



UPDATED
CORRIDOR PERFORMANCE INDICATORS
REPORT
FOR TRANS-KALAHARI CORRIDOR
MARCH 2022



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EXECUTIVE SUMMARY

This updated Corridor Performance Indicators report provides an update regarding the corridor performance indicators which were measured on the Trans-Kalahari corridor (TKC) in 2019-2020. The report outlines several improvements in terms of the corridor performance factors in some areas, albeit areas where little or no movement has taken place due to the COVID lockdowns.

The baseline report of 2019-2020 noted several activities and projects that were being undertaken by various TKC stakeholders to improve the performance of the corridor. The report recommended the tracking of parameters to monitor progress on the parameters and to further note and record any new initiatives as well as identifying any challenges that might have developed.

The notable developments include completion of the Swakopmund bypass which is reported to have improved the traffic situation in Swakopmund. For instance, most trucks now no longer pass through the town of Swakopmund alleviating the congestion problem caused by heavy trucks. However, the update report notes that law enforcement needs to be improved to ensure compliance as some heavy trucks are reported to be still entering Swakopmund for purposes of safe parking overnight, especially at service stations.

COVID-19 is reported to have delayed the completion of several road projects where work halted due to the pandemic. Very little progress was made due to movement restrictions. This also was reported to have affected joint law enforcement which has not happened for two years so far.

With the easing of COVID-19 restrictions, work has since resumed with dualisation of key sections reported to be at 80% complete status. There are further road projects that have commenced that will improve the condition of the TKC. For instance, there is a road being constructed from Gobabis to Keetmanshoop bypass Windhoek for traffic to South Africa, Zimbabwe, Botswana and etc, which is at 40% completion.

The road improvements on the TKC are continuing and are going to improve safety on the corridor. As shown in the findings, there has been a continued decline in accidents each year, with the highest of 19% having been realised in 2020.

With respect to weighbridges, it was reported that some truckers were applying to be exempted from passing through weighbridges despite the damage caused to roads by trucks. Weighbridges which fall under roads authority are said to be not adequate. There is a proposal that private companies be allowed to set up weigh bridges operated by road authorities in Swakopmund and Walvis.

There are developments at Mamuno border post aimed to establish a one-stop-border-post (OSBP). Already the governments of Botswana and Namibia are in discussions on converting the border post to an OSBP. At the time of interviews, the second meeting was said to have been scheduled for August 2021. It was reported that upgrades in terms of parking infrastructure had commenced at the port of entry on the TK side, while Mamuno had started drawings in line with this development.

In terms of port performance, there has been a lot of upgrades which have reduced ship turnaround times. However, the landside equipment is said to be inadequate, causing delays

with the potential of causing congestion in the port. The other issues said to be affecting the port is the unavailability of empty containers reported by port users. The operating hours for dry ports are reported to be limited and are said to be constraining the operations in terms of transit cargo handling.

Rail operations are said to have been affected by rain damage which has rendered some section of the line impassable. They have also been several derailments due to aging equipment and compounded by shortage of engineers. There are also developments on the TK Rail where the governments of Botswana and Namibia are determined to see the project through as they are commissioning a more detailed study to proceed with the project.

Lastly, the development of truck stops seems to have gained momentum, with Gobabis local authority having allotted a piece of land earmarked for developing a truck stop and container terminal so that goods can be transported by rail and transhipped to other parts of the SADC South Africa and Botswana. The planning is said to be under way with timelines not yet known. The project is being supported by TKCS. NamPort has also identified land where they will collaborate with the private sector to develop a truck stop that will alleviate the current overnight parking challenge for trucks coming to collect cargo from the port.

1. INTRODUCTION AND BACKGROUND

The Cross-Border Road Transport Agency is an economic regulatory authority founded in terms of the Cross-Border Road Transport Act No. 4 of 1998 (C-BRT Act), as amended, for the purpose of facilitating unimpeded movement of persons and goods between South Africa and neighbouring countries in the region in support of regional trade, economic development, and regional integration.

The mandate of the Agency is aligned to the mandate of fellow regulatory authorities regulating cross-border road transport movements in Botswana and Namibia, hence the collaboration with respect to implementation of the CPI study. The implementation of the CPI study was conducted in alignment and pursuit of the objectives of the Trans-Kalahari Corridor Memorandum of Understanding concluded by and between Botswana, Namibia, and South Africa particularly with respect to:

- The need to enhance seamless movement of goods and persons on the Trans-Kalahari Corridor;
- The need to reduce transportation costs and transit times; and
- The need to increase the competitiveness of goods produced in the Southern African Development Community for distribution in regional and international markets.

The implementation of the project was therefore not only envisaged to improve the unimpeded flow of freight and passenger traffic along these corridors but also to reduce the cost of doing business by operators and contribute to the growth of the regional economy. As a building block, it is envisaged that the findings from the study and sustained monitoring of corridor performance will contribute to the overall objectives of enhancing cross-border road transport system efficiency, intra-Africa trade, regional integration and business opportunities to cross-border road transport operators and business community in general, as enshrined in the Linking Africa Plan, TKC MoU, SADC Protocol on Transport, Communications and Meteorology the Tripartite Free Trade Agreement and African Continental Free Trade Agreement, amongst others.

1.1. Problem Statement

The absence of commonly agreed set of CPIs in the SADC region is a cause for concern as the measurement of performance of regional corridors is a critical part of facilitation of cross-border road transport movements, regional trade, and the growth of the regional economy. Corridor monitoring systems in existence use different parameters to monitor performance and they all seem to be nodal based as they give little or no regard at all to the end-to-end analysis of corridors.

Most of the corridors in the region are characterised by a wide range of constraints, which vary by corridor and they include:

- Poor corridor network connectivity, capacity and condition owing to missing links and poorly maintained road sections;
- Inefficient border management systems;
- Unharmonized border operating times;
- Outdated Information Communication Technology systems;

- Unintegrated customs systems and disjointed regulatory frameworks characterized by variability in regulatory requirements;
- Poor corridor services, comfort, and safety;
- Delays and long transit times; and
- High operational costs, amongst others.

Corridors provide access to both local and international markets, especially for landlocked countries in the region. Therefore, the development of indicators to measure the performance of corridors serving South Africa and SADC counterparts is expected to generate significant tangible benefits in terms of improving corridor efficiency, cross-border operations and lowering logistics costs. Such improvement will undoubtedly increase economic activity for the region.

1.2. Aim and Objective of the Study

The aim of the project was to assess the Trans-Kalahari corridor and determine corridor performance based on defined corridor performance indicators. It is expected that the CPI project will provide a framework or sustained corridor monitoring with a view to addressing constraints and enhancing unimpeded flow of cross-border road transport and trade between countries.

The objectives of the project were to:

- Engage TKC stakeholders and determine CPI parameters for measurement of corridor performance for the TKC;
- Assess the TKC corridor against predetermined CPI parameters;
- Consult corridor stakeholders to obtain data for specific CPI parameters; and
- Conduct corridor performance assessment.

1.3. Purpose of the baseline report

The Trans-Kalahari Corridor (TKC) Corridor Performance Indicators (CPI) report articulates findings from the study conducted to measure the performance of the TKC corridor. The Cross-Border Road Transport Agency (C-BRTA or the Agency), with support from Trans-Kalahari Corridor (TKC) public and private sector stakeholders, and coordination by the TKC Secretariat led implementation of the project.

The aim of the project was to measure the performance of the TKC corridor. This was conducted in line with corridor performance measurement framework that was determined and agreed by the TKC stakeholders from the three countries connected by the corridor: Botswana, Namibia, and South Africa.

The development of the CPI framework and implementation of the project was informed by several reasons. Cross-border road transport provides a critical link for Southern African Development Community (SADC or the region), especially for landlocked countries such as Botswana, Zambia, and Zimbabwe. It carries over 90% of the goods traded by and between countries in the region and in most cases, it is the only reliable mode linking countries, connecting economies, and enabling both intra-regional and inter-regional trade within and between SADC and other Regional Economic Communities in Africa.

Despite its significance, cross-border road transport faces many challenges that include poor network connectivity, capacity and condition, poorly maintained road sections, inefficient border management systems, unharmonized border operating times, outdated Information Communication Technology systems, unintegrated customs systems and disjointed regulatory frameworks characterized by variability in regulatory requirements. These challenges, which are also experienced on the TKC negatively affect accessibility to regional economic hubs and seaports, cross-border road transport system performance, corridor performance, investment, intra-regional, regional, and intra-Africa trade as well as regional competitiveness,

In view of the above, the measurement of corridor performance was conducted during the period 2019-2020, with a view to identify bottlenecks, constraints and to facilitate unimpeded flow of cross-border road traffic (freight and passengers). It is important to indicate that this project was the first comprehensive study conducted ended-to-end on the TKC corridor to measure corridor performance.

The baseline report findings form Part I of this report and provides baseline for tracking corridor performance on the TKC on biennial basis. Part II of this report presents the first update, which tracks parameters as of 2021.

2. METHODOLOGY

This section presents the methodology used to compile the baseline report and explains the surveys conducted and the review of relevant literature.

2.1. Literature review

Literature review involved reviewing existing literature focusing on corridor performance measurement systems, tools and technologies including the World Bank SSATP Corridor Performance Monitoring System and the East African Community Corridor Performance Monitoring System.

Key outcomes are summarised below:

- Moving goods and people is the basic function of trade and transport corridors. Common objectives of corridor projects include improving infrastructure connectivity, facilitating the efficient movement of freight, and promoting economic growth by improving the competitiveness of exports and reducing the costs of imports or developing clusters of economic activity along the corridor supported by efficient logistics;
- A corridor that links a landlocked country to a port has a far more complex function than one that links the inland area of a coastal country to a port in the same country;
- A corridor has three main categories of intertwined dimensions, namely infrastructure, services, and institutions for coordinating corridor activities (Kunaka, 2014);
- Carrying out a detailed diagnostic of a corridor is an important first step in determining its operational performance, identifying bottlenecks to the flow of traffic, and recommending potential improvement measures;
- Corridor performance assessment should cover the quality and performance of corridor infrastructure, logistics services and institutions;
- Corridor performance assessment should include all agencies and parties that provide infrastructure and services in the corridor, as well as agencies that formulate and implement policies and regulations that affect corridor operations;
- Executing corridor performance assessment should identify the critical data that should be collected during assessment, including key performance indicators. The collection of primary data is often required, as data on corridors are generally not readily available; and
- The output of a diagnostic should be a detailed report describing the corridor and its component parts, the services it offers, the parties and agencies involved, and the level of performance and prioritizing interventions to improve corridor performance.

The following CPIs were identified:

- a) **Prices and Cost:** The prices for trader and the cost factors for logistics service providers and control agencies entering the composition of that price, across the main corridor components;
- b) **Time and Delays:** This parameter entails a combination of individual processing times and the idle time between successive processes. The variation of times resulting in the uncertainties of delays, for port dwell time, transport time, and final clearance;

- c) **Volumes Passing through the Corridor:** This includes the volumes and nature of goods moved on the corridor and on the various routes by mode;
- d) **Efficiency:** Looking at the efficiency element of transport infrastructure and services in terms of design capacity and efficiency for the main corridor modes and nodes. The nodes include dry ports, traffic control points (including weigh bridges), truck stops and border posts.

Each of the above parameters has several indicators. Essentially an indicator is a summary of several observations. Table 1 below outlines corridor indicators associated with each category.

Table 1 Corridor Indicators

Category	Indicators
Prices & Cost	<ul style="list-style-type: none"> • Port charges; • Charges by customs and transit agencies; • Cost of road transport; • Road maintenance cost.
Time & Delays	<ul style="list-style-type: none"> • Stoppage time at weighbridges, police checkpoint and border posts; • Transit time to destination; • Average number of stops per truck per country.
Volumes	<ul style="list-style-type: none"> • Overall cargo traffic at seaport; • Volume of imports and exports by country; • Ratio of trucks per country.
Efficiency	<ul style="list-style-type: none"> • Dwell time; • Customs release time; • Ship & truck turnaround time.

2.2. Research process

The process adopted in the development of the baseline report is depicted in Figure 1 below.

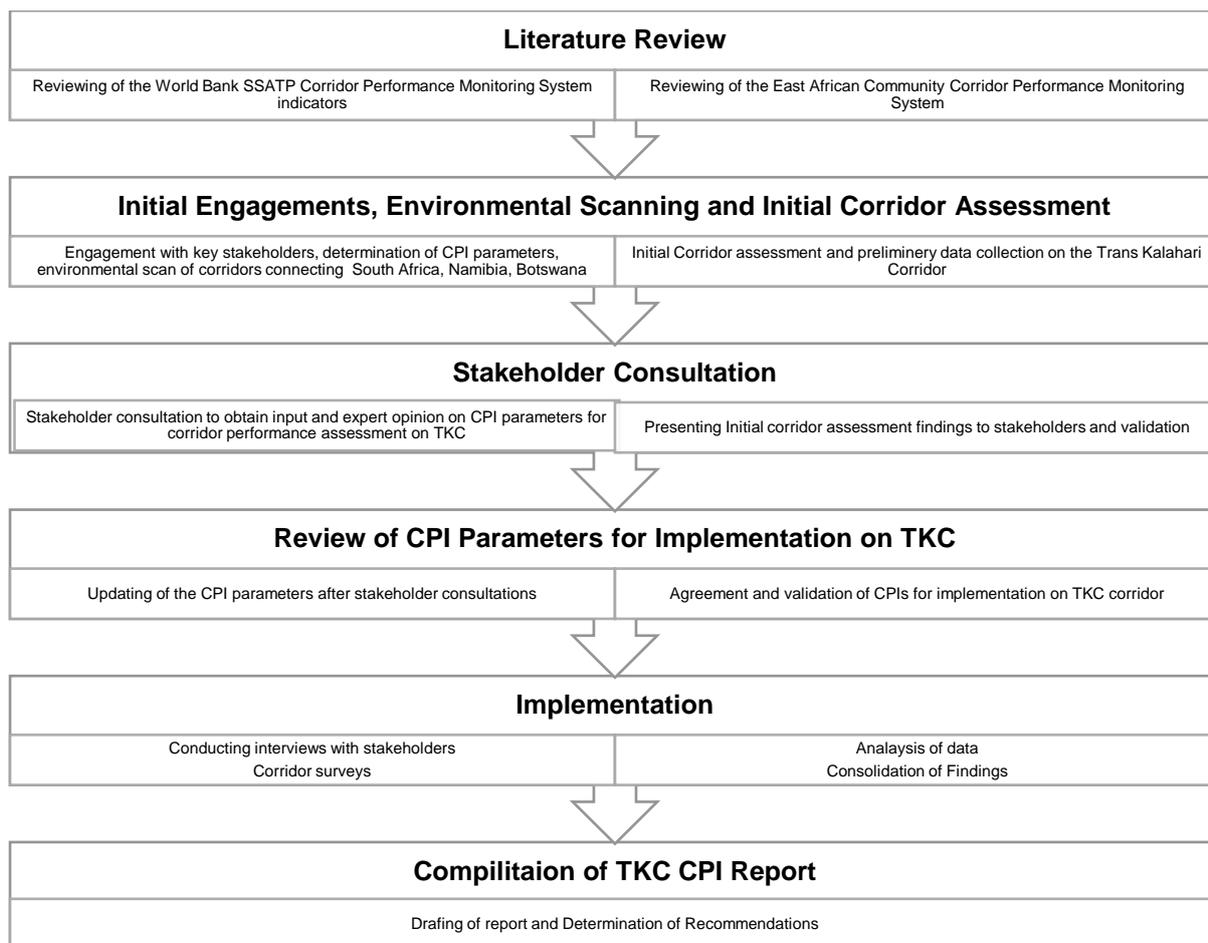


Figure 1 CPIs Methodology Flow Diagram

2.3. Initial Engagements, Environmental Scanning, and Initial Corridor Assessment

This step involved:

- initial engagements with corridor stakeholders in Botswana, Namibia, and South Africa;
- Determination and validation of CPI parameters for TKC;
- Environmental scanning and initial corridor data collection and corridor assessment;
- Acquisition and use of information about the TKC; and
- Investigating corridor trends and relationships in the corridor's external environment.

The data and information obtained was used for detailed planning for implementation of the project and measurement of CPIs to determine corridor performance.

2.4. Stakeholder Consultation

This step involved:

- Presentation of preliminary findings from initial corridor assessment conducted on the TKC for validation; and
- Stakeholder consultation to obtain input and expert opinion on CPI parameters for detailed corridor performance assessment on TKC.

2.5. Review of CPI Parameters for Implementation on TKC

This step involved:

- Updating of the CPI parameters after stakeholder consultations; and
- Agreement and validation of CPIs for implementation on TKC corridor.

2.6. CPI Implementation

This step involved:

- Extensive consultations with cross-border road transport regulators, ministries, and departments responsible for transport, law enforcement, road construction, corridor safety, customs and immigration in Botswana, Namibia, and South Africa;
- Consultations with industry associations, clearing agencies and cross-border road transport drivers;
- Consultations with TKC Secretariat, Walvis Bay Corridor Management Group and Trans-Namib Railway and many other stakeholders in the corridor.
- Conducting corridor surveys in the three countries;
- Data analysis and consolidation of findings.

This step was aimed at obtaining relevant data pertaining to CPI parameters for corridor performance assessment on TKC, and validation of findings from corridor assessment.

3. STAKEHOLDER PARTICIPATION

The roles of some of the stakeholders that participated in the project are summarised in Table 2 below.

Table 2 Key Stakeholders for the implementation of CPIs and their roles

STAKEHOLDER	ROLE
TKC Secretariat	Leading coordination of the implementation of the project
C-BRTA	Technical leadership and support the TKCS in mobilisation of stakeholders
WBCG	Provision of relevant data. They are the Custodian of coordinating various parties (users and port operator)
Customs (Namibia, Botswana, South Africa)	Provision of relevant data. They are responsible for facilitating access to border posts and points of cargo clearing
Clearing Agents	Provision of relevant data. They are agents for cargo owners that process cargo documentation
Immigration (Namibia, Botswana, South Africa)	Provision of relevant data. They allow access to border facilities and controlling movement of persons
Security agents (Namibia, Botswana, South Africa)	Provision of relevant data Provide law enforcement
Operators	Provision of relevant data.

		Provide vehicle equipment and partners
Regulatory (Transport)	authorities	Provision of relevant data. Provide information and support

4. STAKEHOLDER CONSULTATIONS AND INTERVIEWS

4.1. Windhoek consultative meeting

The Windhoek session was attended by Road Transport Regulation, Road Fund, Trans-Namib Railways, Customs, Walvis Bay Corridor Group and Police. The stakeholders were consulted as part of the CPI parameters improvement and validation insofar as these applied to the Trans Kalahari Corridor. The Windhoek consultation session was conducted on the 11 October 2019 at the Ministry of Transport offices and was coordinated by the TKC Secretariat.

The purpose of the session was to share with the stakeholders the identified parameters and to obtain input from participants to improve on the variables and or parameters to be included in the CPI before the pilot could be conducted.

While the stakeholders agreed with the parameters proposed, they made other proposals that needed to be included in line with their experience with the corridor. For instance, there was a proposal that safety is a critical parameter that has a bearing on the performance of the corridor. The safety parameter was said to have financial implications as well in terms of cost of accidents which entail loss of lives and capital equipment replacement as well as insurance costs. The stakeholders noted the relationship between the delay parameter and the safety parameter, whereby drivers endure long driving hours to compensate for lost time which may lead to accidents due to fatigue.

The stakeholders suggested the inclusion of truck stops or resting facilities as a parameter that needed to be included as it had a bearing on the endurance by drivers for long driving hours as they look for a safe place to park. The argument is that the more resting places there are along the corridor the better as drivers would not risk to driver for long hours. The truck stops would also improve on the safety parameter in terms of goods, equipment, and the driver. This parameter was identified as critical on the TKC currently as there were said to be not enough resting places and that they were farther apart. Table 3 below summarises the parameters.

Table 1 Indicators and parameters proposed by stakeholders

PROPOSED PARAMETER	INDICATOR
Safety	Accidents, theft, and loss of goods; torching of vehicles, driver safety
Truck stops	Number of resting places, fuel stations, risk analysis by operators
Labour relations	Overtime (night outs) traveling spending more time on the road; VOC go up
Security	Theft and loss of goods, Hijacking incidents etc. vandalising of equipment
Insurance	High premiums increasing cost of doing business
Trade facilitation policies at border post policy harmonisation	Initiatives to facilitate trade on TKC
Capacity at border posts	Adequacy of manpower on both sides
Border posts performance by country	Comparative assessment (one side against the other and between border posts)
Infrastructure development	(OSBP) improve transit times; inadequate capacity (TKC and Mamuno not able to accommodate abnormal loads) ICT application
Soft issues	coordination among agencies to facilitate trade
Rail transport	Reduced cost, less trucks on the road, improve safety
National single window platform	Reduced processing time at border post

4.2. Walvis Bay consultative meeting

The meeting was well attended attracting the shipping lines representatives and Freight Forwarding Association, Namport, Traffic law enforcement. The inputs received from the meeting echoed the same inputs raised in Windhoek and a few additional ones such as the enhancement of corridor performance through the promotion of rail transport to take away some of the trucks from the road thereby improving safety.

The law enforcement emphasised the safety concerns and emphasised the need for improved safety given the continued increase in port capacity. The other concern was lack of harmonisation of traffic laws including vehicle dimensions in terms of standards to facilitate unimpeded flow of vehicles across the corridor. The provision from legislation that drivers should drive for not more than eight hours per day is not being enforced properly due to lack of requisite means. Traffic law enforcement was cited as one area that needs attention

including driver training to be conversant with legislation across the entire corridor, in line with the local laws, although the ultimate is harmonisation of laws and standards.

4.3. Botswana consultative meeting

The consultative meeting in Botswana was following the consultations that had been conducted in Namibia for purposes of incorporating inputs on the corridor performance indicator parameters. The Botswana TKC stakeholders consultative meeting was convened on the 17th of February 2020, at the Department of Road Transport and Safety (DRTS), Broadhurst offices in Gaborone.

The proceedings of the discussions were chaired by DRTS and attended by the following stakeholders:

- DRTS
- Motor Vehicle Accident Fund (MVA)
- Botswana Unified Revenue Service (BURS)
- Botswana Railways
- Botswana Police/Traffic

Of the invited stakeholders, two could not attend the meeting of the 17th of February due to commitments. These were Gaborone Container Terminal (GABCON) and Botswana Freight Forwarders, but they both participated in the one-on-one interviews. The only stakeholder who could not participate in the one-on-one interviews was Botswana Police due to the absence of the responsible official who was away on official business out of the country. However, they were represented at the consultative meeting of the 17th of February and participated in the discussions. The attendance registers for all the meetings held in Botswana are attached in the appendices.

The purpose of the consultative meeting was to present the CPI parameters as contained in the working CPI document which incorporated inputs from the Namibia stakeholders' consultative meetings of Windhoek and Walvis Bay. The C-BRTA, on behalf of the Trans Kalahari Corridor Secretariat (TKCS) presented the CPI project and the outcomes from Namibia to the stakeholders. After the project had been explained, the stakeholders were requested to provide input and comments to be incorporated in the draft report of the CPI.

4.4. Surveys and interviews

The consultations with stakeholders in Namibia and Botswana were followed by a series of one-on-one interviews with stakeholders after the parameters had been updated. The purpose of interviews was to obtain the views of each stakeholder in terms issues that were impacting on the performance of the corridor with respect of their area of focus. Each stakeholder was asked to provide their input in terms of possible solutions for resolving the identified issues. The reporting of these response in this report will not be according to the stakeholder, but rather according to the relevant parameter affecting the performance of the TKC. These parameters are discussed in the following sections.

4.5. Safety

In all engagements with stakeholders, the safety parameter was raised as one of the critical determinants of corridor performance. The stakeholders observed that the carnage on the road sections along the corridor needed to be considered as they had a significant financial

and economic impact to the region. The indicator for the safety parameter was the number of accidents recorded along the corridor which cost the countries involved in terms loss of lives and damage to equipment and property.

The road accident funds for the three countries, Botswana Namibia and South Africa cater for the costs of these accidents. With the increase in accidents, more and more funds must be made available to compensate the victims of the road carnage which is cost that have to be catered for by these countries. The more accidents occur on the TKC the more the cost of compensation. Therefore, to address this issue, measures to reduce accidents would need to be put in place to reduce accidents with the result of reduced costs in terms of accident insurance and or compensation.

Among the solutions proposed by the stakeholders were, improvement on the road infrastructure especially sections that were bad along the corridor. Sections with narrow shoulders need to be widened to allow vehicles to pass. There are also sections where there are potholes which contribute to accidents. Fixing of these sections and resurfacing would go a long way in reducing incidents on the TKC.

Linked to the safety parameter was drivers' lack of resting along the corridor, leading to fatigue. The lack of rest according to the stakeholders was a result of lack of resting facilities on the TKC. This leads to drivers driving for very long distance, up to 500km or more in search of a safe place to park. The TKC does not have enough places for trucks to park over night for drivers to rest, an issue that was echoed by stakeholders from the interviews in both Botswana and Namibia.

4.6. Truck stops

The establishment of truck stops along the corridor is seen by stakeholders as one of the parameters that required incorporation. Currently there are very few truck-stops on the corridor, hence the lack of rest by drivers. This parameter is linked to the safety parameter. Truck-stops provide secure and safe places for drivers to park and rest as well as refreshing. At truck-stops the security of the goods and trucks is guaranteed as there will be no exposure to robbery and theft. In 2013 The TKCs conducted a study on the feasibility of establishing Truck Stops along the TKC and produced a report on the possible locations of these stops. However, very little progress has been achieved in terms of having these facilities constructed and or established. The only one that is functional is the one in Gobabis, although it is not fully completed in line with the capacity indicated in the 2013 report. The layout of the Gobabis Truck Stop as per the TKCs 2013 report is illustrated in Figure 2 below.

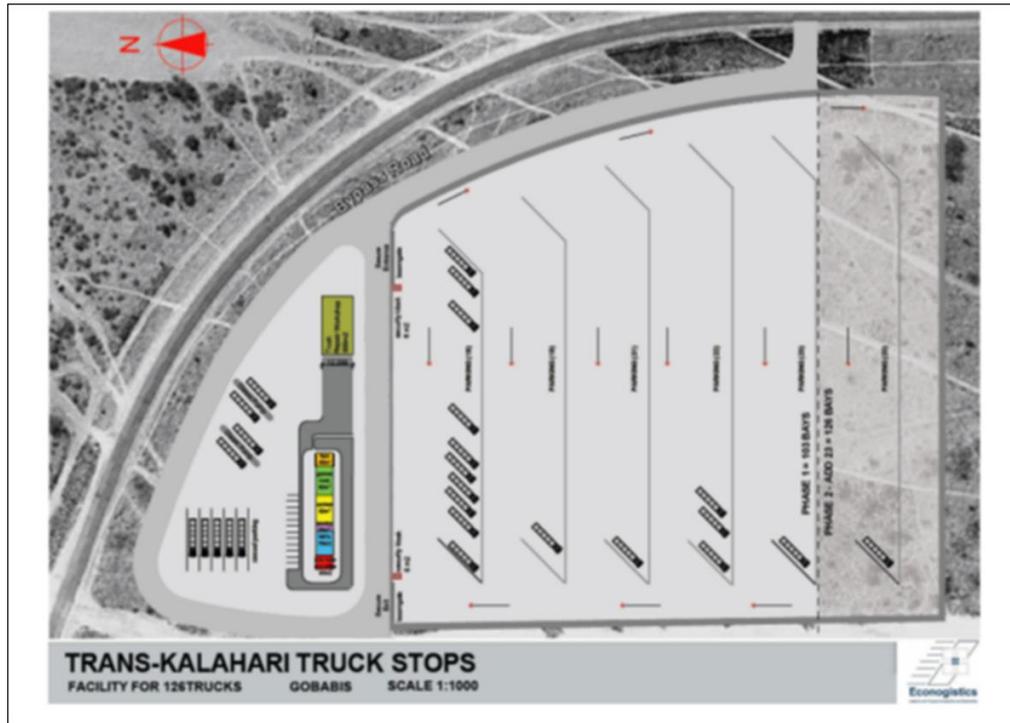


Figure 2 Gobabis Truck Stop

Source: Trans Kalahari Secretariat (2013)

The issue of resting facilities needs also to be looked at with respect to trucks awaiting collection of cargo from the port. The current facility is not only inadequate, but of substandard and of limited capacity. The staging area used by trucks waiting to collect cargo or to deliver cargo is a narrow-fenced strip accommodating two parallel lines along which trucks queue. This facility can accommodate at most fifty trucks if not less than that. There is only one toilet and shower to cater for all the drivers. The facility is a hazard as drivers cook in this fenced enclosure posing a danger should a fire start. The facility which is located next to a railway line is illustrated below.



Figure 3 Namport staging area (truck stop) near the port

From the interviews conducted with the drivers parked at the facility revealed that trucks can stay at the facility for more than weeks and sometimes up to a month. With the continued increase in traffic at the port, there is need to address the parking facility matter. Sanitation would need to be improved as the current situation is a threat to health and the environment. The facility gets congested leading to trucks parking along the adjacent street posing a traffic hazard.

The issue of the upgrade of the staging area and or truck stop near the port is a matter that could be addressed by the port authority together with the municipality of Walvis Bay. The discussions held with the stakeholders emphasised the need for the development of truck stops, but not specific to the facility near the port. It is unfortunate that the survey team only visited the facility after the interviews had been completed. Nevertheless, it is important that the TKCs task team considers engagement with the relevant authorities to ensure that an appropriate facility be developed to serve the port.

Thus, CPI initiative seeks to embrace the various initiatives underway and those planned for purposes of ensuring that an appropriate performance system is developed for the TKC. The quarterly pilots that will be conducted once the corridor performance system is in place will seek to track the progress on the implementation of the various projects. Furthermore, it will assess the impact of the initiatives on the corridor performance so that recommendation can be made for further initiatives to enhance the performance of the TKC. The aim is to ensure that the TKC becomes a corridor of choice with the least logistics costs and one of the most efficient corridors in the region. While there are several initiatives being implemented to enhance corridor performance, stakeholders believe there is still a lot of issues that still need to be attended to if the corridor performance is to be improved. They implored that the TKCs to work with the three countries in ensuring that projects meant to address the various issues are implemented and that the right policies are put in place.

4.7. Infrastructure development and maintenance

The development of infrastructure along the corridor is a good measure for performance of a corridor as it affects capacity and even turnaround times of equipment. There have been

several improvements in infrastructure along the TKC, with major one being the completion and commissioning of the new Walvis Bay Container Terminal in 2019 (see Figure 3 below).



Figure 4 The new Walvis Bay container terminal (February 2020)

There is also the construction of the bypass road which will prevent heavy trucks from passing through the town of Swakopmund where the issue of congestion was a concern from the local community particularly from port bound heavy trucks. Figure 5 below shows a section of the bypass road that connects through the road from the Walvis Bay International airport. Trucks using this road do not pass through Swakopmund, thereby reducing the congestion that occurred before the construction of the bypass. The road is in very good condition as most of the sections had just been completed, with some parts still under construction, especially the sections closer to the Swakopmund junction on the road to Windhoek. Running parallel to the bypass road is a railway line, which also links the port with the hinterland.



Figure 5 Swakopmund bypass road to from Walvis Bay port

The existence of a railway line present an opportunity for traffic to and from the port to be shared between road and rail, thereby helping preserving the road infrastructure.

Along the highway linking the port of Walvis bay and Windhoek, several road works were observed especially the section near Windhoek. At the time of the route assessment conducted by the observing team in October 2019, there were road construction works that were underway where the road section was being widened and bridges being constructed (see Figure 6 below). These works will improve the condition of the road and improve the capacity of the link and will contribute to improved performance of the corridor.



Figure 6 Road widening just outside Windhoek towards Walvis bay (2019 October)

Equally, the section of the corridor on the Botswana side has several sections of the highway that have been improved, especially the section between Kanye and Jwaneng. There are also road works between Gaborone and Lobatse where the highway is going significant improvements and dualisation of the road up to Ramotswa. The continued upgrades on the TKC road infrastructure will have a positive impact on the logistics costs especially through reduced vehicle operating costs (VOC) and improved journey times, making the corridor efficient.

The section that was still under construction is the one near Kang where the road was being widened to increase capacity on the section. Figure 7 below shows the road works on the section near Kang where roadworks was underway during the October route assessment exercise conducted on the TKC.



Figure 7 Road rehabilitation near Kang, Botswana (October 2019)

Close to this section of the corridor there are two service stations one operated by Puma and the other by Engen. There is also space for trucks to park and for drivers to rest although there is not fenced facility to constitute a truck stop. The assessment team noted that the service was not adequate between Lobatse and Mamuno border post. For instance, after Lobatse the next facilities are in Jwaneng and then Kang. After Kang the next service station is 384km away, at Charles Hill and was under rehabilitation at the time of the assessment exercise.

The sparse distribution of these facilities has a negative impact on the performance of the corridor and would need to be taken into consideration in the planning of truck stops development. The other observation made by the team was the absence of weighbridges along the way, except at border posts, Pioneer Gate and Mamuno. The impact of this is that road damage can go undetected thereby reducing the economic life of the road due to lack of monitoring of heavy vehicles weights. In the next section the issue of weighbridges is discussed.

4.8. Weighbridges

The existence of weighbridges on the corridor is very important as these help with protecting the road infrastructure from damage through overloading of vehicles. As indicated earlier, the distribution of the weighbridges is not adequate, which could be the reason for the excessive damage on the road on certain sections. Generally, the loads carried by trucks tend to shift with time over certain distances which contribute to road infrastructure damage. The location of weighbridges at strategic points on the corridor can help with the control of weights thereby protecting the road infrastructure.

The fixed weighbridges are at Mamuno border post, Pioneer Gate and Tlokweng on the Botswana section of the TKC. However, during the interviews with traffic officials in Gaborone, the survey team learnt that there are mobile weighbridges operated along the corridor, although no specific pints were determined. During the route assessment exercise conducted in October 2019 these were not seen in operation. The advantage of fixed weighbridges is that they can be located at strategic locations in line with cargo origins and distance travelled to warrant reweighing.

On the Namibian side the weighbridge is located near the Dunes Mall on the road to the airport which also leads to the new bypass road now being used by most freight trucks. The outcome

of the interview with the weighbridge in Walvis bay revealed some concerns that the authorities have. They feel that the weighbridge location is not strategic based on their experience. They feel that it should be located along the main highway to ensure that no additional cargo is collected after weighing.

According to the officials, trucks come to the weighbridge and obtain a certificate showing compliance and then go back and load more cargo before departing. While on the weigh they just produce the certificate confirming that the vehicle has been weighed and is compliant, yet there might extra load collected after weighing. Figure 8 bellow shows a picture of the weighbridge located near the Dunes Mall in Walvis Bay. The weighbridge is sad to be understaffed although it operates 24/7. Another shortcoming raised by the officials was the lack of coordination between the weighbridge authorities and the national police. They feel that more can be achieved if the two authorities could work together and coordinate their efforts.



Figure 8 Weighbridge in Walvis Bay opposite Dunes Mall (2010 February)

It is also an issue of concern that the weighbridge inland at Katimamulilo for vehicles going through Rundu have different operating hours giving room for trucks to leave without being checked. The weighbridge at Katimamulilo does not operate during public holidays and closes earlier than the Walvis Bay one. Thus, it is believed that drivers know this and always work around these deficiencies and put more cargo and cross when the weighbridge is closed. They feel that this problem can be resolved by synchronising operating hours and by locating weighbridges at strategic locations.

Finally, on the South African section of the TKC, there are two weighbridges, at Bapong (see Figure 9 below) and the Zeerust weighbridge on the R49 serving traffic using Skilpadhek/Pioneer Gate and Kopfontein/Tlokweg border posts on the TKC.



Figure 9 Bapong weighbridge on the South African section of the TKC)

The distribution of weighbridges on the section between Bapong and the two border posts, Skilpadhek and Kopfontein is adequate as the intervals are less than 300km. For instance, after Bapong, there is the Zeerust weighbridge after which there are the Pioneer Gate and Tlokweng border posts ones respectively depending on which route the truck chooses to enter or exit Botswana.

4.9. Border post capacity

The TKC is not spared from the challenges of border post capacity and operational constraints. The corridor is served by several border posts, including the Trans Kalahari/Mamuno border post (between Namibia and Botswana), Skilpadhek/Pioneer Gate (between Botswana and South Africa) and Kopfotein/Tlokweng (between Botswana and South Africa). Each of these border post contributes to the overall performance of the corridor in terms of the time taken to process trucks.

This observation has been confirmed by another study conducted on transit times, where sometimes trucks spend up to a week or more to cross one border post. There are several reasons that normally cause such delays some of which might include permit requirements or other document related issues. There are times also when systems are down leading to very long queues, lasting for days. The other reasons cited by stakeholders during the one-on-one interviews with stakeholders is the issue of insufficient capacity to deal with large volumes of traffic. The picture in Figure 10 below shows a long of queue of trucks waiting to be processed on the South African side of the border post. These queues sometimes stretch for more than 5 kilometres.



Figure 10 Long queue of trucks awaiting processing at Skilpadhek border post (November 2019)

The stakeholders interviewed during the surveys confirmed that there several challenges that are currently affecting the border posts on the TKC. They cited issues of coordination between the two countries sharing a border to facilitate trade. There are legislative issues that sometimes lead to delays in the processing of commercial vehicles across the borders.

The fact that most decisions on cross-border trade are made and ratified at head offices in the big cities leading to delays at border posts. This also includes the issuing of certain permits required for the conveyance of goods and passengers at border posts. The other issue raised by stakeholders, was the lack of coordination among the various public agencies operating at the border posts which again lead to delays adding to the cost of doing business along the corridor. The issue of coordination is not limited to the country level but also between the two countries whereby each country does its own thing without consulting with the counterpart, leading to complications that hinder trade and transport movement.

The other challenge relating to border posts is the issue of capacity. For instance, the Trans Kalahari border post is said to have a challenge when it comes to handling abnormal cargo vehicles according to the interviews held by some stakeholders. This issue is common to the traditional border posts on the corridor that were designed many years ago when trade volumes were very little and in some cases no trade at all. It is for this reason that some border posts have a physical capacity constraint.

Apart from the physical capacity constraint, stakeholders also cited manpower capacity issues as another impediment, especially with the lack of coordination between countries sharing a border post. The gains on one side of the border are not complemented if the capacity on the other side is deficient. It was recommended that the exercise on performance measurement considers a comparative analysis with a view to bring alignment and coordination for efficiency purposes.

4.10. The role of Rail

Rail transport is known for carrying more volumes than trucks over long distances and tends to offer more competitive tariffs and or rates compare to road transport due to the inherent

economies of scale associated with its capacity. While this is so, currently the market share of rail is significantly low compared to road to the extent of ratios of 90:10 in favour of road. There are commodities being transported by rail to and from the port of Walvis by Trans Namib Railways. These commodities range from grain fertiliser, salt, cement, coal, and petroleum products. However, containerised cargo is not featuring much on the commodities being transported by rail on the TKC. The Trans Namib Railway has recently signed a memorandum of understanding with shipping lines which will see more participation by rail on the transportation of cargo to and from the port.



Figure 11 Rail wagons being loaded at the port of Walvis Bay general cargo section (October 2019)

One of the challenges facing rail transport on the TKC is the issue of missing links on certain key sections of the TKC, especially the link between Namibia and Botswana. The line along this part of the corridor only runs as far as Gobabis 907km from Ramatlabama where Botswana Rail links with South Africa's Transnet Rail system. According to the discussions held during interviews with Trans Namib, there are plans underway to construct a logistics hub, jointly with Botswana Railways order to cater for port bound traffic from and to Botswana.

The current scenario is not sustainable given the continued rise in fuel prices which impact heavily on trading costs among the regional countries using the port of Walvis Bay and the TKC. The shipping lines are showing keenness to engage rail as they realise the benefit of including rail in the logistics chain especially given the continued rise in cargo volumes being handled at the port of Walvis Bay. According to the shipping lines association, there are more vessels calling at the port of Walvis Bay which has given rise to the demand for transport.

4.11. Walvis Bay Port capacity and performance

The port of Walvis Bay has witnessed many improvement projects ranging from deepening of berths and the expansion of capacity by the building of a new container terminal. The general cargo berths capacity has been enhanced by the commissioning of the container terminal which boasts of massive coverage area of 40 hectares. The completion of this project saw the rise of handling capacity from 350 000 twenty-foot equivalent units (TEU) to &50 000 TEU per year, more than double the original capacity.



Figure 12 General cargo berths at Walvis Bay Port

The expansion project included the construction of an additional new 600m quay wall to the original 1 800m to minimise disruptions during operations. The new container terminal has three new berths, designated 9, 10 and 11. The two 600m-long berths can accommodate liner vessels of 8 000 TEU. Thus, port now has 11 berths giving it the ability to handle more cargo than it could handle before.



Figure 13 The four high-capacity ship-to-shore cranes installed at the new Walvis Bay container terminal

To improve productivity capacity four new ship-to-shore cranes were installed at the terminal to load and offload containers from vessels. These cranes shown in Figure 13 offer higher lifting capacity than the existing ship-to-shore (STS) cranes at the port.

4.12. Development and implementation of the system

The implementation of the corridor performance measuring system will provide invaluable intelligence vis a vis the chokepoints on the corridor, which drive transport and logistics costs.

This will enable the authorities to address the bottlenecks and reduce the costs that currently reduce the efficiency of the corridor. The information will help identify sections of the corridor where investment should be directed for improving the performance of the transport system, thereby promoting trade and economic development for the benefit not only for the three countries, but for the SADC region and the Tripartite Alliance.

5. FINDINGS

Sections below provides the overall findings from the study paying special attention to bottlenecks that were identified, major constraints and corridor performance outcomes.

5.1. Corridor Performance

- The overall capacity of the corridor has continued to improve, especially at the port with now 11 berths operational;
- The additional three berths at the new container terminal doubled the container handling capacity of the Walvis Bay Port together with the high-performance ship to shore gantry cranes installed;
- The hinterland connectivity remains a challenge in terms of the road condition and the distribution of weighbridges;
- The accidents reported are still high and would need to be reduced to improve the performance of the corridor;
- The lack of adequate resting places along the corridor reduces the performance of the corridor due to the costs associated with accidents due to drive fatigue
- Safety levels are still low due to long distance driving without resting;
- The continued increase in trucks on the road is a safety concern as rail is not operating at its optimum capacity;
- There is need for improved coordination among stakeholders which currently is poor and affecting the performance of the corridor;
- Delays at border posts currently reduces the transit and turnaround times, affecting the performance of the corridor;
- The lack of rail connectivity on certain sections of the corridor has contributed to the low performance levels due to the heavy reliance on road by the corridor; and
- The lack of coordination between operators and clearing agents make trucks wait for days and sometimes weeks adding to the cost of doing business on the corridor.

5.2. Major Bottlenecks and Constraints

- Border posts along the corridor do not operate 24 hours which limits the performance of the corridor;
- The reduced period for registering vessels to 72 hours is cited as a bottleneck at the port-by-port users and clearing agents;
- The time allocated to foreign drivers of five days is seen as a bottleneck which needs to be reviewed as drivers need to pay to extend the time;
- The bad condition of the road at some sections of the corridor is a bottleneck that also contributes to accidents;
- The missing link between Gobabis and the Botswana rail system at Ramatlabama and or Lobatse is a bottleneck as there is no rail service linking the port with Botswana on the TKC;

- Lack of coordination among public entities between countries and within the same country creates bottlenecks that affect the performance of the corridor;
- Lack of coordination in terms of implementation of initiatives makes it difficult to improve the performance of the corridor;
- The existence of traditional border posts models with no OSBP on the corridor remains a bottleneck as well;
- The absence of single window platforms at the border posts on the corridor is another bottleneck as various process are not synchronised;
- The failures of systems contribute to delays at border posts; and
- The variations in the application of law-by-law enforcement agents across the corridor is another bottleneck that is cited.

PART II: STATUS UPDATE: 2021

6. INTRODUCTION

The baseline report of 2020 identified several issues that were affecting the performance of the TKC based on parameters identified as key indicators. In this Part II of the report, these findings are updated following engagements with stakeholders. The update report tracks the parameters in terms of improvements recorded since the baseline report. Each parameter is assessed to establish the extent to which each parameter had moved and to note any new initiatives, either under consideration or already being implemented, in respect of the parameters.

The parameters tracked in this report are listed below:

- Safety
- Truck stops
- Labour relations
- Security
- Insurance
- Trade facilitation policies
- Capacity at border post
- Border post performance
- Infrastructure development
- Soft issues
- Rail transport

6.1. Methodology and Approach

To update of the baseline report, a series of consultative meetings with stakeholders from Namibia and Botswana were conducted. The qualitative data was obtained in the form of responses to questions asked in accordance with the status of the relevant parameter. A matrix, listing the parameters as contained in the baseline report was developed for purposes of tracking movements on each parameter. The matrix was then used to guide the interviews

with responsiveness. The responses were analysed and grouped accordingly to update the baseline report.

The CPI data update matrix shown in Table 2 below, is the instrument that was used in the collection of qualitative data from stakeholders in the virtual interviews conducted. The identified parameters were used to track progress from the baseline results. The instrument is illustrated below:

Table 2 CPI data update matrix

PARAMETER MEASURED	2019 - STATUS REPORTED	2021 - STATUS UPDATE
SAFETY	LOW	Improved
TRUCK STOPS	VERY FEW	Plans underway for several truck stops
INFRASTRUCTURE MAINTENANCE	ROAD WORKS UNDERWAY	Dunes bypass completed and several other sections under rehabilitation
WEIGHBRIDGES	INADEQUATE	Under consideration
BORDER POST CAPACITY	LOW	Initiatives under way at Mamuno/TK Border post
BORDER POST PERFORMANCE BY COUNTRY	LOW	Initiatives underway
THE ROLE OF RAIL TRANSPORT	LIMITED	Constrained with derailments and resource constraints
PORT CAPACITY AND PERFORMANCE	NEW CONTAINER TERMINAL	Challenges of empty containers and Dr ports operating hours restriction

SYSTEM DEVELOPMENT & IMPLEMENTATION	NON	Corridor Trip Monitoring System (CTMS) and BURS initiative
LABOUR RELATIONS	LONG DRIVING HOURS	Under consideration
INSURANCE	HIGH PREMIUMS	Improvement recorded
TRADE FACILITATION	UNDERWAY	Underway with new initiatives
SECURITY	LOW	Under consideration
SOFT ISSUES/COORDINATION AMONG AGENCIES	POOR	Under consideration
SINGLE WINDOW PLATFORMS	NONE	Under consideration
TRANSIT TIME	LONG	Under consideration
COST	RELATIVELY HIGH	Likely to improve with initiatives being implemented

6.2. Interviews with stakeholders

The interview meetings were arranged through the Trans Kalahari Corridor Secretariat (TKCS) in both Namibia and Botswana. The interviews were conducted virtually from the 28th of July to the 18th of August. Each interview lasted for 1 hour, except for the interview with NamPort, which lasted for 2 hours because there were more issues to be discussed with NamPort than with any other stakeholder.

The interview data collection process involved the following:

- Outlining the status quo and findings of the baseline report to the stakeholders;

- Consulting stakeholders on the status of parameters since the last engagement and to establish any new initiatives underway to address challenges identified in respect of the parameters.

The list of concluded interviews is illustrated in Tables 3 and 4 below.

Table 3 shows the organisations interviewed in Namibia and the dates when the interviews were conducted. These were conducted between the 28th of July through to the 18th of August as shown in the Table.

Table 3 Schedule of Interview Meetings conducted with stakeholders from Namibia

LOCATION	ORGANISATION	DATE
Interviews with: Stakeholders in Windhoek	MVA Fund	10 August 2021
	Ministry of Works and Transport	11 August 2021
	TK Rail	09 August 2021
	NamRa	06 August 2021
	Roads Authority	18 August 2021
	Ministry of Home Affairs & Immigration, Safety & Security	17 August 2021
	National Road Safety Council (NRSC)	18 August 2021
	TransNamib	28 July 2021
	Traffic (NamPol)	29 July 2021
Walvis Bay Corridor Group	28 July 2021	
Interviews with: Stakeholders at the coast	Walvis Bay Port Users Association	04 August 2021
	SeaRail	05 August 2021
	NamPort	11 August 2021
	Walvis Bay Port Users Association (WBPUA)	04 August 2021
	Swakopmund Municipality	30 July 2021

Table 4 however, shows the Botswana stakeholders with whom interviews were conducted, from the 12th of August up to the 18th of August 2021. Interviews with the Botswana Traffic Police, Botswana Immigration and the Ministry of Investment Trade and Industry, could not take place as these were not available on the dates that had been confirmed with the TKCS.

Table 4 Schedule of Data Collection Meetings Conducted with Stakeholders from Botswana

LOCATION	ORGANISATION	DATE
Interviews with Botswana Stakeholders:	Botswana Freight Forwarders Association	12 August 2021
	Botswana Police/Traffic*	12 August 2021
	Botswana Railways	13 August 2021
	Ministry of Transport and Communication	17 August 2021
	Botswana Unified Revenue Service (BURS)	17 August 2021
	Freight & Customs Clearing Association of Botswana (FCCAB)	18 August 2021
	GABCON	18 August 2021
	Botswana Immigration*	19 August 2021
	Ministry of Investment, Trade, and Industry (MITI)*	19 August 2021
	Department of Road Transport and Safety (DRTS)	20 August 2021
	MVA Fund	20 August 2021

*Stakeholder not available for interview

6.3. Interviews with Stakeholders from Namibia

As indicated above, a total of 15 (fifteen) stakeholders were interviewed in Namibia to obtain data on the various CPI parameters as contained in the baseline report. The stakeholders were consulted as part of the CPI parameters tracking against the baseline report status. The interviews were conducted virtually because physical meetings were not possible due to the Covid-19 restrictions. Each stakeholder was engaged in line with parameters that fell under their mandate. The following entities were interviewed:

- The Walvis Bay Corridor Group
- Namibia Port Authority
- Trans Namib Railways
- Walvis Bay Ports Users Association
- SeaRail (a subsidiary of Botswana Rail at the port of Walvis Bay)
- Namibian Revenue Authority
- Ministry of Transport
- Namibia Traffic Police
- Roads Authority
- Motor Vehicle Accident Fund
- Trans Kalahari Rail
- Roads Authority
- Ministry of Home Affairs & Immigration
- National Road Safety Council (NRSC)
- Swakopmund Municipality

6.4. Interviews with Stakeholders from Botswana

The stakeholders engaged were involved in the parameters consultations and in the baseline report. Again, as was the case with Namibian stakeholders, each stakeholder provided responses in respect of their mandate hence the need to engage each one of them separately to track movements on the parameters relevant to them. Interviews were conducted with stakeholders from the following organisations:

- Botswana Freight Forwarders Association
- Botswana Railways
- Ministry of Transport and Communication
- Botswana Unified Revenue Service (BURS)
- Freight & Customs Clearing Association of Botswana (FCCAB)
- GABCON
- Ministry of Investment, Trade, and Industry (MITI)*
- Department of Road Transport and Safety (DRTS)
- MVA Fund.

6.5. Focus of interviews

The interviews were aimed at obtaining information of the status of the various parameters to determine progress on the issues reported in the baseline report. Apart from tracking the status of parameters as reported in 2020, information was also collected in terms of news

developments to update the report in terms of the new developments. For instance, where new projects and or initiatives existed, these would be noted and classified according to the relevant parameter sought to be addressed. The responses were analysed to determine the likely impact on the respective parameters to allow for appropriate recommendations.

6.6. Data analysis

The respective responses collected using the matrix were grouped according to relevant parameters and sorted in accordance with the baseline report findings as indicated in Table 4 below. The respective movements were updated in line with the information obtained from the respondents. The new status is shown in the third column of the matrix, showing the 2021 status of the various parameters.

In instances where new initiatives were underway, these were also recorded to update the status of parameters to which the new initiatives apply. The details of findings on each parameter are discussed in section 8. To track the movement of the parameters status, the outcomes of the 2020 interviews were mirrored against the 2021 interviews outcomes as indicated in the Table 4 above. The findings of the interviews and outcomes are discussed in the next section, while the detailed comparison of the two periods, is discussed in section 8.

7. STAKEHOLDERS INTERVIEWS RESULTS DISCUSSION

7.1. Introduction

In this section, the results of the interviews conducted with all the stakeholders in respect of the parameters identified in the baseline report are discussed. The discussion focussed the status of each parameter in terms of whether there have been any improvements or not. Furthermore, in instances where new initiatives have been added to those contained in the baseline report, these are noted and captured in the update.

7.2. Safety

The number of incidents has been reported to have improved significantly during the period 2020-2021 according to stakeholders. The statistics from MVAF indicate a significant decline in the number of crushes and claims on the Trans Kalahari Corridor for the period. This is shown in Table 5 below. It is evident that for the 2020 period the figures are lowest compared to the other years, 2018 and 2019.

Table 5 Road crashes and claims report for the period 2018-2020

Table 1: Quick crash statistics facts (2018 – 2020)¹			
Crash Outcome	2018	2019	2020
Crashes	3,798	3,689	3,000
Fatalities	577	607	462
Injuries	6,145	6,156	4,956
Casualties	6,722	6,763	5,418
MVA Fund Claims	2,902	2,683	2,426
Reference Data			
Vehicle Population	393,062†	401,536†	403,955†
Namibia Population	2,413,643‡	2,458,936‡	2,504,498‡
Indicators			
Fatalities per 10,000 vehicles	14.7	15.1	11.4
Fatalities per 100,000 persons	23.9	24.7	18.4
Injuries per 10,000 vehicles	156.3	153.3	122.7
Injuries per 100,000 persons	254.6	250.4	197.9
Casualties per 10,000 vehicles	171.0	168.4	134.1
Casualties per 100,000 persons	278.5	275.0	216.3
Fatalities per crash	0.15	0.16	0.15
Injuries per crash	1.6	1.7	1.7
Casualties per crash	1.8	1.8	1.8
Crashes for 1 fatality	6.6	6.1	6.5

Source: Botswana MVA Road Crash & Claims Report 2020

There is a view by the stakeholders that the Covid-19 lockdowns could have contributed to the decline as volumes of traffic declined. Whatever the reason for the decline, it shows a significant improvement on the safety parameter for the TKC.

According to the report there was a reduction of 19% if compared with those recorded in the 2019 period as shown in Table 5 above. However, there has been a progressive improvement with years. For instance, the 2019 crashes show a 3% decline compared to 2018. The continued improvement in road infrastructure could be one of the many factors contributing to the improvement in safety on the TKC. This argument is supported by the trend analysis of the statistics which show an average annual decrease of 8% in road crashes from 2016 to 2020.

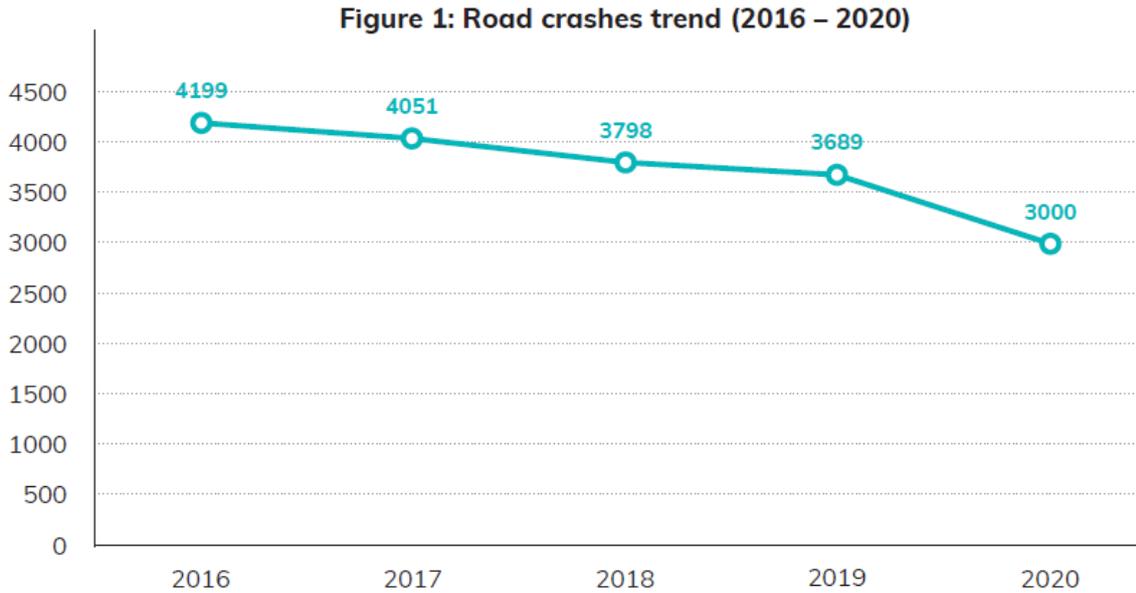


Figure 14 TKC road crashes trend for the period 2016 - 2020

7.3. Truck stops

The establishment of truck stops has gained momentum with several engagement underway to identify ideal locations and to obtain land for the projects. Both Namibia and Botswana are working on identifying suitable sites, with engagements with private sector going on to attract investors to set up truck stops. In Namibia land has been identified in Walvis Bay for the establishment of a truck stop where Namport will partner with private sector to develop the truck stop.

The issue of resting facilities needs also to be looked at with respect to trucks awaiting collection of cargo from the port. The current facility is not only inadequate, but of substandard and of limited capacity. The staging area used by trucks waiting to collect cargo or to deliver cargo is a narrow-fenced strip accommodating two parallel lines along which trucks queue. This facility can accommodate at most fifty trucks if not less than that. There is only one toilet and shower to cater for all the drivers. The facility is a hazard as drivers cook in this fenced enclosure posing a danger should a fire start. The facility which is located next to a railway line is illustrated below.

Another location where land has been identified for the development of a truck stop ins in Gobabis, again the private sector is involved. Discussions are said to be under way where the local authority is expected to provide the land for the establishment of a truck stop through private investment.

7.4. Container terminal

The port of Walvis Bay is facing a challenge of containers which is affecting the performance of the container terminal. According to users, the shortage of empty containers has led to increases in logistics costs. While the new terminal has improved the port capacity

tremendously, back of port handling capacity is reported have become a constraint, affecting port productive capacity.

7.5. The Dunes bypass road

The bypass road that was under construction in 2019-20 has since been completed, which has improved the traffic challenges, especially in Swakopmund where heavy trucks were a menace. Trucks no longer must pass through the town of Swakopmund, rather they now go through the bypass road to and from the port of Walvis Bay.

7.6. Rail transport

Rail way has remained constrained despite efforts to increase the use of rail to transport cargo on the corridor. It is reported that heavy rains destroyed most parts of the line leading to closure of some sections of the line. The challenge of lack of manpower, especially qualified engineers has made maintenance difficult. However, TransNamib together with the government are working on addressing this challenge not only of lack of manpower, but also that of aging equipment.

7.7. Road infrastructure

Road rehabilitation continues on various sections on the TKC, where widening of the road between Windhoek and Walvis bay is still ongoing after some sections were completed.

On the Botswana side there are also several road projects on the TKC all meant to improve the condition of the highway. The main sections include the complete section near Kanye and sections near Kang.

7.8. Weighbridges

It is reported that apart from the public weigh bridge near the Dune Mall, there are several private weigh bridges in Walvis Bay. According to stakeholders, there are adequate weighbridges, but the main issue is the location. Authorities are to be engaged to ensure that weighbridges are located at strategic points of the corridor to address the current problems encountered.

7.9. Border post capacity

There are plans underway to establish OSBP's at three border posts, namely Mamuno, Pioneer Gate and Tlokweng. This development will improve the issue of border post capacity and reduce transit times, hence improve the performance of the corridor. The current capacity remains constrained as shown by long queues.

gains on one side of the border are not complemented if the capacity on the

7.10. Development and implementation of the system

There is a new development in terms of implementation of systems to improve trade on the TKC, the implementation of the Corridor Trip Monitoring System (CTMS). The CTMS is being rolled out at various border posts in the SADC region with the assistance of the SADC Secretariat. It is reported that TK/Mamuno border post had been earmarked for roll out of the system. This will help with facilitation of trade and cross-border transport facilitation.

PART III: COMPARISON

8. COMPARATIVE ASSESSMENT OF ALL PARAMETERS

This section presents the comparison of the status of parameters for the periods 2020 and 2021 in terms of improvements or otherwise.

For each parameter, there are remarks indicating changes and or improvements achieved as well as any initiatives embarked on after 2020.

Table 6 Truck Stops

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Truck stops	Very few with no proper facilities	Planning of truck stops gaining momentum	Land identified close to the port and negotiations with local authority in Gobabis

Table 7 Safety

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Safety	Level of safety was low	Improvement in safety is reported	There has been a marked decline in accidents, with MVAF reporting a 19% decline. However, the issue of unregulated abnormal loading is a safety issues causing carnage.

Table 8 Labour Relations

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Labour relations	Long driving hours were reported	This is being addressed through law enforcement	The lack of safe resting hours compounds this problem. As more truck stops are established this will further improve.

Table 9 Security

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Security	This was reported as low	Along the corridor security has improved	Trucks are mostly attacked at night mostly at service stations. Truck stops are believed to be the answer guaranteeing safe overnight parking.

Table 10 Insurance

PARAMETER	STATUS 2020	STATUS 2021	INTERPRETATION/ REMARKS
Insurance	High premiums reported	Less claims due to reduced incidents	The decline in accidents means less claims which reduces premiums. The improvement of security will further reduce risk leading to lower premiums.

Table 11 Trade Facilitation Policies

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Trade facilitation policies	Reported as underway	Started at Tlokweng and Pioneer Gate	Mamuno/TK OSBP's discussions at advanced stage to

			help with trade facilitation. Candidate border posts include TK/Mamuno, Pioneer Gate and Tlokweng.
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Table 12 Border Capacity

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Border posts capacity	Reported as low	With OSBP implementation capacity will be enhanced	Infrastructure development needs to happen in terms of facilities Assessment has been done for OSBP in terms of Passenger on the Botswana side and Cargo on the Namibian side

Table 13 Border Post Performance

PARAMETER	STATUS 2020	STATUS 2021	INTERPRETATION/REMARKS
Border posts performance	This was reported as low	Efforts to improve are now in progress	The border operations committee meets every month Joint operations. In terms of staffing Recruitment is underway. Most vacancies are at the lower levels which affects the operations of the border.

Table 14 Soft Issues

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Soft issues	Cooperation among agencies was low	There is a marked improvement with joint committees meeting regularly	Task force operations over festive; CTMS all stakeholders are involved CTMS meetings are done weekly Harmonisation of standards remains a problem in the tripartite

Table 15 Rail Transport

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Rail transport	The role of rail was limited	Not much has changed The focus has been to move cargo within Namibia	Derailments affect rail due to Old rail stock. Storm affected rail operations Poor rail infrastructure remains a challenge and lack of engineers Line section to Gobabis operational at limited capacity 100km still to be constructed

Table 16 Single Window Platform

PARAMETER	STATUS 2020	STATUS 2021	REMARKS
Single window platform	Reported as non-existent	This is now underway	BURS has commenced moving to single window platform

Transit time	Reported as long	Initiatives such as CTMS and preclearance initiatives	BURS implemented a new customs management system to allow preclearance to facilitate quick release
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9. FINDINGS REGARDING PARAMETER STATUS MOVEMENTS

Sections below provides the overall findings of the interview outcomes.

9.1. Movement on parameters

- Most road projects that were under way have been completed, especially the Swakopmund bypass, while work on sections on the B1 could not be completed due to COVID-19 with new road works also underway;
- There are several projects being undertaken in terms of road maintenance and the border post facilities
- It is reported that the work is more than 80% complete dual carriage way
- The Ministry of Transport is yet to make assessments of the TKC to determine the extent of work progress to date
- The container terminal performance is being hampered by lack of empty containers;
- The weighbridges are adequate, but they are not strategically located;
- The accidents reported are very low on the Windhoek – Walvis Bay route, but the Okahandja – Walvis Bay section is still accidents prone; this being attributed to low traffic due to Covid lockdown;
- The lack of adequate resting places along the is meant to be addressed as plans are under way to build truck stops in Walvis Bay and Gobabis
- Truck stop projects must be expedited to improve safety;
- Coordination of stakeholder is said to have improved significantly;
- Plans to establish OSBP at Mamuno, Pioneer Gate and Lobatse border posts will address the issue of delays at border posts;
- Rail remains a challenge due to old equipment, derailments and due to damage by rains; and
- The issue of non-coordination between truckers and clearing agents that result in drivers staying for many days at the port is being attended to.
- The introduction of pre-clearance by BURS in Botswana is going to contribute to the reduction of delays at border posts

10. CONCLUSION

The 2020 Corridor Performance Indicators Report identified several activities and projects that were underway as part of efforts to improve the performance of the TKC. It made recommendations for the tracking of parameters to determine progress of initiatives meant to

improve the performance of the corridor. This update report has noted several improvements in some areas, although there are also areas where little or no movement has taken place due to the COVID lockdowns.

The Swakopmund bypass has been completed and is reported to have improved the traffic situation in Swakopmund. Most trucks now no longer pass through the town of Swakopmund, where they were causing congestion. However, law enforcement still needs to ensure that trucks use the bypass as it is noted that there are still some trucks entering Swakopmund for purposes of safe parking overnight, at service stations.

Most of the road projects that were reported as underway in the baseline report could not be completed because work halted due to the COVID-19 pandemic. Not much progress was made due to restrictions. However, projects were affected because people could not move due to restrictions, to the extent that very little was done in 2020 and 2021. This also affected joint law enforcement, which has not happened for two years so far.

Nevertheless, work has since resumed with dualisation of key sections reported to be at 80% completion status. There are further road projects that have commenced, that will improve the condition of the TKC. For instance, there is a road being constructed from Gobabis to Keetmanshoop bypass Windhoek for traffic to SA, ZIM BW etc, 40% completion.

The road improvements on the TKC are continuing and are going to improve safety on the corridor. As shown in the findings, there has been a continued decline in accidents each year, with the highest of 19% having been realised in 2020.

With respect to weighbridges, it was reported that some truckers were applying to be exempted from passing through weighbridges despite the damage caused to roads by trucks. Weighbridges which fall under roads authority are said to be not adequate. There is a proposal that private companies be allowed to set up weigh bridges operated by road authorities in Swakopmund and Walvis.

There are developments at TK/Mamuno border post to establish as one-stop-border-post (OSBP). Already the governments of Botswana and Namibia are in discussions on converting the border post to an OSBP. At the time of interviews, the second meeting was said to have been scheduled for August 2021. It was reported that upgrades in terms of parking infrastructure had commenced at the port of entry on the TK side, while Mamuno had started drawings in line with this development.

In terms of port performance there has been a lot of upgrade that has reduced ship turnaround time. However, the landside equipment is said to be inadequate, causing delays with the potential of causing congestion in the port. The other issues said to be affecting the port is the unavailability of empty containers reported by port users. The operating hours for dry ports are reported to be limited and are said to be constraining the operations in terms of transit cargo handling.

Rail operations are said to have been affected by rain damage which has rendered some section of the line impassable. They have also been several derailments due to aging equipment and compounded by shortage of engineers. There are also developments on the TK Rail where the governments of Botswana and Namibia are determined to see the project through as they are commissioning a more detailed study to proceed with the project.

Lastly, the development of truck stops seems to have gained momentum, with Gobabis local authority having allotted a piece of land earmarked for developing a truck stop and container terminal so that goods can be transported by rail and transhipped to other parts of the SADC South Africa and Botswana. The planning is said to be under way with timelines not yet known. The project is being supported by TKCS. NamPort has also identified land where they will collaborate with the private sector to develop a truck stop that will alleviate the current overnight parking challenge for trucks coming to collect cargo from the port.

11. RECOMMENDATIONS

Based on the findings discussed, the following is recommended:

- The TKCS should continue engaging the various parties to ensure the execution of various initiatives addressing the issues that affect the corridor
- The identified issues and the interventions to address them should be constantly tracked to ensure that issues are addressed
- The establishment of the technical task team needs to be concluded so that the team can commence its work of conducting performance assessments and identifying necessary interventions;
- The task team once constituted should embark on developing a corridor performance monitoring tool/system;
- The development of truck stops at Gobabis and Walvis Bay port should be expedited to address the issue of safety as trucks continue to be attacked due to lack of safe night parking;
- The TKCS to support the launch of a safety campaign and assessing the issue of safety by transport authorities in collaboration with police to address the issue of safety
- Rail operations need to be improved, especially the problem of derailments and shortage of skilled manpower as well as equipment condition;
- The implementation of OSBP at TK/Mamuno, Pioneer Gate and Tlokweng should be supported as these will improve the performance of the TKC;
- Harmonisation of traffic regulations are necessary across the tripartite as they are currently said to be misaligned;
- SA, and Namibia should emulate Botswana (BURS) in introducing a single window platform; and
- Introduction of preclearance at all TKC border posts can reduce transit times and delays on the TKC

Going forward, the TKC Secretariat is expected to continue with its leading role as the custodian of the corridor, bringing all parties together. The TKCS will work with all stakeholders on the corridor to coordinate the work of various parties and the three governments ensuring that the recommendations made in here are followed through with responsible authorities. The participation of the TKCS in the OSBP initiatives will be fundamental as it has the capacity to represent the interests of stakeholders, both public and private.

The C-BRTA will continue to provide technical expertise going forward. Initiatives to enhance the performance of the corridor will be coordinated by the TKCS. The task team once constituted, will serve as the corridor performance advisory arm of the TKCS and will be

making recommendations time and again on corridor performance enhancement through its work on the corridor.