

Functional Documentation - Procurement - SPRINT report

1.0 Overview

Business Context and Application Overview

Background

SPRINT stands for Solvay Purchasing Reporting INTelligence

A procurement sprint report refers to a document or summary that provides insights into the progress, status, and outcomes of a procurement sprint. It is a time-boxed iteration within the procurement process, often associated with an Agile or accelerated approach to acquiring goods or services.

The objective of SPRINT is to offer a simplified global reporting solution for the PtP process, from procurement to payment, to meet the requirements of the Purchasing and Supply Chain Excellence Function and SBS PtP process : Access to the data, network, global projects, TCO Analysis / saving calculation & easy simulation.

Application User Profile

Describe the key User profiles that exist for the application.

General role/Viewer role:

Approver role:

Target Users:

As examples: Controllers / Accountants

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	dd.mm.yyyy	<Insert name>	Initial draft

Application Type

Data Product Type

- Dashboard
- Report
- Advanced analytics
- AI
- Others <specify which one>

Technologies

- BW
- Tableau
- QlikSense
- Talend
- Dataiku
- Others <specify which one>

Data Sources

Note: list of all applications and various environment

- SAP PF1 (Production environment)
- SAP WP1
- SAP PI1
- BW (versions)
- iCare CRM
- CORE CRM
- Others <specify the name of the source>

2.0 Business Process

General Information

To build a purchasing report, it is important to understand the main structuring data implemented in SPRINT.

The below information is aimed to help you.

Segment Management is a strategic process for managing the purchase of goods and services. It aligns business goals and customer requirements with supply market capability and maximizes long-term value for the organization.

The purpose of the **new Global Purchasing Segmentation** project is to classify our purchases and related sources, to ensure the integration of data into a single reference matrix and to transfer the information to all the tools accordingly. This will be achieved by using a 3-level hierarchy consisting of **Domain**, **Segment** and **Material Group**. The Domain and Segment hierarchy is designed to be common and unique for **suppliers** and **items** (goods and services). Suppliers are assigned to one segment according to preponderant spend. Items (goods and services) are assigned to one Material Group based on the category of purchase.

Once the target model was defined, the segmentation was reviewed with and agreed upon by the Domain networks, and validated at the end of 2013. All updates introduced since this date have been revalidated by purchasing, general ledger and tax.

For more information : [GPS SITE](#)

NEW SEGMENTATION : DOMAIN / SEGMENT

The spend is assigned thanks to the :

VENDOR PREPONDERANT :

- Domain : (ex: Packaging 5)
↓
- Segment : (ex : Plastic Drum P066)

For Raw Mat only :

Product - Value Chain - Material code

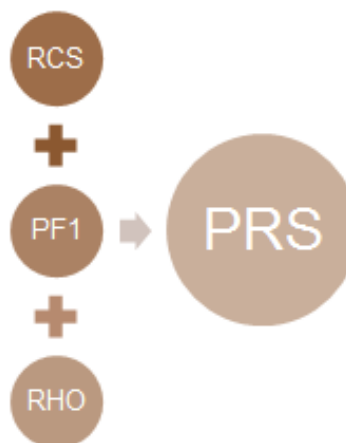
MATERIAL SEGMENTATION analysis can be done within the report :

- Domain (ex: Packaging 5)
↓
- Segment (ex : Plastic Drum P066)
↓
- Material Group (ex : ZM7130)

PRS Supplier Code

PRS is one dedicated SAP environment (based on PF1) which aim is to unify some structural information as segmentation, suppliers... :

- **Suppliers** : each SAP legacy has it own code for the same supplier which makes difficult to make analysis
- PRS is making a link between them by allowing **one single common PRS Supplier code**.
- SPRINT is providing one dedicated query to find easily the PRS Supplier code which will help the user to extract common Solvay figures (ex : the whole Solvay spend for one dedicated supplier)



- **STEP 1**

If you want to analyze only CAPEX spend : please select CAPEX in the CAPEX flag field available in the prompt :

Capex Flag (Selection Option, = [dropdown] [input field] [refresh icon])

Select Member

Find Members... [refresh icon]

Display [dropdown]

Member(Text)

- Billing
- CAPEX
- NC OTC (OPEX)
- Not assigned

• STEP 2

If you want to analyze the split between CAPEX and OPEX, please let the field blank in the prompt and launch the query with the different criteria needed.

In the query :

Drag and drop the CAPEX flag available as a dimension:

• STEP 3

How to read the results ?

- CAPEX comes always from the WBS element and here is equal to 49 263 136€
- Billing concerns only purchase to sell and has to be considered as CAPEX : 1 741 933€
- OPEX comes from both the OPEX related to projects (10 757 346€) and the OPEX without projects (3 221 303 162€) = 3 232 060 508€

		[+] Total Invoiced Value (FI) (EUR)
Capex flag		EUR
BL	Billing	1 741 933
IM	CAPEX	49 263 136
NC	NC OTC (OPEX)	10 757 346
#	Not assigned	3 221 303 162

The 3 fields come from the WBS elements (projects)

Not assigned : is the spend without WBS elements (without project)

To summarize:

For CAPEX Spend : use IM – CAPEX and BL-BILLING
For OPEX Spend : use NC- OTC (OPEX) and # not assigned

By default, SPRINT includes the A, B and C class suppliers and the not assigned class suppliers at vendor and/or creditor level in the prompt :

Creditor Class (Several Single Value, O

A		
B		
C		
#		

Vendor Class (Several Single Values, O

A		
B		
C		
#		

But, the Solvay Internal Suppliers are excluded by default. To include them, select the Creditor and Vendor class "G" and launch the query :

Vendor Class (Several Single Values, O	A		
	B		
	C		
	#		

Display

Member(Key)

- #
- B
- C
- G
- X

Exchange rate

In some SPRINT queries, we can use the field "Target currency" to select the currency we want to have in our report.

SPRINT exchange rate is based on CAR3 which is the **Cumulated monthly mean** :

Formula :

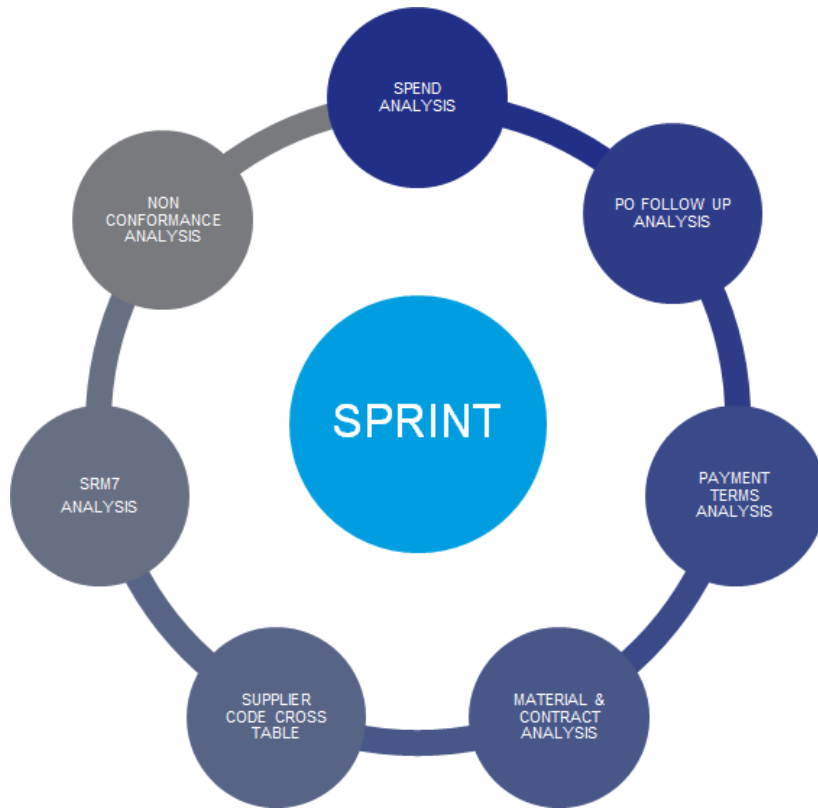
$$MMC = (MM1 + MM2 + MM3 + \dots + MMn)/n$$

Related articles

Queries

The below diagram shows the main queries and processes associated with this application

Queries Overview

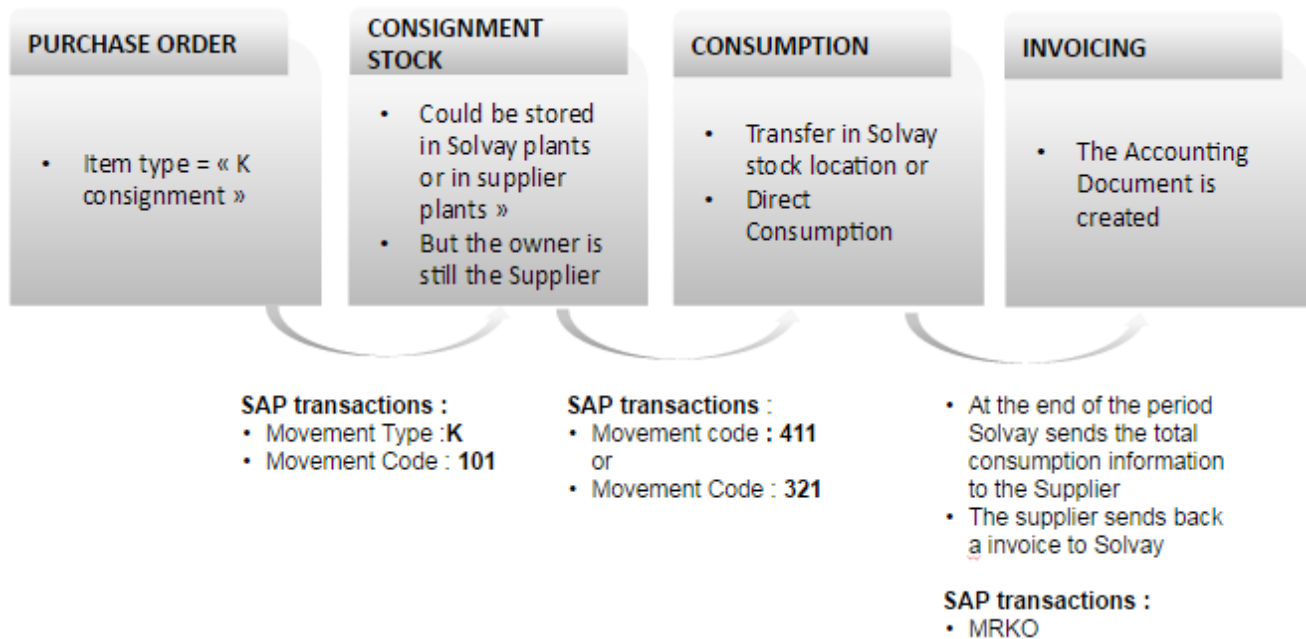


SPEND Analysis Query

For buyers, this query provides a clear vision of the commitments (Purchase orders), accruals (Receipts) and Spend (Invoices) for a chosen period.

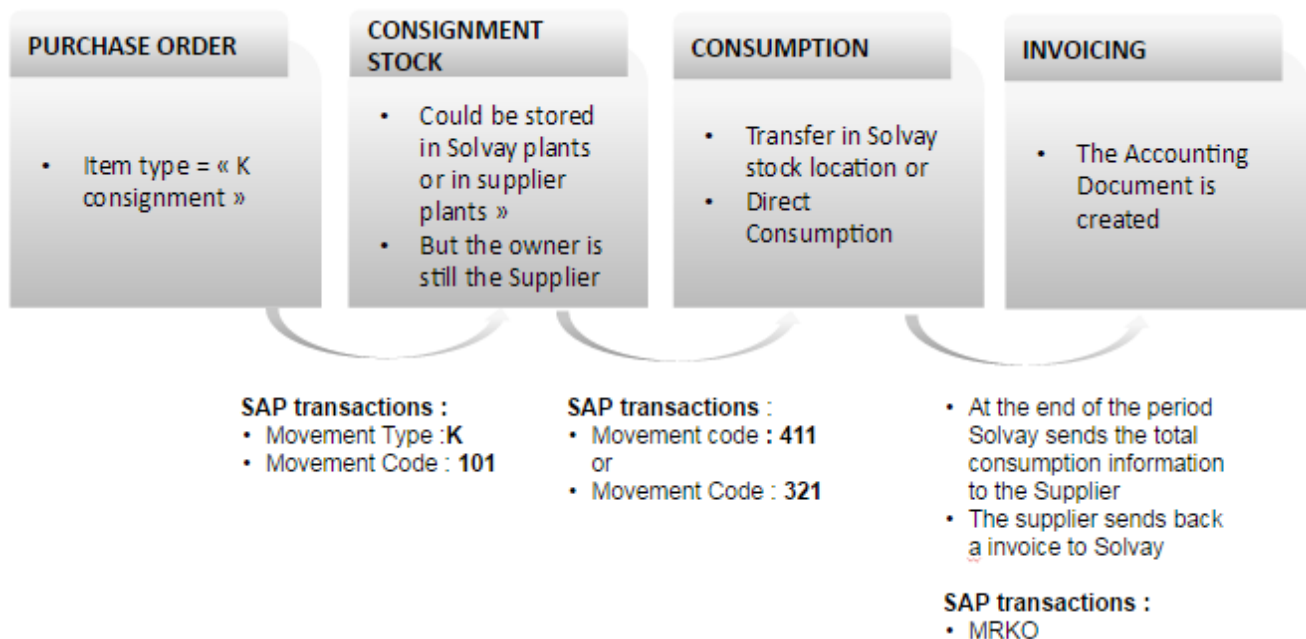
Consignment Flow

[Solvay Consignment process :](#)



PO follow up Analysis Query

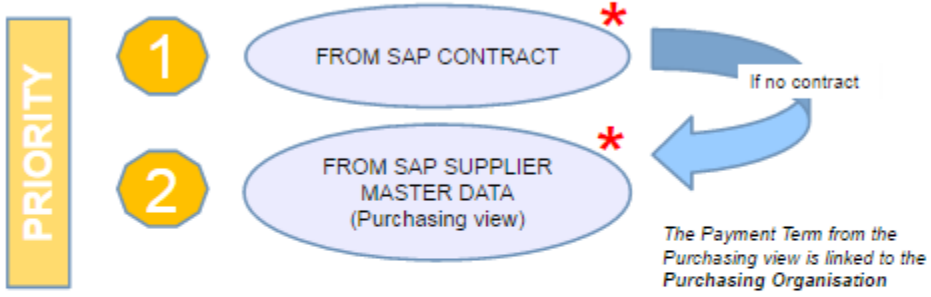
[Solvay Consignment process :](#)



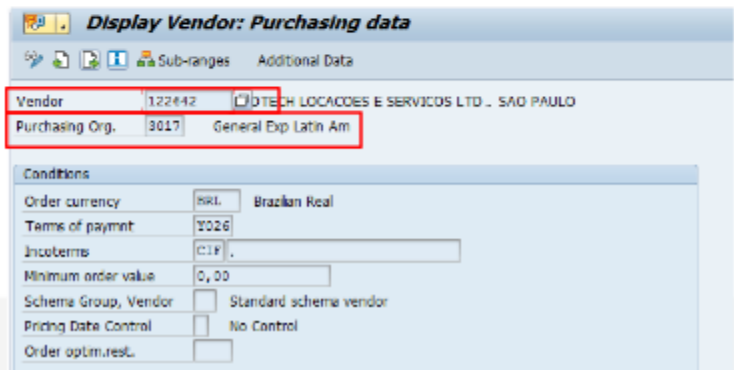
Payment terms Analysis Query

[Where does the payment terms in purchase order come from?](#)

Where does the payment terms in purchase order come from?



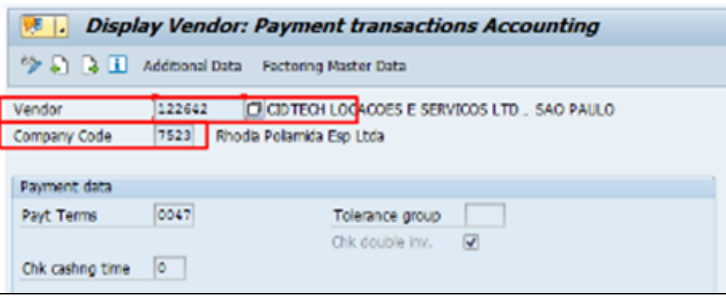
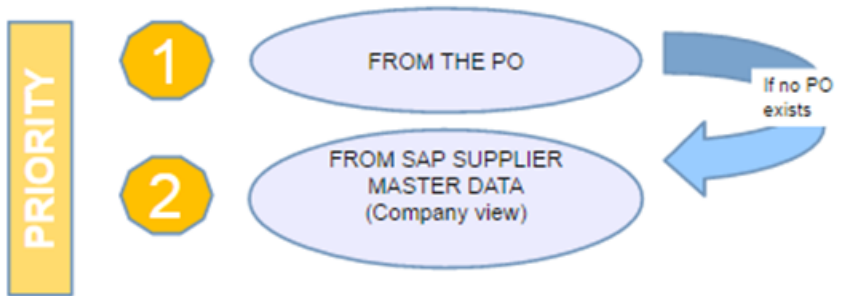
* Alternative payment terms can be managed at plant level (LFM2 Payment terms)



2 | 29/09/2015

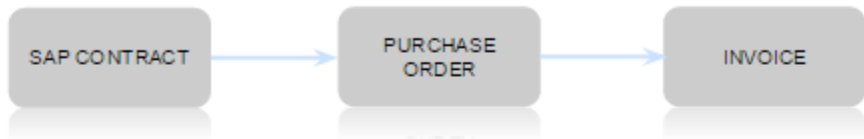
Where does the payment terms in invoice come from?

Where does the payment terms in invoice come from?

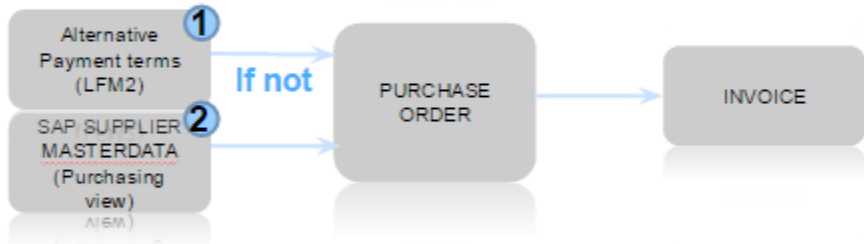


The Payment Term from the Company view is linked to the Company code

1 PO created by call on contract



2 PO created without call on contract



3 Direct Invoice



Non Conformance Analysis Query

xxxx

Material & Contract Query

xxxx

SRM7 Query

xxxx

Supplier Code Cross Table

xxxx

3.0 Application Feature Overview

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
SPEND Analysis Query	<p>This query is aimed to provide you the whole Solvay Purchasing spend from Solvay (PF1), Rhodia (RCS) and Acetow (RHO) legacies. It provides all the invoicing amount, with or without purchase orders, including logistic costs</p> <p>You can include or exclude the Joint Ventures turnover</p> <p>The spend can be displayed in target currency, in local (company) currencies or in the invoice currency</p> <p>This query is able to give you some PO information such as the PO number and the vendor of PO</p>	xxx	xxx	BW_QRY_MV_SPD01_0004

PO follow up Analysis Query	Give you the activity (portfolio) in value and quantity for a chosen period. Ex : Invoicing spend for January 2016. Track all the document flows history from the PO till the Invoicing document.	MANDATORY - In the report, you need to filter on the same period than the chosen period in the prompt.	xxx	BW_QRY_M V_SPD01_00 02
Payment terms Analysis Query	All payment terms information from suppliers (supplier masterdata, PO, Invoice, Contracts) in payment terms conditions and days. The indicators are weighted, therefore the results are dynamic when you change a dimension. An analysis between the payment due date coming from the Invoice and the effective payment done to the suppliers with a calculation of delay. Only Supplier SAP codes from each legacy must be used with this query (not the PRS Supplier codes).	xxx	xxx	BW_QRY_M V_SPD01_00 05
Non Conformance Analysis Query	Analyze the supplier non-conformances activity : number of non-conformances registered, open and closed notifications, treatment time, demerit rate... Take into account all QM* registration related to suppliers from both Rhodia and Solvay legacies according to SAP Quality Management module deployment (QM) Adapt the query to your scope: Analysis by GBU, plant, gravity level, domain...	xxx	xxx	BW_QRY_M VGSVQM_00 03
Material & Contract Query	Several information from SAP material and contracts • The analysis of the multiple sourcing (material/plant) • All the information related to SAP contracts, Scheduling Agreements, Purchasing Inforecords, materials	xxx	xxx	BW_QRY_M V_MATAN2_ 0001
Supplier Code Cross Table	<u>With the Creditor or/and Vendor codes from one of the 3 legacies (PF1, RCS and RHO) to find its related :</u> •Creditor or/and Vendor codes •PRS Creditor or/and PRS Vendor codes <u>With the Creditor or/and Vendor PRS codes to find its related :</u> •PRS Vendor or/and Creditor codes •Creditor or/and Vendor codes (from each legacy)	xxx	xxx	BW_QRY_M V_SPD01_00 06
SRM7 Query		xxx	xxx	xxx

4.0 Functional Specification

4.1 General Data/Calculations

This section approaches the concepts/definitions that will be used in all the reports and required to understand the data from the reports.

SPEND Analysis Query

- Consignment Flow

Consignment - PO Follow Up query :

A	B	C	D	E	F	G	H
			Ordered Qty	Ordered Value (EUR)	Average Ordered Value	Receipt Qty	Receipt Value (EUR)
PO Number	PO Item Categ.		KG	EUR	EUR / KG	KG	EUR
4502370967	2	Consignment (K)	486 200,00	0,00	0,00	486 200,00	0,00

- PO with Item Category 2 is equal to « K- Consignment »:
- Only ordered quantity and receipt quantity are available (no value)

Document Overview Off | Print Preview | Messages | Personal Setting

Standard PO | 4502370967 | Vendor: 53482 EUROPEAN OWENS CORN...

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Pri.
	10	K	64217	GLASS FIBER 10 MICRON..		28.600	KG	D	26.01.2015	
	20	K	64217	GLASS FIBER 10 MICRON..		28.600	KG	D	23.01.2015	
	30	K	64217	GLASS FIBER 10 MICRON..		28.600	KG	D	23.01.2015	
	40	K	64217	GLASS FIBER 10 MICRON..		28.600	KG	D	22.01.2015	
	50	K	64217	GLASS FIBER 10 MICRON..		28.600	KG	D	21.01.2015	

- Transaction: ME23N / PO Number: 4502370967

PO Number	PO Unit	Qty to be Received	Consignment Consumption Qty	Consignment Consumption Value (EUR)	Average Consignment Consumption Value	[-] Total Invoiced Qty	Invoiced Consignment Qty	[-] Total Invoiced Value (EUR)	Invoiced Consignment Value (EUR)	Average Invoice Value	Qty to be Invoiced
CONSIGNMEN	Bag	-2,00 BAG	2,00 BAG	31,60	15,80 EUR / BAG	33,00 BAG	33,00 BAG	521,40	521,40	15,80 EUR / BAG	-33,00 BAG
	Bobbin	-3,00 BOB	3,00 BOB	396,93	132,31 EUR / BOB						
	Box	-427,00 BX	427,00 BX	5 670,76	13,29 EUR / BX	825,00 BX	825,00 BX	12 192,86	12 192,86	14,78 EUR / BX	-825,00 BX
	Canister	-1,00 CAN	1,00 CAN	26,50	26,50 EUR / CAN	2,00 CAN	2,00 CAN	53,00	53,00	26,50 EUR / CAN	-2,00 CAN

- Here the consignment part with receipt and invoiced quantities and values
- In SPRINT the default PO number for the consignment is « **CONSIGNMEN** »

Consignment - Spend query versus PO Follow Up query :

The invoiced values (Spend) is the same between the PO Follow-up and Spend queries.

- In the Spend query, the PO Origin 17 – Consignment gives you the spend linked to the Consignment flow.

				[-] Total Invoiced Value (FI) (EUR)	Total Invoiced Value with PO (FI) (EUR)
Domain		PO Origin Need		EUR	EUR
2	PACKAGING	17	Consignment	108 864	108 864

- In the PO Follow Up query, the PO Origin 17 – Consignment gives you also the spend linked to the Consignment flow in amount and quantity

				Total Invoiced Qty	[-] Total Invoiced Value (EUR)	Invoiced Consignment Value (EUR)
PO Origin		Vendor			EUR	EUR
17	Consignment	6532	COVERIS FLEXIBLES DEUTSCHLAND GMBH	32 280,00 PC	108 864,10	108 864,10

Dimensions



- Deactivate the automatic refresh when you create your report
- Re Activate it once finished

- ① • The dimensions are listed by alphabetical order
- To select a dimension (also called free characteristics), double click on the chosen field or drag and drop

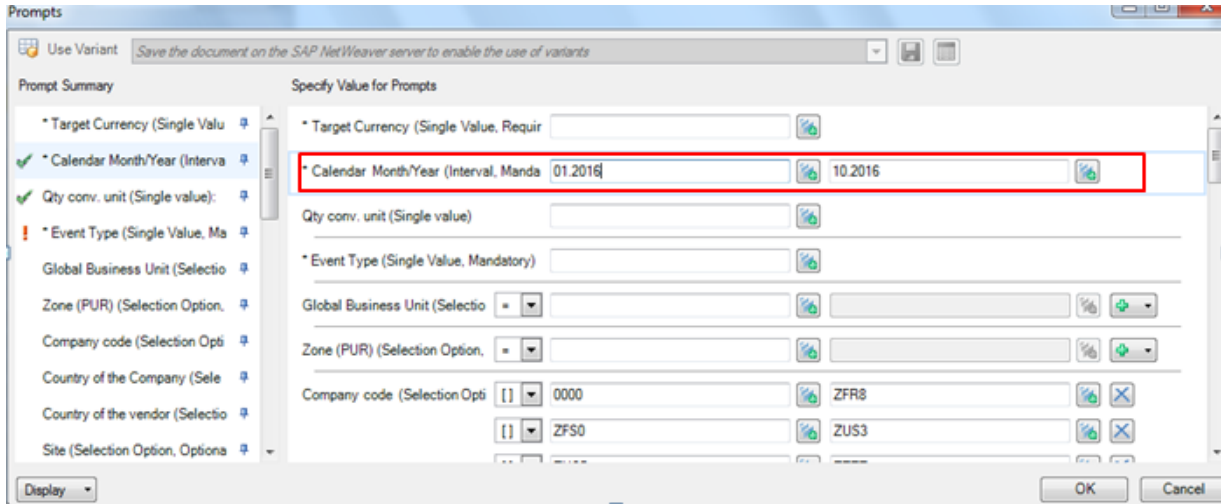
PO follow up Analysis Query

- Prompt

- **STEP 1**

In the prompt, complete the period "**Calendar Month/Year**"

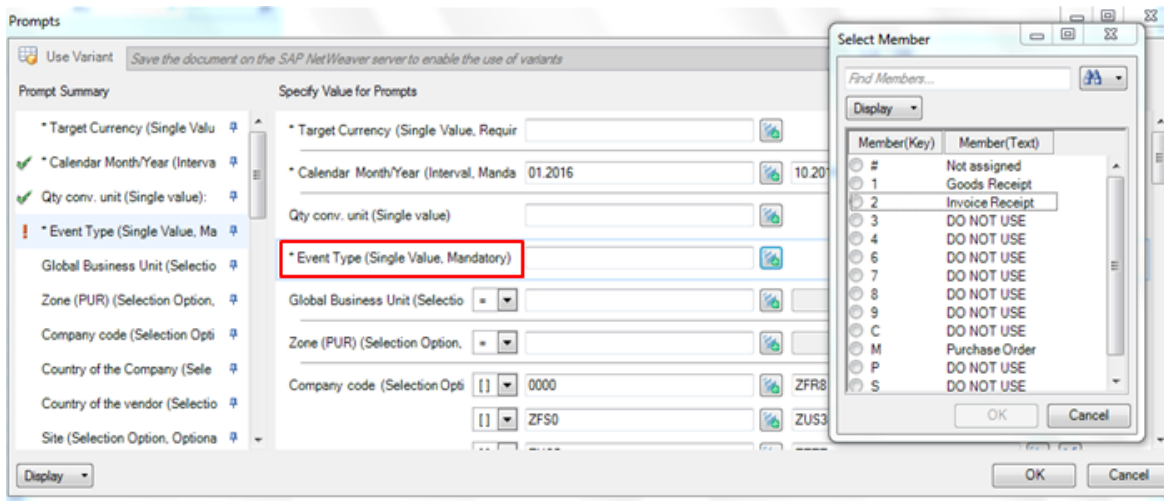
It will provide you all the PO, Receipts and Invoices posted in SAP during this selected period.



- **STEP 2**

The field "**Event Type**" has to be completed by choosing :

- Purchase Order
- Goods Receipt
- Invoice Receipt



- This **Event type** is linked to the chosen period.
- Ex : we choose 2 - Invoice Receipt.
- In the report, if we take the dimension "calendar day", it will give the exact day of the Invoice posting in SAP.
- You can also enter directly a PO number, or a SAP Contract number to track its document flow.

Dimensions

The dimensions are very detailed.

All information related to the Purchase Request, the PO, the Invoice, the SAP Contract, the InfoRecord and the vendor (including partner functions) are available.

Filter	
Calendar Day	
Calendar Month/Year	
Certification Date (For t	
Company	
Contract Item	
Contract Number	
Contract SWAP Type	
Contract SWAP	
Cost Center	
Country of the Compan	
Country of the Vendor	
Domain	
Event Type	
FP Goods Supplier	
FP Invoice presented b	
FP Ordering Address	
FP Vendor	
Function	
Global Business Unit	
Incoterms (Core)	
Incoterms 2 (Core)	
Internal Partner Flag	
Invoice Number	
Invoice Payment Terms	
Material Group	
Material Type	
Material	
Minority Indicator (For	

Payment terms Analysis Query

- Prompt

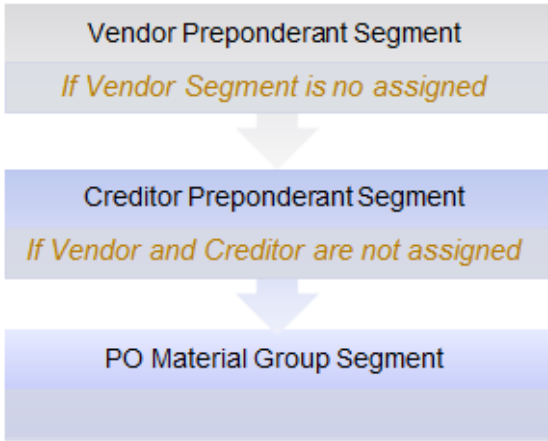
- **STEP 1**

In this prompt, we can select more accounting fields, such as the Net Due Date, the Clearing Date, the Accounting document

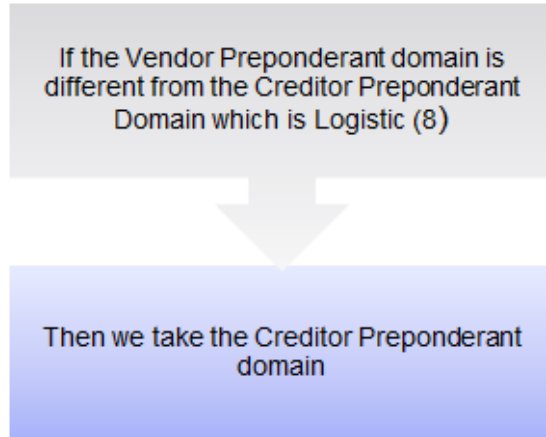
Domain (Selection Option, O		
Segment (Selection Option, #		
Group (PUR) Code (Selectio #		PO Number (Selection Option, = ▾
Creditor (Several Single Valu #		Base Date (Interval, Optional)
Creditor PRS (Selection Opti #		Net Due Date (Interval, Optional)
Creditor Class (Several Singl #		Clearing date (Interval, Optional)
Material (Selection Option, O #		
Material Group (Selection Op #		Account document number (Se = ▾
SAP Contract SWAP Type (S #		

To be able to link a domain and a segment to the spend, a specific rule has been implemented in SPRINT : the Spend Assignment rule.

The new Spend Assignment rule is applied in SPRINT :



An exception is implemented to be able to track delivery costs within the Logistic Domain :



Contract number to track its document flow.

Non Conformance Analysis Query

Prompt

- STEP 1

The selection of the period of Non-Conformance analysis is mandatory.

Prompts

Use Variant *Save the document on the SAP NetWeaver server to enable the use of variants*

Prompt Summary

- * Calendar Month/Year (Interval, Mandatory)
- Completion Date (Interval, Optional)
- GBU/Function (Selection optional)
- Zone (PUR) (Selection Option, Optional)
- Company code (Selection Optional)
- Country of the company (Selection Optional)
- Country of the vendor (Selection Optional)
- Plant (Selection Option, Optional)
- Vendor from PO (Several Single)
- Vendor from PO Domain (Selection Optional)

Specify Value for Prompts

* Calendar Month/Year (Interval, Mandatory)

Completion Date (Interval, Optional)

GBU/Function (Selection optional) =

Zone (PUR) (Selection Option, Optional) =

Company code (Selection Optional) {} 0000 ZFR8

{ } ZFS0 ZUS3

{ } ZUS5 ZZZZ

= #

= ZFR9

You can select several values such as the domain, segment or material group but also the coordinator or the author of the notifications.

Notification (Multi Values, Optional)

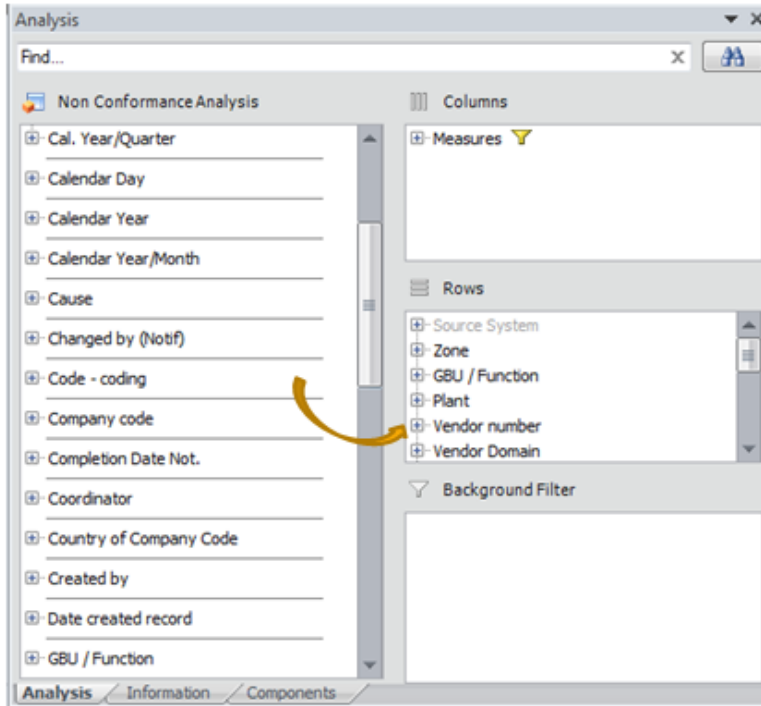
Author (Multi Values, Optional)

Coordinator (Multi Values, Optional)

An analysis by gravity level is also available

Gravity (Multi Values, Optional)  

Dimensions



- All the key dimensions are available in this query
- Just drag and drop the needed information



- Desactivate the automatic refresh when you create your report
- Re Activate it once finished

Material & Contract Query

Prompt

You can select :

- A chosen material if you want to analyze its sourcing (link material/plant)
- A chosen document to view its details
- A chosen supplier if you want to analyze his related documents

- **STEP 1**

By default, the system gives you only the documents still valid in SAP :

ex : you will see only SAP Contracts, Scheduling Agreements and Purchase info records still valid today on November the 7th, 2016 with a validity period ending in the future.

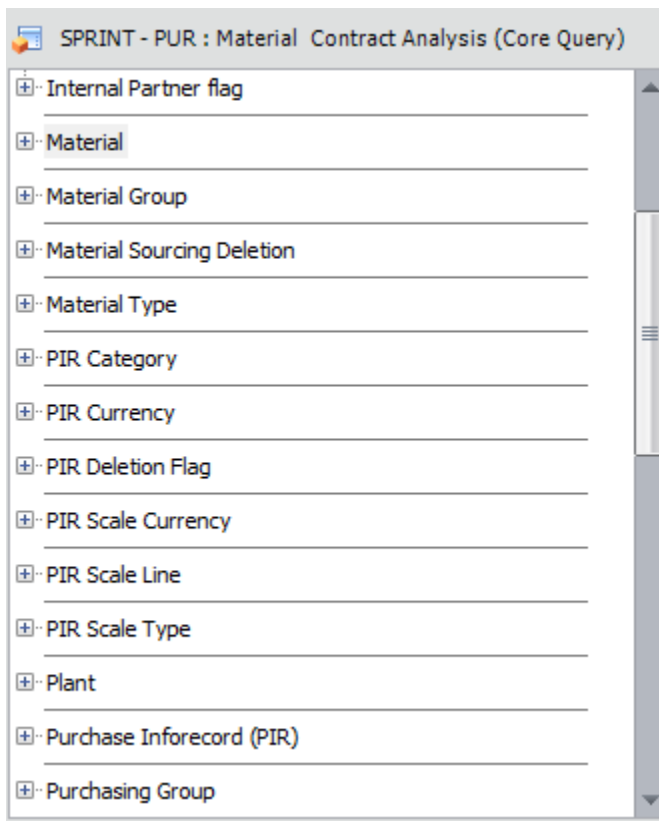
Prompt Summary Specify Value for Prompts

Valid To (Interval, Optional, C	Valid To (Interval, Optional, Customer)	07.11.2016	31.12.9999
* Target Currency (Single Valu	* Target Currency (Single Value, Requir		
Vendor Zone (PUR) (Selection	Vendor Zone (PUR) (Selection		
Country of the vendor (Selectio	Country of the vendor (Selectio		
Site (Selection Option, Optiona	Site (Selection Option, Optiona		
Plant (Selection Option, Option	Plant (Selection Option, Option	0	7865
Purchasing Group (Selection O		7867	8259
Vendor from PO (Several Singl		8270	8334
Vendor from PO PRS (Selecti		8336	ZZZZ
Vendor Domain (Selection Opti		#	
Vendor Segment (Selection Op		7866	
Group (PUR) Code (Selection			
Material (Selection Option, Opt			
Material Group (Selection Opti			
SAP Contract Deletion Flag (Si	Purchasing Group (Selection		
SAP Ctt Item Deletion Flag (Si	Vendor from PO (Several Single Values,		
PIR Scale : Deletion Flag (Sing	Vendor from PO PRS (Selecti		
Material Sourcing Deletion (Sin	Vendor Domain (Selection Opti		
Source System (Several Single	Vendor Segment (Selection O		

Dimensions

The dimensions give all details of the Vendor and all available documents :

- Sap Contracts
- Scheduling Agreements
- Purchase Info Record









SRM7 Query




Prompt




You can make an analysis either by :




- Stakeholders : Requestor, Approver
- Vendors
- WBS Elements




Country of the vendor (Selectio = ▾    ▾




Site (Select Option, Optional) = ▾    ▾




Plant (Selection Option, Option [] ▾ 0  7865  




[] ▾ 7867  8259  




[] ▾ 8270  8334  




[] ▾ 8336  ZZZZ  




= ▾ #   



= ▾    ▾




Requestor (Select Option, Opti = ▾    ▾




Approver (Select Optional, Opt = ▾    ▾




Shopping Cart Number (Option = ▾    ▾

SC Approval status (Select Op = ▾    ▾

Vendor from PO (Several Single Values.   ▾



Vendor from PO PRS (Selecti = ▾    ▾



Vendor from PO Domain (Sele = ▾    ▾



Vendor from PO Segment (Sel = ▾    ▾



The following time axis can be selected (day/month/year) :

- Creation Date
- Approval Date Start
- Approval Date End
- Change Date of document

Creation Date (Interval, Optional) 01.01.2016  30.03.2016 

Approval Date Start (Interval, Optional)  

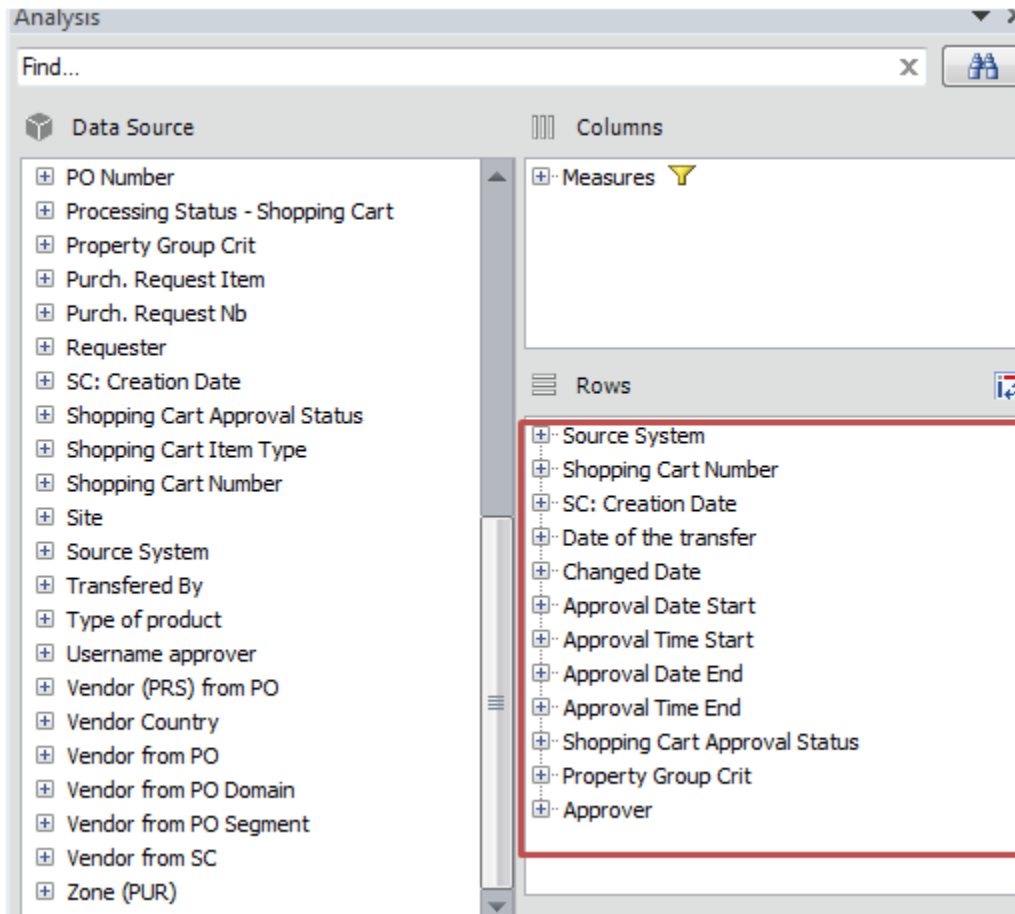
Approval Date End (Interval, Optional)  

Change Date of document (Interval, Opt  

Dimensions

A default template is available with all shopping cart workflow information.

Moreover, other information can be added as dimension



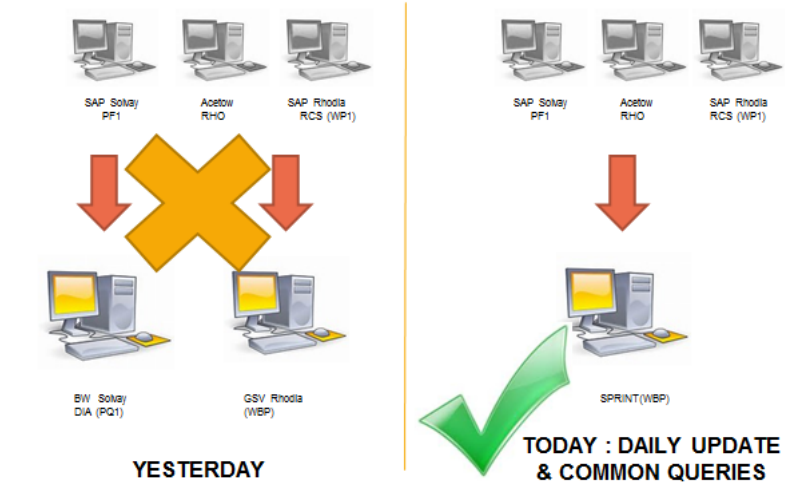
Supplier Code Cross Table

Prompt

Existing Documentation	<insert link>
------------------------	---------------

This section represents the process with detail information for the application.

SPRINT new application architecture

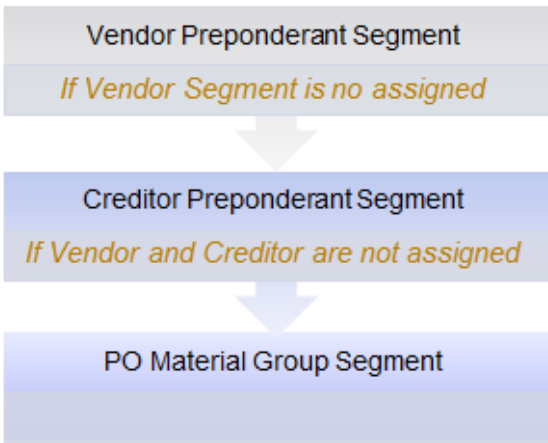


SPEND Analysis Query

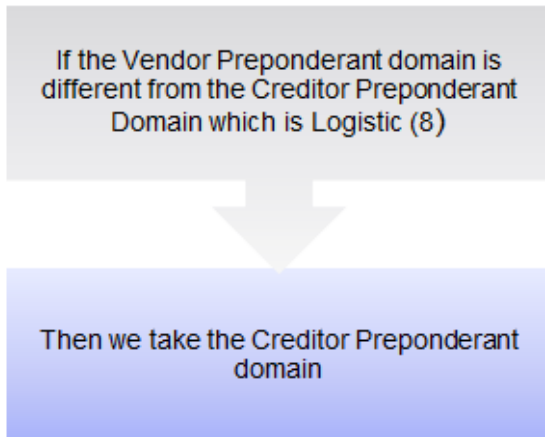
The Spend Assignment Rule

To be able to link a domain and a segment to the spend, a specific rule has been implemented in SPRINT : the Spend Assignment rule.

The new Spend Assignment rule is applied in SPRINT :



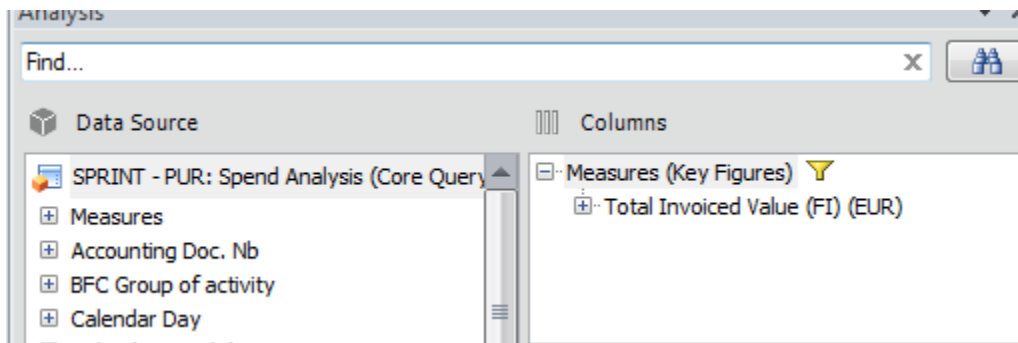
An exception is implemented to be able to track delivery costs within the Logistic Domain :



Indicators

- STEP 1

Double click on "Measures" to find all indicators available.



- **STEP 2**

Total Invoiced Value (FI) : Default KPI

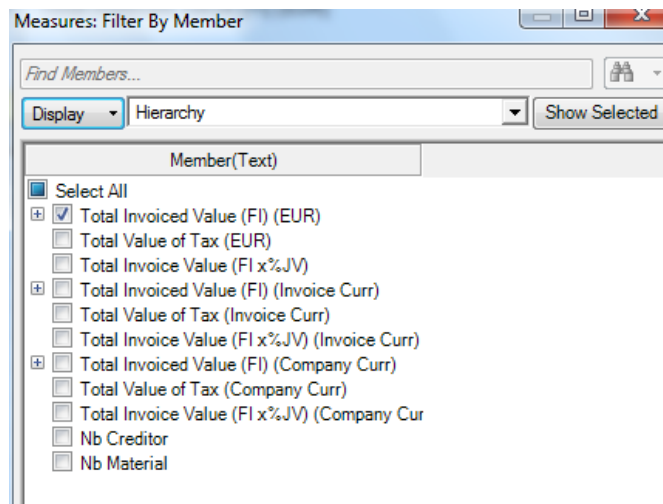
FI Spend (based on the Invoice posting date) in target currency (including total Joint Ventures spend) with the split of spend with or without PO.

Total Invoiced Value (FIxJV)

FI Spend in target currency with the percentage of consolidated Joint Venture (purchasing perimeter).

Total Value of tax (target currency)

Only used by Credit Management team.



But end users can also add the following KPIs :

Total Invoiced Value (FI) (Document currency)

FI Spend in document currency (including total Joint Ventures spend) with the split of spend with or without PO.

Total Invoiced Value (FIxJV) (Document currency)

FI Spend in document currency with the percentage of consolidated JV (purchasing perimeter).

Total Value of tax (Document currency)

Only used by Credit Management team.

Total Invoiced Value (FI) (Company currency)

FI Spend in internal currency (including total Joint Ventures spend) with the split of spend with or without PO.

Total Invoiced Value (FIxJV) (Company currency)

FI Spend in company currency with the percentage of consolidated JV (purchasing perimeter).

Total Value of tax (Company Currency)

Only used by Credit Management team.

Each indicator provides also a display of the split of the Spend with and without Purchase Order by clicking on 

How the Spend indicators are calculated ?

C	D	E	F	G	H
				[+] Total Invoiced Value (FI) (EUR)	Total Invoice Value (FI x%JV)
	Company Integ Rate	Company Consolidation Method		EUR	EUR
SOLVAY SODI	75,00	30	Proportionately cons	3 850 039	2 887 529

It takes all the spend including the total spend of the JV :

Ex : Solvay Sodi : even if the integration rate (consolidation %) is 75%, we take 100% of the spend = 3 850 039€

It takes the spend multiplied by the integration rate (consolidation %) of the JV :

Ex : Solvay Sodi : 3 850 039 x 75%= 2 887 529€

The dimension "Consolidation method" allows you to know how the JV is consolidated

Global Integration = Full consolidated

Solvay consolidates the legal entity at 100%

Proportional integration = Proportionately consolidated

Solvay consolidates the legal entity at the % indicates for P&L and Balance Sheet (payables).

Equity Method = Equity method.

Solvay consolidates only the legal entity result in the last part of the P&L at the % in the file. No integration at Balance sheet (payables) thus 0% at spend level.

The others methods:


Sold 0%, Not fully consolidate 0%, Not equity method 0%, Not assigned 0%

Are not taken in account and checked with the financial file.

Only merged method is taking also at 100%.

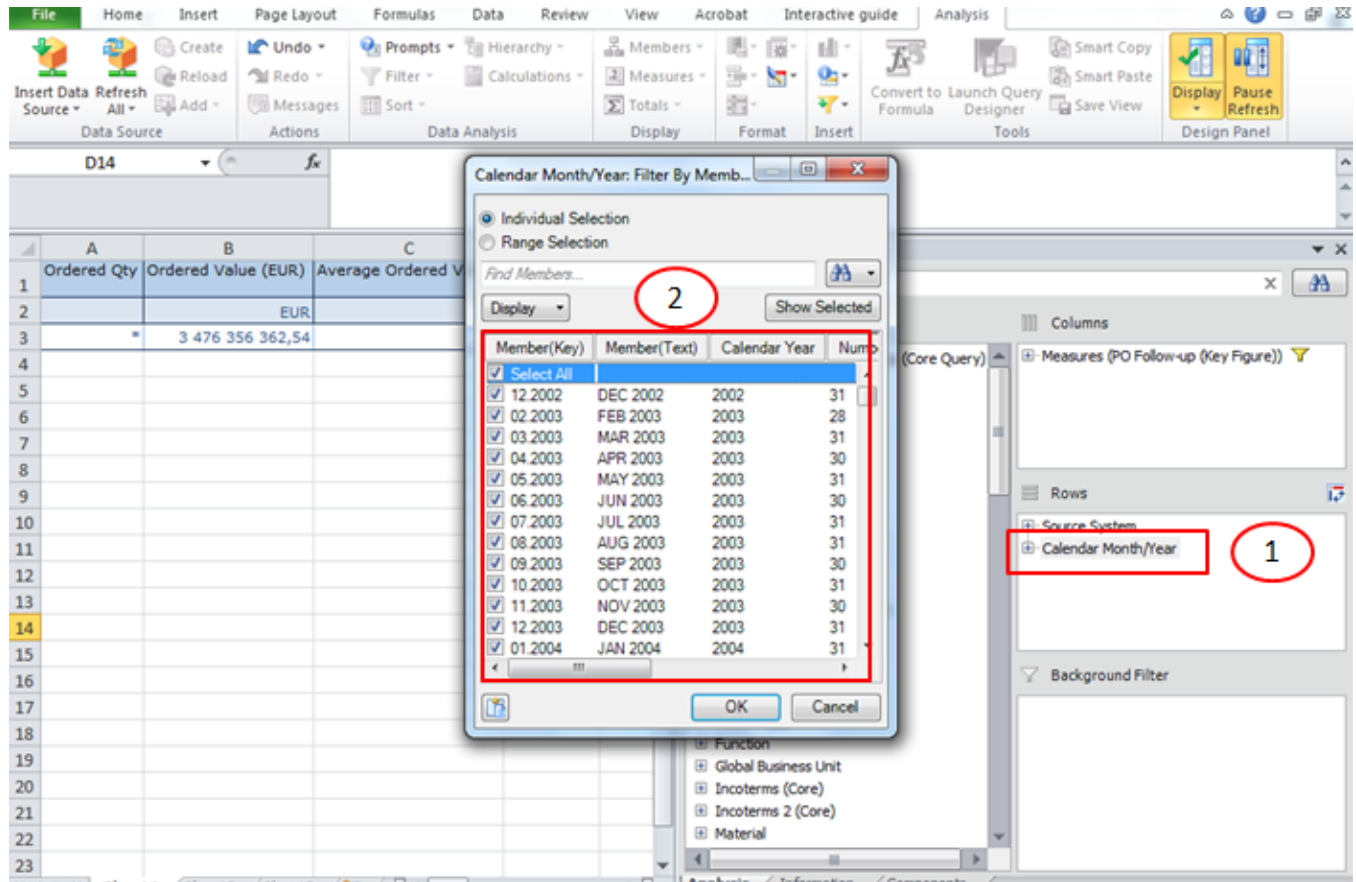
PO follow up Analysis Query

Indicators

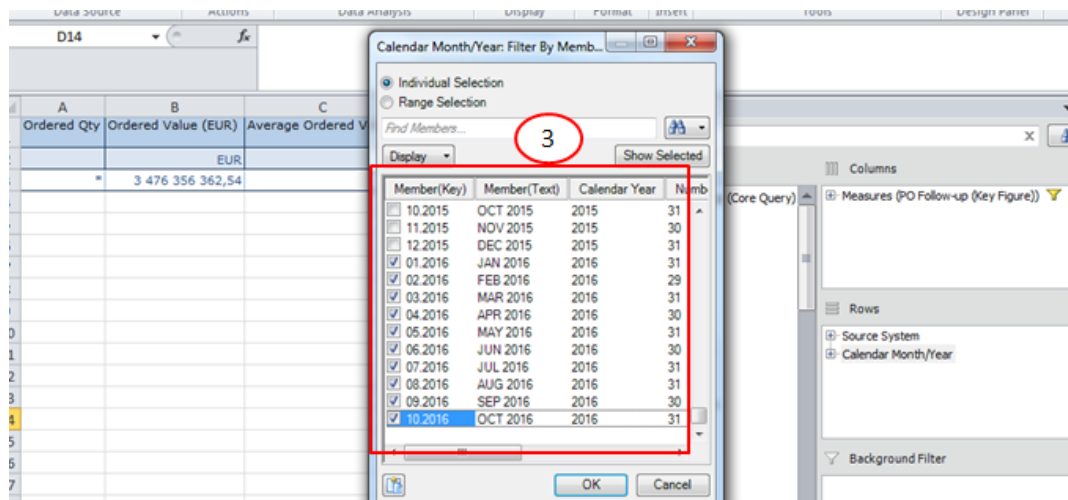
- 

MANDATORY -

In the report, you need to filter on the same period than the chosen period in the prompt



- 1 Put "Calendar Month" as a dimension & Right Click on it.
- 2 By default, the system selects old invoicing dates (even if the chosen period in the prompt was Jan.2016>Oct.2016).
- 3 Deselect the old invoicing dates and keep the period running from Jan.2016 to Oct.2016.



- **STEP 2** - Orders & Receipts

Ordered Qty	Ordered Value (EUR)	Average Ordered Value	Receipt Qty	Receipt Value (EUR)	Average Receipt Value	Qty to be Received
	EUR			EUR		
1,00 AU	16 885,89	16 885,89 EUR / AU	1,00 AU	16 468,18	16 468,18 EUR / AU	0,00 AU

- **Ordered Qty**
Quantity from the SAP purchase order
- **Ordered value**
Amount from the SAP purchase order
- **Average Ordered value :**
Purchase Order price unit
- **Receipt Qty :**
Received quantities (from SAP Goods Receipts)
- **Receipt value :**
Goods receipt amount
- **Average Receipt Value :**
Receipt Price Unit

- **STEP 3** - Consignment Consumption

This is when the stock property transfer is done between the supplier and Solvay :

- Transfer in Solvay stock location or
- Direct Consumption

Consignment

[See Consignment flow](#)

SPRINT gives you the quantity and the related amount consumed.

Consignment Consumption Qty	Consignment Consumption Value (EUR)	Average Consignment Consumption Value
	EUR	
1733 160,00 PC	418 737,64	0,24 EUR / PC

- **STEP 4** - Invoices

Each column can be opened by clicking on

[+] Total Invoiced Qty	[+] Total Invoiced Value (EUR)	Average Invoice Value	Qty to be Invoiced
	EUR		
1,00 AU	16 450,64	16 450,64 EUR / AU	0,00 AU

[-] Total Invoiced Qty	Invoiced Consignment Qty	Invoiced Qty	Invoiced Delivery Cost Qty	Subsequent Delivery Cost Qty	Subsequent Qty
320 000,00 KG		320 000,00 KG	1600 000,00 KG		49 000,00 KG

- **Total Invoiced Qty :**
It is the Total Invoiced quantity from SAP Invoice document + the SAP invoiced quantities from consignment (which is a specific flow).
- **Invoiced Consignment Qty :**
SAP Invoiced quantities from Consignment flow.
- **Invoiced Qty :**
SAP invoiced quantities (all flows except Consignment).
- **Invoiced Delivery Cost :**
SAP invoiced transportation costs.
- **Subsequent Qty :**
Debit or Credit note quantities.
- **Subsequent Delivery Cost Qty :**
Debit or Credit note quantities related to transportation.

Payment terms Analysis Query

Indicators

PAYMENT TERMS FROM MASTERDATA :

- **Vendor Payment Terms (PUR) in day**
Payments terms from SAP Supplier Masterdata (purchasing view) translated in days
- **Vendor LFM2 Payment Terms in day**
Alternative Payments terms from SAP Supplier Masterdata (by division) translated in days
- **Creditor Payment Terms (Co) in days**
Payments terms from SAP Supplier Masterdata (company view) translated in days

PAYMENT TERMS FROM DOCUMENTS:

- **Contract Payment Terms in days**
Payment terms from SAP Contracts translated in days
- **Purchase Order Payment Terms (weighted) in days**
Payment terms from SAP Purchase Orders translated in days
- **Invoice Payment Terms (weighted) in days**
Payment terms from SAP Invoices translated in days

ACCOUNTING INFORMATION :

- **Net Due Date - Clearing Date**
It is the Net Due Date minus the Matching Date (payment)
- **Total Invoiced Value (FI) (EUR)**
FI Spend in euro including Joint Ventures
- **Total Invoiced Value (FI) (Ocurr)**
FI Spend in invoicing currency including Joint Ventures
- **Total Invoiced Value (FI) (Icurr)**
FI Spend in company currency including Joint Ventures

- Select All
- Vendor Payment Terms Weighted in days
- Vendor LFM2 Payment Terms Weighted in days
- Creditor Payment Terms (Co) Weighted in days

- Contract Payment Terms Weighted in days
- PO Payment Terms Weighted in days
- Invoice Payment Terms Weighted in days

- Net Due Date - Clearing Date
- Total Invoiced Value (FI) (EUR)
- Total Invoiced Value (FI) (EUR - With Tax)
- Total Invoiced Value (FI) (Invoice Curr)
- Total Invoiced Value (FI) (Invoice Curr - With Tax)
- Total Invoiced Value (FI) (Company Curr)
- Total Invoiced Value (FI) (Company Curr - With Tax)

The objective of these indicators is to compare the different payment terms from SAP masterdata and documents in Solvay 3 legacies (RCS Rhodia, Solvay PF1 and Acetow RHO) :

PAYMENT TERMS DEFINITION :

1. **Vendor Payment terms (PUR) are always linked to a Purchasing Organization :**
Then, a same supplier can have different payment terms according to Solvay different Purchasing Organizations
2. **Creditor Payment Terms (Co) are always linked to a Company:**
Then a same supplier can have different payment terms according to Solvay different companies
3. **Vendor Payment Terms (LFM2) are linked to a plant :**
Then a same supplier can have different payment terms according to Solvay different plants
4. **If Vendor Payment Terms (PUR), Vendor Payment Terms (LFM2) and PO Payment terms are not assigned and if there is no Vendor of PO :**
*Then it is a flow without Purchase Orders (Direct Invoice)
Therefore Creditor Payment terms (Co) and Invoice Payment terms are completed with the payment terms*
5. **If SAP Contract Payment terms are not assigned :**
Then no SAP contracts exist
6. **If Invoice Payment Terms are not assigned**
Then no Invoice payments terms exist, the payment has been done manually by the accounting department
7. **Payment terms can be modified manually at PO level, Contract level and also Invoice level**
Then payment terms can be different sometimes

HOW TO COMPARE PAYMENT TERMS ?

1. **Compare the SAP Contract Payment terms with the PO Payment terms :**
They should be the same unless backoffice changed it in the Purchase Order
2. **If there is no contract, the PO Payment terms should come from the Vendor Payment Terms (LFM2) linked to the Plant if mentioned in the masterdata (optional) :**
Then PO Payment terms should be the same than Vendor Payment terms (LFM2) unless backoffice changed it in the Purchase Order
3. **If there is no contract, no Vendor Payment Terms (LFM2) then the PO Payment terms will come from the Vendor Payment Terms (PUR) linked to the Purchasing Organization :**
Then PO Payment terms should be the same than Vendor Payment terms (PUR) unless backoffice changed it in the Purchase Order
4. **Compare the Invoice Payment terms with the PO Payment terms :**
They should be the same except :
 - if the accounting department changes it in the invoice
 - if the accounting department makes manual payment using a specific field ("base date") when invoice payment terms are not assigned

Non Conformance Analysis Query

Indicators

- STEP 1

Double click to Measures to find all indicators available :

Member(Text)
<input type="checkbox"/> Select All
<input checked="" type="checkbox"/> N° NCs Recorded
<input type="checkbox"/> Closed notific items
<input checked="" type="checkbox"/> % Closed
<input type="checkbox"/> Notif open after 2 months
<input checked="" type="checkbox"/> % Open after 2 Months
<input checked="" type="checkbox"/> Treatment time (in day)
<input checked="" type="checkbox"/> Financial Impact
<input checked="" type="checkbox"/> Demerit
<input type="checkbox"/> Average Demerit

- **Total Notifications items**
Number of notifications created
- **Closed Notifications items :**
Number of notifications closed (with a completion date)
- **% of closed notifications :**
Number of closed notifications divided by the total number of notifications
- **Notifications open after 2 months :**
Number of notifications still open after 2 months.
This indicator is based on the creation date of the notification ("Date created record") and the notification status (must be different from the "notification completed")
- **% of Notifications open after 2 months:**
Number of Notifications still open after 2 months divided by the total number of notifications
- **Treatment time (in days) :**
Number of days of treatment for each notification.
Calculation done once the notification closed
- **Financial Impact :**
Amount recorded manually in QM (free text)
« -1 » means «financial impact to be confirmed later »
- **Demerit :**
The demerit is based on the following gravity levels:
G1=1; G2=10; G3=50; g4=100
- **Average Demerit**
Total Demerit level divided by the total number of notifications

Material & Contract Query

Indicators

The result of the report gives all documents with the expiration date and all the amount details for each document.

Purchasing Organization	PIR Category	Plant	Purchase Info Record (PIR)	SAP Contract Number	SAP Contract Item	PIR Scale Line	Valid To	Contract Target Value	Contract Target Qty	Contract Net Price	Contract Unit Quantity	PIR Values	PIR Unit Quantity	PIR Scale Qty	Scheduling Agreement Value	Scheduling Agreement Qty
0001	0	#	5300000009	#	#	#	31.12.9999					0,00 FRF	1,00	0,00 AK		
0001	0	#	5300000012	#	#	#	31.12.9999					13 112,00 FRF	1000,00	0,00 AK		
0001	0	#	5300000110	#	#	#	31.12.9999					701,25 EUR	1000,00	0,00 KG		
0001	0	#	5300008949	#	#	#	31.12.9998					480,00 DM	1,00	0,00 PC		
0001	0	#	5300008951	#	#	#	31.12.9998					812,00 DM	1,00	0,00 PC		
0001	0	#	5300024258	#	#	#	31.12.9998					234,00 DM	1,00	0,00 PC		
0001	0	#	5300024260	#	#	#	31.12.9998					620,00 DM	1,00	0,00 PC		
0001	0	#	5300024262	#	#	#	31.12.9998					680,00 DM	1,00	0,00 PC		
0001	0	#	5300025068	#	#	#	31.12.9999					1469,45 EUR	1000,00	0,00 PC		
0001	0	#	5300025069	#	#	#	31.12.9999					1527,23 EUR	1000,00	0,00 PC		
0001	0	#	5300025070	#	#	#	31.12.9999					1790,54 EUR	1000,00	0,00 PC		
0001	0	#	5300025073	#	#	#	31.12.9999					1514,45 EUR	1000,00	0,00 PC		
0001	0	#	5300025077	#	#	#	31.12.9999					1514,45 EUR	1000,00	0,00 PC		
0001	0	#	5300025081	#	#	#	31.12.9999					2 059,48 EUR	1000,00	0,00 PC		
0001	0	#	5300025085	#	#	#	31.12.9999					2 059,48 EUR	1000,00	0,00 PC		
0001	0	#	5300033686	#	#	#	31.12.9999					760,00 FRF	1,00	0,00 PC		
0001	0	#	5300036433	#	#	#	31.12.9998					480,00 DM	1,00	0,00 PC		
0001	0	#	5300036434	#	#	#	31.12.9998					314,00 DM	1,00	0,00 PC		
0001	0	#	5300039933	#	#	#	31.12.9999					994,80 EUR	1,00	0,00 AD		
0001	0	#	5300039999	#	#	#	31.12.9999					14 000,00 EUR	1,00	0,00 PC		

INDICATOR1

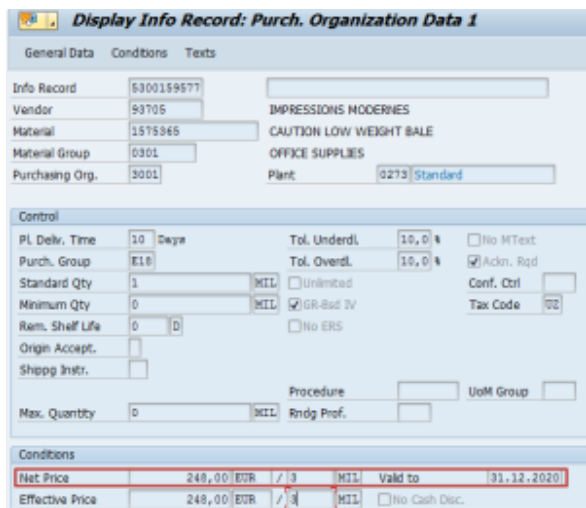
PURCHASE INFORECORDS

For Purchase Inforecords, SPRINT shows you PIR net price and PIR Unit quantity.

SPRINT :

Purchasing Organization	PIR Category	Plant	Purchase Info Record (PIR)	SAP Contract Number	SAP Contract Item	PIR Scale Line	Valid To	PIR Values	PIR Unit Quantity	PIR Scale Qty
3001	0	0273	5300159577	#	#	#	31.12.2020	248,00 EUR	3,00	0,00 MIL

Here the PIR info in SAP :



SPRINT is also able to give you the **PIR Scales quantities** :

It allows to display the different ranges of prices according to bought quantities.

SPRINT :

Purchase Inforecord (PIR)	SAP Contract Numbr	SAP Contract It	PIR Scale Lit	Valid To	PIR Values	PIR Unit Quanti	PIR Scale Q
5300233274	#	#	4	31.12.2020	1 134,26 EUR	1,00	4,00 PC
5300233274	#	#	7	31.12.2020	976,57 EUR	1,00	6,00 PC
5300233274	#	#	10	31.12.2020	924,64 EUR	1,00	8,00 PC
5300233274	#	#	13	31.12.2020	821,24 EUR	1,00	10,00 PC

Here the same values in SAP :

Scales							
Scale Type	Scale quantity	U...	Amount	Unit	per	UoM	PricActive
From		4 PC	1.134,26	EUR		1 PC	<input type="radio"/>
		6	976,57				<input type="radio"/>
		8	924,64				<input type="radio"/>
		10	821,24				<input type="radio"/>
							<input type="radio"/>

INDICATOR2

OUTLINE AGREEMENTS :

- Outline agreement is a long term purchasing agreement with vendor containing terms and conditions regarding the material that is supplied by vendor.
- Outline agreement are valid up to certain period of time and cover a certain predefined quantity or value.

Outline agreement is of following two types.

- SAP Contract
- Scheduling Agreement

In the SAP Contracts field, you can find SAP contracts numbers (ranging with 47xxxxxx) and also Scheduling Agreements (ranging with 55xxxxxx) :

SAP CONTRACTS :

SAP Contract Target Value :

This indicator takes into account the value of the SAP Contracts and the Scheduling Agreements. This indicator comes from SAP IT tables.

SAP Contract Target Qty (1)

This indicator takes into account the targeted quantities from the SAP Contracts.

SAP Contract Net Price : (2)

This indicator takes into account the unit price from the SAP Contracts.

SAP Contract Unit Quantity : (3)

It specifies how many units of the purchase order price unit the price is valid for.

SPRINT :

Pla	Purchase Inforecord (PIR)	SAP Contract Number	SAP Contract Item	PIR Scale Line	Valid To	Contract Target Value	Contract Target Qty	Contract Net Price	Contract Unit Quantity
7512	#	4700001325	170	#	31.12.2016	100 800,00 EUR	10 000,00 PC	10,08 EUR	1,00 PC

The information coming from SAP :

Display Contract : Item 00170

Account Assignments

Agreement Item: 4700001325 170 Item Cat. AcctAssCat

Material: 1573074 Matl Group: 0572 Plant: 7512

Short Text: PALETTE BOIS CP1 1000X1200 TT HT+SECHEE Stor. Loc.: ESAT

Quantity and Price

Target Quantity: 10.000 1 PC RelOrdQty: 1

Net Order Price: 10,08 2 EUR / 1 3 PC Price Date: 31.12.9999

Qty Conversion: 1 PC <-> 1 PC InfoUpdate

SAP SCHEDULING AGREEMENTS

Scheduling agreement is a long term outline agreement between vendor and ordering party over a predefined material or service which are procured on predetermined dates over a framework of time.

Scheduling Agreement Value :

This is the total amount by item : net price X the target quantity (scheduling agreement quantity)

Scheduling Agreement Quantity (target quantity) :

Total quantity, agreed with the vendor, that can be released or scheduled against the Scheduling agreement

SPRINT :

Pla	Purchase Inforecord (PIR)	SAP Contract Number	SAP Contract Item	PIR Scale Line	Valid To	Contract Target Value	Contract Target	Contract Net Price	Contract Unit Quantity	PIR Values	PIR Unit Quantity	PIR Scale Qty	Scheduling Agreement Value	Scheduling Agreement Qty
TAW	#	5500000134	10	#	31.12.2999			302,00 EUR	1,00 PC				30 200,00 EUR	100,00 PC
TAW	#	5500000134	20	#	31.12.2999			332,31 EUR	1,00 PC				33 231,00 EUR	100,00 PC

SAP Scheduling Agreements :

Display Scheduling Agreement...

Search or enter application name or transaction code

Menu

Display Scheduling Agreement : Item Overview

Agreement 5500000134 Agreement Type LP Agmt Date 06.08.2013
 Vendor 102103754 PRAXAIR Currency EUR

Outline Agreement Items

Item	I	A	Material	Short Text	Targ. Qty	O...	Net Price	Per	O...	Mat. Grp	Plnt	SLoc	D	T...
10	F		109541	MIX ACRYLATE/OXYGEN...	1	100	PC	302,00	1	PC	ZM5210	TAW		
20	F		109542	MIX METHYLACRYLONIT...		100	PC	332,31	1	PC	ZM5210	TAW		

SOURCING

Number of different sources (SAP contract, Purchasing Info record, Scheduling Agreements) for a material in a selected plant.

Go to Measures (Indicators) and deselect all.

Select only "Nb of Sourcing"

Go to Rows and put the following dimensions

STEP 3

The report considers that we have two sourcing as we have :

One SAP Contract n 4700002086 (for vendor 54238 BRENNTAG) (1)

One vendor 56237 NOVACID (2)

A Source list flag exists also for Vendor BRENNTAG (Source List Flag is equal to YES).(3)

It means that in SAP, we consider this source of supply as priority.

Measures: Filter By Member

Individual Selection
 Range Selection

Find Members...

Display Show Selected

Member(Text)

- Select All
- Nb of Sourcing
- Contract Target Value
- Contract Target Qty
- Contract Net Price
- Contract Unit Quantity
- PIR Scale Qty
- PIR Values
- PIR Unit Quantity
- Scheduling Agreement Value
- Scheduling Agreement Qty

Columns

- Measures
 - Contract
 - Target Value
 - Contract
 - Target Qty
 - Contract
 - Net Price
- Rows
 - Source System
 - Purchasing Organization
 - PIR Category
 - Plant
 - Purchase Info record (PIR)
 - SAP Contract Number
- Background Filter

Rows
Source System
Source List Flag
Vendor from PO
Material
Purchasing Organization
Plant
SAP Contract Number
Purchase Inforecord (PIR)

SPRINT :

Source List Flag	Vendor from PO		Material		Purchasing Organization	Plant	SAP Contract Number	Purchase Inforecord (PIR)	Nb of Sourcing
Yes 3	54238	BRENTAG SA	81221	HYDROCHLORIC AC	3006	0273	4700002086	#/0273/#	1
No	56237 2	NOVACID	81221	HYDROCHLORIC AC	3006	0273	#	0/0273/5300011676	1
Result									2

Same information than in SAP :

Article

ACIDE CHLORHYDRIQUE 32/37% VRAC

Division

ZFR3 Valence

Fiches du répertoire des sources d'approvisionnement

	Déb.valid.	Fin valid.	Fourn.	Org...	Div...	UA	Contrat	Poste	Source fixe	S...	Pl...	Unité plan.
	28.05.2015	31.12.2020	54238	3006		TO	4700002086	380	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	
	28.05.2015	31.12.2999	56237	3006				0	<input type="checkbox"/>	<input type="checkbox"/>		

SRM7 Query

Indicators

By default, all indicators are available in the report in number of days :

Lead Time request : this is the approval lead time based on the request date (Approval date end minus Approval request date).

Lead time transferred date: this is the approval lead time based on a transfer of validation (Approval date end minus the Approval transferred date).

Lead Time conditional : if no transfer of validation is done, the Lead Time conditional is equal to the Lead Time request.

Lead time date:

1) if no transfer of validation is done, then this indicator shows the duration of the approval process based on the beginning of the approval workflow (Approval Date end minus the Approval date start).

2) In case of transfer of validation : the indicator shows the duration of the approval process based on the date of transfer (Approval date end minus Approval transferred date).

Approver		Lead Time Conditional	Lead Time Date	Lead Time request date	Lead Time transferred date
100010335	Maheshwari, V	0	0	0	0
100010335	Maheshwari, V	1	0	1	0
100004744	FILLON, Cedric	36	0	36	0
100012724	Liu, Caigao	14	4	14	0
100007891	Zanetti, Michel	3	3	3	0
100005652	CHEN, GuangWei	3	0	3	0
100005652	CHEN, GuangWei	3	0	3	0
100003630	KIM, Sang-Hwan	4	4	4	0
100007891	Zanetti, Michel	3	0	3	0
100010335	Maheshwari, V	3	0	3	0
100006015	SCHEPP, Doug	8	0	8	0
100006015	SCHEPP, Doug	3	0	3	0
100006015	SCHEPP, Doug	0	0	0	0
100003648	LEFEU, Alexandre	0	0	0	0
100005922	BARRACLOUGH, Craig	0	0	0	0
100006027	SOROKO, Keith	3	0	3	0
WF-BATCH	WF-BATCH	0	0	0	0
100006928	CHAVIS, Rita	3	3	3	0
100003713	CABELLO, Dalia	3	3	3	0
WF-BATCH	WF-BATCH	0	0	0	0
100006141	MAGALLANES, Jesse	3	3	3	0
100006162	WHITE, Robert	3	3	3	0
100006025	PODOLAK, Michael	3	0	3	0

Supplier Code Cross Table

Indicators

This query doesn't provide indicators as its aim is to display Creditor/Vendor codes :

C	D	E	F	G	H	I	J
Creditor		Creditor PRS		Vendor from PO		Vendor (PRS) from PO	
2100018	XEROX CORPORATION	2100018	XEROX CORPORATION	#	PF1_020/Not assigned	#	Not assigned
				2100018	XEROX CORPORATION	2100018	XEROX CORPORATION
				210388	XEROX CORP	210388	XEROX CORP
				212260	XEROX CORP	212260	XEROX CORP
				212655	XEROX CORPORATION	212655	XEROX CORPORATION
				217972	XEROX CAPITAL SERVICES LLC	217972	XEROX CAPITAL SERVICES LLC
				218397	XEROX CORPORATION	218397	XEROX CORPORATION
				2126561	XEROX CORPORATION	2126561	XEROX CORPORATION
2100070	VULCAN SAFETY SHOES INC	2100070	VULCAN SAFETY SHOES INC	#	PF1_020/Not assigned	#	Not assigned
				2100070	VULCAN SAFETY SHOES INC	2100070	VULCAN SAFETY SHOES INC
2100062	TRANSCAT INC	2100062	TRANSCAT INC	#	PF1_020/Not assigned	#	Not assigned
				2100062	TRANSCAT INC	2100062	TRANSCAT INC
				2100064	TRANSCAT	2100064	TRANSCAT
				2106955	TRANSCAT CALEX/PRESS	2106955	TRANSCAT CALEX/PRESS
2100199	THEIE TECHNOLOGIES INC	2100199	THEIE TECHNOLOGIES INC	#	PF1_020/Not assigned	#	Not assigned
				2100199	THEIE TECHNOLOGIES	2100199	THEIE TECHNOLOGIES
2100227	THE JET PULVERIZER CO	2100227	THE JET PULVERIZER CO	#	PF1_020/Not assigned	#	Not assigned
				2108823	JET PULVERIZER COMPANY	2108823	JET PULVERIZER COMPANY
2100357	SOLVAY FLUORIDES, LLC	2100357	SOLVAY FLUORIDES, LLC	#	PF1_020/Not assigned	#	Not assigned
				2123036	SOLVAY FLUORIDES, LLC	2123036	SOLVAY FLUORIDES, LLC
				302307374	SOLVAY FLUORIDES	302307374	SOLVAY FLUORIDES
				302307795	SOLVAY FLUORIDES, LLC	302307795	SOLVAY FLUORIDES, LLC
2100388	SHIMADZU SCIENTIFIC INSTRUME	2100388	SHIMADZU SCIENTIFIC INSTRUME	#	PF1_020/Not assigned	#	Not assigned
				2120075	SHIMADZU SCIENTIFIC INSTRUM	2120075	SHIMADZU SCIENTIFIC INSTRUMENTS
2100461	ROMAR LEARNING SOLUTIONS LL	2100461	ROMAR LEARNING SOLUTIONS LL	#	PF1_020/Not assigned	#	Not assigned
				2100461	ROMAR LEARNING SOLUTIONS	2100461	ROMAR LEARNING SOLUTIONS LLC
2100704	OMEGA ENGINEERING INC	2100704	OMEGA ENGINEERING INC	#	PF1_020/Not assigned	#	Not assigned

5.0 Non-functional Descriptions

Please populate the relevant section and delete those that are not applicable.

5.1 Usability

Usability is about the ease with which a User can learn to start using the solution and the ease with which they can use the system. In addition to ease of learning and ease of use, usability also includes areas such as ease of recall, error avoidance and handling, accessibility among others e.g., 99% of metadata entry Users who have use the Maintenance Dashboard should be able to change filters, extract etc., when required. Maintenance data will be centrally stored in the Google Cloud platform, which will be available to other applications e.g., and Dashboards if needed.

5.2 Regulatory Compliance

Software systems must comply with legal and regulatory e.g., GDPR requirements, this can change depending on country, organisation industry and / or region. The software systems must be secure from unauthorized access. The Maintenance Dashboard will comply with Solvay's regulations and compliance e.g., access only granted to authorized Users.

5.3 Security

Security refers to essential aspects that assure a solution and its components will be protected against unauthorized access or malware attacks. Important considerations related to security aspects of a system are User authentication, User authorization or User access privileges, data theft, malware attacks, data encryption, and maintaining audit trails, e.g., only Users with administrator access shall be able to create new accounts and assign data access privileges to the new accounts e.g.,

- All data will be encrypted in the dashboard
- Only authorised Users / Administrative Users will be able to access data.
- Maintenance data will be split between either SCO or ECO, and Users will only have authority to one Entity data.

5.4 Performance

Performance defines how fast a software system or a particular section of it responds to certain User actions under a certain workload. In most cases, this metric explains how long a User must wait before the target operation happens e.g., the page renders, a transaction is processed, etc., given the overall number of Users now. Performance requirements may describe background processes invisible to Users, e.g., backup and speed of data transfers.

5.5 Reliability

Reliability is the ability of a solution or its component to perform its required functions without failure under predefined conditions for a specified time / period. Reliability can possibly be specified in terms of average time system runs before failure occurs, percentage of operations completed successfully within a time / period, maximum acceptable failure probability, or number of failures within a period. Reliability aspects are in reference to (but not limited to) evaluation of the system to be considered as reliable, classification of reliability defining failures vs. regular failures, and the impact of failure on business operations. The Maintenance Dashboard will display data from the previous refresh of data.

5.6 Scalability

Scalability refers to the degree to which a solution can evolve to handle increased amounts of work. The increased amount of work could be in terms of the user base, transactions, data, network traffic, or other factors e.g., the system should be able to handle an additional load of a maximum of 5,000 Users every month for the next 6 months without any noticeable performance impacts.

5.7 Compatibility

Interoperability is the degree to which the solution is compatible with other components. It is a measure of how effectively the system interoperates with other software systems and how easily it integrates with external hardware devices.

Interoperability aspects to be discussed during elicitation are in reference to (but not limited to) software systems to be interfaced with along with data / messages to be exchanged and any standard data formats, hardware components to be integrated with, and any standard communication protocols to be followed e.g., Order Management system will push the order file into a secured file transfer protocol server from where it will be loaded into the system through a daily job. To guarantee between Google Cloud platform and SAP BW Queries e.g., BW_QRY_MVPMOR01_0002, Solvay has introduced a new tool called Xtract ([Xtract](#)).

5.8 Availability

Availability is the degree to which the solution is operable and accessible when required. It is a measure of time during which the system is fully operational e.g., available for use and sometimes included as a Service Level Agreement (SLA) considering its criticality to the business, e.g., the system shall be at least 99% available on weekdays between 09:00 to 18:30 Central European Time (CET).

5.9 Refresh of the Data

Frequency, data, and time of the data refresh in the data product.