

Vendor Subrange Functionality for Multiple Currencies for One Vendor



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Summary

Vendor Subrange functionality is utilized to ensure that different currencies can be used for the same vendor. All possible currencies need to be maintained in vendor master which can be used in the purchasing document like purchase order (or scheduling agreement).

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Hemant has been a Plant Maintenance & Service Management Consultant for more than 8 Years with 7 plus implementation & 2 Enhancement/Maintenance projects. He is trained in SAP IS-Utility/CCS from SAP India. He has over six & half years of industry experience in plant maintenance & service management in cement / refractory manufacturing, automotive industry, Forest & Paper Products Weyerhaeuser Company USA & power projects.



The author works with IBM as a logistics consultant. He brings with him rich experience in logistics modules of SAP for close to 4 years and domain experience of 2 years. He is an engineer and later pursued his MBA in Information Technology from VGSOM, IIT Kharagpur.

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Business Case

The case is for an European life science & industrial product manufacturer. It is observed that in business savings up to 40,000 USD can be achieved if procurement of materials from one vendor can be done in more than one currency. Existing structure of SAP design enables only one currency for each vendor and hence enhancement or upgradation is required in terms of functionality in which procurement process is handled when dealing with different currencies.

Proposed Solution

SAP offers a functionality of “Vendor Subrange” which can be used to maintain different purchasing data for the same vendor.

Vendor Subrange

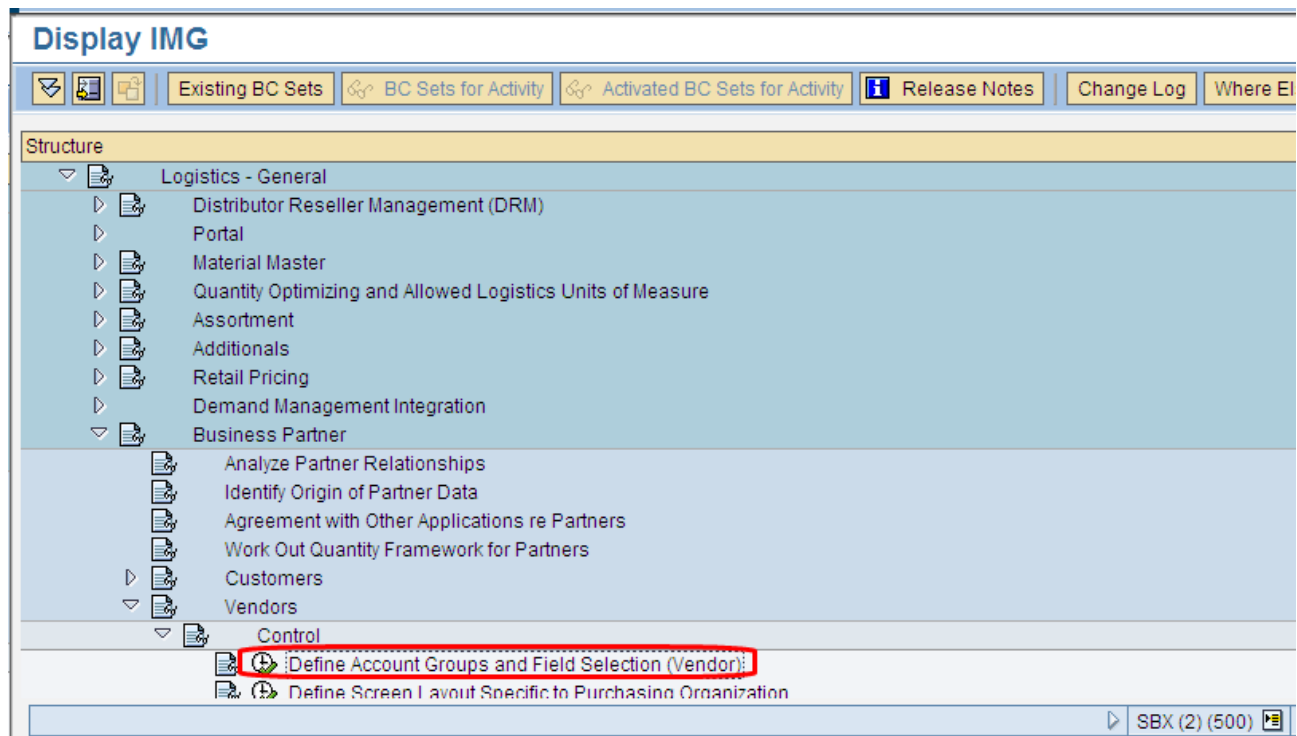
This functionality is utilized to ensure that different currencies can be used for the same vendor. All possible currencies need to be maintained in vendor master which can be used in the purchasing document like purchase order (or scheduling agreement).

Customization Required for Vendor Sub Range

Vendor Subrange functionality can be achieved using small configuration. This is indicated below-

Vendor Account Group Configuration

Please run through the path below for the node of vendor account group-



Select the account group of vendor which should be enabled for vendor Subrange functionality -

Change View "Vendor Account Groups": Overview

Details New Entries Copy As... Delete Print Standard List Select All Select Block Deselect All

Group	Description
0001	Vendor
0002	Goods supplier
0003	Alternative payee
0004	Invoicing Party
0005	Forwarding agent
0006	Ordering address
0007	Plants
0012	Hierarchy Node
0100	Vendor distribution center
CPD	One-time vend.(int.no.assgnmt)
CPDL	One-time vend.(ext.no.assgnmt)
DARL	Lender
KRED	Vendor (int.number assgnmt)

Position... Entry 1 of 26

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Activate the checkbox for Vendor Subrange feature in this account group & save it.

Change View "Vendor Account Groups": Details

Expand Field Status New Entries Copy As... Delete Previous Entry Next Entry Print Standard List

Account Group **KRED**

General Data

Name Vendor (int.number assgnmt)
 Number Range A7
 One-Time Account

Field Status

Data Retent. Levels: Purchasing

Vendor sub-range relevant
 Plant level relevant

Default Values

Do not transfer any data

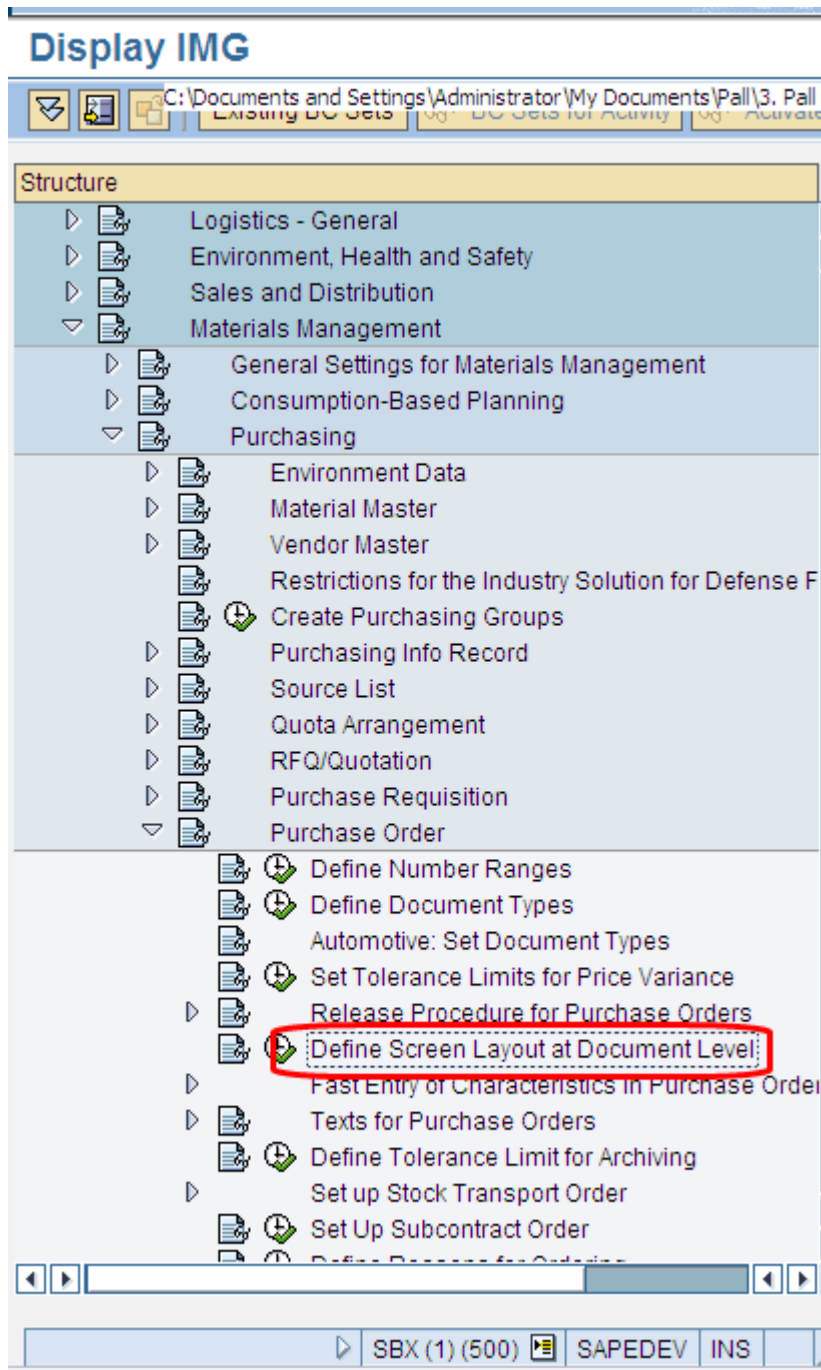
PartnerDetermProced.

Partner schema, purch. org. L1
 Partner schema, sub-range

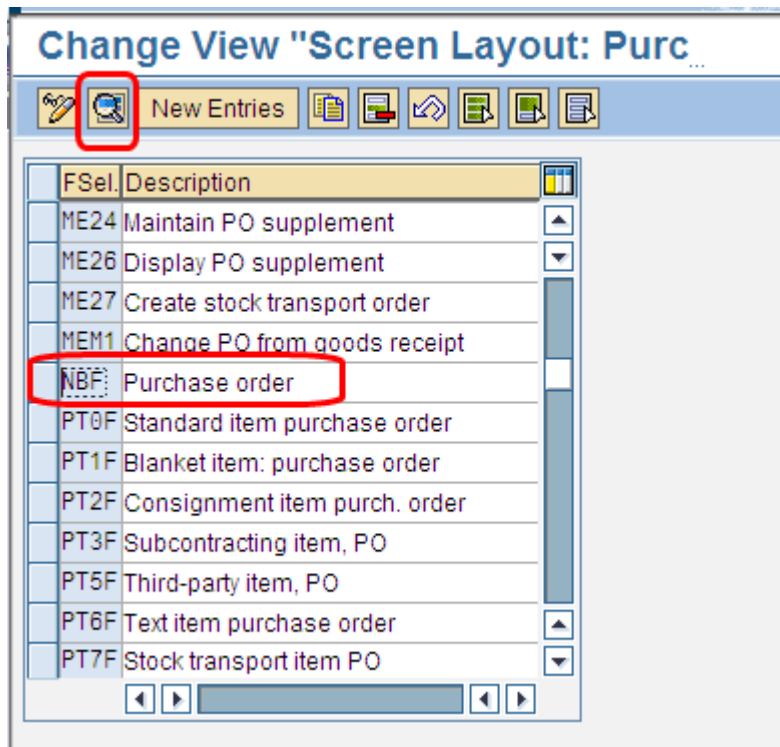
SBX (2) (500)

Field Selection Customizing

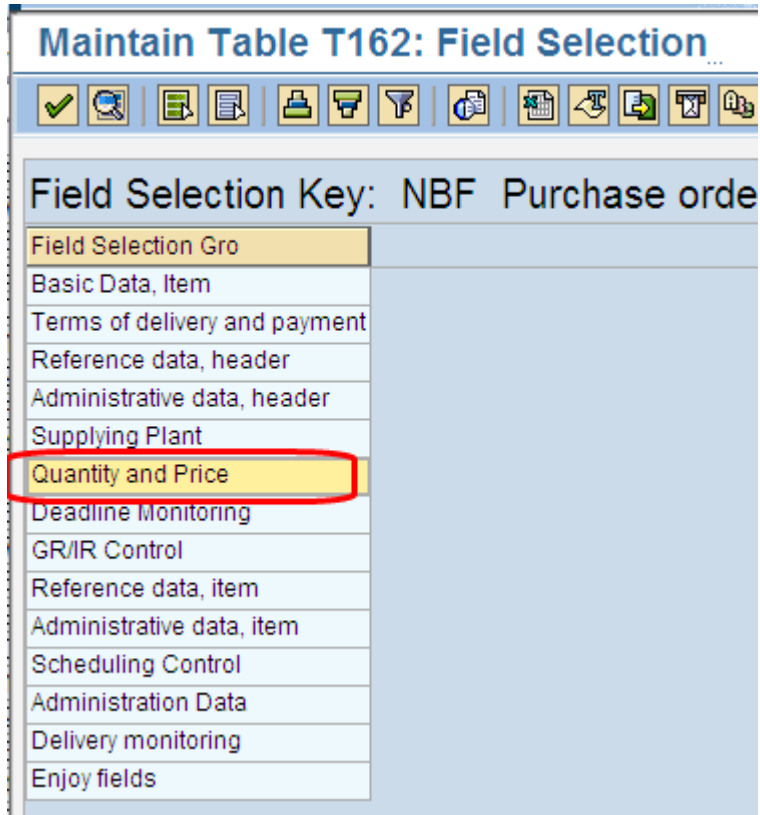
Below field selection configuration is required for purchasing document-



Below selection can be made for making vendor sub range field mandatory in vendor subrange configuration-



Select "Quantity & Price" in the selection key-



Here, we make the vendor subrange entry mandatory.

Maintain Table T162: Fields for Field Selecti...

Field Selection Key: NBF Purchase order
Selection group: Quantity and Price

Field Label	Reqd. entry	Opt. entry	Display
Qualification for discount	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Quantity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unit of measure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Settlement group	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Price and price unit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Price printout indicator	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Order price unit (purchasing)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Weights	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition group	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vendor sub-range	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pricing date control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Master Data

Master data is prepared for vendor master PIR (Purchasing Info Record) for the Material, Vendor, Purchasing Organization and Plant.

Vendor Master with Active Vendor Subrange

Vendor master is created with active vendor subrange functionality in the purchasing view as shown below-

Display Vendor: Initial Screen

Vendor: 709890
Company Code:
Purch. Organization: CH15

General data

Address
 Control
 Payment transactions
 Contact Persons

Company code data

Accounting info
 Payment transactions
 Correspondence
 Withholding tax

Purchasing organization data

Purchasing data
 Partner functions

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Subrange option need to be selected. Note the primary currency of the Vendor. It is GBP.

Display Vendor: Purchasing data

Alternative data **Sub-ranges** Interchangeability NF Metal Data

Vendor 709890 2KM (UK) LTD ASTON FIELDS TRADING
Purchasing Org. CH15 Pall Int SARL (UK)

Conditions

Order currency	GBP	British Pound
Terms of paymnt	NT60	
Incoterms	EXW	
Minimum order value	0.00	
Schema Group, Vendor	Standard schema vendor	
Pricing Date Control	No Control	
Order optim.rest.		

Sales data

Salesperson
Telephone
Acc. with vendor

Control data

<input checked="" type="checkbox"/> GR-Based Inv. Verif.	ABC indicator	<input type="checkbox"/>
<input type="checkbox"/> AutoEvalGRSetmt Del.	ModeOfTrmsprt-Border	<input type="checkbox"/>
<input type="checkbox"/> AutoEvalGRSetmt Ret	Office of entry	
<input type="checkbox"/> Acknowledgment Reqd	Sort criterion	<input type="checkbox"/> By VSR sequence number
<input checked="" type="checkbox"/> Automatic purchase order	PROACT control prof.	<input type="checkbox"/>
<input type="checkbox"/> Subsequent settlement	<input type="checkbox"/> Revaluation allowed	
<input type="checkbox"/> Subseq. sett. index	<input type="checkbox"/> Grant discount in kind	
<input type="checkbox"/> B.vol.comp./ag.nec.	<input type="checkbox"/> Relevant for agency business	
<input type="checkbox"/> Doc. index active		

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In the subrange, below 4 currencies are maintained as indicated. These are currency subrange for this vendor. These are the possible currencies in which procurement can be done with this vendor.

Display Vendor: Sub-range

VSR multi-lingual

Vendor 709890 2KM (UK) LTD ASTON FIELDS TRADING

Sub-range

Vend.	VSR description
EUR	EUR
GBP	GBP
INR	INR
USD	US dollars

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USD related purchasing data of the vendor is as below-

Display Vendor: Dif. Purch. Data

Partner functions Next detail

Vendor: 709890 (UK) LTD ASTON FIELDS TRADING
Purchasing Org.: CH15 Pall Int SARL (UK)
Subrange: USD US dollars

Conditions

Order currency: USD United States Dollar
Terms of paymnt: NT60
Incoterms: EXW
Minimum Order Value: 0.00
Pricing Date Control: No Control
Order optim.rest:

Sales data

Salesperson:
Telephone:

Control data

GR-based inv. verif. ABC indicator:
 AutoEvalGRSetmt Del. Mode of transport:
 AutoEvalGRSetmt Ret Office of entry:
 Order Acknw. Reqmt. PROACT control prof.:
 AutoOrdering Revaluation
 Srv.-Based Inv. Ver.

Default data material

Purchasing group:
Planned Deliv. Time: 0 Day(s)

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Purchasing Info Record (PIR)

This is another master data wherein we maintain the subrange at info record. We will see three PIRs with respect to these subrange. Below is the record of EUR subrange-

Display Info Record: Initial Screen

Vendor: 709890
Material: AB1EKV7PJ
Purchasing Org.:
Plant:
Info Record: 5300163850

Info category

Standard
 Subcontracting
 Pipeline
 Consignment

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Subrange EUR is maintained for this info record-

Info Record Edit Goto Extras Environment System Help

Display Info Record: **General Data**

Texts Classify

Info Record 5300163850
 Vendor 709890 2KM (UK) LTD
 Material AB1EKV7PJ
 Filter 10" Supor EKV 0,2µm
 Material Group 00000003 Filter Cartridges

Vendor Data	Origin Data
1st Rem./Exped. 0 Days	Certif. Cat.
2nd Rem./Exped. 0 Days	Certificate
3rd Rem./Exped. 0 Days	Valid to
Vendor Mat. No.	Ctry of Origin GB
Vendor Subrange EUR EUR	Region
VSR Sort No. 0	Number
Vendor Mat. Grp	Manufacturer
Points 0.000 / 1 EA	
Salesperson	
Telephone 01527-834720	Supply Option
Return Agmt	Available from
Prior Vendor	Available to
	<input type="checkbox"/> Regular Vendor

Purchase Order Unit of Measure
 Order Unit EA
 Conversion 1 EA <-> 1 EA
 Var. Order Unit Not active

SBX (1) (500)

Similarly, subrange GBP is maintained for below purchasing record-

Display Info Record: **General Data**

Texts Classify

Info Record 5300163851
 Vendor 709890 2KM (UK) LTD
 Material AB1A0157WH4
 10" Profile Star 1,5µm - W OPTION
 Material Group 00000003 Filter Cartridges

Vendor Data	Origin Data
1st Rem./Exped. 0 Days	Certif. Cat.
2nd Rem./Exped. 0 Days	Certificate
3rd Rem./Exped. 0 Days	Valid to
Vendor Mat. No.	Ctry of Origin GB
Vendor Subrange GBP GBP	Region
VSR Sort No. 0	Number
Vendor Mat. Grp	Manufacturer
Points 0.000 / 1 EA	
Salesperson	Supply Option
Telephone 01527-834720	Available from
Return Agmt	Available to
Prior Vendor	<input type="checkbox"/> Regular Vendor


Purchase Order Unit of Measure
 Order Unit EA
 Conversion 1 EA <-> 1 EA
 Var. Order Unit Not active

SBX (1) (500)

Subrange USD is maintained for below purchasing record-

Display Info Record: General Data

Texts Classify

Info Record **5300163852** 

Vendor 709890 2KM (UK) LTD

Material AB1A0503H1

AB 10" PROFILE STAR C3 A050 H1

Material Group 00000003 Filter Cartridges

Vendor Data

1st Rem./Exped. 0 Days

2nd Rem./Exped. 0 Days

3rd Rem./Exped. 0 Days

Vendor Mat. No.

Vendor Subrange USD US dollars

VSR Sort No. 0

Vendor Mat. Grp

Points 0.000 / 1 EA

Salesperson

Telephone 01527-834720

Return Agmt

Prior Vendor

Origin Data

Certif. Cat.

Certificate

Valid to

Ctry of Origin GB

Region

Number

Manufacturer

Supply Option

Available from

Available to


Regular Vendor

Purchase Order Unit of Measure

Order Unit EA

Conversion 1 EA <-> 1 EA

Var. Order Unit Not active

SBX (1) (500) 

Test Case for Vendor Subrange

Data in Sandbox

Data which is tested is given below for quick reference-

Vendor	Material	Plant	Purchase Info Record	Vendor Subrange in Vendor Master	Purchase Requisition
709890	AB1EKV7PJ	CH02	5300163850	EUR	11537928
	AB1A0503H1		5300163852	USD	11537929
	AB1A0157WH4		5300163851	GBP	11537930

Purchase Requisitions (PR)

Three purchase requisitions are made with respect to three PIRs. All these PRs have got same vendor, plant, purchasing group and purchasing organization.

Display Purchase Req. 11537928

Document Overview On Personal Setting

NB Purchase Requisition: 11537928

Header

St.	Item	Proc. St.	A	I	Material	Short Text	Quantity	Unit	C	Delivery Date	Mati Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fixed V
	10				AB1EKV7PJ	Filter 10" Supor EKV 0,2µm	11	EA	D	16.06.2011	Filter Cartrid	PALL lfracomt		100				70989

Item: 1 [10] AB1EKV7PJ, Filter 10" Supor EKV 0,2µm

Material Data | Quantities/Dates | Valuation | Source of Supply | Status | Contact Person | Texts | Delivery Address | Spec2000/LB

Agreement: Purch. Org.: CH15 PO Unit:

Fixed Vendor: 709890 2KM (UK) LTD Supplying Plant:

Info Record: 5300163850

Desrd Vndr: Vendor Material No.:

Assign Source of Supply

SBX (1) (500)

Second requisition is indicated below corresponding to second PIR.

Display Purchase Req. 11537929

Document Overview On Personal Setting

NB Purchase Requisition: 11537929

Header

St.	Item	Proc. St.	A	I	Material	Short Text	Quantity	Unit	C	Delivery Date	Mati Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fixed V
	10				AB1A0503H1	AB 10" PROFILE STAR C3	12	EA	D	16.06.2011	Filter Cartrid	PALL lfracomt		100				70989

Item: 1 [10] AB1A0503H1, AB 10" PROFILE STAR C3

Material Data | Quantities/Dates | Valuation | Source of Supply | Status | Contact Person | Texts | Delivery Address | Spec2000/LB

Agreement: 0 Purch. Org.: CH15 PO Unit:

Fixed Vendor: 709890 2KM (UK) LTD Supplying Plant:

Info Record: 5300163852

Desrd Vndr: Vendor Material No.:

Assign Source of Supply

SBX (1) (500)

Below is the third PR for 3rd PIR-

Display Purchase Req. 11537930

Document Overview On Personal Setting

NB Purchase Requisition 11537930

Header

St...	Item	Proc. St.	A	I	Material	Short Text	Quantity	Unit	C	Delivery Date	Matl Group	Plant	Stor. Loc.	PGr	Requisnr.	Tracking...	Des.Vendor	Fixed
	10				AB1A0157WH	10" Profile Star 1,5µm - W C	13	EA	D	29.08.2011	Filter Cartridge	PALL Iffracomt		100				70989

Item: 10 AB1A0157WH4 , 10" Profile Star 1,5µm - V

Material Data | Quantities/Dates | Valuation | Source of Supply | Status | Contact Person | Texts | Delivery Address | Spec2000/LB

Agreement: 0 | Purch. Org.: CH15 | PO Unit:

Fixed Vendor: 709890 | 2KJ (UK) LTD | Supplying Plant:

Info Record: 5300163851

Desrd Vndr:

Vendor Material No.:

Assign Source of Supply

SBX (1) (500)

Auto PO Creation

Transaction ME59 is used to convert PRs into PO. These are grouped into single PO if they have got same vendor, plant and purchasing group.

ME59 with Vendor Subrange Option

Option "Per Vendor Subrange" needs to be selected. Based on this optio, system would create 3 POs for respective PRs. PR numbers are put into the selection option as indicated below. Alternative input selections can be given like vendor, plant, purchasing group and purchasing organization as an option of creation separate POs.

For vendor subrange demonstration, PR numbers are directly put into the input selection.

Automatic Creation of Purchase Orders from Requisitions

Per Purchasing Group Per Delivery Date
 Per Plant **Per Vendor Subrange**
 Per Storage Location Per Requisition
 Per Item Category Per Requisition Item
 Per Company Code

Generate Schedule Lines Test Run
 Omit Faulty Items Detailed Log
 Set Requisitions to "Closed"

Material Group to
 Release Date to
 Delivery Date to
 MRP Controller to
 Purchase Requisition 11537928 to
 Material to
 Equipment/Tooling Number to

Multiple Selection for Purchase Requisition

Select Single Values (3) Select Ranges Exclude Single Values Exclude Rang

Single value
11537928
11537929
11537930

SBX (1) (500)

On execution, we see that, system has created 3 POs as highlighted-

Automatic Creation of Purchase Orders from Requisitions

P0rg	QTy.	Contract	Reqs	P0 Item	Message
Vendor	709890				
CH15	NB	W/o Contract	1	1	Purchase order 4500181596 Created
CH15	NB	W/o Contract	1	1	Purchase order 4500181597 Created
CH15	NB	W/o Contract	1	1	Purchase order 4500181598 Created

SBX (1) (500)

Validation in the Purchase Orders

We validate each of the 3 POs created for their currency. PI make a note of first PIR, corresponding PR and the currency. Header currency system picked up is EUR. This has come from the PIR subrange data.

Standard PO 4500181596 Created by Rahul Asai

Document Overview On | Print Preview | Messages | Personal Setting

NB Standard PO | 4500181596 | Vendor | 709890 2KM (UK) LTD | Doc. date | 19.05.2011

Delivery/Invoice | Conditions | Texts | Address | Communication | Partners | Additional Data | Org. Data | Status | NF Default Values

Payment Terms: NT60
 Currency: EUR
 Exchange Rate: 1.00000
 Exch. Rate Fixed:

Payment in: 60 days 0.000 %
 Payment in: 0 days 0.000 %
 Payment in: 0 days net
 Incoterms: EXW

Display Scope: ALL All Items | Char. Display

Item Overview w. Fast Entry of Characteristic

S	Item	Glob.	A	I	Short Text	Material	PO	Q	S	Deliv. Date	Net Price	Curr.	P	O	Mat. Group	Plnt	Info Rec.	Purchase	Req.	Stor.	Bat.	T	F
	10				Filter 10" Supor EK	AB1EKV7PJ	11	EA		016.06.2011	30.00	EUR	1	EA	Filter Cartridg	PALL Ifracom	5300163850	11537928	10				

Item Detail | SBX (1) (500)

Similarly, a separate PO is created for USD as indicated below for a PIR with subrange data as USD.

Standard PO 4500181598 Created by Rahul Asai

Document Overview On | Print Preview | Messages | Personal Setting

NB Standard PO | 4500181598 | Vendor | 709890 2KM (UK) LTD | Doc. date | 19.05.2011

Delivery/Invoice | Conditions | Texts | Address | Communication | Partners | Additional Data | Org. Data | Status | NF Default Values

Payment Terms: NT60
 Currency: USD
 Exchange Rate: 0.75483
 Exch. Rate Fixed:

Payment in: 60 days 0.000 %
 Payment in: 0 days 0.000 %
 Payment in: 0 days net
 Incoterms: EXW

Display Scope: ALL All Items | Char. Display

Item Overview w. Fast Entry of Characteristic

S	Item	Glob.	A	I	Short Text	Material	PO	Q	S	Deliv. Date	Net Price	Curr.	Per	O	Mat. Group	Plnt	Info Rec.	Purchase	Req.	Stor.	Lo	F	
	10				AB 10" PROFILE STA	AB1A0503H1	12	EA		016.06.2011	1.00	USD	1	EA	Filter Cartridg	PALL Ifracom	5300163852	11537929	10				

Item Detail | SBX (2) (500)

Another PO is created for GBP as indicated below for a PIR with subrange data as GBP.

Standard PO 4500181597 Created by Rahul Asai

Document Overview On

NB Standard PO **4500181597** Vendor 709890 2KM (UK) LTD Doc. date 19.05.2011

Delivery/Invoice Conditions Texts Address Communication Partners Additional Data Org. Data Status NF Default Values

Payment Terms NT60 **Currency GBP** Exchange Rate 1.17706 Exch. Rate Fixed

Payment in 60 days 0.000 %
 Payment in 0 days 0.000 %
 Payment in 0 days net
 Incoterms EXW GR Message

Display Scope ALL All Items Char. Display

Item Overview w. Fast Entry of Characteristic

S	Item	Glob	A	I	Short Text	Material	PO Q.	O	S	Q	Deliv. Date	Net Price	Curr	Per	O	Mat. Group	Plnt	Info Rec.	Purchase	Req	Stor. Lo
	10				10" Profile Star 1.5µm	AB1A0157WH4	13	EA			029.08.2011	10.00	GBP	1	EA	Filter Cartridge	PALL Ilfracom	5300163851	11537930	100	

Item Detail SBX (2) (500)

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