Functional Documentation - COPA Netback, iCare and Exchange Rate

1.0 Overview

COPA Netback, iCare, Exchange Rate Queries Menu

Business Context and Application Overview

The scope COPA Netback, iCare, exchange rate queries they are not an application but they are queries based in SAP CO module and exchange rate information in SAP. They have been create in WBP in the context of PQ1 Decommissioning project.

Application User Profile

For this Application the access is provided based on the BW menu "NB - Netback" 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 "NB - Netback"

Target Users:

BW COPA Netback query (Core Query) => SodaAsh GBU Controllers.
BW iCare query => Specialty Polimerys for Interface Sales Forces.
BW - BFC YTD Exchange rate monthly query (Core Query) => Controllers.

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	14.08.2023	Inês Vilares	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 ☑ BFC flat files ☐ Others <specify the name of the source>

2.0 Business Process

COPA Netback and iCare

In the context of our business operations, these 2 queries are based on the Profit and Loss scope, so to understand in more detail this part please check in the respective functional documentation.

Regarding the COPA Netback process, the purpose is to utilize the same framework as our Profit and Loss scope to generate reports on the GBU SodaAsh side. The primary objective here is to reallocate sales made by trading entities by Solvay, identifying Solvay customers, and ensuring the accuracy of customer information. The ultimate aim is to maintain the cleanest and most accurate data possible.

For this process, they make use of our COPA information, and on their side they use the Dataiku tool to manipulate this data, ultimately generating a file referred to as 'COPAG' containing the necessary information.

The file will offer a substantial amount of data that has been meticulously processed by Dataiku to ensure that they are working with the most precise and accurate data for their specific objectives. This approach was necessitated by the fact that our initial queries from the Profit and Loss side did not fully meet the requirement of providing the cleanest data pertaining to the costs associated with SodaAsh. Furthermore, it enables the analysis for specific cases as in the United States concerning the payment of royalties to certain companies that own lands, where a percentage of the Netback is associated with trona mineral (comprising 65% SodaAsh and 35% bicarbonate).

For the iCare query they were using the figures to feed Salesforce tool but since 2023 they change the process to feed the Salesforce part so this query is not used anymore **(it will be decommisioned).**

Exchange Rates

The exchange rates are a critical concept in SAP especially in the context of multinational businesses or organizations that conduct transactions in multiple currencies. SAP provides robust functionality for managing exchange rates, and here's an overview of how exchange rates work within the SAP system:

Exchange Rate Types: SAP allows you to define multiple exchange rate types to accommodate various scenarios. Exchange rate types are categorized based on their use, such as buying rates, selling rates, or average rates. Common exchange rate types in SAP include "M" (average), "B" (bank buying), and "G" (group buying).

Exchange Rate Sources: SAP supports different sources for obtaining exchange rates, including manual entry, automatic update from external sources, or user-defined calculation methods. Exchange rates can be maintained in the system's tables or retrieved from external systems.

Currency Types: SAP supports various currency types, such as local currency, group currency, and parallel currencies. These currency types allow you to represent financial data in multiple currencies simultaneously.

Exchange Rate Tables: Exchange rates in SAP are stored in exchange rate tables (e.g., TCURR) that capture rates for different currency pairs, rate types, and validity periods. You can maintain these rates manually or use interfaces to update rates automatically.

Currency Conversion: Currency conversion in SAP involves converting financial transactions from one currency to another based on defined exchange rates. This process allows you to report financial data in a consistent currency, even when transactions occur in different currencies.

Exchange Rate Determination: SAP determines which exchange rate to use based on factors like the transaction currency, local currency, exchange rate type, and validity date. The system selects the appropriate rate for currency conversion automatically.

Document Currency: In SAP, each financial document is typically recorded in a document currency. The document currency is the currency in which the transaction is originally recorded, and exchange rate conversion may be necessary to report it in other currencies.

Parallel Currencies: SAP allows you to define and maintain parallel currencies, enabling you to report financial data in multiple currencies simultaneously. This is valuable for internal and external financial reporting requirements.

Currency Translation: SAP enables the translation of financial statements and balances from one currency to another, helping multinational organizations prepare consolidated financial reports in a common currency.

Automatic Currency Conversion: SAP can automatically perform currency conversion during data entry, reporting, and posting, ensuring that financial data remains consistent across different currencies.

Exchange Rate Differences: SAP also handles exchange rate differences that may arise due to fluctuations in exchange rates between transaction dates and settlement dates. These differences are recorded as accounting entries.

Exchange Rate Update: SAP allows for periodic updates of exchange rates to reflect real-world fluctuations. You can define update frequencies and methods for currency exchange rates.

In summary, exchange rates in SAP are a fundamental component of managing financial transactions in a global business environment. SAP provides comprehensive tools and functionality to define, maintain, and use exchange rates, ensuring accurate and consistent currency conversion and financial reporting across various currencies.

For solvay this will always depend on the scope for each company to have this definition for exchange rates.

We also have a dedicated wiki Exchange rates explaining all the available exchange rates in WBP, currencies, frequency, among other informations to be aligned with the information from SAP and BFC side.

3.0 Application Feature Overview

For this scope we will describe the queries since we don't have workbooks.

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
BW - BFC YTD Exchange Rate Monthly (Core Query)	The reports contains the information about exchange rate types and currency types for the calendar day range as per the selected criteria.	Mandatory fields: • Calendar day; Optional: • Exchange Rate Type; • From Currency; • To Currency.	NA	BW_QRY_DAFICE01_0002
BW COPA Netback query (Core Query)	This report has been adapted to provide the required information and formatting for the GBU SodaAsh team's use in generating their final report. It includes specific data from the Profit and Loss (P&L) dataset, sharing similar characteristics.	Mandatory fields: • Period /Fiscal Year. Optional: • PRS Company Code; • BFC GBU; • Division; • Customer; • Customer; • Sales Employee; • Ship to party; • Product Hierarchy; • Material; • Plant; • Batch Origin; • Auth. Scope on Company Code.	NA	BW_QRY_MVCOPA01_NETBACK_0001

BW ICARE Query	This report has been adapted to provide the required information and formatting to fill information to the Sales force tool. It includes specific data from the Profit and Loss (P&L) dataset, sharing similar characteristics for one period or a range of periods.	Mandatory fields: • Conso. View; • Calendar year /month; • Exchange Rate type (Default value "C"). Optional: • Auth. Scope on Company Code; • BFC GBU; • BFC Group of Activities; • PRS Comp. Mgt zone; • PRS Company Code; • Company Code; • Target Currency.	NA	BW_QRY_MVCOPA01_0016

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.

Since for this scope we have 2 queries based in P&L queries this section it's the same for the Profit and Loss report. We can check the general data for the 2 queries COPA Netback and ICare.

Exchange Rate	In the context of SAP (Systems, Applications, and Products), exchange rates refer to the rates at which foreign currencies are converted into the local currency within the SAP system. SAP uses exchange rates for various financial and accounting processes, such as currency translation, consolidation, and foreign currency valuation. Exchange rates in SAP are used to determine the value of foreign currency transactions in the local currency, which is essential for financial reporting and analysis. SAP allows for the management of exchange rates, including maintaining different exchange rate types, source rates, and historical rates, to meet the specific financial requirements of an organization. SAP's Exchange Rate Table (TCURR) is where these rates are typically maintained, and they are used in various SAP modules, including Financial Accounting (FI) and Controlling (CO), to ensure accurate financial reporting and compliance with international accounting standards. More information/links about exchange rates please see below: • Values can be checked In the finance team site. Under Exchange Rate. "Moyen / Average": https://aodocs.altirnao.com/?locale=en_US&aodocs-domain=solvay.com#Menu_listDoc/LibraryId_QLsALxhAuXNKLSz74H/ViewId_QLsANWb3lkRIe5nnjN/Filter_%257B%2522QLsALAy014DXTQRuXH%2522:%25220B0Km5zvG_rngN2p2YTBvSjEtSjQ%2522%257D • Or in the Solia CICC Online, Financial And Credit Tools: http://solia.solvay.com/irj/portal/CICCOnline_FinancialAndCreditTools • Definition for each Exchange Rate: https://wiki.solvay.com/display/ISAPPSUP/Exchange+rates

4.2 Process Detail

4.2.1. Report/Process Definition

Domain	Finance
Application	NA since it's only queries

Provider	MVCOPA01 and DAFICE01 (for exchange rate)

In this section we will approach each query:

- BW - BFC YTD Exchange Rate Monthly (Core Query)
- BW COPA Netback query (Core Query)
- BW ICARE Query

BW - BFC YTD Exchange Rate Monthly (Core Query)

This query contains the information about all the exchange rates types, the existent currencies (from ->to) and the exchange rate used depending on the selected month. In here the users can check which currency and value were used to a specific month for other calculations in other queries in BW.

As example for 31.07.2023 filtering the GBP (from currency):

A	B	C	D	E	F
End of the month	**Exchange Rate Type**		**From Currency**	**To Currency**	Exchange rate
31.07.2023	A	Average monthly (reporting)	GBP	EUR	0.8585119
	C	Cumulated average monthly (reporting)	GBP	EUR	0.8738772
	EURX	EMU regulation, variable exchange rates	GBP	EUR	0.8574000
	LBRD	Brazil: Day to Day Operat.	GBP	BRL	-6.0961000
	M	Standard translation at average rate	GBP	EUR	0.8574000
	ZRH2	Exchange Rate base on ZHRO ref. crcy EUR	GBP	EUR	-1.1663200
	ZRH3	Exchange Rate base on ZHRO ZBUD ref. EUR	GBP	EUR	-1.1663200
	ZRHO	Monthly valuation consolidation rate	GBP	BRL	-6.0915600

We have different types and the values for the respective currency to be translated.

As mentioned in the Business Process section, we have the link for the Exchange Rates wiki page for more detail information about all the exchange rates regarding the frequency, source, loads, among others used in BW.

BW COPA Netback query (Core Query)

As already mentioned this is a specific query for the requirements on GBU SodaAsh side.

In the technical documentation we have more detail information regarding the source of each key figure/measures designed for this query. For the characteristics that can be used in the reports they are similar from the P&L structure.

US special case:

The query for this scenario was designed to give specific Netback calculation which is used to calculate the royalties in the US. They have a production site called Green River in Wyoming where they mine soda ash and the soda ash leases are in one square mile parcels which are government Lease meaning Federal lease local lease and state lease. Depending on the lease they have a royalty associated and depends on the product sold, basically it's a mineral right lease royalty so they will paid the correspondent percentage to the lease holders. This is a legal requirement.

The Netback it's calculated from the NetV calculation and it's the top line of the P&L (Revenues) but we take in consideration things like rebates, agency fees, commissions so exist certain things are deduct to have the NetV. This give us the NetVc which is the starting point for the royalty.

The NetVc is not found in the P&L it's calculated in this report. (note: exist an SAP report which will reproduce this the report it's called invoiced registry ZINVREG). With the calculation of the NetVc the royalty definition is the amount paid by the customer (rebates are normally assumed in US it's different from Europe so they deduct the rebates from the NetV) and they subtract the restock.

Based on these calculations for the NetV and NetVc we have the Netback calculation since the Netback is not found in P&L. It's a very specific calculation = Revenues - Rebates - Fees/Commissions - Thruput - Last Leg Freight. Netback will allow to calculate the royalty to be paid. It's done on a monthly basis and it's done in D+3.

BW ICARE Query

As already mentioned in the business process section this query it will be decomissioned since it's not used anymore.

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

COPA and iCare queries: Same loads from Profit and Loss Scope. Please check the functional documentation.

Exchange rate query: loads are on a daily basis in the early morning (1:00 a.m).