

Functional Documentation - Corporate Business Services - Function costs report

1.0 Overview

CBS Function Costs Menu

Business Context and Application Overview

Within Solvay, Corporate Business Services- Function cost application is a part of the Finance domain and uses data from various systems such as SAP systems, data from Cost Centers, Orders and WBS (SAP PS).

The Corporate Business Services are activities which combine or consolidate certain enterprise-wide needed support services, provided based on specialised knowledge, best practices, and technology to serve internal (and sometimes external) customers and business partners.

This Function is split in 4 parts:

- Corporate (not re-invoiced)
- Function services (re-invoiced and under guarantee)
- R&D and engineering projects
- Interco flows - It allows the identification of inter-company billing at company level

Application User Profile

For this Application the access is provided based on the BW menu "CBS - Function Costs" and it's done via Service one.

Fill the form

<https://solvay-dwp.onbmc.com/dwp/app/#/itemprofile/622>

In SAP system select the "WBP - BW Business Warehouse"

In WBP - BW Business Warehouse : Select the Business Role select the "CBS - Function Costs"

Target Users:

Users of this application include Corporate Controlling Controllers, Function Controllers, Plant Controller, Accountants and GBU controller

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	15.09.2023	Inês Vilares	Initial draft

2.0 Business Process

To understand the business process it's important to know the basic concept for the SAP CO module and how it's applicable in Solvay organization.

The SAP CO module in the SAP ERP (Enterprise Resource Planning) system focus on financial controlling and management accounting functions within an organization. SAP CO is designed to provide tools and capabilities to effectively manage and control costs, perform internal and external accounting, and support decision-making processes related to financial aspects of the business. SAP CO is tightly integrated with other SAP modules, such as SAP FI (Financial Accounting) and SAP MM (Materials Management), providing a cohesive and comprehensive solution for managing financial data, controlling costs, and supporting financial decision-making throughout the organization.

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

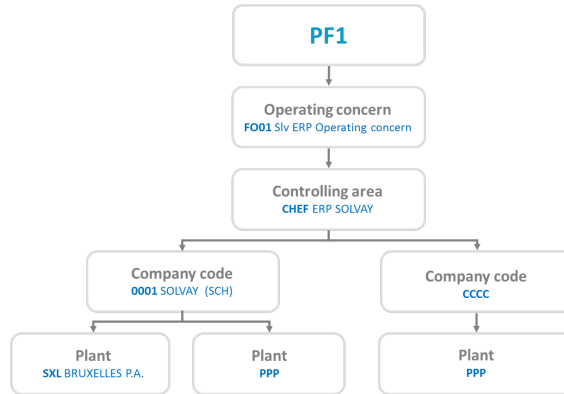
Note: list of all applications and various environment

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

CO Structure in Solvay:

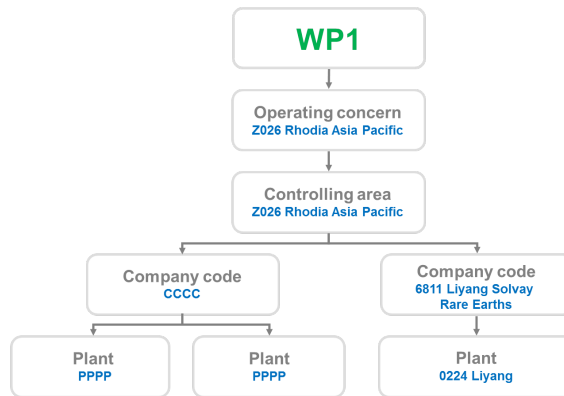
PF1 Structure

	Code	Description
Operating concern	FO01	Slv ERP Operating concern
Controlling area	CHEF	ERP SOLVAY



WP1 Structure

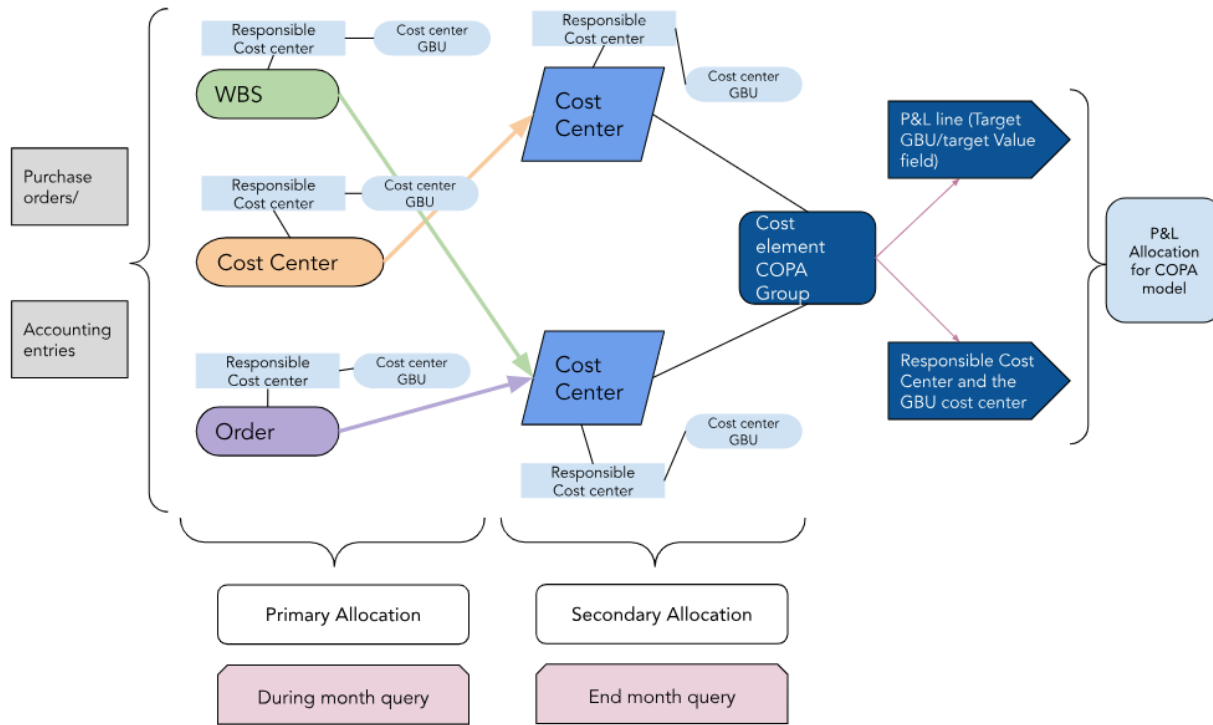
	Code	Description
Operating concern	Z001	Solvay Engin. Plasti.Polan
	Z006	Rhodia Europe
	Z013	Rhodia Europe
	Z025	Rhodia Latin America
	Z026	Rhodia Asia Pacific
	Z028	Solvay North America
Controlling area	= Operating concern	



Overview of the business process for CBS functions costs

For the CBS function costs we use the SAP information from the controlling part. For this it's important to understand the structure behind and how the business see the costs and be able to analyze the information to perform their activities during and end of month.

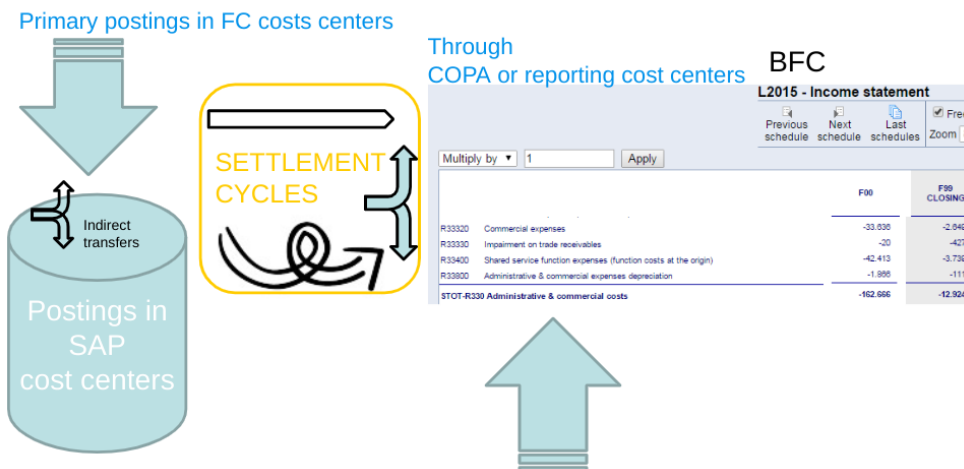
Model behind for PF1 and WP1:



Currently we have the WBS, cost centers and orders objects with values coming from the purchase orders and accounting entries. Each object is linked to a cost center which we call it "Responsible Cost Center" and this cost center is linked to a GBU.

We have the primary postings and during the closing process we have the settlements cycles (which will allocate the costs to a final cost center) and the final cost centers has the correspondent cost element for COPA line items to be present in the P&L report for PF1 and WP1 using the respective value field.

Reporting fixed costs challenges : reconciliation SAP/BFC:



In the controlling side we have primary posting in the CO objects for the fixed costs and during the closing we have the settlement cycles to transfer /allocate the costs to a final CO object and to be in the respective lines in P&L.

3.0 Application Feature Overview

For this scope we are using queries instead of workbooks. See below all the queries available:

1 - Solvay Group Fixed Costs

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
<p>CBS - Functions - during month (Core query)</p>	<p>In the report we can analyze the costs posted on function cost centers and CO objects with function CC as responsible CC for a specific period.</p> <ul style="list-style-type: none"> • No categorization of costs • Highest level of detail: partner CO object • The sign of the amount is seen from the function cost center (+: costs increase / -: costs decrease) <p>Default filters:</p> <p>1 Organization</p> <ul style="list-style-type: none"> • ZCBS-CORPO • ZCBS-FUNCT • ZCBS-PROJ 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Period /Fiscal Year. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • 1 Organization; • GBU Function; • Function Grouping; • Function; • 3 Sub-funct Grouping; • 4 Sub-function; • Company Code; • Prompt Currency. 	<p>N.A</p>	<p>BW_QRY_MPR_FC001_003</p>
<p>CBS - Functions - end of month (Core query)</p>	<p>In the report we can analyze the costs posted on function cost centers only for a certain period or periods after the settlements for the analysis on a end of month perspective.</p> <ul style="list-style-type: none"> • Categorization of costs following the structure described in the section ""Synthesis" & "Function – end of month" report". • Highest level of detail: partner CO object • The sign of the amount is seen from the function cost center (+: costs increase / -: costs decrease) <p>Default filters:</p> <p>1 Organization</p> <ul style="list-style-type: none"> • ZCBS-CORPO • ZCBS-FUNCT • ZCBS-PROJ 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Period /Fiscal Year. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • 1 Organization; • GBU Function; • Function Grouping; • 3 Sub-funct Grouping; • 4 Sub-function; • Function; • Company Code; • Prompt Currency. 	<p>N.A</p>	<p>BW_QRY_MPR_FC001_001</p>

<p>CBS - Functions by Companies - during month (Core query)</p>	<p>In the report we can analyze the costs posted on function cost centers and CO objects with function CC as responsible CC for a specific period. Used more as a local reporting.</p> <ul style="list-style-type: none"> • No categorization of costs • Highest level of detail: partner CO object • The sign of the amount is seen from the function cost center (+: costs increase / -: costs decrease) • Same layout as "Functions – During the month" <p>Default filters:</p> <p>1 Organization</p> <ul style="list-style-type: none"> • ZCBS-CORPO • ZCBS-FUNCT • ZCBS-PROJ 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Period /Fiscal Year. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • 1 Organization; • GBU Function; • Function Grouping; • Function; • 3 Sub-funct Grouping; • 4 Sub-function; • Company Code; • Prompt Currency. 	<p>N.A</p>	<p>BW_QRY_M PR_FC001_004</p>
<p>CBS - Functions by Companies - end of month (Core query)</p>	<p>In the report we can analyze the costs posted on function cost centers only for a certain period or periods. Used more as a local reporting.</p> <ul style="list-style-type: none"> • No categorization of costs • Highest level of detail: partner CO object • The sign of the amount is seen from the function cost center (+: costs increase / -: costs decrease) <p>Default filters:</p> <p>1 Organization</p> <ul style="list-style-type: none"> • ZCBS-CORPO • ZCBS-FUNCT • ZCBS-PROJ 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Period /Fiscal Year. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • 1 Organization; • GBU Function; • Function Grouping; • Function; • 3 Sub-funct Grouping; • 4 Sub-function; • Company Code; • Prompt Currency. 	<p>N.A</p>	<p>BW_QRY_M PR_FC001_002</p>

CBS - Synthesis of the Functions (Core query)	<p>In the report we can analyze the costs posted on function cost centers only for a certain period or periods.</p> <ul style="list-style-type: none"> • Categorization of costs following the structure described in the section ""Synthesis" & "Function – end of month" report". • Highest level of detail: cost center x cost element • The sign of the amount is seen from the function cost center (+: costs increase / -: costs decrease) <p>Default filters:</p> <p>1 Organization</p> <ul style="list-style-type: none"> • ZCBS-CORPO • ZCBS-FUNCT • ZCBS-PROJ 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Period /Fiscal Year. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • 1 Organization; • GBU Function; • Function Grouping; • Function; • 3 Sub-funct Grouping; • 4 Sub-function; • Company Code; • Prompt Currency. 	<p>N.A</p>	<p>BW_QRY_MPR_FC001_005</p>
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2 - Solvay Group detailed Fixed Costs

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
BW - Detail costs by Orders - Rhodia (Core query)	<p>The report is for Rhodia companies scope and show the costs for the selected order and all the details as partner cost center, partner activity, partner WBS element, partner order, CO document number and CO document line item for different periods in Amount (EUR) and Amount in Company Currency.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Order. <p>Optional:</p> <ul style="list-style-type: none"> • Prompt Currency; • Auth Scope on Company Code; 	<p>N.A</p>	<p>BW_QRY_MPR_FC002_001</p>
BW - Detail costs by Orders - Solvay (Core query)	<p>The report is the same as "BW - Detail costs by Orders - Rhodia (Core query)" but the scope is for Solvay companies.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Order. <p>Optional:</p> <ul style="list-style-type: none"> • Prompt Currency; • Auth Scope on Company Code; 	<p>N.A</p>	<p>BW_QRY_MPR_FC002_002</p>

BW - Detail costs by WBS Elements - Rhodia (Core query)	The report is for Rhodia companies scope and show the costs for the selected WBS Element and all the details as compay code, partner cost center, partner WBS element, partner order, CO document number and CO document line item for last closing period in Amount (EUR) and Amount in Company Currency.	Mandatory: • WBS Element. Optional: • Prompt Currency;	N.A	BW_QRY_MPR_FC002_003
BW - Detail costs by WBS Elements - Solvay (Core query)	The report is the same as "BW - Detail costs by WBS Elements - Rhodia (Core query)" but the scope is for Solvay companies.	Mandatory: • WBS Element. Optional: • Prompt Currency; • Auth Scope on Company Code;	N.A	BW_QRY_MPR_FC002_004

4.0 Functional Specification

4.1 General Data/Calculations

For these reports, it's important to understand some general concepts which are transversal to all the reports which allows the users to work with the reports in the same way as the SAP system and BFC tool.

Cost Center	A cost center is a specific organizational unit within a company that is responsible for incurring costs. It represents a location, department, or function where expenses are generated. Cost centers are used for tracking and controlling costs, allocating expenses, and monitoring budget compliance.
Responsible Cost Center	A responsible cost center is a subcategory of a cost center that is responsible for specific cost incurrences within the main cost center. It allows for more detailed tracking and allocation of costs within a broader cost center. Responsible cost centers help organizations drill down into expenses for greater accuracy in cost analysis and control. Responsible Cost center is : - the cost center linked to the Order and WBS of the line item (CO-OM, PS) - the cost center of the line item for CO-CCA
Cost element	It's a categorization used to track and classify expenses incurred by an organization. It represents a specific type of cost, such as wages, materials, rent, or utilities, and serves as a fundamental building block for cost accounting and reporting. Cost elements are essential for allocating and analyzing costs within the SAP CO module. It's the P&L account used to post the amounts in SAP CO document.
Plant	Refers to a specific physical location or facility within a company's organizational structure.
Cost Center Hierarchy	Refers to a structured arrangement or organization of cost centers within a company. It establishes a hierarchical relationship among cost centers, typically based on their functions, responsibilities, or reporting structures. This hierarchy helps in organizing and managing cost centers efficiently for accounting, budgeting, and reporting purposes, allowing for better control and analysis of costs across the organization.

4.2 Process Detail

4.2.1. Report/Process Definition

Domain	Finance
Application	BW reports under CBS - Function Costs folder (queries option)

Provider	MPR_FC001 and MPR_FC002.
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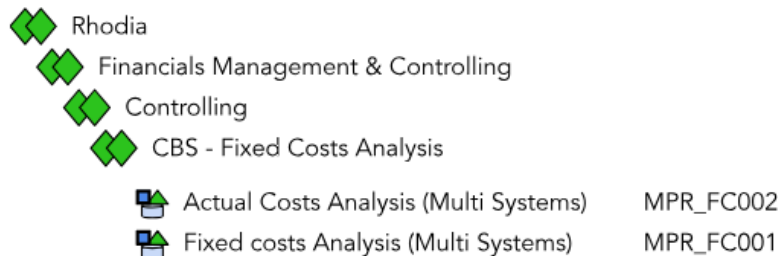
In this section we will approach:

- [SAP BW High Level View](#)
- [Hierarchy](#)
- [Restrictions](#)
- [Function cost tracking reports](#)
- ["Synthesis" & "Function – end of month" reports](#)
- [Characteristics available in CBS reports](#)
- [Cytect case for Non-ERP](#)

For the CBS function costs application we have the PF1 and WP1 systems and we are using the main CO objects cost centers, WBS and orders and with this information extracted we the data is splitted in two BW tools one side the GBU fixed costs and the other solution is CBS for the functions (For the GBU fixed costs scope the explanation it is in the "[GBU Fixed Costs application](#)"). For both applications we use the same data base and the same cubes but the multiproviders are different also because of the authorization part.

SAP BW High Level View

To see the data from the source systems see below how the information is organized in the BW perspective:



Hierarchy

The below costs are included in the Corporate Business:

- Actual costs only: Statistical costs are not taken into account
- IFRS rules only: Costs posted using local gaap accounts are excluded (Brazilian entities)
- Costs posted on CBS (Corporate Business Services) cost centers (directly or through orders or WBS). It corresponds to the cost centers included in the following groups of the [cost centers hierarchy ZCBS](#):
 - ZCBS-CORPO = Corporate
 - ZCBS-FUNCT = Function services
 - ZCBS-PROJ =Projects
 - ZCBS-ICO = Interco
- Costs are organized with the [cost elements group ZRCS-FC](#)
- Inter-company re-invoiced function service costs should be posted on cost centers of the group ZCBS-ICO

In SAP using the transaction [KSH3 - Display cost center hierarchy](#)



In the Cost Element Hierarchy from 01 Jan 2022 the Cost Element Group ZRCS-FC it was replaced by the [Cost Element Group ZSOLV](#). In the reports we have information for the ZSOLV group but the reports are still working for the filters and key figures with the old group. Discussions are on going to see the best solution to have the reports adapted with the new group ZSOLV.

Restrictions

To determine CBS Fixed Costs perimeters, there is restrictions on:

- Cost center
- Cost element
- Miscellaneous filters

In CBS application the CBS hierarchy for PF1 and WP1 systems in BW was denormalized (levels of the hierarchy are translated as attributes of cost center and responsible cost center):

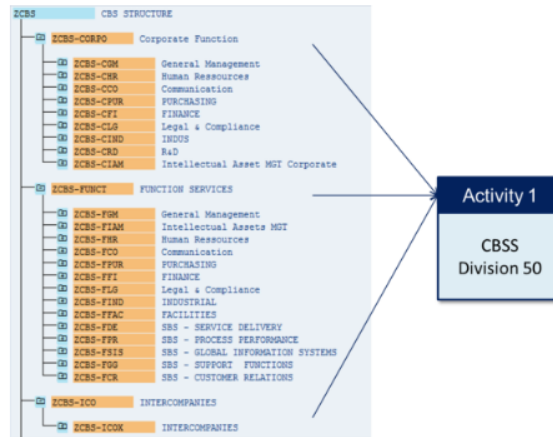
Levels of the CBS hierarchy

Characteristic C_COSTCTR - maintain master data: List

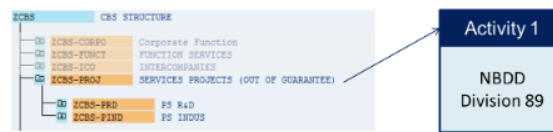
Control	Cost Center	L	Valid to	Valid from	Business a	Company co	Src	Sys. Object	cur	Profit Cen	Person Responsible	0 Hierarch	1 Organisa	2 Function	3 Sub-func	4 Sub-func	Record cha	CC
CHEF	ID13110000	EN	31.12.2011	01.01.1000				PF1_020			MOHAMED ABDELMONEIM	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID13110000	EN	31.12.9999	01.01.2012	7250	6046		PF1_020 EGP	CAXA		MOHAMED ABDELMONEIM	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16210000	EN	31.12.2011	01.01.1000				PF1_020			LABLA ELGHAZALY	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16210000	EN	31.12.9999	01.01.2012	7250	6046		PF1_020 EGP	CAXA		LABLA ELGHAZALY	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16310000	EN	31.12.2011	01.01.1000				PF1_020			LARBI BOUJRAD	ZCBS	ENTRP	EADM	EADMA	EADMAG	07.06.2016	
CHEF	ID16310000	EN	31.05.2016	01.01.2012	7250	6046		PF1_020 EGP	CAXA		LARBI BOUJRAD	ZCBS	ENTRP	EADM	EADMA	EADMAG	07.06.2016	
CHEF	ID16310000	EN	31.12.9999	01.06.2016	7250	6046		PF1_020 EGP	CAXA		LARBI BOUJRAD	ZCBS	ENTRP	EADM	EADMA	EADMAG	07.06.2016	
CHEF	ID16410000	EN	31.12.2011	01.01.1000				PF1_020			KHALED AHMED	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16410000	EN	31.12.9999	01.01.2012	7250	6046		PF1_020 EGP	CAXA		KHALED AHMED	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16430000	EN	31.12.2011	01.01.1000				PF1_020			KHALED AHMED	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16430000	EN	31.12.9999	01.01.2012	7250	6046		PF1_020 EGP	CAXA		KHALED AHMED	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
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CHEF	ID16450000	EN	31.12.9999	01.01.2012	7250	6046		PF1_020 EGP	CAXA		KHALED AHMED	ZCBS	ENTRP	EPRD	EPRD5	EPRD56	07.06.2016	
CHEF	ID16510000	EN	31.12.2011	01.01.1000				PF1_020			MOHAMED ABAZA	ZCBS	ENTRP	EADM	EADMA	EADMAA	07.06.2016	

Cost centers hierarchy/restriction for this scope:

- All cost centers included in the groups **ZCBS-CORPO** Corporate Function & **ZCBS-FUNCT** FUNCTION SERVICES are assigned to the **Activity 1** CBS S in WP1 (=IECRA00569) or 50 in PF1.
- Cost centers included in the group **ZCBS-ICO** INTERCOMPANIES are assigned to the **Activity 1** CBSS in WP1 (=IECRA01148) or 50 in PF1.



- All cost centers included in the group **ZCBS-PROJ** SERVICE S PROJECTS (OUT OF GUARANTEE) are assigned to the **Activity 1** NBDD (=IECR A00554) in WP1 or 89 in PF1.



- All cost centers included in the group **ZCBS-OTH** CBS NON FUNCTION COSTS are assigned to the **Activity 1** CBNR (=IECRA00450) in WP1 or 59 in PF1.



The sub-group:

- ZCBS-OTH5** CBS NON FUNCTION COSTS - Scope F2G is used in the frame of the project F2G to manage the **CoSta - Anaplan & F2G Scope**
- ZCBS-OTHPO** CBS NON FUNCTION COSTS - Scope PO2 was created in the frame of the project **Power of 2** to follow-up the costs of the project

5 queries available, corresponding to 2 approaches

- Point of entry : function(s) or company(ies)
- End of month (final settlement on function CC) or During the month (link to function CC before settlement)

		End of Month	During the Month
		to be used for reporting after the closing when all costs posted in orders are settled on CBS cost centers	to be used during the month when orders are not yet settled
By Function	function controlling	BW_QRY_MPR_FC001_001 ★ BW_QRY_MPR_FC001_005	BW_QRY_MPR_FC001_003
	corporate controlling		
By company	local controlling	BW_QRY_MPR_FC001_002 ★★	BW_QRY_MPR_FC001_004

★ BW_QRY_MPR_FC001_001 CBS Functions - end of month => for reporting to corporate controlling

★★ BW_QRY_MPR_FC001_002 CBS Functions by companies => for reconciliation FC vs BW

Possibility to analyze a “one-level-up” cost cascade

Data

- CO documents: actual costs in local currency + report in other currency with BFC exchange rate
- Entries on Cost Centers, Orders and WBS elements
- Postings to COPA & Local Gaap cost elements are excluded

“Synthesis” & “Function – end of month” reports

Additional axis : Structure with 6 categories

	Category	Definition	Example
(1)	Gross	All costs excluding depreciation before any deduction (sales, capitalization, etc...)	all labour costs + travel + services + ...
(2)	Depreciation	Postings with depreciation cost elements	depreciation costs
(3)	Sales	postings with sales cost elements (excluding capitalization) + postings with all other cost elements linked to Invoicing WBS element (partners with object class “Profitability Analysis”)	activity (man Hr) posted on invoicing WBS -> time spent on IT project reinvoiced to customer
(4)	Costs going to be capitalized	postings linked to Investment WBS or Orders (partners with object class “Investment”)	activity (man Hr) posted on investment WBS -> time spent on IT project for development phase
(5)	Cost transferred ★	Credits from overheads CC WBS IO (partners with class object “Overheads” - excluding sales cost elements)	activity (man Hr) posted on overhead WBS -> time spent on IT project for training phase
	Net Function	Balance of the cost center	(1) + (2) - (3) - (4) - (5)
	★	postings on function CC from WBS or internal order settlement are classified in Gross	

Characteristics available in CBS reports

Characteristics		Synthesis	Functions - End of month	Functions by Companies - End of Month	Reports - During Month
0 – Hierarchy	Level 0 of ZCBS hierarchy	X	X	X	X
1 – Organization	Level 1 of ZCBS hierarchy	X	X	X	X
2 – Function	Level 2 of ZCBS hierarchy	X	X	X	X
3 – Sub-Funct Group	Level 3 of ZCBS hierarchy	X	X	X	X
4 – Sub-Function	Level 4 of ZCBS hierarchy	X	X	X	X



What can I do if after having followed the procedure, my workbook is not fixed ?

If you have followed the procedure and there is still no data in your workbook, you may contact the [Contact SBS Support](#) .

5.0 Non-functional Descriptions

5.1 Usability

5.2 Regulatory Compliance

5.3 Security

5.4 Performance

5.5 Reliability

5.6 Scalability

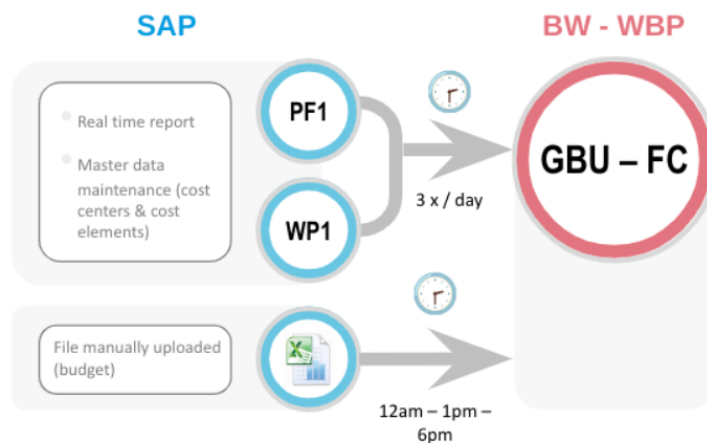
5.7 Compatibility

5.8 Availability

5.9 Refresh of the Data

The loading it's the same logic as for GBU fixed costs since the use the same data base:

Closing Time:



Outside of Closing: it's one time on a daily basis.