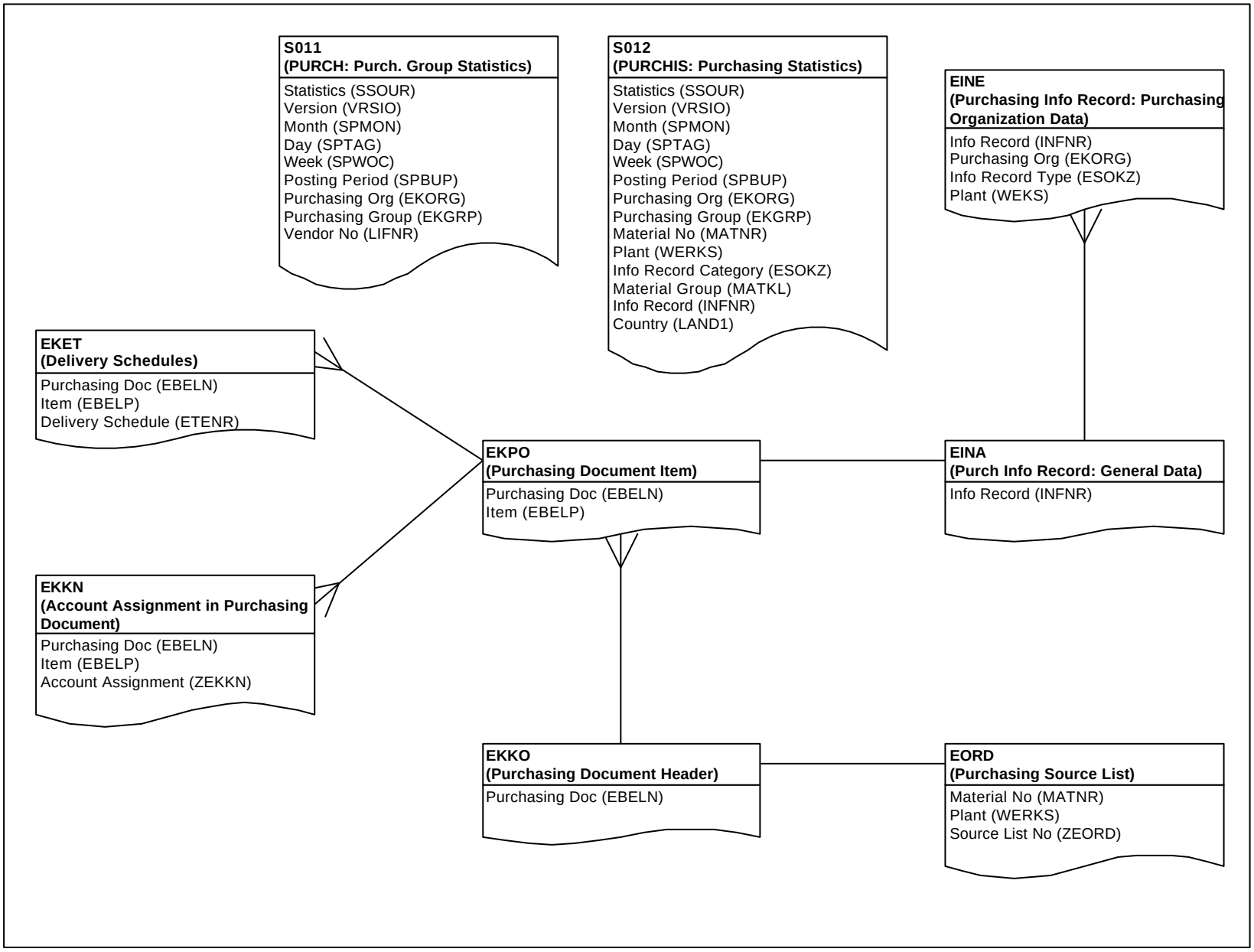
# SAP MM - Purchasing

## Purchasing Requisition



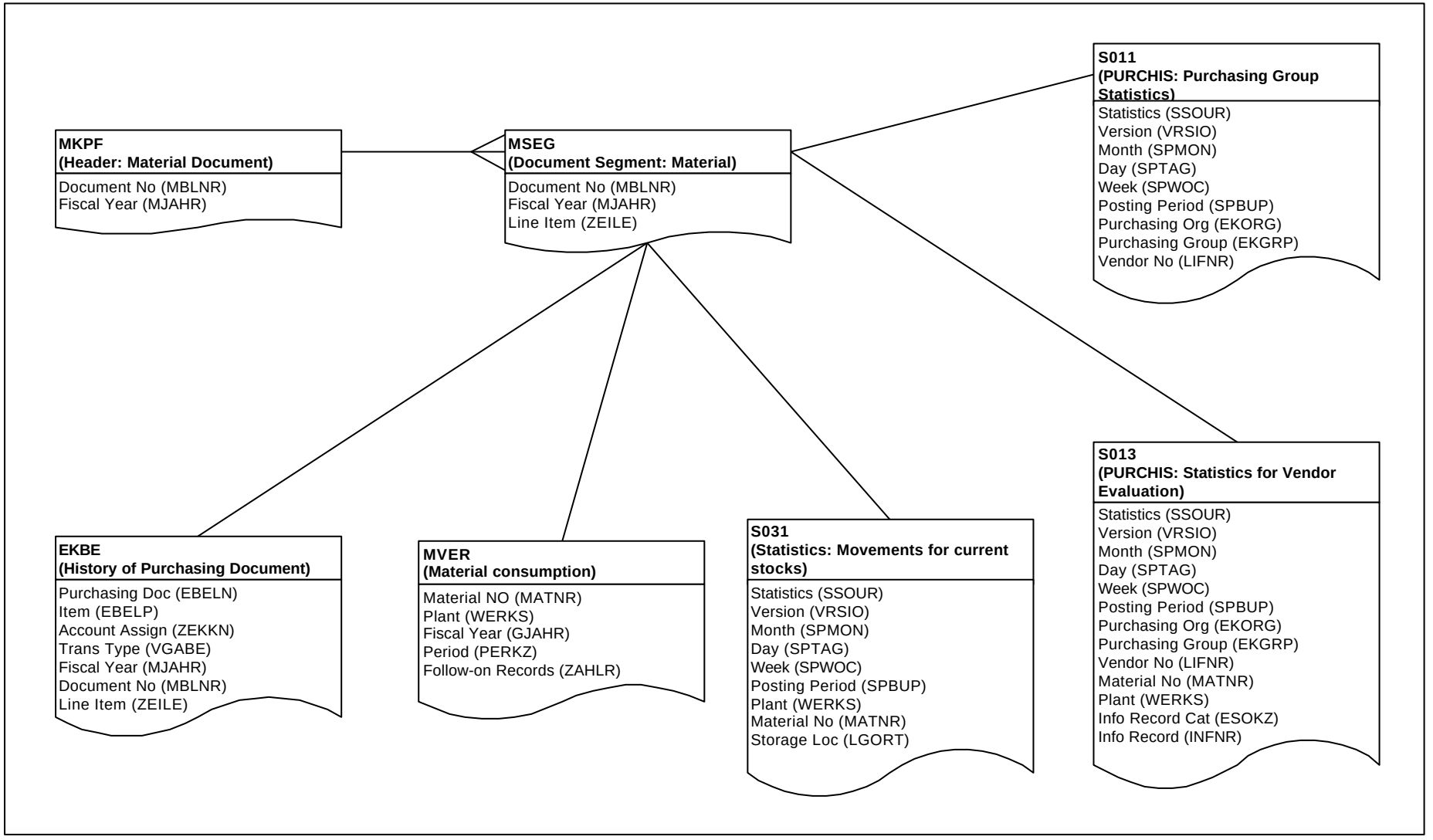
# SAP MM - Purchasing

## Purchase Orders

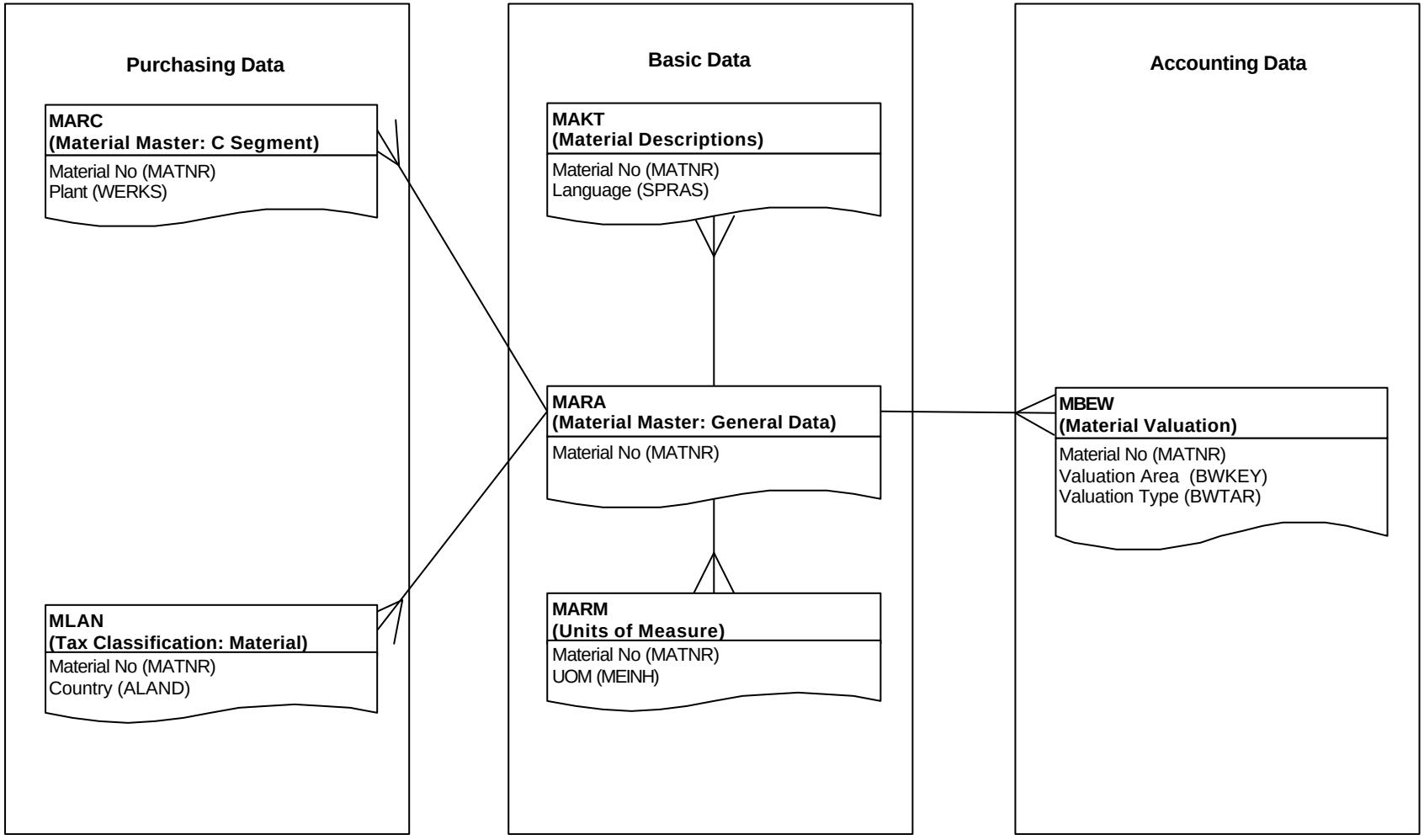


# SAP MM - Purchasing

## Goods Receipt

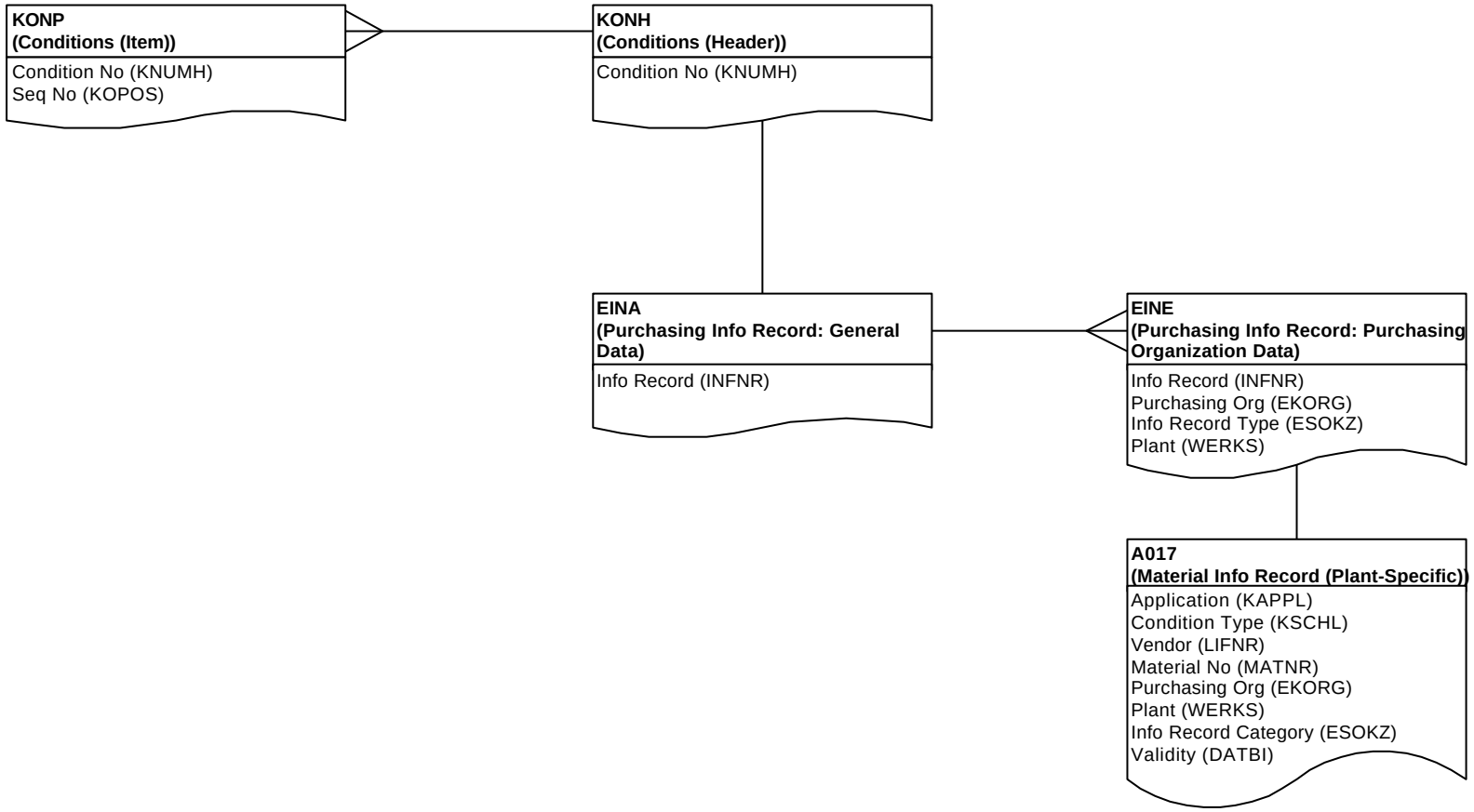


# SAP MM - Master Data

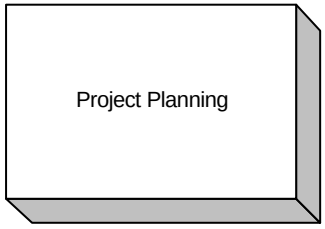


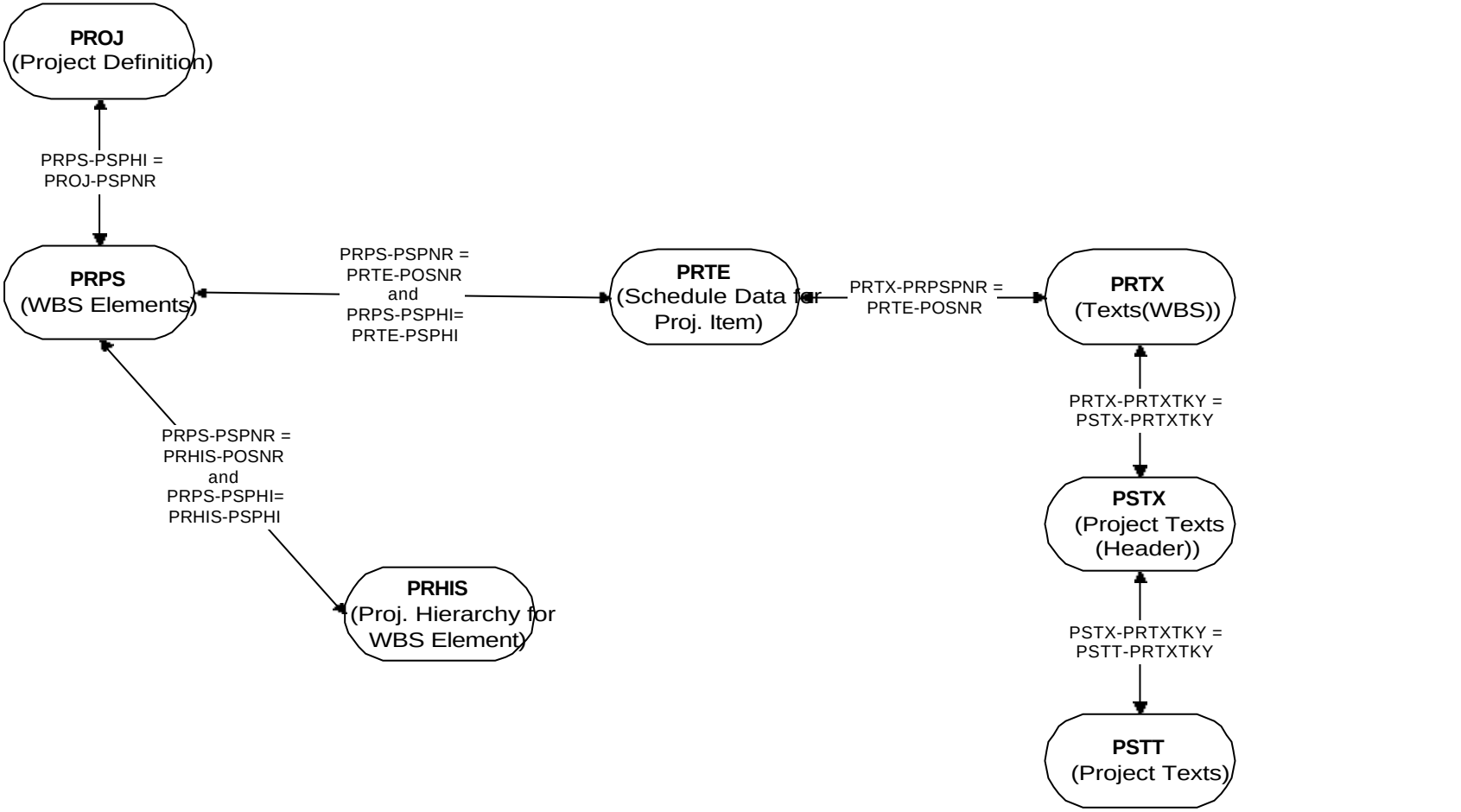
# SAP MM - Purchasing

## Purchasing Info Record



**SAP - Project Planning**



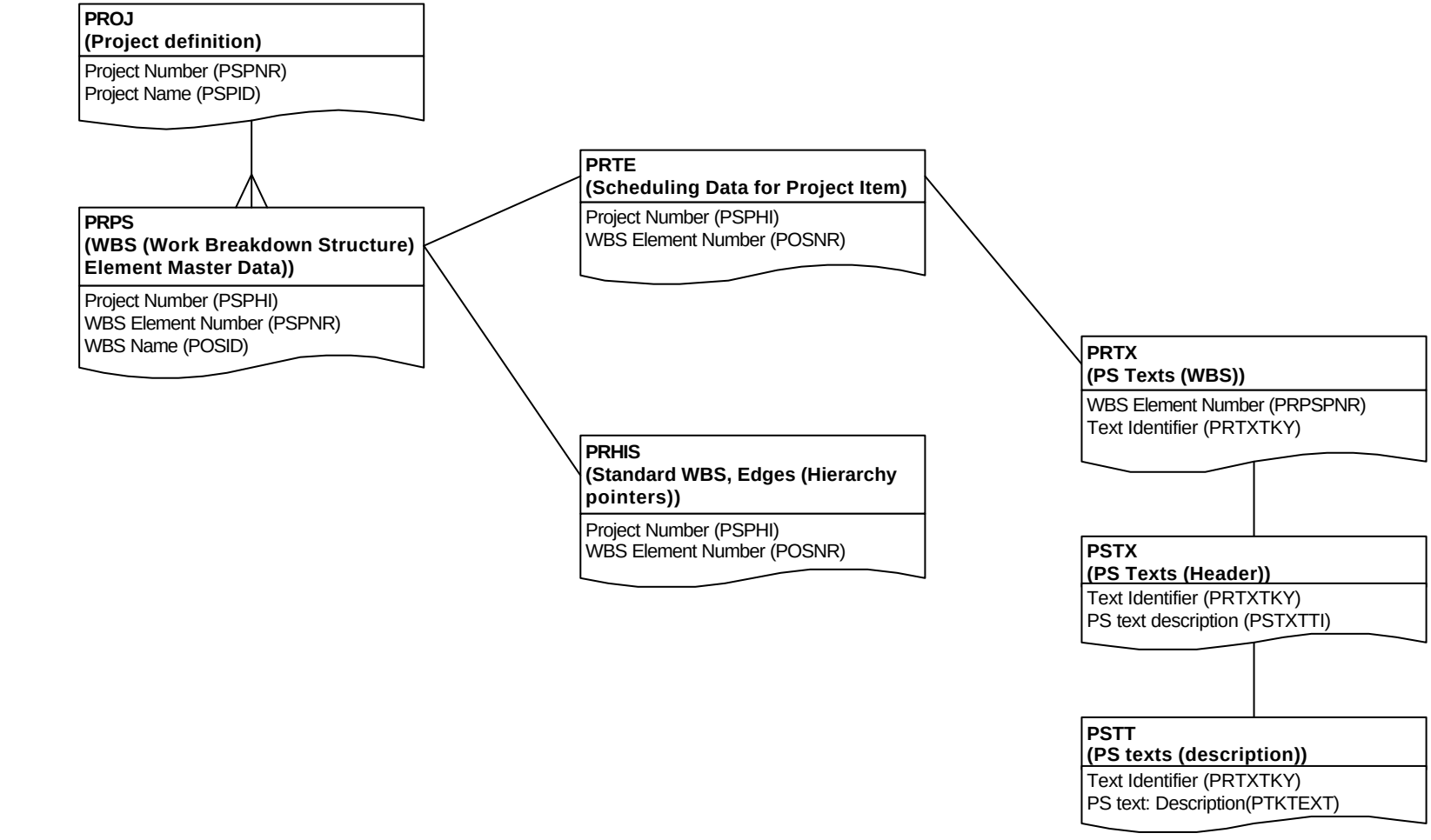



# PP

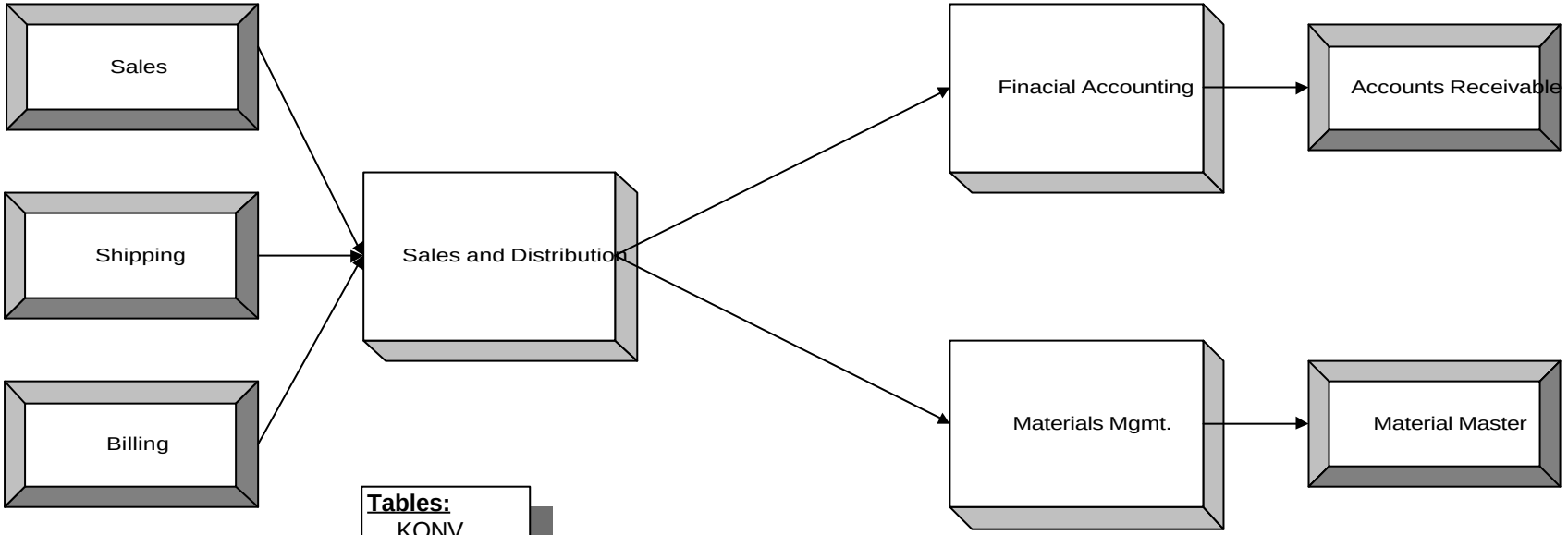
Table Mapping

# SAP PP - Project Planning

PROJECTS
Project and WBS element numbers have a domain with a conversion function module which converts it from 8 numc input to 24 char on output.

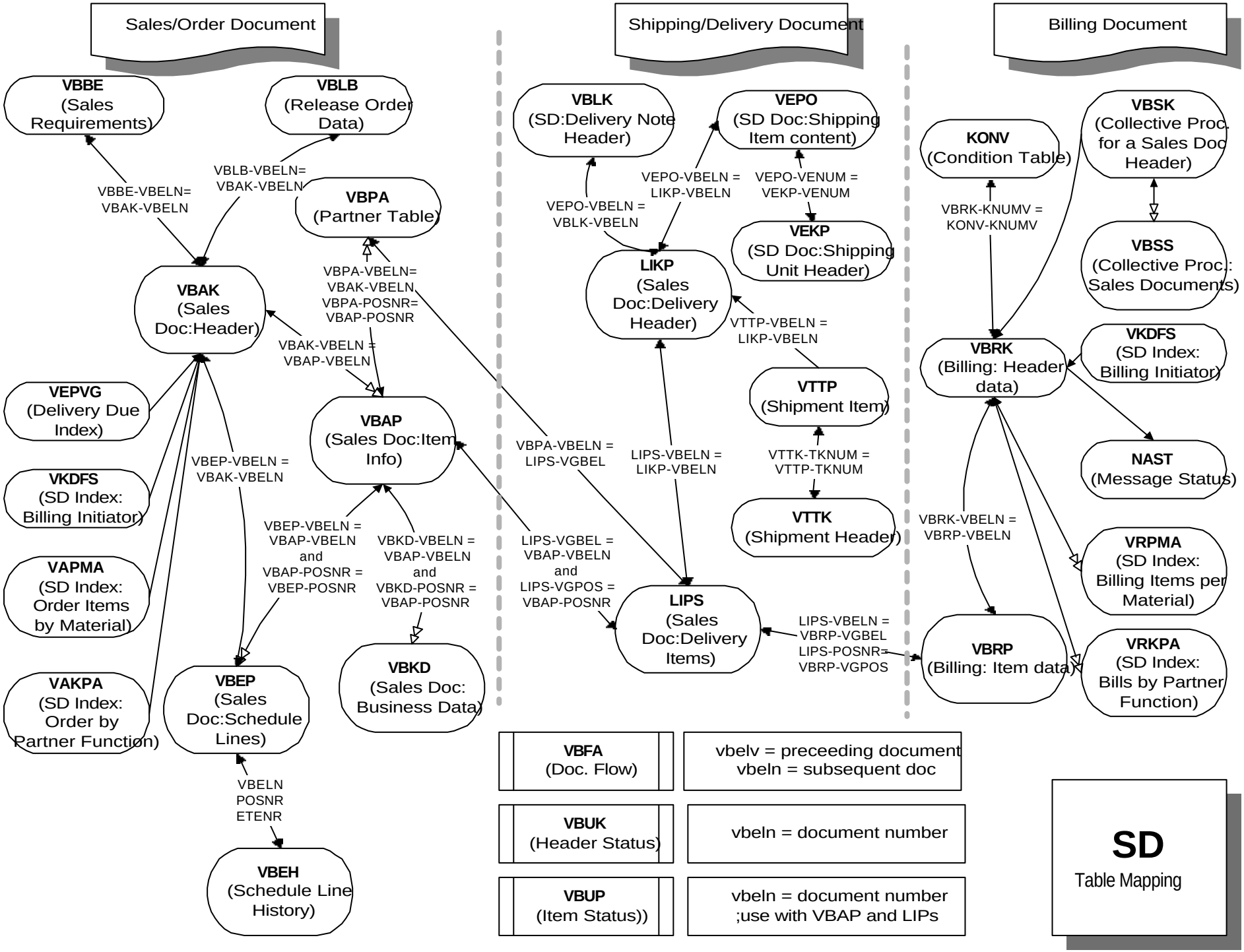


# SAP - Sales and Distribution

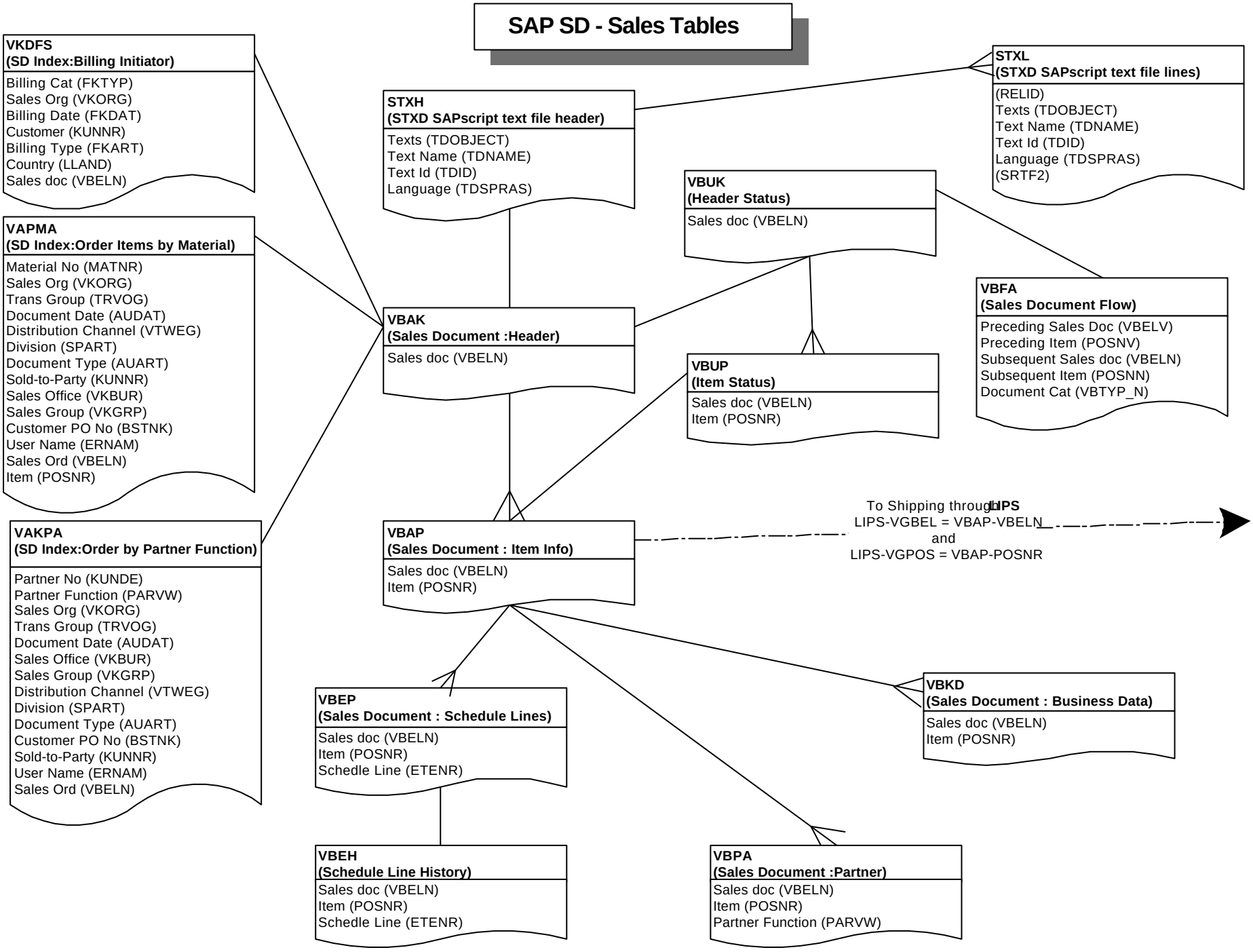



**Tables:**

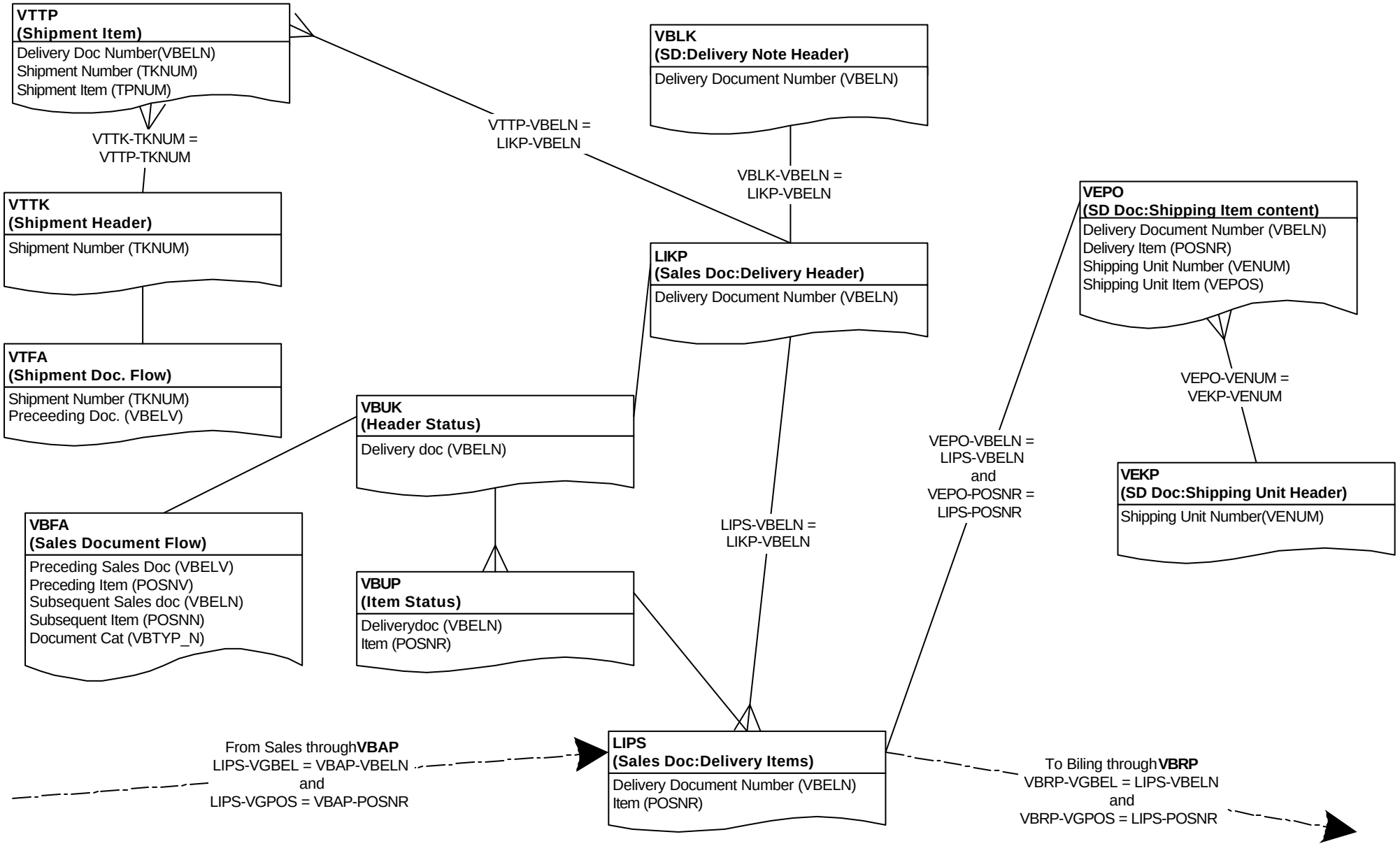
- KONV
- LIKP
- LIPS
- VBAK
- VBAP
- VBBE
- VBEH
- VBEP
- VBFA
- VBLB
- VBLK
- VBPA
- VBRK
- VBRP
- VBUK
- VBUP
- VEKP
- VEPO
- VEPVG


Sales/Order Document
Shipping/Delivery Document
Billing Document
VBBE (Sales Requirements)
VBLB (Release Order Data)
VBPA (Partner Table)
VBAK (Sales Doc:Header)
VBAP (Sales Doc:Item Info)
VEPVG (Delivery Due Index)
VKDFS (SD Index: Billing Initiator)
VAPMA (SD Index: Order Items by Material)
VAKPA (SD Index: Order by Partner Function)
VBEP (Sales Doc:Schedule Lines)
VBKD (Sales Doc: Business Data)
VBEH (Schedule Line History)
VBLK (SD:Delivery Note Header)
VEPO (SD Doc:Shipping Item content)
VEKP (SD Doc:Shipping Unit Header)
LIKP (Sales Doc:Delivery Header)
VTTP (Shipment Item)
VTTK (Shipment Header)
LIPS (Sales Doc:Delivery Items)
KONV (Condition Table)
VBSK (Collective Proc. for a Sales Doc Header)
VBSS (Collective Proc.: Sales Documents)
VBRK (Billing: Header data)
VKDFS (SD Index: Billing Initiator)
NAST (Message Status)
VRPMA (SD Index: Billing Items per Material)
VBRP (Billing: Item data)
VRKPA (SD Index: Bills by Partner Function)
VBLB-VBELN= VBAK-VBELN
VBBE-VBELN= VBAK-VBELN
VBPA-VBELN= VBAK-VBELN VBPA-POSNR= VBAP-POSNR
VBAK-VBELN = VBAP-VBELN
VBEP-VBELN = VBAK-VBELN
VBEP-VBELN = VBAP-VBELN and VBAP-POSNR = VBEP-POSNR
VBKD-VBELN = VBAP-VBELN and VBKD-POSNR = VBAP-POSNR
VBELN POSNR ETENR
VEPO-VBELN = VBLK-VBELN
VEPO-VBELN = LIKP-VBELN
VEPO-VENUM = VEKP-VENUM
VBPA-VBELN = LIPS-VGBEL
LIPS-VBELN = LIKP-VBELN
VTTP-VBELN = LIKP-VBELN
VTTK-TKNUM = VTTP-TKNUM
LIPS-VGBEL = VBAP-VBELN and LIPS-VGPOS = VBAP-POSNR
LIPS-VBELN = VBRP-VGBEL LIPS-POSNR= VBRP-VGPOS
VBRK-KNUMV = KONV-KNUMV
VBRK-VBELN = VBRP-VBELN
VBFA (Doc. Flow)
vbelv = preceeding document
vbeln = subsequent doc
VBUK (Header Status)
vbeln = document number
VBUP (Item Status))
vbeln = document number ;use with VBAP and LIPs
SD
Table Mapping

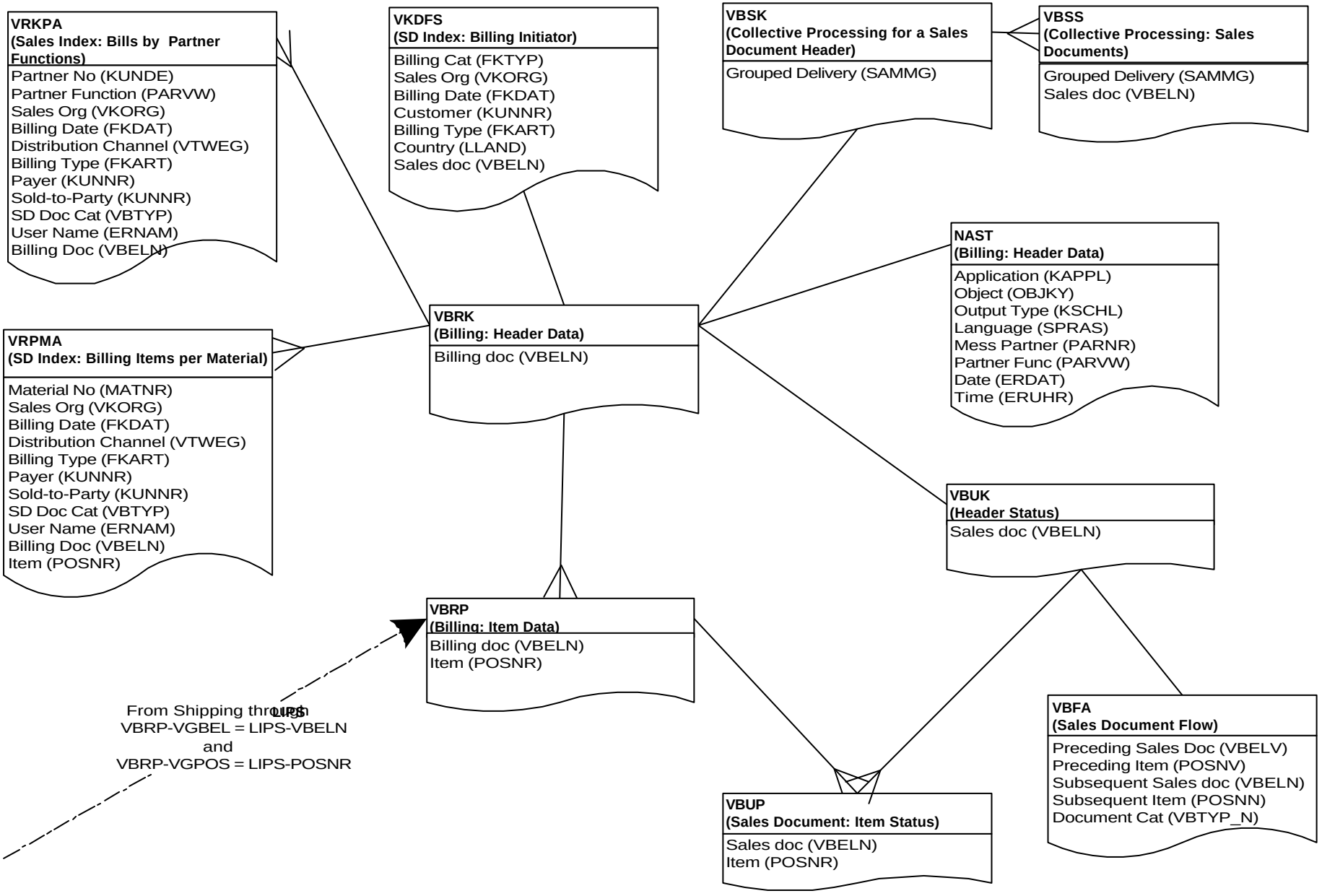
# SAP SD - Sales Tables



# SAP SD - Shipping Tables

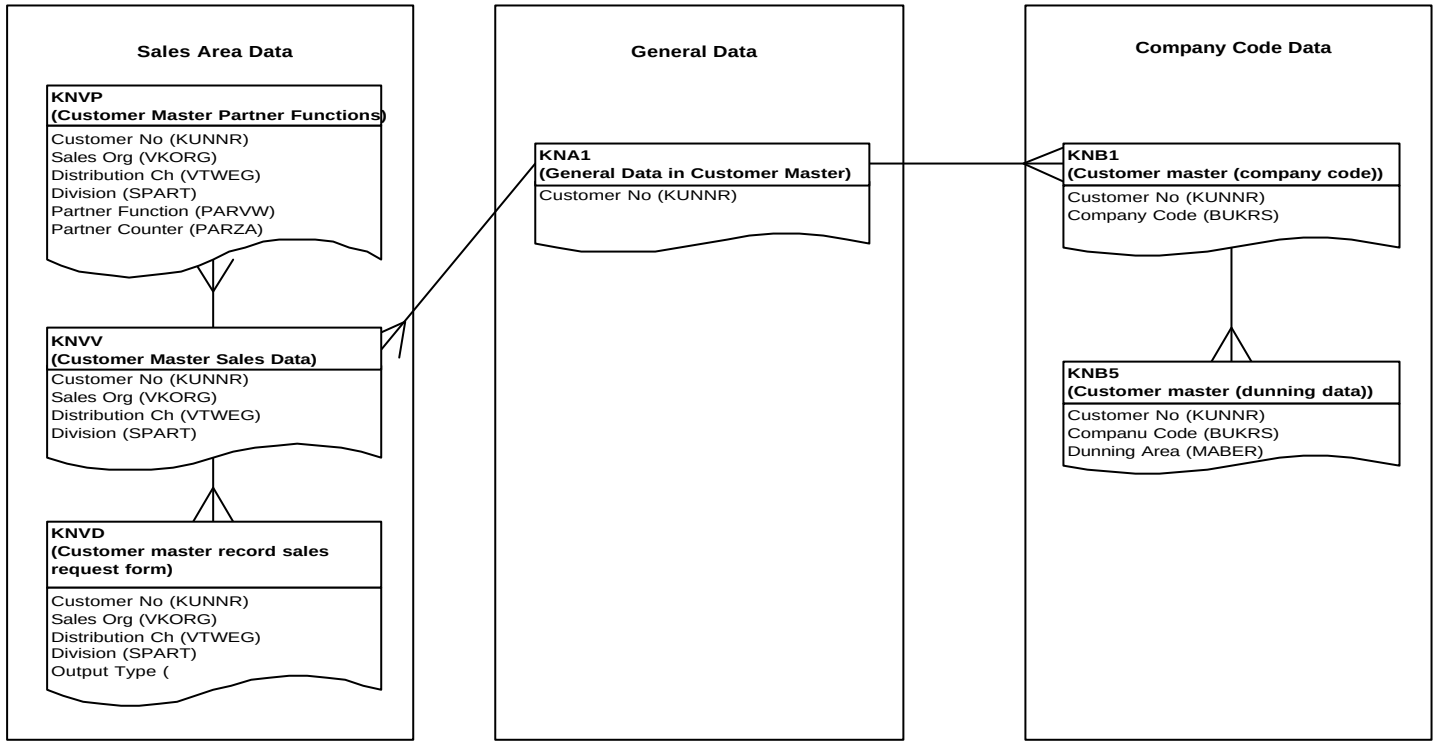


# SAP SD - Billing Tables



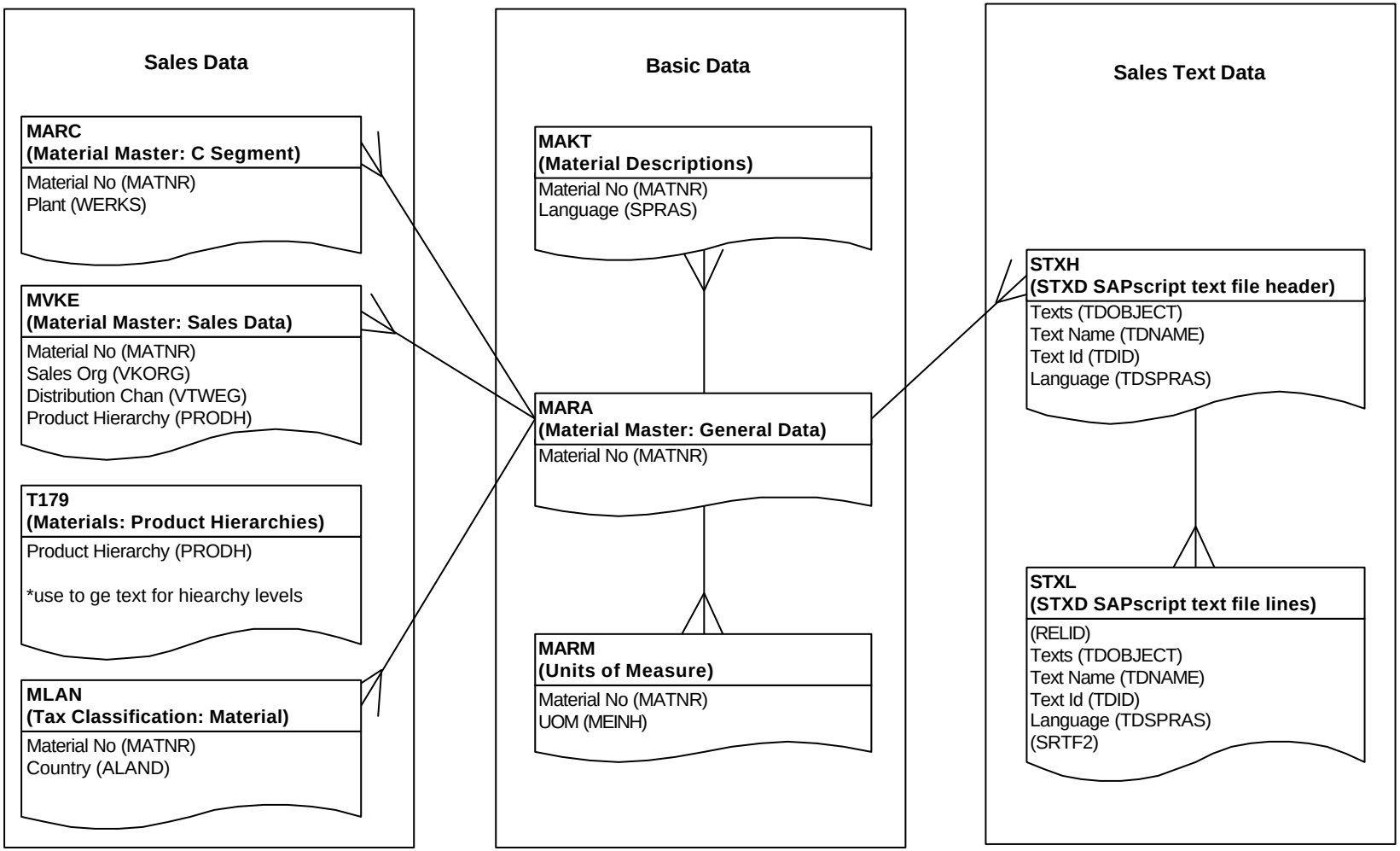
# SAP SD - Links to FI Tables

***Customer Master Data***



# SAP SD - Links to MM Tables

***Material Master Data***



Contributions by

**Master Data**
Jim Lewis (Whittman-Hart, inc.)

**FI/CO**
Michael Rhodes (MedPartners, inc.)

**HR**

**MM**
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Michael Rhodes (MedPartners, inc.)

**PP**

**SD**
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Krishna Prasad (Whittman-Hart, inc.)
Russ Smith (Benteler)
Michael Rhodes (MedPartners, inc.)