Functional Template - Stock Movement Production Report

1.0 Overview

This reports is provides a synthesis of stock and planning elements.

You can find Actual from **past** inventory movements :

- Production
- Consumption
- Procurement
- Sales
- inventory

and **Future** planning from MRP elements :

- Planned Production
- Planned Consumption
- Planned Procurement
- Future Demand : Sales Orders + remaining Sales Forecast
- Projected Stock

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	12/05/2023	Abidemi Raji	Initial draft

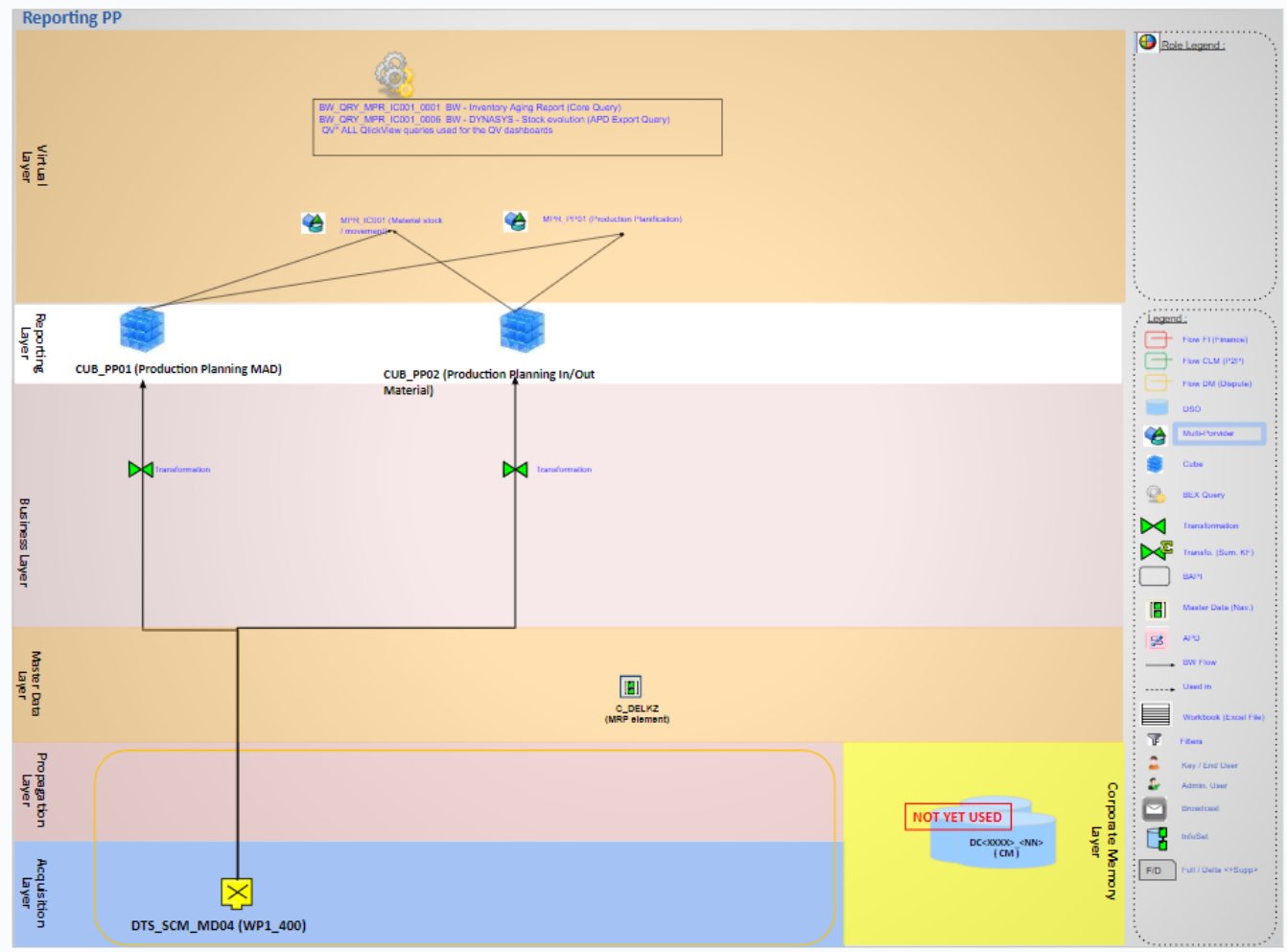
Application Type

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

Capture the business process that the application supports . This can be describe through a process diagram or a business capability model

Stock Movement Reporting Manual:



3.0 Application Feature Overview

Information about the existent Workbooks and the respective BW queries.

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name

Query Name **BW - Stock Movement Production (Core Query)**		Mandatory: • Cal. year/month • Company Code Optional: • Plant • GBU • Business Unit • Product Line 00 • Material No. of Higher Assembly • Material • MRP Controller • Profit Center • Valuation Class • Ent Material Group • Convert Unit • Value Stream • Material Type • Auth Scope on Company Code • Target Curr. for conversion	**BW - Stock Movement Production (Core workbook)** **(BW_WBK_PP_0001)** BW - Stock Movement All types (Core workbook) (BW_WBK_PP_0006)	BW_QRY_MPR_IC001_0013

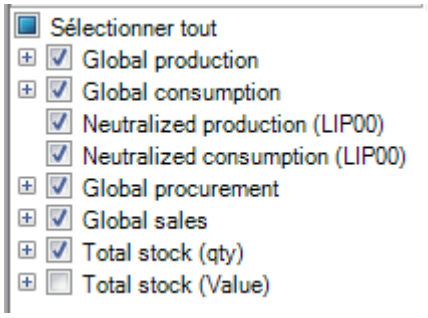
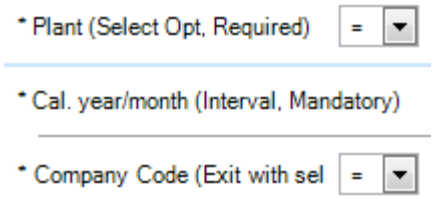
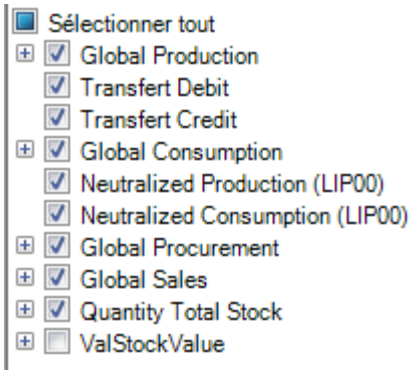
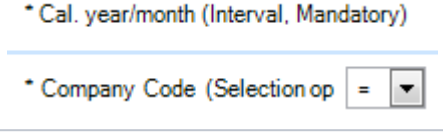
Purpose of this query

This query allows to follow the **past** inventory movements with a supply chain view, to follow monthly, weekly or daily evolution of :

- Production
- Consumption
- Procurement
- Sales
- inventory (Qty, Value)

Application	PP - Production Planning
Query Name	BW - Stock Movement Production (Core Query)
Query Technical Name	BW_QRY_MPR_IC001_0013
Multi-Provider Name	Material Stock/Movement
Multi-Provider Technical Name	MPR_IC001
Names & Technical Names of Main Sub-Providers Used	Material Stocks (CUB_IC001) Material Movements (CUB_IC002)
Usage type	Direct execution in Analysis
Expected users	Controllers, Supply chain, Production Manager, Demand manager, Scheduling Manager , Planning manager.
Related workbooks	**BW - Stock Movement Production (Core workbook)** **(BW_WBK_PP_0001)** BW - Stock Movement All types (Core workbook) (BW_WBK_PP_0006)

Related Queries

Application	PP - Production Planning
Query Name	BW - Stock Mmvt with conversion (Core query)
Query Technical Name	BW_QRY_MPR_IC001_0063
Content	
Mandatory Prompt	
Application	PP - Production Planning
Query Name	BW - Stock Movement All Types (Core query)
Query Technical Name	BW_QRY_MPR_IC001_0014
Content	
Mandatory Prompt	

4.0 Functional Specification

4.1 General Data/Calculations

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

Could be specific fields, closing activities, additional information to work and understand the reports.

4.2 Process Detail

4.2.1. Report/Process Definition

This section represents the process with detail information for the application. Can include specific or special cases, complex logics , calculations, flows, among others.

Neutralisation – How does it work ?

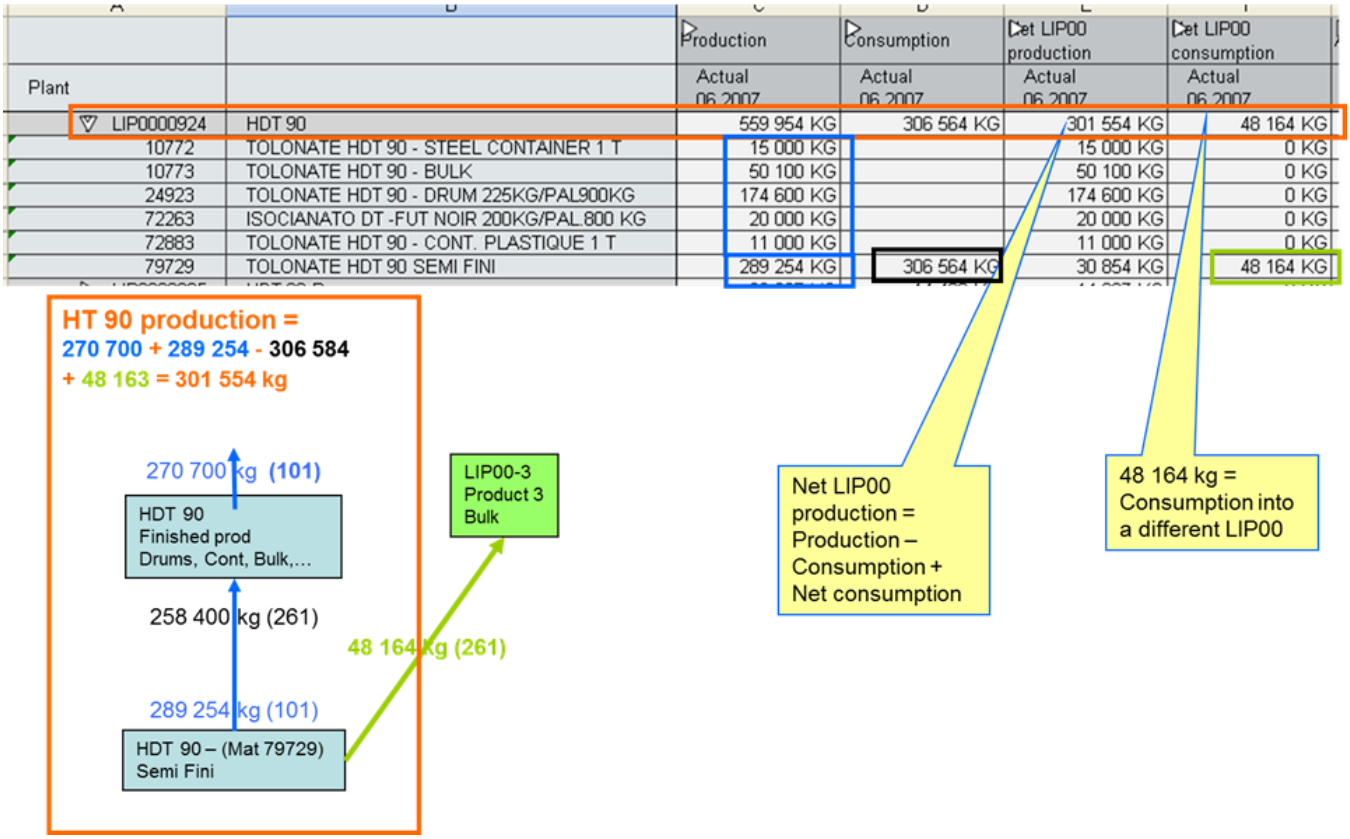
What is neutralisation

- Neutralisation is a calculation which avoids to aggregate some key figures for which a simple sum is not relevant

Why do we neutralise

- Neutralisation is required when a process order produces and consumes material which belong to the same group of material.
- Example : group of material = LIP00, where LIP00 is a code which defines the chemical product of a material
    - Packaging process orders
    - Unpacking process orders (Silica « Craquage », Salicylic acid in Roussillon)
    - Recycling or Rework process orders (only net qty needs to be counted)
    - Relotification process order

Neutralisation – Example on LIP0000924 = HDT 90



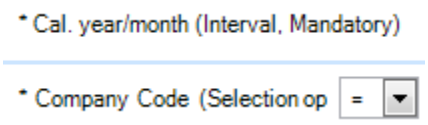
How do we neutralise ?

- First: Neutralized consumption = consumption into a material of another group
- Second: Neutralized production = Production – Consumption + Neutralized consumption

Selection Screen

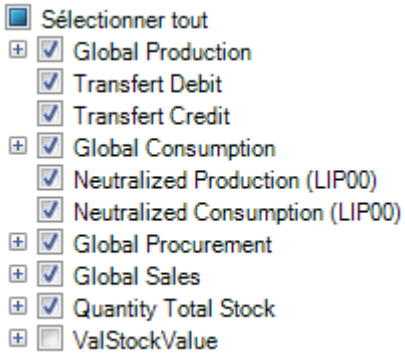
Example:

1. Calendar Year/Month is mandatory (MM.YYYY) as well as Company Code (due to authorization)
2. Other prompts are optional.

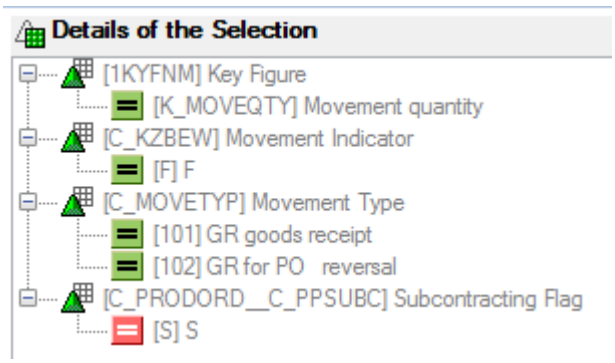


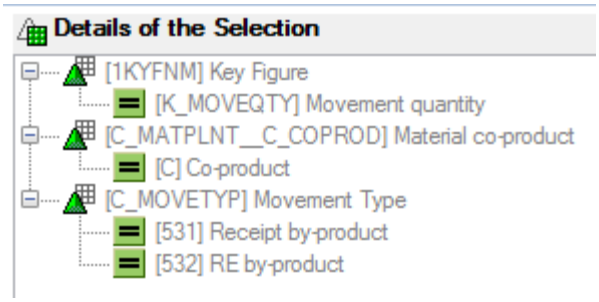
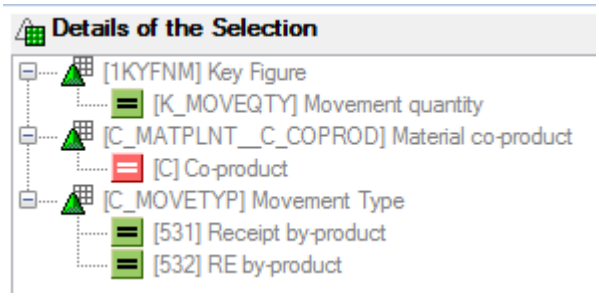
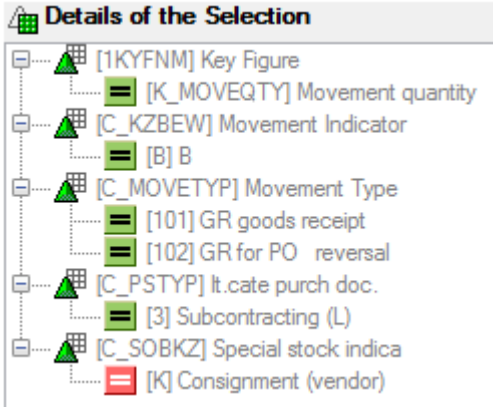
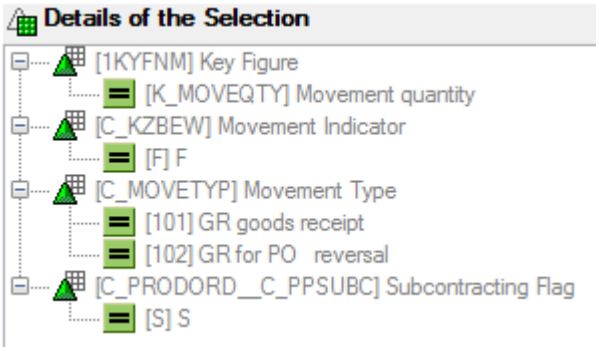
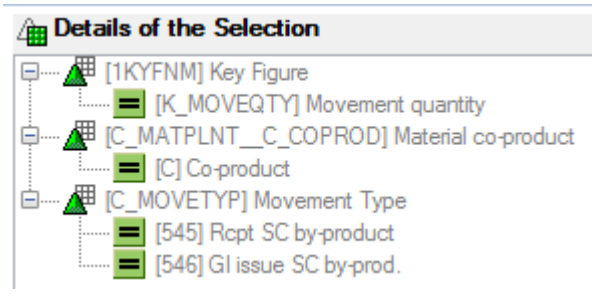
Characteristics and Key Figures available for Display and Drilldown

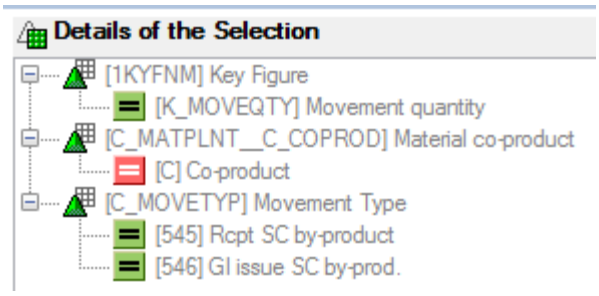
Characteristics

Name	TechName	Description
Plant	0PLANT	Displays Plant Code and Name
MPR Controller	C_MATPLNT__0MRP_CONTRL	Displays MPR Controller Code and Name
Work Center	0WORKCENTER	Displays Work Center Code and Name (Medium text)
Material Plant	C_MATPLNT	Displays Material Plant Code and Name
Key Figures		

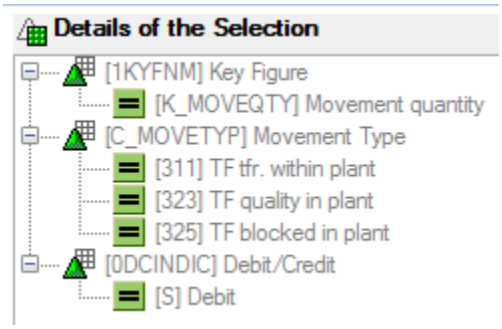
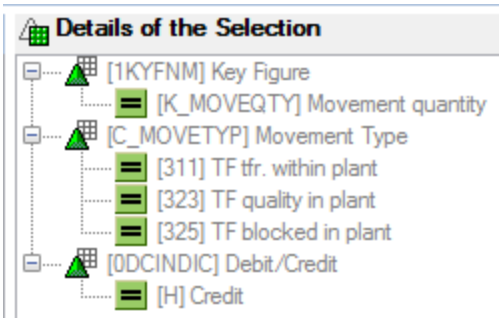
Key Figures : Production

Name	Description
Global Production	Internal Production + Sub Contacting Production
Internal Production	Principale Production + Co-product Production + By-product Production
Principale Production	

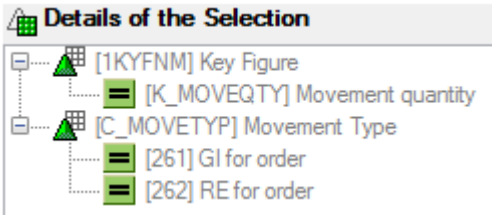
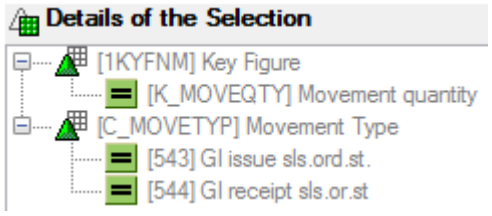
Co-product Production	
By-product Production	
Sub contracting production	Sub contractor Production MM + Sub contractor Production PP + Sub contractor Co product Production + Sub contractor By-product Production
Sub contractor Production MM	
Sub contractor Production PP	
Sub contractor Co product Production	

Sub contractor By-product Production	

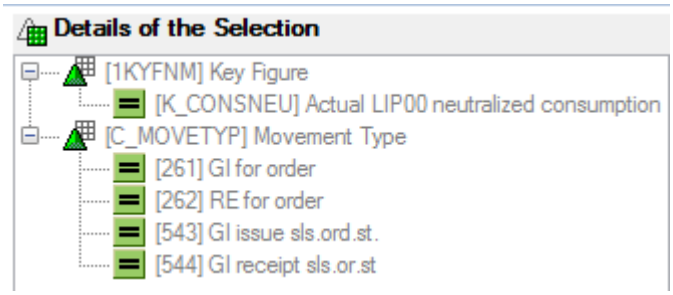
Key Figures : Transfert

Name	Description
Transfert Debit	
Transfert Credit	

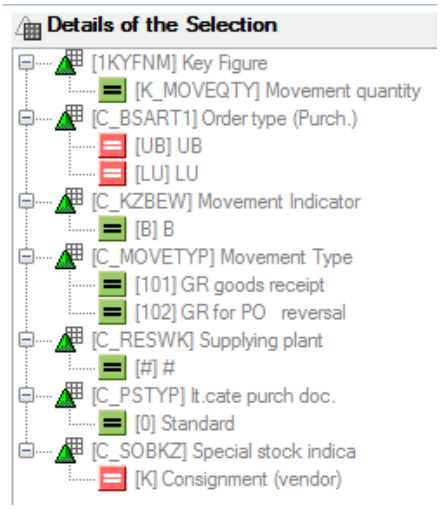
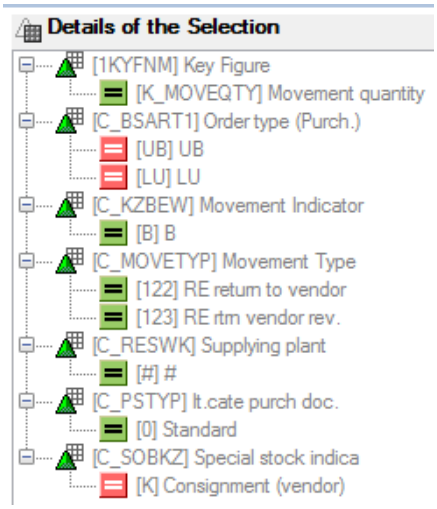
Key Figures : Consumption

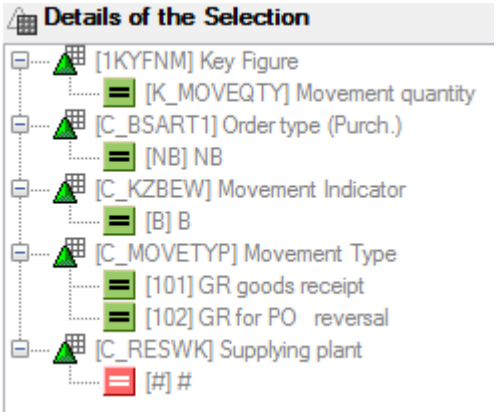
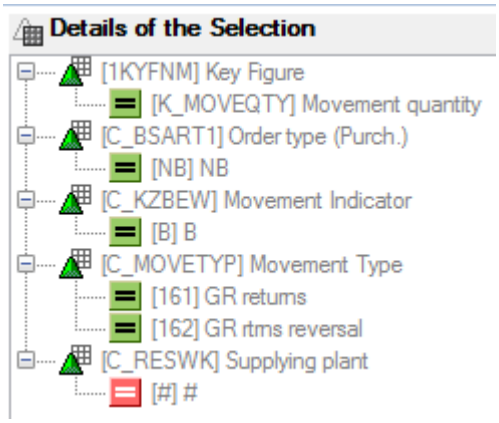
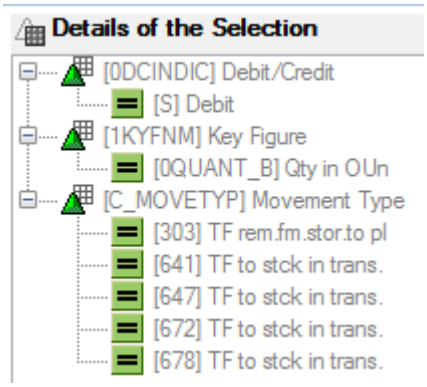
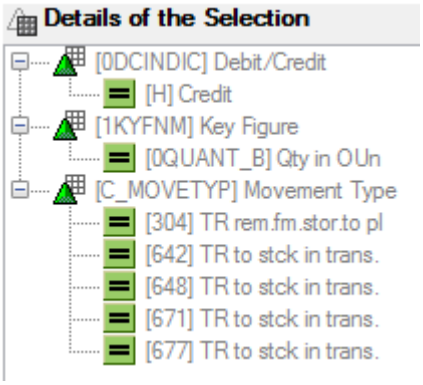
Name	Description
Global consumption	Internal consumption + Sub contracting consumption
Internal consumption	
Sub contracting consumption	

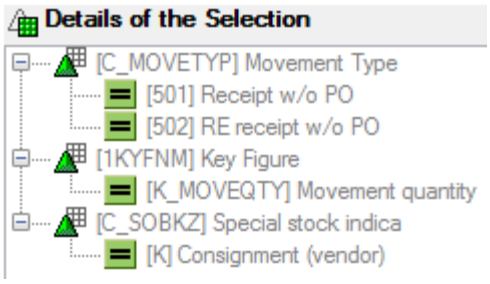
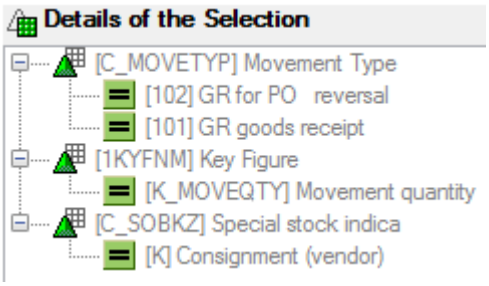
Key Figures : Neutralized Production and Consumption

Name	Description
Neutralized production (LIP00)	Principale Production + Co-product Production + By-product Production + Sub contractor Production PP + Sub contractor Co product Production + Sub contractor By-product Production - (Internal consumption + Sub contracting consumption) + Neutralized consumption (LIP00)
Neutralized consumption (LIP00)	

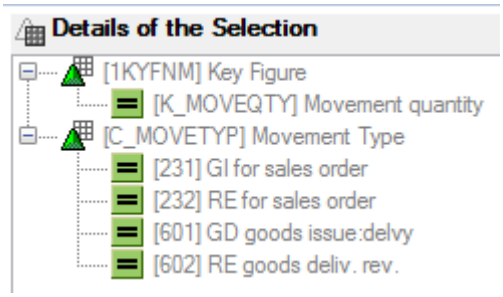
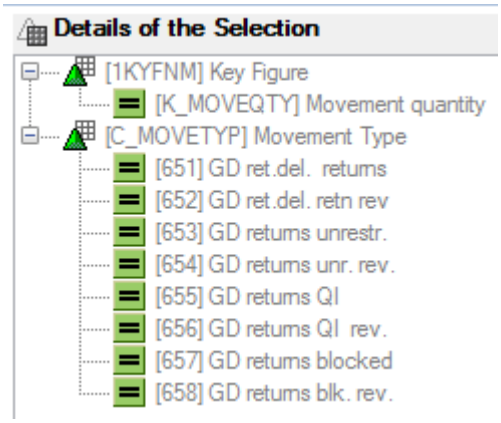
Key Figures : Procurement

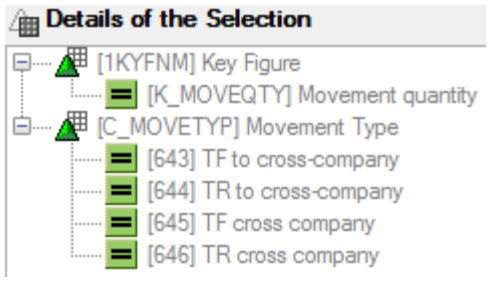
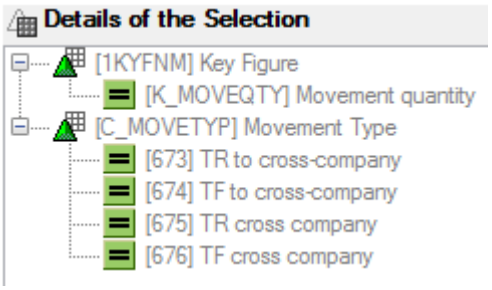
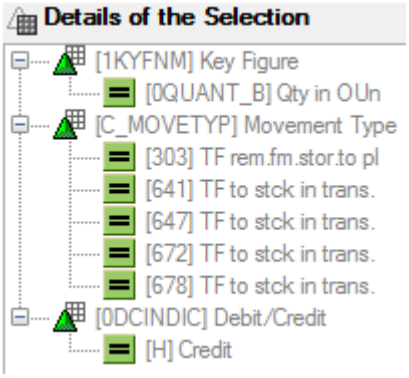
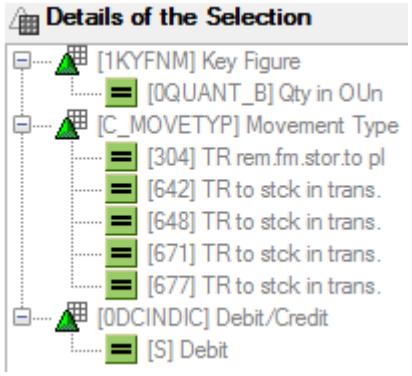
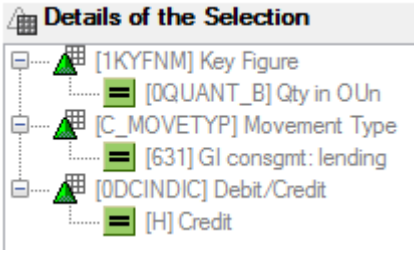
Name	Description
Global procurement	Procurement External + Procurement Inter Company + Procurement Intraco + Procurement Consignment
Procurement External	Procurement External (+) - Procurement External (-)
Procurement External (+)	
Procurement External (-)	

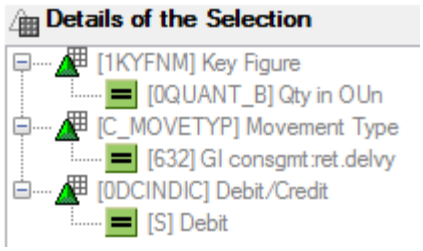
Procurement Inter Company	Procurement Inter Company (+) - Procurement Inter Company (-)
Procurement Inter Company (+)	
Procurement Inter Company (-)	
Procurement Intraco	Procurement Intraco (+) - Procurement Intraco (-)
Procurement Intraco (+)	
Procurement Intraco (-)	
Procurement Consignment	Procurement Consignment (without order) + Procurement Consignment (with order)

Procurement Consignment (without order)	
Procurement Consignment (with order)	

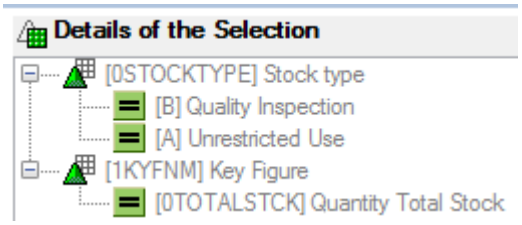
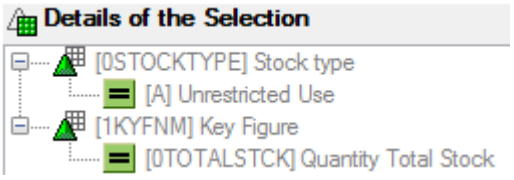
Key Figures : Sales

Name	Description
Global Sales	Sales External + Sales Inter Company + Sales Intraco + Sales Consignment
Sales External	Sales External (+) - Sales External (-)
Sales External (+)	
Sales External (-)	
Sales Inter Company	Sales Inter Company (+) - Sales Inter Company (-)

Sales Inter Company (+)	
Sales Inter Company (-)	
Sales Intraco	Sales Intraco (+) - Sales Intraco (-)
Sales Intraco (+)	
Sales Intraco (-)	
Sales Consignment	Sales Consignment (+) - Sales Consignment (-)
Sales Consignment (+)	

Sales Consignment (-)	

Key Figures : Quantity and Valuation Total Stock

Name	Description
0TOTALSTCK	Quantity Total Stock
Unrestr.-use stock (Unrestr + Quality Inspection)	
Unrestr.-use stock	
0QMSTOCK	Stock in Quality Inspection
0BLOCKEDSTK	Blocked Stock
0VALSTCKVAL	Valorised Stock Value
Unrestr.-use stock (Unrestr + Quality Inspection) (Value)	Unrestr.-use stock (value) + Q stock (value)
Unrestr.-use stock (value)	Valorised Stock Value * Unrestr.-use stock / Quantity Total Stock
Q stock (value)	Valorised Stock Value * Stock in Quality Inspection / Quantity Total Stock
Blocked stock (Value)	Valorised Stock Value * Blocked Stock / Quantity Total Stock

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.