Ngwenya - Oshoek Border End to End

Time Release Study

ERS Eswatini Revenue Service

SARS South African Revenue Service

Report 2023/24

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ERS
Eswatini Revenue Service

SARS
South African Revenue Service

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LIST OF ACRONYMS

ACRONYM	MEANING
AEO	Authorized Economic Operator
ANPR	Automated Number Plate Recognition
BCP	Border Crossing Point
CB & TA	Capacity Building & Technical Assistance
CMT	Customs Management Team
EPC	Extended Procedure Code
ERS	Eswatini Revenue Service
NLP	Natural Language Processing
NTFC	Eswatini National Trade Facilitation Committee
OCR	Optical Character Recognition
OGA	Other Government Agency
OSBP	One Stop Border Post
SARS	South Africa Revenue Service
SoP	Standard Operating Procedure
TRS	Time Release Study
WCO	World Customs Organization
WTO TFA	World Trade Organization Trade Facilitation Agreement

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ACKNOWLEDGEMENT

This report was made possible by the efforts of several people. All thanks to the Eswatini National TRS Working Group (NTRS-WG) especially the ERS, who chaired the working Group, both in coordinating the different agencies involved in the study and providing critical leadership to the project.

Acknowledgement should also be made to the ERS and other government agencies staff that participated in the study by collecting data and supporting the study. This includes ERS staff at Ngwenya Border. Thank you to the staff at the Ministry of Agriculture-National Agricultural Marketing Board, Eswatini Dairy Board and Port Health.

Thanks also to the WCO specialists Mr Stephen Muller, Mr Maxwell Kapindula from Zambia Revenue Authority (ZRA), Ms Jacobina Foetus and Johanna Kakota both from Namibia Revenue Agency (NamRA) who were instrumental in providing insights, comments, and assistance in overcoming the challenges that arise in the project of this scope and complexity. Our gratitude goes to our counterparts, South Africa Revenue Service (SARS) for their hospitality.

Finally, thank you to the enumerators who participated in collecting data at the Border despite the extreme weather conditions. Thanks goes to the ERS officials working at the control room who entered the data into the WCO TRS software.

Figure 0-1 : WCO specialists assisting an ERS official on the WCO TRS software tool

1. EXECUTIVE SUMMARY

The survey measured the time taken for goods to complete processes on import, export, and transit at the Border Post. Further, each process steps in the clearance process were examined to test the effectiveness of the processes at the border and operational efficiencies. The findings of this study were also compared to the findings of the previous TRS conducted in 2021.

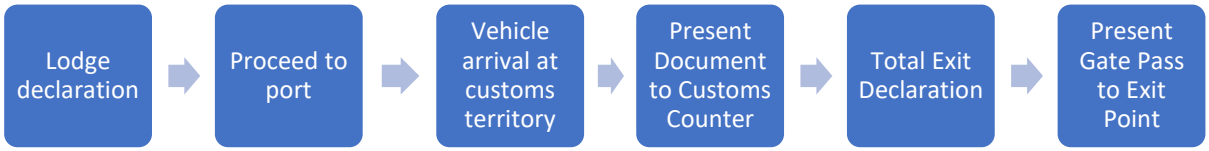


Figure 1-1 TRS Scope

The scope of the Time Release Study (TRS) focused on the time when an entry is lodged for processing up to the point where the entry is finally cleared. The study used a combination of both the Information and physical flow procedure.

The type of regimes covered by the study:
- ✓ Import declarations.
- ✓ Transits and
- ✓ Exports declarations.

An end-to-end Time Release Study (TRS) was conducted by Eswatini and South Africa at the Ngwenya/ Oshoek land border from the 14th to 17th November 2023. It took **four (4)** days to collect the data from 0700hrs to 0000hrs.

The coordination between both countries illustrates the importance of the Ngwenya/Oshoek border as one of the busiest land borders between Eswatini and South Africa, with an average of 600 trucks crossing daily.

1.1. Imports

The total average time for the regulatory processes associated with importing goods into Eswatini was **01hr 04mins** and this was **49mins** better than the average time taken in the 2021 TRS survey which was **01hr 53mins**. The time costs fell most heavily on imports **(Physical flow)**. An average of **01hr 07mins** was recorded from registration of declaration to proceed to port instruction **(Information Flow)**. Further, it took **08hrs 42mins** average time from registration of a declaration to total exit, whilst it took **11hrs 06mins** on the 2021 survey from the registration of a declaration to total exit **(Total flow)**.

For import declarations, 21.1 % were channelled to red, 5.3 % to yellow, 71.6% to green and 2% for blue. Green channel average time at the border was **55mins** compared to blue **45mins**, yellow **1hr 04mins** and red **1hr 37mins**.

1.2. Transits Entry

This includes both transit declarations with a destination within Eswatini and through transit with a destination outside Eswatini. The 2021 survey did not measure transits as compared to now with the influx of coal that is transiting through Eswatini to Mozambique. The total average time for transits was **54mins**. An average of **11mins** was recorded from registration of declaration to proceed to port instruction. Further, it took **06hrs 40mins** average time from registration of a declaration to total exit.

1.3. Total Imports

Total imports time measures all imports including transits. The average time for all imports is **01hr 01mins** for the border process and the average time from registration of declaration to receiving proceed to port instruction is **54mins**. The entire information flow took an average of **08hrs 27mins.**

1.4. Exports

The total average time for exporting goods out of Eswatini was **43mins** and this was **35mins** better than the average time taken in the 2021 TRS survey which was **01hr 19mins**. An average of **57mins** was recorded from registration of declaration to proceed to port instruction. Further, it took 19hrs 14mins average time from registration of a declaration to total exit, whilst it took **01d 06hrs 32mins** on the 2021 survey from the registration of a declaration to total exit.

1.5. Total Regulatory Time

1.5.1. Imports Regulatory Time:

Total regulatory time includes time stamps when various agencies and/or trader are performing certain actions related to the clearance of goods.

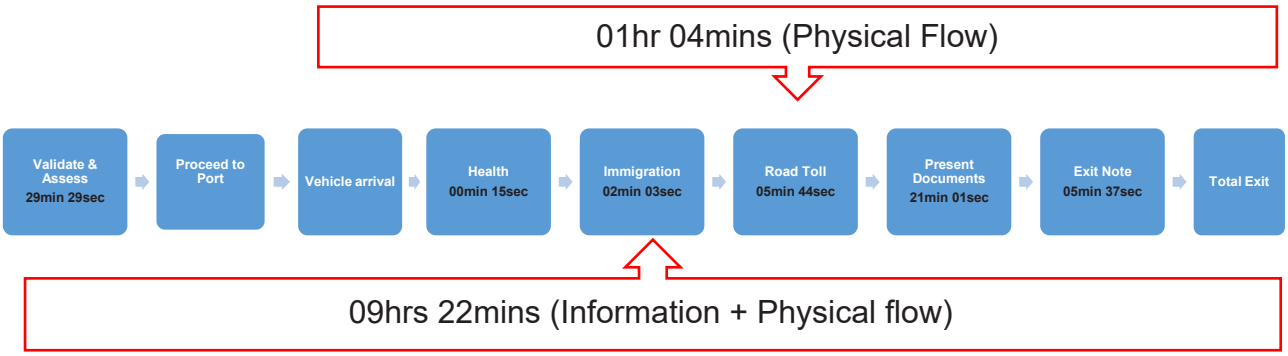


Figure 1-2 Imports Regulatory Time

1.5.2. Exports Regulatory Time:

Total export regulatory time is made up of the components presented below. This total regulatory time for exports is **19hrs 14mins**. This time is an indication that on average most exporters pre-clear.

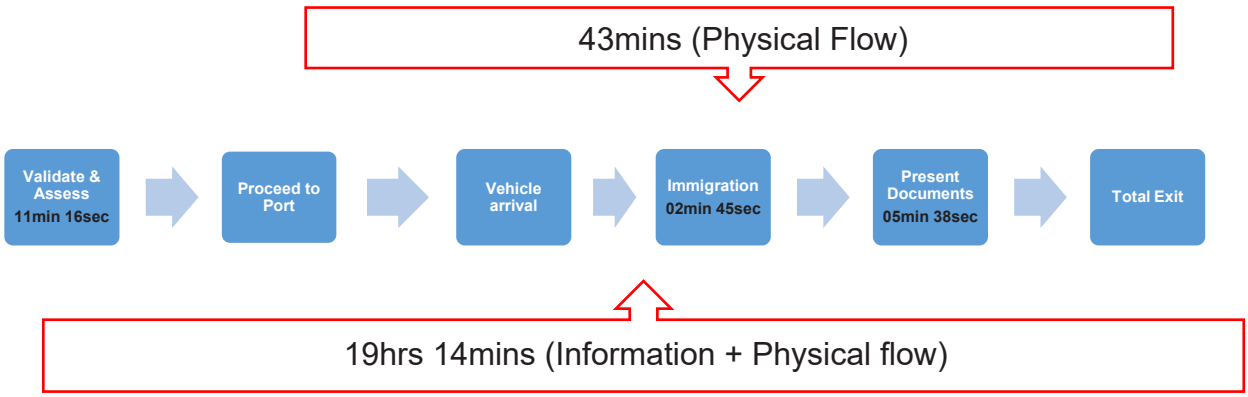


Figure 1-3 : Exports Regulatory Time

1.5.3. Transits Entry Regulatory Time:

Total transits regulatory time is made up of the same components as imports regulatory time and represents an average of the components presented below. The average time is **06hrs 40min**.

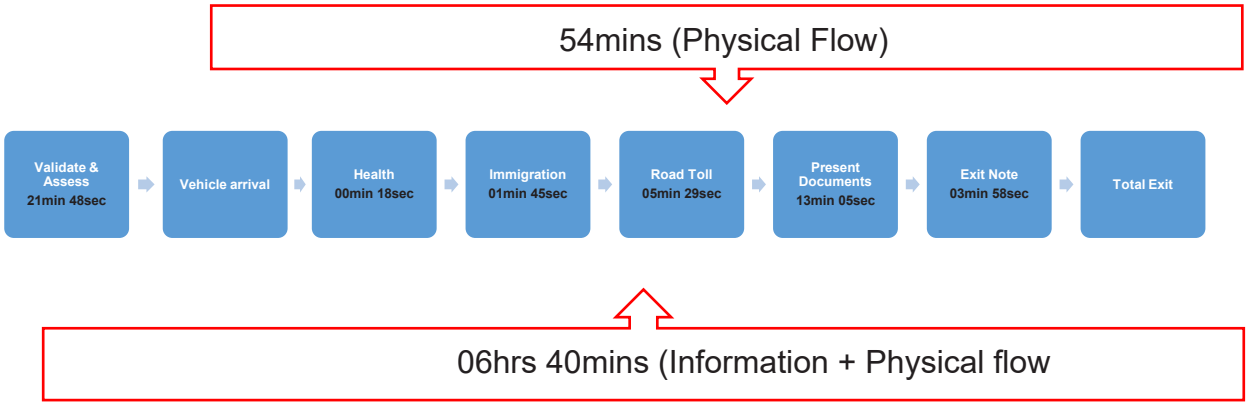


Figure 1-4 : Transits Regulatory Time

1.6. End to End Results

Exports from South Africa – Imports into Eswatini

Information flow: Average time

Time at the Oshoek border	Time at the Ngwenya border	Total time
42 minutes	54 minutes	01hrs 36mins

Physical flow: Average time

Time at the Oshoek border	Time at the Ngwenya border	Total time	As a % of total	As a % of total
			Oshoek	Ngwenya
01hr 24mins	01hrs 01mins	02hrs 25mins	58%	42%

Exports from Eswatini – Imports into South Africa

Information flow: Average time

Time at the Ngwenya border	Time at the Oshoek border	Total time
42 minutes	57 minutes	01hr 39mins

Physical flow: Average time

Time at the Ngwenya border	Time at the Oshoek border	Total time	As a % of total	As a % of total
			Ngwenya	Oshoek
34mins	43mins	01hrs 17mins	56%	44%

Physical layout at the Oshoek-Ngwenya Border Post

On average when importing from South Africa into Eswatini the entire border process takes about **2hrs 25mins**. When exporting from Eswatini into South Africa it took an average of **01hr 17mins**.

2. INTRODUCTION

Gaining insight into the time taken for goods to pass through a border and undertake other regulatory requirements to either import or export is an important element in identifying areas for trade facilitation and modernization from a whole-of-government perspective.

As a party to the World Trade Organization Trade Facilitation Agreement (WTO TFA), Eswatini has made a commitment to reduce the time and costs of trading across borders. This will not only address potential areas of reform at the border, but also looks at potential reforms in other trade related activities. Under the Eswatini National Trade Facilitation Committee (NTFC), steps are being made to implement trade facilitation measures across all government agencies and to speed up the processes of trade.

A Time Release Study (TRS) is a valuable tool in providing insights into how the time and costs for exporting and importing can be reduced as well as into how resources for both Eswatini Revenue Service (ERS) and other government agencies (OGAs)can be deployed in the most effective way. It is not a stand-alone event, but rather a tool that allows for comparisons to previous studies and findings or pre-set standards. The data analysis of this study was compared to the findings of the 2021 Eswatini TRS conducted by KGH to assess the impact of trade facilitation initiatives introduced in response to the findings of the 2018 study.

The World Customs Organization Time Release Study (WCO TRS) provides a structured and recognized approach to measure the time taken for goods to complete all the processes associated with clearance and release for export, import and transit.

For Eswatini, virtual capacity building commenced in July 2023 and for South Africa in October 2023. This capacity building was followed by an in-country mission from 06 November to 17 November 2023. The mission was joined by the WCO TRS and Trade Facilitation Specialist, a recognized/experienced TRS expert from Zambia and two experienced/recognized TRS experts from Namibia, with a view to strengthen capacity within both TRS National Technical Working Groups through a peer-to-peer, experience sharing approach. This includes training for the enumerators in the background and practical collection of timestamps. The control room team was trained on the use of WCO TRS Software.

This report contains the findings and recommendations from the Eswatini Time Release Study (TRS) using data collected from Ngwenya Border Post. The report is based on the data entered to the WCO TRS Software.

TRS is based on the WCO TRS Methodology and encompass not only the average time taken by clients to clear their goods from the time of arrival at the border to the total exiting/ release of the goods, but also the time taken from lodgement of a declaration to total exiting/release of the goods. The report includes a quantitative analysis based on data collected during the TRS and a qualitative analysis based on observations made during the execution of the TRS, and in accordance with international standards and best practices, i.e. the WCO International Convention on the Simplification and Harmonization of Customs Procedures (the Revised Kyoto Convention), the WCO SAFE Framework of Standards, the WCO Risk Management Compendium, the World Trade Organization's Trade Facilitation Agreement, and the World Bank's Border Modernization Handbook are all examples of international standards and best practices.


NGWENYA
BORDER POST

3. METHODOLOGY

3.1. TRS Cycle

This study is based on the WCO's World Customs Organization Guide to measure the time required to release goods, Version 3, 2018 and the WCO TRS System. Using these methodologies allowed for the capture of statistical data on times which, together with qualitative information, forms the basis of the analysis and recommendations contained in this report.

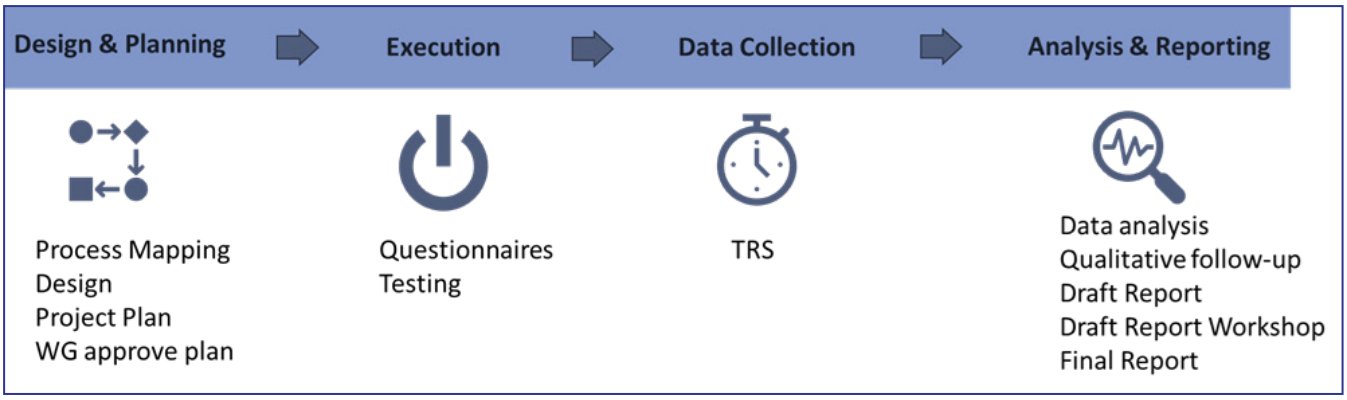


Figure 3-1: TRS Cycle

3.2. Scope of the Study

The study was conducted between 14 to 17 November from 07:00hrs to 00:00hrs.

Table 3-1 : Scope of the Study

Location	Import	Export	Transits Entry	Data Collection Period	Test Period
Ngwenya	• Process from registration of entry to departure from the BCP (Source: Manual Survey Sheets and ASYCUDA World). • Commercial goods only.	• Process from registration of entry to departure from the BCP (Source: Manual Survey Sheets and ASYCUDA World). • Commercial goods only.	• Process from registration of entry to departure from the BCP (Source: Manual Survey Sheets and ASYCUDA World). • Commercial goods only.	4 days	1 day

3.3. Statistical valid data collection

To have statistically valid findings at a 95 % confidence level with an interval of +/- 5 % in line with the requirements of the project, the services of a statistician were used to analyze data provided by the ERS. This is also a requirement from the WCO to reach this statistical threshold. This allowed the correct sampling strategy during the data collection phase to achieve a 'typical' week at the border. Due to this method, the data in this final report is statistically valid.

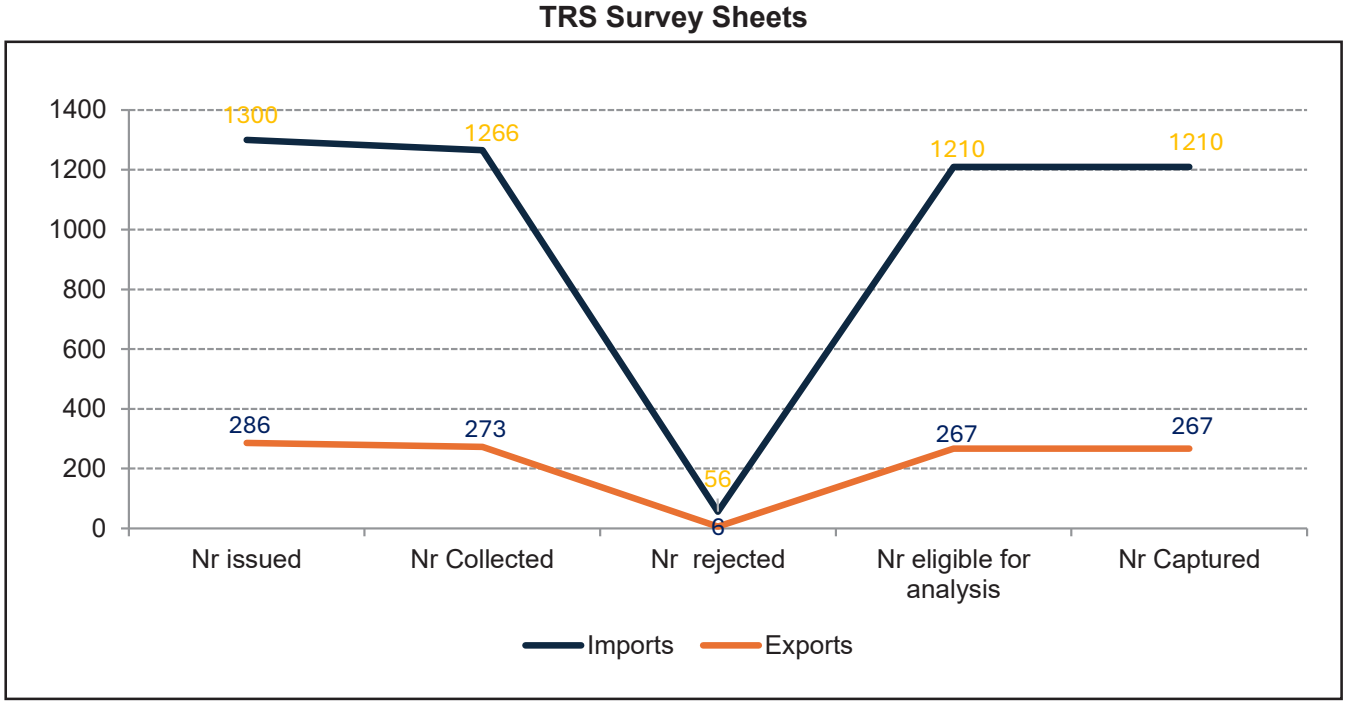


Figure 3-2 : TRS Survey Sheets Collection

3.4. Testing

Data collection required the involvement of many people and accurate data from manual and computer sources. The process maps and the survey sheets must also be verified and the need to update them must be done before the operational phase commences. For this reason, a test run was undertaken for two days on the 10th and 13th November 2023 by all the involved parties at Ngwenya. The test allowed the survey sheets and TRS processes to be refined before the actual data collection phase.

3.5. Data collection and integration

The TRS ran for 4 days from Tuesday 14th November to Friday 17th November 2024 in line with the recommendation from the World Customs Organization Guide to measure the time required to release goods, Version 3, 2018.

Some of the BCP timestamp data was available in Asycuda World. Other data was collected manually by enumerators. This required the use of paper survey sheets. Both the physical and information data were manually quality assured, integrated and captured into the WCO TRS Software tool by ERS officials. Entry into the WCO TRS Software tool was done by ERS officers located in the control room.

3.6. Use of enumerators

To reliably capture data at the border, enumerators were deployed to directly capture manual and ASYCUDAWorld time stamps. Most of these enumerators were ERS employees with support of staff from OGAs.

Figure 3-3 : Enumerator Collecting Data

3.7. Out of Scope

Some occurrences have been omitted due to low volumes, being periodic, being primarily security related or unrelated to public sector trade facilitation processes, such as:

- Private sector processes, including preparation of road manifest.
- Eswatini Environmental Authority certificates, permits, and licenses.
- National Police certificates, permits and licenses.
- Non-border related ERS processes.
- Diplomatic consignments.
- Empty trucks/containers.

3.8. Key timings and Events

Activity	Start	End
Virtual Capacity Building	Aug	Oct
In country Capacity Building and preparation	06-Nov	10-Nov
TRS Launch	13-Nov	
Data Collection - Manual	14-Nov	17-Nov
Data Collection - Electronic	14-Nov	17-Nov
Data Cleansing	14-Nov	24-Nov
Data input into the WCO Software Tool	27-Nov	14-Dec
Data Analysis	03-Jan	15-Jan
Root Cause Analysis	16-Jan	02-Feb
Report Drafting	05-Feb	16-Feb
Validation of findings and draft report	19-Feb	15-Mar
Launch of TRS report		15-Apr

Table 3-2: Key Times & Events

4. DATA INTERPRETATION

4.1. Data from the WCO TRS Software

The data presented on this report was drawn from the WCO's web based TRS Software Tool. Manual time data provided to and collected by the enumerators was entered into the software. By selecting two time points based on the survey sheet, an average (or mean) and median time is given. The average time taken for each 10 % of declarations to complete the period between the two time points is also presented by the software.

It is also possible to get average times between two time points against dimensions set in the survey sheet, for example, prioritized commodities or channel. It is not possible to get average times across multiple data points. Where declarations went through yellow lane, the start and end time for the documentary check process were used.

Below is a sample of an imports table from the WCO Software tools

Table 4-1 : Sample of WCO TRS Software Results - Imports

%	minutes	h m d	
10	19	0d 0h 19m	
20	24	0d 0h 24m	
30	29	0d 0h 29m	
40	34	0d 0h 34m	
50	38	0d 0h 38m	
60	45	0d 0h 45m	
70	55	0d 0h 55m	
74	61	0d 1h 1m	⇐ average
80	75	0d 1h 15m	
90	114	0d 1h 54m	
100	1312	0d 21h 52m	

4.2. Data from ASYCUDAworld

Data form ASYCUDAworld was extracted and analyzed in excel spreadsheets and is presented in tables with average, mode, minimum and maximum times. The number of applications processed for each process and sub process are also presented.

4.3. Average and mode times

Average time is the time that is representative of the times entered into the WCO TRS Software for the two time points being measured. It is calculated by adding together all the times entered for the two time points being measured and dividing by the number of valid entries in the WCO TRS Software for the two time points. The mode is the most frequently appearing time.

Averages are influenced by:

- ✓ the volume being measured for any process.
- ✓ data not being correctly entered into the WCO TRS Software for all timestamps.
- ✓ the fact that not all declarations in the study sample pass through the same processes.
- ✓ some declarations or vehicles may not have completed all the processes when data collection ended.

This means that the number of entries in the WCO TRS Software may not always add up.

Averages should be viewed as a way of understanding the time taken with an eye to the influencing factors and the impact of outlying times, while ensuring that outlying times do not become the focus of analysis. An explanation of outlying times is provided where it is possible to do so. At BCPs while there is a theoretical shortest time for any process to be completed, averages are impacted by individual declarations that take a long time to complete a process.

When analyzing the data, it is important to note that the average time for two or more sub-processes will not add up to the average time for the main process (known as Simpson's paradox). The fact that not all declarations or vehicles follow the same processes and there is no fixed order for sub-processes also contributes to this effect.

In some cases, to be able to provide insight into regimes across BCPs or within a particular BCP, weighted averages are used, and these are clearly identified. Weighting has been done for comparable processes based on the number of declarations or vehicles for the process at individual BCPs.

5. TRADE AND ESWATINI

In 2023 Eswatini exported E38.68bn worth of goods with South Africa being the largest export partner with 67.4% (E26.09bn) of all the exports. Kenya, Mozambique, Nigeria and Zimbabwe the constitute the top 5 exporters at 4.3%, 3.9%,3.3% and 2.3% respectively. Concentrates are the leading exports products at E10.77bn which is 27.8% of the total exports. Cane sugar then follows at 17.6% (E6.83bn), Chemical products 13.1% (E5.08bn) and then Pine at 3.6% (E1.40bn)

Our imports in 2023 were worth E37.64bn with the major importing partner still being South Africa with 81.1% of our total imports (E30.55bn) being from South Africa. Other import partners were China (E1.90bn), Mozambique (E1.35bn), India (E544 million) and the United States of America at E367million. Petroleum products which are diesel and petrol were the most imported at 12.5% when combined, followed by electrical energy at 4.2%, maize at 1.5%, concentrates at 1.5% and medicaments at 1.3%.

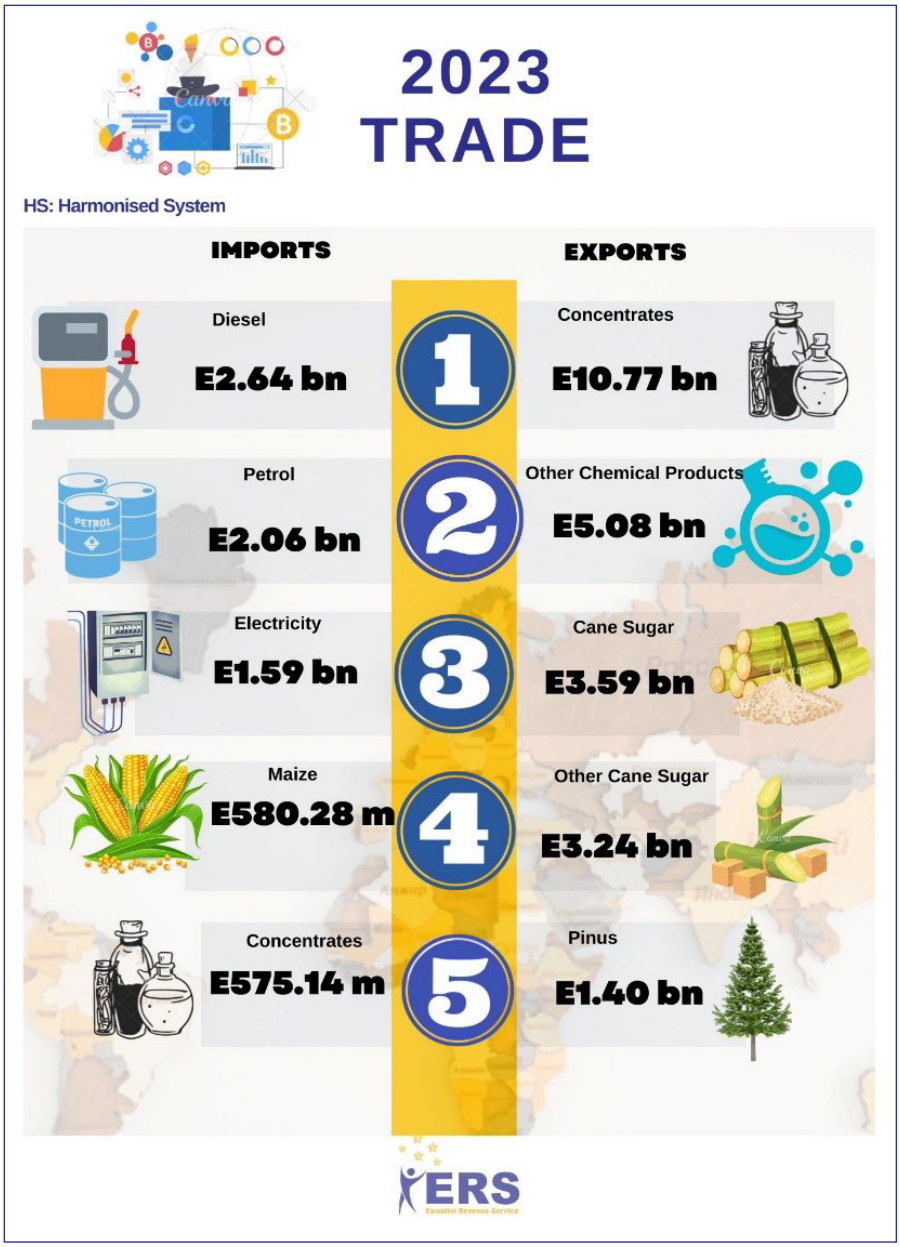


Figure 5-1 : Eswatini Trade 2023 by HS

6. VISION FOR A FUTURE BORDER

6.1. One Stop Border Post-(OSBP)

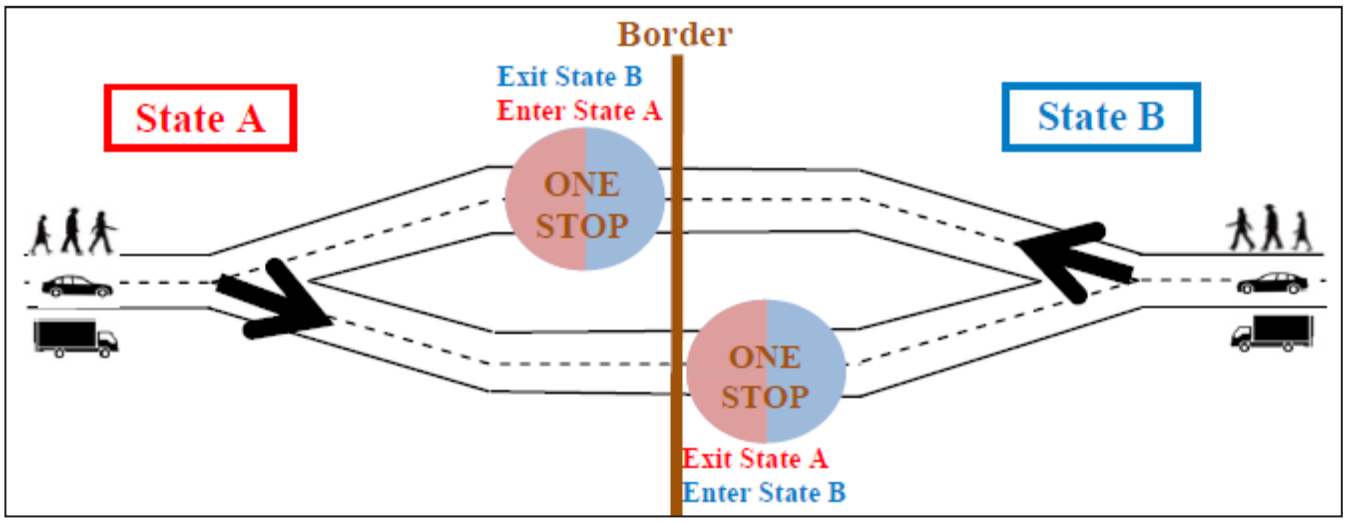


Figure 6-1: Schematic Diagram of a Juxtaposed OSBP (One Stop Border Post Handbook 2nd edition, May 2016)

Eswatini vision is to have a OSBP. This could be achieved by requesting support from the WCO-Accelerate Trade Facilitation Program to conduct a workshop, discuss the above recommendation in detail, re-engineer the current clearance process, draft the required Standard Operating Procedure (SoP) and build capacity within the same technical working groups. This would lead to both countries receiving CB&TA to implement Article 8 Border Agency Cooperation Measure 2 (Each Member shall, to the extent possible and practicable, cooperate on mutually agreed terms with other Members with whom it shares a common border with a view to coordinating procedures at border crossings to facilitate cross-border trade). To attain this vision, there is a need to engage and involve all border agencies and the private sector in the discussions and workshop.

6.2. Artificial Intelligence in Customs

- ✓ Use of natural language processing (NLP) for automated classification of products.
- ✓ E-Customs platform with chatbot for customs issues.
- ✓ E- certificate at 100%

7. FINDINGS AND ANALYSIS

7.1. Imports

Table 7-1 : Imports Analysis Results

From	To	Average	Mode	Min	Max
Valid & assess	**Total Exit**	00:12:47:27		00:00:23:43	21:23:44:41
Valid & assess	**Boom Gate Exit**	00:09:22:39		00:00:39:40	07:11:14:16
Valid & assess	**Arrival of Vehicle**	00:08:42:56		00:00:01:24	07:11:01:16
Exit Note Start	**Exit Note End**	00:00:05:37	00:00:01:00	00:00:00:00	00:02:05:00
Arrival of Vehicle	**Total Exit**	00:05:12:49		00:00:00:08	21:16:05:33
Arrival of Vehicle	**Boom Gate Exit**	00:01:04:13	00:00:26:00	00:00:07:00	00:21:52:00

The analysis shows that most declarations are now being precleared. The survey shows an average of **08hrs 42mins** from the lodgement declaration until the truck arrives at the border. This improvement on pre-clearance has seen time taken at the border decreasing.

In 2021 the average time from lodgement of declaration to boom gate exit was **10hrs 56mins**. In the survey the same process took an average of **09hrs 22mins**.

For imports excluding transits the average border process (from arrival to Boom gate exit) the average time was **01hr 04mins** with the longest time begin **21hrs 52mins**. This delay was caused by the importer having issues with their invoices thus a longer than average time was observed. Most importers took about **26mins** to complete the border process. However, there are concerns of idle time that was observed during the TRS period that arises from importers conducting their own personal things that do not involve goods clearance while they are within the customs territory. There was also an anomality in the time taken from arrival of vehicle to system total exit where the maximum time taken was **21d 16hrs 05mins**. Upon investigation it was discovered that some declarations were not totally exited from the system due to the following reasons:

- Human error when officers total exit declarations
- Importers only presenting declarations that have been totally exited at the boom gate.

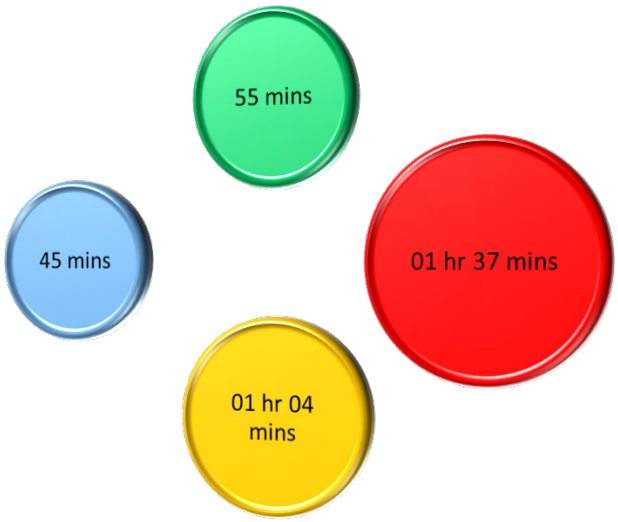


Figure 7-1 : Imports Selectivity Criteria Analysis

On average green lane declarations took 55mins, blue lane took **45mins**, yellow **01hr 04mins** and red took **01hr 37mins** for the entire border process. The green lane average times of **55 mins** show a great improvement when compared to **01hr 43mins** for the 2021 survey, this is an indication that there is an improvement in the ease of doing business with Eswatini as most importers take lesser time to clear their goods at the border.

For Eswatini, about 72% of imports were channelled to green. Those channelled to red were about 21% due to an increase in declarations requiring the VAT Easy program. On average, the red channel took **01hr 37mins** compared to **03hrs 19mins** for 2021 TRS. This shows an improvement of about **01hr 42 mins**. This can be attributed to the program of increasing inland referrals for inspection on importers premises to try and improve trade facilitation and reduce traffic congestion at the border. Declarations channelled to yellow were about 5%. The average time to process yellow declarations was **01hr 04mins** which also shows an improvement of **01hr 08mins** when compared to the **2hrs 12mins** for 2021 survey. This shows that declarations channelled to yellow has decreased, VAT easy declarations are now channelled to red lane only. Blue channelled declarations were only 2% and comprised of two AEO importers.

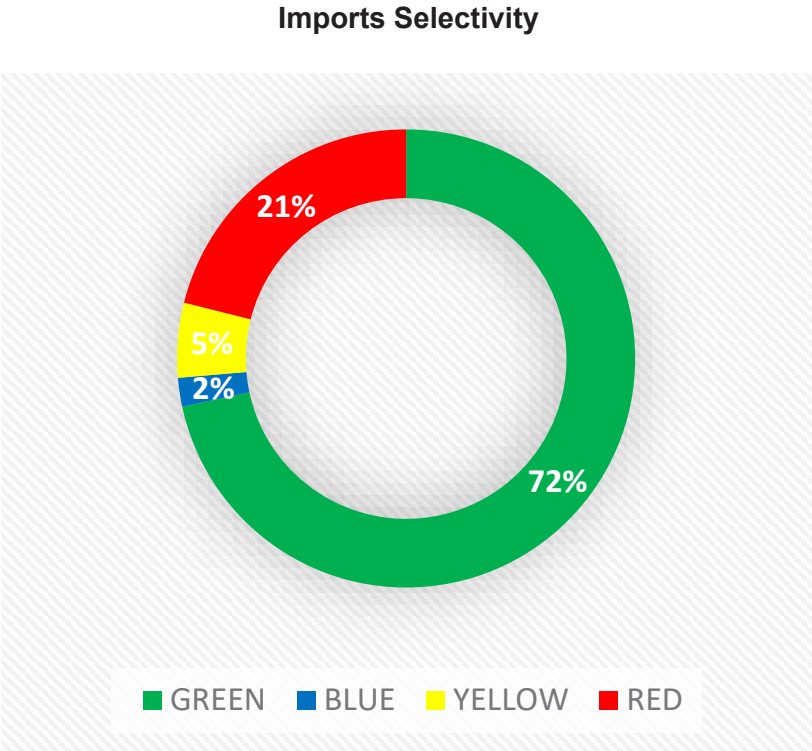


Figure 7-2 : Imports Selectivity Proportions

7.2. Exports

Table 7-2 : Exports Analysis Results

From	To	Average	Max	Min	Mode
Submission Start	**Submission End**	00:00:05:38	00:01:32:00	00:00:01:00	00:00:01:00
Immigration Start	**Immigration End**	00:00:02:45	00:03:52:00	00:00:01:00	00:00:01:00
Entry Customs Hall	**Exit Customs Hall**	00:00:14:42	00:12:58:00	00:00:01:00	00:00:04:00
Arrival of vehicle	**Boom gate exit**	00:00:43:47	00:13:14:00	00:00:03:00	00:00:25:00
Validate & Assess	**Total exit**	00:18:41:11	07:16:46:51	00:00:24:57	
Validate & assess	**Arrival of vehicle**	00:18:26:41	07:16:41:02	00:00:09:48	

The total exports time is made from pre- border processes and border processes. The total average time is **19hrs 14 mins**. This average time is from where the declarations is lodged on the system until the truck exits the border.

From registration of declaration until the truck arrives at the border is **18hrs 26 mins**. An average time of **43 mins** was taken on the border processes, from the arrival of the vehicle to total exit. This time includes the time for presenting documents to customs counter and Immigration processes. This shows an improvement as compared to the **01hrs 19 mins** for the 2021 survey. The **35 mins** is due to the automation of the exit note which is now generated by the declarants and most of them do pre-clearance.

7.3. Transits

This includes both transit declarations with a destination within Eswatini and through transit with a destination outside Eswatini. The 2021 survey did not measure transits as compared to now with the influx of coal that is transiting through Eswatini to Mozambique. The total average time for transits was **54mins**. Further, it took **06hrs 40mins** average time from registration of a declaration to total exit. The average time taken from registration of a declaration to the arrival of the vehicle is **05hrs 57 mins**.

7.4. Other Government Agencies

We conclude this section by summarizing the time taken by the other OGAs present at the border. They include Immigration, health, Namboard, Dairy board as part of the border stakeholders.

Table 7-3 : OGAs Analysis Results

OGA		Imports			Exports	
	Average	Min	Max	Average	Min	Max
Agriculture	00:00:02:00	00:00:02:00	00:00:02:00			
Dairy Board	00:00:01:00	00:00:00:00	00:00:01:00			
Namboard	00:00:01:56	00:00:01:00	00:00:05:00			
Health	00:00:00:17	00:00:00:00	00:00:15:00			
Police	00:00:16:00	00:00:16:00	00:00:16:00	00:00:02:00	00:00:02:00	00:00:02:00
Other	00:00:03:20	00:00:01:00	00:00:08:00	00:00:02:20	00:00:01:00	00:00:06:00
Immigration	00:00:01:58	00:00:00:00	00:01:04:00	00:00:02:45	00:00:00:00	00:00:09:00

7.5. Customs Hall

Table 7-4 : Customs Hall Analysis Results

From	To	Average	Mode	Min	Max
Road Toll Start	**Exit Customs Hall**	00:00:13:26	00:00:03:00	00:00:01:00	00:06:54:00
Road Toll Start	**Road Toll End**	00:00:05:39	00:00:00:00	00:00:00:00	00:02:26:00

The average time taken at the customs counter for road toll is 05mins with the maximum time being 02hrs 26mins. Most traders complained about network problems especially on MoMo Pay which causes delays in the payment process. There were also issues regarding unavailability of funds in their accounts, so they have to wait for their companies to send funds.

7.6. Imports by EPC

Table 7-5 : Imports by EPC Analysis Results

From	To	EPC	Average	Min	Max
Arrival of Vehicle	Total Exit	**4000**	00:03:08:43	00:00:00:08	13:05:51:04
		4300	00:18:47:07	00:00:09:12	21:16:05:33
		6023	00:00:22:37	00:00:22:37	00:00:22:37
		8000	00:01:03:04	00:00:30:32	00:01:35:36
		8100	00:01:06:26	00:00:05:18	01:12:48:42
Valid & assess	Boom gate Exit	**4000**	00:09:36:28	00:00:39:40	07:11:14:16
		4300	00:08:37:47	00:00:54:24	04:06:20:23
		6023	00:03:47:25	00:03:47:25	00:03:47:25
		8000	00:10:36:12	00:05:02:57	00:16:09:27
		8100	00:06:39:18	00:00:01:03	03:20:08:01
Arrival of Vehicle	Boom gate Exit	**4000**	00:00:58:57	00:00:07:00	00:21:33:00
		4300	00:01:42:39	00:00:09:00	00:21:52:00
		6023	00:00:39:00	00:00:39:00	00:00:39:00
		8000	00:00:45:30	00:00:37:00	00:00:54:00
		8100	00:00:54:50	00:00:01:00	00:08:44:00

The key observation on the Extended Procedure Codes (EPC) is that the times are influenced by declarations that were not totally exited in the system. VAT Easy 4300 takes more time compared to the other EPCs especially 8000 and 8100 because there are given first preference to try and ease traffic at the border.

7.7. Imports by Harmonized System (HS)

Table 7-6 : Imports by HS Analysis Results

HS Heading	Average Time	Items
2701: Coal	00:00:51:26	417
1005: Maize	00:00:24:34	61
8708: Vehicle Parts	00:06:35:23	54
0709: Vegetables	00:00:16:45	43
2710: Petroleum Products	00:01:38:13	42
4415: Pallets	00:00:36:56	40
2202: Mineral Water	00:00:24:17	39
2523: Portland Cements	00:00:20:05	38
3923: Articles of packing of goods	00:04:51:51	32
9403: Furniture	00:00:38:35	30

During the period of the study coal was the most imported product which took an average time of **51mins**. It accounts for 52% of the top 10 products imported. Vehicle parts take the longest time of **06hrs 35 mins** because the risk engine flags them as high risk and vegetables took the least time of **16mins** due to the nature of the product.

7.8. Idle time

Idle time refers to the duration when the border process is not actively engaged in productive work. The border process is not being utilized at that given time. An estimate of idle time was calculated by adding the average time of each process then subtracting the sum of each process from the average total border process time.

7.8.1. Imports

Table 7-7 : Imports Idle Time

Process	Average Time	Proportion
Health	00:00:00:13	0.34%
Immigration	00:00:02:03	3.19%
Road toll	00:00:05:44	8.93%
Present documents	00:00:21:01	32.73%
Exit note	00:00:05:57	9.27%
Idle time	00:00:29:15	45.54%
Total time	00:01:04:13	100.00%

7.8.2. Exports

Table 7-8 : Exports Idle Time

Process	Average Time	Proportion
Immigration	00:00:02:45	6.29%
Present documents	00:00:05:38	12.86%
Idle time	00:00:35:24	80.85%
Total time	00:00:43:47	100.00%

7.8.3. Transits

Table 7-9 : Transits Idle Time

Process	Average Time	Proportion
Health	00:00:00:18	0.55%
Immigration	00:00:01:45	3.22%
Road toll	00:00:05:29	10.07%
Present documents	00:00:13:05	24.01%
Exit note	00:00:03:58	7.28%
Idle time	00:00:29:53	54.86%
Total time	00:00:54:29	100.00%

Average idle time for imports is **29 mins** which is 45.54% of the total time spent at the border. Transits idle average time was also 29 mins accounting for 54.86% of the total average time. Exports had the biggest average idle time of 35 mins accounting for a significant proportion of 80.85%.

Reasons for idle time:

- Personal breaks and activities from traders
- Traders' movement between borders sorting out their documents & also fetching their trucks from either side
- Traffic congestion at border entry points and within the customs territory
- Bad weather
- Border staff shift changes

8. RECOMMENDATIONS AND ACTIONS

Observations	Recommendations		
	Short-term	Medium-term	Long-term
Inside the Customs halls the linear process is not followed, i.e., the sequential process of obtaining approval.	Have a Customer Flow Management officer who ensures that the linear process is followed.		Implement full Juxtaposed OSBP as recommended by WCO
Increase in clearance and release time due to idle time: • Imports 29mins • Exports 35mins • Transits 29mins	Enhance the visibility of police for traffic management	Enforce mandatory pre-registration/ pre-clearance before heading to the border	Introduce a provision or Policy that would penalize traders who deliberately leave their trucks at the border
VAT Refund Administration (Sekulula) declarations took more to process **(01hr 42 mins)**			Request SARS to provide their VAT registered companies sample invoices and develop an optical character recognition (OCR) system to match invoices.
Blue lane took comparatively less time to process		Enroll more the number of AEOs to enable trade facilitation, more compliant trader will reduce time spent at the border	
Some border agencies are seriously impacted by network related and system issues		Have backup dongles in case of blackouts	Improve network bandwidth through system upgrade
There is considerable number of not totally exited declarations in the system especially for bulk declarations although the truck has physically left the border. One declaration took 21 days to be totally exited	Create a dashboard that flags not totally exited declarations daily.	Removal of the exit office, with 100% usage of tablets at boom gate point for total exit.	Introduce automated number plate recognition (ANPR) camera that will be linked to the manifests
Delay in road toll payments queue	Two queues on the road-toll procedure.	Instant road-toll cards for traders. (Cashless payments	
Traffic congestion due to non-availability of separate lane for green lane cargo including transits	Construct a mini office at the search bay to generate T1 and totally exit for transits.	Introduce prepayment account on the declarations to deduct road toll fee.	Auto generation of T1

9. CONCLUSION

This is the first time that the ERS and SARS conducted an END-TO END TRS at Ngwenya – Oshoek border as a benchmarking survey. While the analysis of Time Release Study (TRS) results paints a significantly positive picture regarding Customs involvement in the clearance process (from lodgement of declaration to total exit), there remains ample room for improvement among all parties involved, including the Customs office itself, to enhance the facilitation of faster clearance.

The TRS serves as an effective diagnostic tool for identifying inefficiencies in the customs clearance process and determining necessary infrastructure, policy, and process improvements. It assesses the time taken for cargo release and provides valuable insights for enhancing performance.

The survey indicates that stakeholders engaged in Customs clearance processes share responsibility for delays. These delays primarily stem from coordination challenges among parties, government agencies, and the stakeholders themselves. Additionally, several other factors exacerbate the situation, including inadequate infrastructure, equipment, reliance on online system software, and the need for multiple documents. These factors directly or indirectly impact the timely release of goods from clearances.

TRS is not an end solution for identifying the more specific factors which are affecting trade clearances, nor it is a process of identifying more specific remedial measures, rather it is the process of identifying average time taken at every process of trade clearances. This will indicate Customs to investigate the process where the average time is high. This will invite series of specific studies to identify the bottlenecks more specifically and its remedial measures for mitigation.

Conducting TRS in certain time interval has seen a regular practice of the Customs worldwide. The bilateral TRS together with subsequent specific studies will help Customs to identify the bottlenecks associated with Customs clearance process and its remedial measures, whereas the follow-up TRS will indicate the Customs whether the facilitation measures implemented after the preceding TRS have become effective.

10. ANNEXTURE

10.1. Exports Survey Sheet

Time Release Study - Export

WORLD CUSTOMS ORGANIZATION
ORGANISATION MONDIALE DES DOUANES

(*) = Mandatory - if indicated for a **section**, mandatory questions for the section must be completed / if indicated for a **question**, the question must be completed if the section is used

Section A General Information	
1. Vehicle Reg Number	
2. Declaration Reg Number	
3. Export	Permanent (EX1) ☐ Temporal (EX2) ☐ Re-Export (EX3) ☐ Transit Out-Bound (EX8) ☐
Section B Physical Arrival Process	
4. Vehicle Arrival at the entry point	day mth - hr min
5. Entry at Customs Hall	day mth - hr min
6. Submission of Documents at Customs- Start	day mth - hr min
7. Submission of Documents at Customs- End	day mth - hr min
8. Physical Inspection	Yes ☐ No ☐
9. Inspection- Start	day mth - hr min
10. Inspection- End	day mth - hr min
11. Immigration Process- Start	day mth - hr min
12. Immigration Process - End	day mth - hr min
13. Exit Customs Hall	day mth - hr min
Section C Exit Process	
14. Inspection by OGAs	Yes ☐ No ☐
15. OGAs	Police ☐ Other ☐

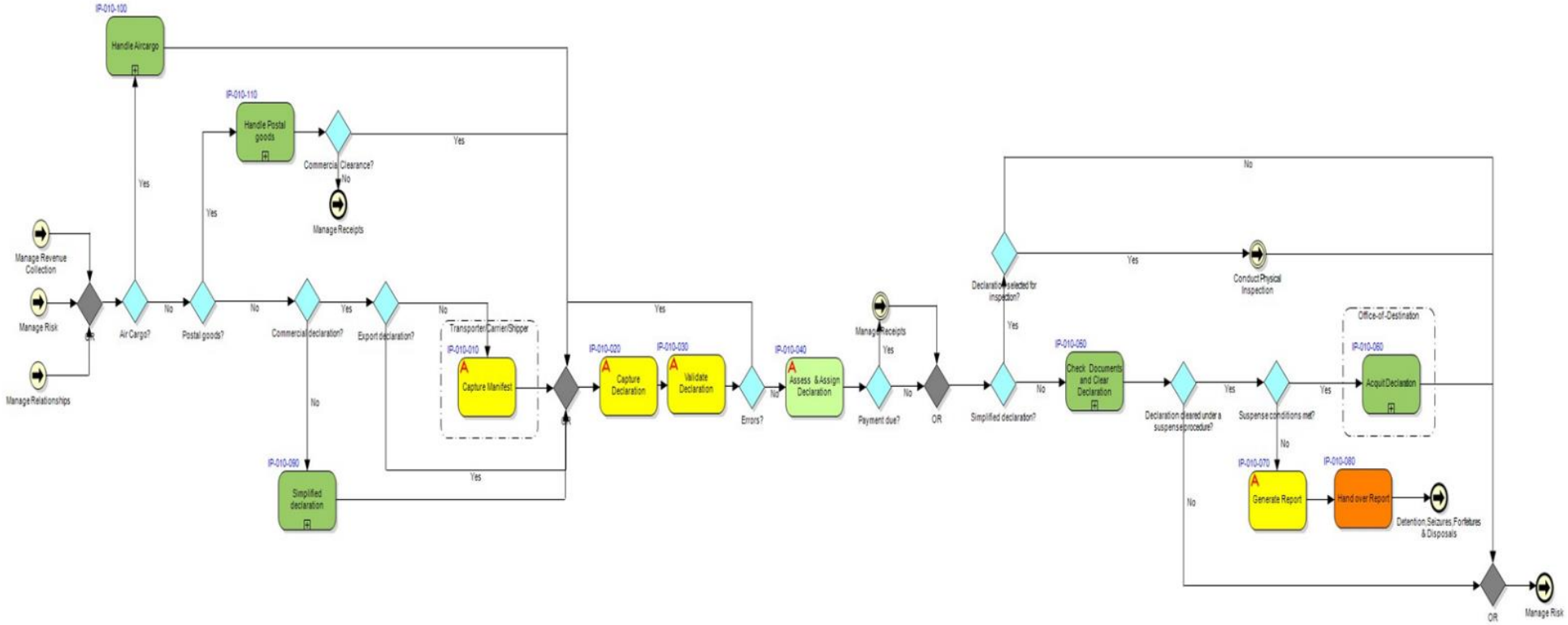
16. Inspection by OGAs- Start	day mth - hr min
17. Inspection by OGA- End	day mth - hr min
18. Total Exit	day mth - hr min
19. Comments	

10.2. Imports Survey Sheet

Section A General Information (*)	
1. Vehicle Reg Number (*)	
2. Declaration Reg Number (*)	
3. Selectivity Criteria (*)	Green ☐ Yellow ☐ Red ☐ Blue ☐
4. Customs Procedure Code (*)	
Section B Physical Arrival Process	
5. Vehicle Arrival at the entry point (*)	day mth - hr min
6. Health Screening - Start	day mth - hr min
7. Health Screening - End	day mth - hr min
8. Immigration Process- Start	day mth - hr min
9. Immigration Process - End	day mth - hr min
10. Road Toll- Start	day mth - hr min
11. Road Toll- End	day mth - hr min
12. Submission of Documents at Customs- Start	day mth - hr min
13. Submission of Documents at Customs- End	day mth - hr min
14. Physical Inspection (*)	Yes ☐ No ☐
15. Inspection- Start	day mth - hr min
16. Inspection- End	day mth - hr min
17. Exit Customs Hall (*)	day mth - hr min
Section C Exit Process (*)	
18. Verification of Certificates, Permits & Licenses (*)	Yes ☐ No ☐
19. Verification by OGAs	Dairy Board ☐ Namboard ☐ Agriculture ☐
20. Verification by Namboard- Start	day mth - hr min
21. Verification by Namboard- End	day mth - hr min

22. Verification by Dairy Board-Start	day mth - hr min
23. Verification by Dairy Board- End	day mth - hr min
24. Verification by Agriculture-Start	day mth - hr min
25. Verification by Agriculture-End	day mth - hr min
26. Submission of Exit Note- Start (*)	day mth - hr min
27. Submission of Exit Note- End (*)	day mth - hr min
28. Inspection by OGAs (*)	Yes ☐ No ☐
29. OGAs	Police Dairy Board ☐ Agriculture ☐ Namboard ☐ Other
30. Inspection by OGAs- Start	day mth - hr min
31. Inspection by OGA- End	day mth - hr min
32. Total Exit (*)	day mth - hr min
33. Comments	

10.3 Clearance Process



10.4. Data Collection Tracker

Manual Data Collection										
Border	**Ngwenya**									
Regime	**Imports & Transit in-bour**									
Date		**Nr Issued**	**Nr Collected**	**%**	**Nr Rejected**	**%**	**Nr Eligible for Analysis**	**Nr Captured**	**% Captured**	**Remarks**
14-Nov	Shift 1	173	167	97%	31	19%	136			
	Shift 2	175	169	97%	8	5%	161			
	Total	**348**	**336**	97%	**39**	**12%**	**297**	**297**	**100%**	Complete
15-Nov	Shift 1	166	153	92%	4	3%	149			
	Shift 2	139	137	99%	4	3%	133			
	Total	**305**	**290**	**95%**	**8**	3%	**282**	**282**	**100%**	Complete
16-Nov	Shift 1	151	147	97%	0	0%	147			
	Shift 2	194	191	98%	5	3%	186			
	Total	**345**	**338**	**98%**	**5**	**1%**	**333**	**333**	**100%**	Complete
17-Nov	Shift 1	139	139	100%	0	0%	139			
	Shift 2	163	163	100%	4	2%	159			
	Total	**302**	**302**	**100%**	**4**	**1%**	**298**	**298**	**100%**	Complete
Total		**1300**	**1266**	**97%**	**56**	**4%**	**1210**	**1210**	**100%**	
Border	**Ngwenya**									
Regime	**Export & Transit out-bour**									
Date		**Nr Issued**	**Nr Collected**	**%**	**Nr Rejected**	**%**	**Nr Eligible for Analysis**	**Nr Captured**	**% Captured**	**Remarks**
14-Nov	Shift 1	59	59	100%	2	3%	57			
	Shift 2	71	68	96%	2	3%	66			
	Total	**130**	**127**	**98%**	**4**	**3%**	**123**	**123**	**100%**	Complete
15-Nov	Shift 1	40	38	95%	0	0%	38			
	Shift 2	73	65	89%	2	3%	63			
	Total	**113**	**103**	**91%**	**2**	**2%**	**101**	**101**	**100%**	Complete
16-Nov	Shift 1	43	43	100%	0	0%	43			
	Total	**43**	**43**	**100%**	**0**	**0%**	**43**	**43**	**100%**	Complete
Total		**286**	**286**	**95%**	**6**	**2%**	**267**	**267**	**100%**	

10.5. Sample Calculation

Unlimited population: $$n = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2}$$

Finite population: $$n' = \frac{n}{1+\frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2 N}}$$

SZNGW Exports			SZNGW Imports	
Confidence Interval	0.99		Confidence Interval	0.99
p	0.5		p	0.5
Error	0.08		Error	0.032
Population	988		Population	6 451
Alpha divided by 2	0.005		Alpha divided by 2	0.005
Z-score	2.575829		Z-score	2.575829304
Numerator	259.1756		Numerator	1619.847803
Denominator	1.262324		Denominator	1
Sample Size	205		Sample Size	1 295

10.6. Enumerators List

	Name	Organisation		Name	Organisation
1.	Mndzebele Lomhlangano	ERS	10.	Masuku Hloniphile	Port Health
2.	Nhlabatsi Thembi	ERS	11.	Dlamini Musa	Namboard
3.	Dludlu Bongiwe	ERS	12.	Msibi Hlobsile	ERS
4.	Shongwe Sandra	ERS	13.	Dlamini Sicheme	Dairy Board
5.	Dlamini Bonkhe	ERS	14.	Macwele Mfundo	Dairy Board
6.	Ngcobo Xolile	ERS	15.	Fakudze Thando	ERS
7.	Ginindza Bongekile	ERS	16.	Siyaya Hloniphile	ERS
8.	Nxumalo Thulisile	ERS	17.	Mkhwanazi Nhlanhla	VET
9.	Mdluli Raymond		18.		

10.7. Technical Working Group

	Name	Organisation		Name	Organisation
1.	Muller Stephen	WCO	8.	Dlamini Nondumiso	ERS
2.	Kapindula Maxwell	ZRA	9.	Magagula Nokuphila	ERS
3.	Foetus Jacobina	NamRA	10.	Mkhatshwa Lungile	ERS
4.	Kakota Johanna	NamZA	11.	Mhlanga Zinhle	ERS
5.	Shabanga Angelinah	ERS	12.	Thomo Ncamsile	ERS
6.	Lukhele Gcebile	ERS	13.	Dube Muziwandile	ERS
7.	Ntshakala Nhlanhla	ERS			

NOTES: