

Functional Documentation - Global Trade Services report

1.0 Overview

Global Trade Services (GTS) refers to a set of tools, processes, and technologies that facilitate and optimize international trade operations within the broader supply chain. It plays a crucial role in ensuring the smooth flow of goods across borders while addressing the complexities and compliance challenges associated with global trade.

Application User Profile

Describe the key User profiles that exist for the application.

General role/Viewer role:

Approver role:

Target Users:

Used by Export Control and Sanctions Compliance Team

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

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

3.0 Application Feature Overview

Reports (Queries/Workbooks)

Main BW Queries used by Export Control and Sanctions Compliance Team

Sales orders (BW_QRY_MVSDSO53_0001) : Corporate

Detailed information on sales orders (product, HS code, country of origin, incoterms,...)

Purchase orders (BW_QRY_MV_SPD01_0002) : **Sprint**

Detailed information on sales orders (product, HS code, country of origin, incoterms,...)

Legal Regulation (BW_QRY_IFS_PR92_0001) : **GTS**

Information on Trade Compliance classification of products

Sales orders of controlled products (BW_QRY_CPSDGT01_0001) : **GTS**

Sales with information on the Trade Compliance classification of products

SPL (BW_QRY_MVSDGT01_0002) : **GTS**

KPI query to check how many orders have blocked for sanctioned partners

License (BW_QRY_CPSDGT02_0001) : **GTS**

KPI query to check how many orders have blocked for missing licence

License (BW_QRY_CPSDGT04_0001) : **GTS**

KPI to check how many licenses we have in the system and for which FTO/regulation, etc

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name

All BW Queries used by ECSC Team

Corporate	Sales + inter-Co Purchases	BW_QRY_MVSDSO53_0001	SAP ERP
Sprint	All Purchases	BW_QRY_MV_SPD01_0002	SAP ERP
Customs	Export	BW_QRY_MPR_GTS01_0004	SAP GTS
	Import	BW_QRY_MPR_GTS01_0001	
Material	Customs classification	BW_QRY_IFS_PRCT2_0001	
	Legal Regulation + Sales	BW_QRY_CPSDGT01_0001	
	Legal Regulation	BW_QRY_IFS_PR92_0001	
	Trade Preference	BW_QRY_MVSDGT93_0001	
Compliance	SPL	BW_QRY_MVSDGT01_0002	
	License	BW_QRY_CPSDGT02_0001	
		BW_QRY_CPSDGT04_0001	
	Partner creation	BW_QRY_CPSDGT02_0002 (not active)	

Sales/Purchase orders query

Different values from the one provided by the consolidation team.

Ex. sales order value (BW_QRY_MVSDSO53_0001) financial value (BW_WBK_PL_0001 (P&L))

Country	Nicolas consolidation	SBS (fully and proportional cons. method for seller)	SBS (fully cons. method & considering 50% of the value for the proportional cons. method for seller)	SBS (only fully cons. method for seller)
AFGHANISTAN	€ 20,997.19	€ 6,202.90	€ 6,202.90	€ 6,202.90
ARMENIA	€ 3,079,000.00	€ 4,071,262.59	€ 3,575,672.59	€ 3,080,082.59
AZERBAIJAN	€ 834,733.87	€ 894,984.72	€ 894,984.72	€ 894,984.72
IRAQ	€ 75,386.26	€ 46,896.58	€ 46,896.58	€ 46,896.58
ISRAEL	€ 58,365,544.83	€ 61,749,387.70	€ 59,535,776.73	€ 57,322,165.76
LIBYA	€ 44,000.00	€ 76,659.21	€ 66,360.49	€ 56,061.76
MALI	€ 154,000.00	€ 299,984.88	€ 299,984.88	€ 299,984.88
MYANMAR	€ 3,538,883.89	€ 6,043,668.16	€ 5,307,754.50	€ 4,571,840.83
NIGERIA	€ 12,479,450.82	€ 21,932,411.26	€ 18,075,298.35	€ 14,218,185.44
PAKISTAN	€ 4,705,450.09	€ 5,722,393.74	€ 5,722,393.74	€ 5,722,393.74
REP.DEM.CONGO	€ 8,915,124.05	€ 8,922,970.22	€ 8,922,970.22	€ 8,922,970.22
RUSSIAN FED.	€ 54,645,763.61	€ 69,502,266.33	€ 69,502,266.33	€ 69,502,266.33
SAUDI ARABIA	€ 115,549,120.60	€ 212,848,536.00	€ 128,839,054.05	€ 44,829,572.10
SUDAN	€ 6,000.00	€ 9,188.55	€ 7,534.28	€ 5,880.00
VENEZUELA	€ 1,242,078.31	€ 1,329,315.21	€ 1,329,315.21	€ 1,329,315.21

P&L query

More reliable data on values but not useful for flow analysis:

- missing key data to be inserted in the prompt (ship to, material,..)
- missing relevant information on the query (HTS codes, order/billing numbers..)

Product Trade Compliance classification

- Not possible to verify controlled product per plant (very useful to support GBUs and Audit)
- Not all products classified in GTS are found by the query.

In BW

Material (Select option, Optional)

=

164121

=

164967

=

164978

=

Display
Members

[164121] CYTOP 2 CYT 49L 632 22.0KG 48.5LB

[164967] CYTOP 2 CYT 49L 350 22.0KG 48.5LB

[164978] CYTOP 2 CYT 44L 632 19.5KG 43.0LB

	A	B
1	No applicable data found	
2		

In GTS

Numbering Scheme	Product No	Commercial Description	Number
CA - Export Control Classification Number	164121	CYTOP 2 CYT 49L 632 22.0KG 48.5LB	1-3.C.4
	164967	CYTOP 2 CYT 49L 350 22.0KG 48.5LB	1-3.C.4
	164978	CYTOP 2 CYT 44L 632 19.5KG 43.0LB	1-3.C.4

Sales of controlled products

Data inconsistency:

-only countries related to the selected regulation should be considered.

-not all products classified in GTS are found

											Invoiced Value (CP)
Source System	BFC GBU	Country	Material		Plant		Leg. Reg. Comp		Ship-to Co	Ship-to	EUR
PF1 Client 020	CORPORATE B	MEXICO	111517	CAL *ZZ F1 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		MEXICO	AROMATIC	164,608.29
PF1 Client 020	CORPORATE B	MEXICO	115530	EPI *RB F23 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		MEXICO	MATERIAS	96,364.92
PF1 Client 020	PEROXIDES	BELGIUM	22517	DIBC *DIV #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		BELGIUM	BASF INTER	3,000,839.76
PF1 Client 020	PEROXIDES	BELGIUM	22517	DIBC *DIV #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		FINLAND	SOLVAY CH	952,194.18
PF1 Client 020	PEROXIDES	BELGIUM	22517	DIBC *DIV #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		GERMANY	SOLVAY CH	1,986,322.14
PF1 Client 020	PEROXIDES	BRAZIL	38426	H2O2 AG-SI #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		BRAZIL	ALLOXY ES	36,160.19
PF1 Client 020	PEROXIDES	BRAZIL	165698	H2O2 AG-SI #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		BRAZIL	MANCHESTE	66,687.18
PF1 Client 020	PEROXIDES	BRAZIL	165698	H2O2 AG-SI #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		COSTA RICA	IMPORTADO	65,085.72
PF1 Client 020	PEROXIDES	THAILAND	168542	H2O2 ST-5 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		THAILAND	HANSON CH	232,342.44
PF1 Client 020	PEROXIDES	THAILAND	168542	H2O2 ST-5 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		THAILAND	L.C. INDUST	156,694.04
PF1 Client 020	PEROXIDES	THAILAND	168542	H2O2 ST-5 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		THAILAND	MC INDUST	-2,724.98
PF1 Client 020	PEROXIDES	THAILAND	168542	H2O2 ST-5 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		THAILAND	NAN YANG	131,084.24
PF1 Client 020	PEROXIDES	THAILAND	168542	H2O2 ST-5 #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		THAILAND	NGAMDEE I	88,070.78
PF1 Client 020	PEROXIDES	USA	68647	H2O2 PARA #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		CANADA	BULK SPECI	250,315.27
PF1 Client 020	PEROXIDES	USA	68647	H2O2 PARA #	PF1_020/#	DUALE	EU - Export Control Regulation (EC No428/2009)		CANADA	GRIEG SEAF	0.00

Controlled Products GBU Identification

Data inconsistency:

Based on the structure of BW Queries, a single product can be linked to several GBUs.

Source System	Material	GBU	Calendar Year/Month
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	CH
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	CS
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	PE
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	PX
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	PY
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	SI
WP1 Client 400	77269	UN-ALLOCATED / PIL ECO-XH	TS

Legal Regulation

Data dCorrectionoes not allow a proper analysis of the information.

-and Evolution requested

Report

EARUS - 0627 (3) (1) - Notepad
File Edit Format View Help
27.06.2022

[L.Reg]	[Type]	Number	External License Number	[Valid From]	[Valid To]	[Status]	[Created By]	Created On	[Change]
EARUS	GVML	20011804	D1210902	10.09.2020	30.09.2024	0004	US17620	01.10.2020 16:35:48	US176
EARUS	GVML	20011805	D1210903	10.09.2020	30.09.2024	0004	US17620	01.10.2020 16:41:32	US176
EARUS	GVML	20011806	D1207561	21.08.2020	30.08.2024	0004	US17620	01.10.2020 16:54:06	US176
EARUS	GVML	20011813	D1207561 HARBIN 7714 MATERIAL	21.08.2020	30.08.2024	0004	US17620	02.10.2020 18:57:41	US176
EARUS	GVML	20012536	D1207561	21.08.2020	31.08.2024	0001	US17620	18.01.2021 17:25:28	US176
EARUS	GVML	20012536	D1207561	21.08.2020	31.08.2024	0001	US17620	18.01.2021 17:25:28	US176
EARUS	GVML	20012538	D1210902	10.09.2020	30.09.2024	0004	US17620	18.01.2021 17:47:40	US176
EARUS	GVML	20012539	D1210903	10.09.2020	30.09.2024	0004	US17620	18.01.2021 17:57:48	CSOUL
EARUS	GVML	20014063	D1210903	10.09.2020	29.09.2024	0006	US17620	26.05.2021 17:23:39	US176
EARUS	GVML	20014064	D1210903	10.09.2020	30.09.2024	0006	US17620	26.05.2021 19:52:09	CSOUL
EARUS	GVML	20014854	D1240195	10.06.2021	30.06.2025	0006	CSOULIS	22.09.2021 08:56:45	CSOUL
EARUS	GVML	20014855	D1240195	10.06.2021	30.06.2025	0006	CSOULIS	22.09.2021 09:15:19	CSOUL
EARUS	GVML	20015224	D1232522	04.08.2021	31.08.2025	0004	CSOULIS	15.11.2021 09:18:42	CSOUL
EARUS	GVML	20015224	D1232522	04.08.2021	31.08.2025	0004	CSOULIS	15.11.2021 09:18:42	CSOUL
EARUS	GVML	20015696	D1264168	14.12.2021	31.12.2025	0004	CSOULIS	15.12.2021 09:27:17	CSOUL
EARUS	GVML	20016963	D1225979	27.04.2021	30.04.2025	0004	CSOULIS	18.02.2022 16:52:58	CSOUL
EARUS	GVML	20016964	D1210903	10.09.2020	30.09.2024	0004	CSOULIS	18.02.2022 17:10:19	CSOUL
EARUS	GVML	20016965	D1240195	10.06.2021	30.06.2025	0004	CSOULIS	18.02.2022 17:26:23	CSOUL
EARUS	LVL	20011373	HLR	16.10.2020	31.10.2020	0004	GIGLIC00	16.10.2020 18:43:05	GIGLIC
EARUS	TVL	20012144	D1217784	19.11.2020	30.11.2024	0004	US17620	20.11.2020 15:46:12	US176
EARUS	TVL	20013512	D1217784 - BR57 LICENSE	19.11.2020	18.11.2024	0004	US17620	15.04.2021 00:41:28	US176
EARUS	TVL	20014200	D1243055	14.06.2021	30.06.2025	0004	US17620	16.06.2021 19:49:10	US176
EARUS	TVL	20014348	D1164055	19.06.2019	30.06.2023	0004	US17620	07.07.2021 16:20:02	CSOUL
EARUS	TVL	20014585	D1226301	14.07.2021	31.07.2025	0004	CSOULIS	06.08.2021 14:57:39	CSOUL
EARUS	TVL	20016679	D1244530 (CYPURE ULTRA - SPECTRUM CHINA)	31.12.2021	30.06.2022	0004	PT63036260	02.02.2022 19:56:57	PT630

Evolution

Inclusion of some fields not mapped:

External Control Number

SO/PO order nº

Attributes included in the license (so we can select the demand for each report purpose)

Material

GBU

Documents and Assigned Documents

You can check that on the image of the license in GTS to know the source of information.

SAP Display Import/Export License

General Data

Legal Regulation	DPCN	CN - China Drug Precursor Regulation
License Type	DPT85	MPS - Transportation license for inter city deliveries
Import/Export License	20013290	
External Number	310215YB21005937	
Valid From	19.03.2021	To 17.06.2021

Attributes with Multiple Sp...

Ref. No.	Item	Product No	Qty	Depr.	Unit	Deprec.	Change	Created	Created On	LogSystem	Def.	Date
85944276	10	160096	60	GAL	-	00	LUC	22.03.2021	WP1_400	23.03.2021		

Assigned Documents

Tickets raised without solution

Tickets - are treated from two years and the some of the problems were solved but due to some structural issues, the tickets were combined and a project were requested with no approval in 2021 and tickets remained on hold for 2022.

On June, 2022 CGI reached out Export Control & Sanctions Compliance, to resolute those tickets. There was meetings with GTS and Export Control and Sanctions Compliance teams to advance in the analysis and CGI sent a budget approval for BW Team without response until 23rd of September 2022.

The summary of this tickets can be found in the file [Tickets SPL & License](#).

Why a Project instead of Maintenance?

Legal and Compliance Team must be able to assess and work with reliable data in order to mitigate risks and provide the fast response in case of regulation change.

Reliability (values, missing information,...)

Technical issues:

-Update source structure of the reports (as informed the reports were develop within a structure that is old and has not been updated. Therefore do not extract the right data.)

Knowledge and resources:

-Lack of knowledge from BW team regarding GTS structure, making it difficulty to understand and develop reports extracting data from unknown origin.

-Grouping several Queries in a project will allow to include the time needed to retrain one or 2 BW developers to the GTS environment, to replace the one that was previously trained (in a past project) but left. For **example**: Request for BW Query improvement - BW_QRY_CPSDGT04_0001 will require alone more than 20 mandays cumulated of work (training on the origin source GTS included how and where it's stored - and how the documents/ reports are structured.

-Provide the time for the GTS time to help you define our request, according to the technical constraints and adjusting the needs .

Assess the best system to provide the reports (SAP, BW, GTS, etc).

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

Domain	<insert name>
Application	>insert name>
Provider	<insert name>
Existing Documentation	<insert link>

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

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