



**ANNUAL STATE OF CROSS-BORDER
OPERATIONS REPORT**

March 2017



Table of Contents

1.	OVERVIEW OF THE REPORT	1
1.1	Introduction and Background	1
1.2	Problem Statement	3
1.3	Purpose of Report	5
1.4	Report Methodology	5
1.5	Focus of the Report	5
1.6	Scope of the Report	6
2.	THE STRATEGIC IMPORTANCE OF TRANSPORT CORRIDORS	8
2.1	The Role of Transport Corridors in Fostering Economic Growth and Development	9
2.2	General Impediments to Corridor efficiency and Regional Integration in Southern and Eastern Africa	11
2.2.1	Overlapping REC Memberships	11
2.2.2	The Heterogeneity of SADC Economies	13
2.2.3	Different Levels of Economic Development	13
2.2.4	Rules of Origin	14
2.2.5	Funding shortages	14
2.2.6	Poor road conditions	14
2.2.7	Lack of road network connectivity	15
2.2.8	Lack of harmonised regulatory frameworks	15
2.2.9	Ineffective border management systems	15
2.2.10	Road blocks and Inspection procedures	16
2.2.11	Corruption practices	16
2.3	Spatial Development Initiatives along Regional Transport Corridors	16
2.4	Management of Transport Corridors in the SADC region	17
2.5	Road Transport Legal and Regulatory Frameworks in the SADC region	18
2.6	Conclusion	18
3.	OVERVIEW OF THE NSC, MDC AND TKC CORRIDORS	20
3.1	Introduction	20
3.2.1	Background	20

3.2.2	Route Description	20
3.2.3	Condition of Road Infrastructure	22
3.2.4	NSC Corridor Constraints	22
3.2.5	High level overview of traffic and trade volumes.....	24
3.2.6	Positioning of Weighbridges and Truck Stops	26
3.2.7	Road User and Cross-Border Charges.....	28
3.2.8	Wrap-Up Remarks	30
3.3	Maputo Development Corridor	30
3.3.1	Background.....	30
3.3.2	Route Description	31
3.3.3	Condition of Road Infrastructure	32
3.4	MDC Corridor Constraints.....	32
3.3.5	High level overview of traffic and trade volumes.....	33
3.3.6	Positioning of Weighbridges and Truck Stops	34
3.3.7	Road User and Cross-border Charges	35
3.3.8	Wrap-up Remarks	37
3.4	Trans Kalahari Corridor	37
3.4.1	Background.....	37
3.4.2	Route Description	37
3.4.3	Condition of Road Infrastructure	38
3.4.4	TKC Corridor Constraints.....	38
3.4.5	High level overview of traffic and trade volumes.....	39
3.4.6	Positioning of Weighbridges and Truck Stops	40
3.4.7	Road User and Cross-border Charges	40
3.4.8	Wrap-up Remarks.....	41
3.5	Conclusion.....	41
4.	IMPORTANCE OF BORDER POSTS IN OPTIMISING CORRIDOR EFFICIENCY	43
4.1	Introduction.....	43
4.2	Commercial Border Posts on Prioritised Transport Corridors	43
4.2.1	North South Corridor	43
4.2.2	Maputo Development Corridor.....	57
4.2.3	Trans Kalahari Corridor	62

4.3.1	Status Quo: Infrastructure Inefficiencies at Border Posts.....	65
4.3.2	Potential Impact of Border Post Improvements	65
4.4	Developments at Major Border Posts in the region.....	66
4.4.1	Regional Developments.....	66
4.4.2	Developments in South Africa	72
4.5	Conclusion	73
5.	CORRIDOR AND BORDER POST GOVERNANCE IN SADC	75
5.1	Introduction.....	75
5.2	Legal Instruments and Frameworks.....	75
5.2.1	SADC Protocol on Transport Communication and Meteorology (PTCM).....	76
5.2.2	SADC Protocol on Trade in Services	77
5.2.3	SADC Regional Indicative Strategic Development Plan	77
5.2.4	SADC Regional Infrastructure Development Master Plan.....	78
5.2.5	Bilateral Cross-Border Road Transport Agreements	79
5.3	Institutional Frameworks.....	80
5.4	Corridor Management Committees and Institutions	81
5.4.1	North South Corridor	82
5.4.2	Maputo Development Corridor.....	82
5.4.3	Trans Kalahari Corridor	84
5.5	Institutional Challenges	84
a)	Lack of Trust and Limited Cooperation between Institutions	85
b)	Institutional Skills Shortages	85
c)	Absence of a Regional Legislative Authority	85
5.6	Conclusion	85
6.	STATUS OF TRANSPORT AND TRADE FACILITATION INITIATIVES IN THE SADC.	87
6.1	Introduction.....	87
6.2	Transport Facilitation Initiatives	87
6.2.1	North-South Corridor Aid-for-Trade Programme.....	87
6.2.2	Establishment of Truck Stops along the Trans Kalahari Corridor	88
6.2.3	Establishment of a Corridor Performance Monitoring Tool for the TKC	90
6.2.4	Development of a Master Plan for the Beitbridge Border Post	91

6.2.5	Implementation of Prioritised Road Transport and Border Post Projects set out in the SADC RIDMP	94
6.2.6	Movement towards adoption of Tourism Univisa	97
6.2.7	Regional Drive towards Harmonisation.....	98
6.2.8	Regional Drive towards Harmonisation and Market Liberalisation	99
6.3	Trade Facilitation Initiatives	100
6.4.	Impediments to the Implementation of Transport and Trade Facilitation Agreements in the SADC.....	111
6.4.1	Poor Level of Implementation.....	111
6.4.2	Non-Alignment of National Legislative Frameworks to Regional Initiatives.....	111
6.3.3	Multiple Memberships to different RECs.....	111
6.3.4	Variation in Customs Systems / Infrastructure.....	111
6.3.5	Funding Constraints	111
6.3.6	Skills shortage	112
6.4	Conclusion.....	112
7.	INTERNATIONAL BENCHMARKING	113
7.1	Introduction.....	113
7.2	The Greater Mekong Sub-Region	113
7.2.1	Background.....	113
7.2.2	Trade and Transport Facilitation Challenges.....	114
7.2.3	Greater Mekong Sub-Regional Programme	114
7.2.4	Greater Mekong Sub-Region Cross-border Transport Facilitation Agreement.....	115
7.2.5	Progress on Transport and Trade Facilitation Initiatives in the Greater Mekong Sub-region	116
7.2.6	Lessons Learned and Successes: Greater Mekong Sub-Region	119
7.3.1	Background.....	120
7.3.2	Institutional Framework.....	121
7.3.3	Transport Corridors in West Africa.....	121
7.3.4	Trade and Transport Facilitation Challenges.....	122
7.3.5	Trade and Transport Initiatives	123
c)	Abidjan-Lagos Trade and Transport Facilitation Project	124
7.3.6	Lessons Learned and Successes: Abidjan-Lagos Corridor.....	131
7.4.1	Background.....	132

7.4.2	Institutional Framework.....	133
7.4.3	Corridor Constraints	134
7.4.4	Trade and Transport Initiatives	134
7.4.5	Lessons learned and Successes	139
7.5	Conclusion.....	140
8.	MOVING FORWARD: IMPROVING CORRIDOR PERFORMANCE IN THE SADC	141
8.1	Introduction.....	141
8.2	Domestication of Reforms by Member States.....	141
8.2.1	Existing Reforms.....	141
8.2.2	New Reforms.....	145
8.3	Role of the C-BRTA in Improving Corridor Performance	149
9.	MAIN FINDINGS AND RECOMMENDATIONS	150
9.1	List of Findings	150
9.1.1	Transport Corridors	150
9.1.2	Strategic Border Posts.....	151
9.1.3	Corridor and Border Post Governance in the SADC	151
9.1.4	Trade and Transport Facilitation Initiatives in the SADC	152
9.1.5	International Benchmarking.....	152
9.2	Recommendations and Action Plans	154
9.2.1	Action Plan for Reform 1: Establish an Independent Regional Body.....	154
9.2.3	Action Plan for Reform 2: Implement MCBRTA.....	154
9.2.4	Action Plan for Reform 3: Transform Prioritised Border Posts into OSBP's	155
9.2.5	Action Plan for Reform 4: Establish Truck stops along Regional Road Transport Corridors.....	155
9.2.6	Action Plan for Reform 5: Establish Corridor Road Transport Observatories	156
9.3	Conclusion.....	156

ABBREVIATIONS

Abbreviation	Meaning
ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
ANE	National Roads Administration of Mozambique
ALCO	Abidjan-Lagos Corridor Organisation
ARTIN	African Regional Transport Infrastructure Network
ASCBOR	Annual State of Cross-border Operations Report
ASYCUDA	Automated System for Customs Data
BCOCC	Border Control Operational Coordination Committee
BMA	Border Management Authority
CBM	Coordinated Border Management
C-BRTA	Cross-border Road Transport Agency
CBTA	Cross-border Transport Facilitation Agreement
CET	Common External Tariff
CMC	Corridor Management Committee
COMESA	Common Market for Eastern and Southern African States
CRM	Customs Reform and Modernisation
DHA	Department of Home Affairs
DIBMS	Draft Integrated Border Management Strategy
DRC	Democratic Republic of the Congo
DTI	Department of Trade and Industry
EAC	East African Community
ECOWAS	The Economic Community of West African States
EDF	European Development Fund
EIA	Environmental Impact Assessment
EU	European Union
EWEC	East West Economic Corridor
FRIGO	Matola Cargo Terminal
FTA	Free Trade Area
FTSW	Foreign Trade Single Window
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GMS	Greater Mekong Sub-region
HGV	Heavy Goods Vehicle
HIV	Human Immunodeficiency Virus

IBMS	Integrated Border Management Strategy
ICT	Information and Communications Technology
IDA	International Development Association
IPAP	Industrial Policy Action Plan
IRI	International Roughness Index
JICA	Japan International Cooperation Agency
JRMC	Joint Route Management Group
KAZA	Kavango-Zambezi
Laos PDR	Lao People's Democratic Republic
LLDC	Landlocked Developing Countries
MCBRTA	Multilateral Cross-border Road Transport Agreement
MCLI	Maputo Corridor Logistics Initiative
MDC	Maputo Development Corridor
MoU	Memorandum of Understanding
MS	Member States
NCC	National Corridor Coordination
NCTA	Northern Corridor Transit Agreement
NCTTCA	Northern Corridor Transit and Transport Coordination Authority
NSC	North South Corridor
NSCMI	North South Corridor Management Institution
NTB	Non-Tariff Barrier
OCAS	Operator Compliance Accreditation Scheme
OSBP	One Stop Border Post
PICI	Presidential Infrastructure Championing Initiative
PIDA	Programme for Infrastructure Development in Africa
POE	Port of Entry
PPDF	Project Preparation Development Facility
PPIU	Project Preparation and Implementation Unit
PPP	Public Private Partnership
PRC	People's Republic of China
PTCM	Protocol on Transport, Communications and Meteorology
REC	Regional Economic Community
RFA	Road Freight Association
RIDMP	Regional Infrastructure Development Master Plan
RISDP	Regional Indicative Strategic Development Plan
RSS	Roadside Stations

RSW	Regional Single Window
RTA	Regional Trade Agreement
RTBG	Regional Transit Bond Guarantee
RUC	Road User Charge
SACU	Southern African Customs Union
SAD	Single Administrative Document
SADC	Southern African Development Community
SADC-PF	Southern African Development Community Parliamentary Forum
SCT	Single Customs Territory
SDI	Spatial Development Initiative
SW	Single Window
TAZARA	Tanzania-Zambia Railway Authority
TEU	Twenty-foot Equivalent Unit
TKC	Trans Kalahari Corridor
TKCMC	Trans Kalahari Corridor Management Committee
TKCS	Trans Kalahari Corridor Secretariat
TMS	Transit Management System
TRAC	Trans African Concessions
TRIPS	Transport Register and Information Platform System
TTF-AP	Transport and Trade Facilitation Action Programme
WBCG	Walvis Bay Corridor Group
WAEMU	West African Economic and Monetary Union
WTO	World Trade Organisation

LIST OF TABLES

Table 1:	SADC Transport Corridors
Table 2:	NSC Weighbridge Locations
Table 3:	Positioning of truck stops between Durban and Musina
Table 4:	Cross-border charges imposed in NSC Member States
Table 5:	Specified Cross-border charges imposed upon NSC Member States
Table 6:	Weighbridges located along the NSC
Table 7:	Cross-Border Charges imposed in MDC Member States
Table 8:	Specified Cross-border charges imposed upon MDC Member States
Table 9:	Cross-border Charges imposed in TKC Member States
Table 10:	Specified Cross-border charges imposed upon TKC Member States
Table 11:	Border Posts along the NSC
Table 12:	Border Posts along the MDC
Table 13:	Border Posts along the TKC
Table 14:	Progress on One Stop Border Post Development
Table 15:	Location Options for Truck Stop Establishment
Table 16:	Key Regional Trade Facilitation Agreements
Table 17:	Performance Indicators Adopted – Abidjan-Lagos Trade and Transport Facilitation Project
Table 18:	International Roughness Index per Country
Table 19:	Prioritised Roadside Stations along the Northern Corridor
Table 20:	Action Plan: Reform 1
Table 21:	Action Plan: Reform 2
Table 22:	Action Plan: Reform 3
Table 23:	Action Plan: Reform 4
Table 24:	Action Plan: Reform 5
Table 25:	Action Plan: Develop Funding Frameworks

LIST OF FIGURES

- Figure 1: Country membership to Regional Economic Communities
- Figure 2: NSC route description
- Figure 3: Percentage of trade processed at the Beitbridge border post
- Figure 4: MDC route description
- Figure 5: Percentage trade processed at the Lebombo border post
- Figure 6: TKC route description
- Figure 7: Relationship between SADC, CMCs and MS
- Figure 8: Beitbridge Master Plan Layout: Option 1
- Figure 9: Beitbridge Master Plan Layout: Graphical Illustration of Option 1
- Figure 10: Beitbridge Master Plan Layout: Option 2
- Figure 11: Univisa Stages
- Figure 12: Port Dwell Times
- Figure 13: Border Crossing Time Indicators in Côte d'Ivoire, Ghana & Togo
- Figure 14: Border Crossing Time Indicators in Togo, Benin & Nigeria
- Figure 15: Number of Roadblocks per country: Côte d'Ivoire, Ghana & Togo
- Figure 16: Number of Roadblocks per country: Benin & Nigeria
- Figure 17: Northern Corridor Transport Observatory
- Figure 18: Action Plan: Establish SADC Parliament
- Figure 19: Action Plan: Establish Single Multilateral Cross-Border Road Transport Agreement
- Figure 20: Action Plan: Establish OSBP's
- Figure 21: Action Plan: Establish Truck Stops
- Figure 22: Action Plan: Develop Road Transport Observatory

EXECUTIVE SUMMARY

This Annual State of Cross-Border Operations Report (ASCBOR) was prepared to present the current state of the cross-border road transport industry to the Minister of Transport, the Department of Transport (DoT) and other stakeholders in the cross-border and transport environment. Specific attention is paid to three strategic regional transport corridors that traverse the Southern African Development Community (SADC) region: the North South Corridor (NSC), Maputo Development Corridor (MDC) and the Trans Kalahari Corridor (TKC).

Apart from identifying the major constraints that affects the efficiency of these transport corridors, the ASCBOR also articulates major trade and transport initiatives unfolding in the SADC region, initiatives implemented to address similar corridor constraints in other regions, i.e. in Asia, West Africa and East and Central Africa as well as trade and transport interventions that are recommended for implementation in the SADC region.

Although transport corridors have been around for centuries, it is only in the last few decades that they have been recognised for what they are and for the value they can add to promoting trade, economic growth and development among communities, towns and countries located along, or in close proximity to transport corridors.

Transport corridors play an important role in facilitating the movement of goods, people and services within the region. Six countries in the SADC (Botswana, Zimbabwe, Zambia, Malawi, Lesotho and Swaziland) are landlocked and rely on coastal countries for the greater share of their trade. Regional road transport corridors play a key role in linking landlocked countries to fellow African countries as well as to foreign markets via the main ports in South Africa, Mozambique, Angola and Namibia.

Given the strategic importance of corridors, the SADC adopted a Corridor Development Strategy in 2008 that acknowledges the need for an integrated transport system that can effectively facilitate intra-regional trade, economic growth and stimulate investment opportunities in the region. Eighteen major transport and development corridors (see table 1) traverse the SADC region, forming a network that binds the region together.

Unfortunately all strategic transport corridors that transit the SADC region are inundated with a plethora of Non-Tariff Barriers (NTB) which risks the attainment of the strategic goals and objectives set out in various road transport agreements and instruments and they include:

- Fragmented and inefficient regulatory regime characterised by misalignment of road transport policies, legislations, rules, standards and practices;
- Lack of harmonised transport policies, procedures, rules and standards;
- Poor and inadequate road infrastructure;
- Inadequate funds for infrastructure maintenance and expansion; and
- Ineffective border management systems coupled with out-dated and inappropriate Information and Communications Technology (ICT) systems for the exchange of information.

These challenges culminate in congestion, delays, long journey and trip turnaround times, reduced safety and high cost of doing business. Ultimately they impede intra-regional trade (estimated at only 12%) and the economic potential of the region whilst also reducing regional competitiveness. These challenges require urgent intervention especially given the fact that cross-border road transport carries over 80% of the total goods that are traded in the region. The status-quo cannot be left to perpetuate if SADC is to achieve its set socio-economic and developmental objectives.

The C-BRTA conducted a benchmarking exercise along highly trafficked road transport corridors in Asia and the West and East / Central African regions with a view of finding solutions to the above-mentioned challenges. Acknowledging the lessons learned from desktop benchmarking and international best practice, the following interventions are recommended:

- 1) Establish an autonomous legal regional body with authority to enforce the implementation of regional policies, agreements and programmes. Although this will take time to achieve, this might be the lasting solution to address the effects of fragmentation of policies, legislations and standards;
- 2) Fast-track the process of implementing the Multilateral Cross-border Road Transport Agreement. This major intervention will have a huge impact with respect to addressing the challenges created by fragmentation of the regulatory framework, different road transport policies, legislations, rules, standards and practices;
- 3) Transform prioritised Border Posts into One Stop Border Posts to address the hard and soft infrastructure challenges experienced at commercial border posts along strategic regional corridors;
- 4) Establish Roadside Stations (truck stops) along prioritised regional road transport corridors in order to improve road safety ;
- 5) Establish Corridor Road Transport Observatories along strategic regional road transport corridors, including the NSC, MDC and the TKC to enable regulatory and law enforcement authorities to obtain real-time information on road traffic flows along strategic road transport corridors, and
- 6) Provide a sustainable funding framework for infrastructure maintenance and expansion at Member State level.

The implementation of any one of the above interventions will require support from respective governments, regulatory authorities and other stakeholders in the cross-border value chain. Decisive decisions will be required to ensure adequate funding is available for the implementation and operationalisation of the interventions.

Lastly, the successful execution of the interventions will have a far reaching impact particularly with respect to addressing NTB, improving corridor efficiency, productivity, reducing the cost of doing business, improving cross-border road transport movements, enhancing regional trade, economic development, regional integration and regional competitiveness.

1. OVERVIEW OF THE REPORT

1.1 Introduction and Background

The Annual State of Cross-Border Operations Report (ASCBOR or Report) is compiled annually to advise the Minister of Transport, the Department of Transport (DoT), fellow industry regulators and other stakeholders with an interest in cross-border operations of major challenges and developments that impact on cross-border road transport operations.

This is the fourth Report after the completion of the first one in 2014, and the two that were finalised in the 2015/16 financial year. The 2014 and 2015 reports largely focused on challenges facing the cross-border road transport industry, progress made towards integrating the road transport environment in the SADC, assessment of the status of commercial border posts, and road safety and operator compliance in South Africa. The 2016 ASCBOR varies from previous reports in so far as it assesses trade and traffic flows along prioritised regional road transport corridors between origin and destination points to obtain a holistic view of corridor constraints and to present solutions that can improve overall corridor performance.

This Report also provides a package of solutions that can be implemented to overcome challenges and cross-border constraints, especially Non-Tariff Barriers (NTBs). It is anticipated that by providing this information to stakeholders in the cross-border value chain they will, through adopting a partnership approach, be able to consider some of the solutions that can be deployed towards addressing challenges thereby enhancing efficiency, viability and productivity in the cross-border road transport industry. In doing so, the cross-border industry will be able to play a strategic role towards enhancing regional trade, regional integration, economic growth and development in the region.

The development of this report is informed by the mandate and responsibilities of the Cross Border Road Transport Agency (C-BRTA or the Agency). The C-BRTA is a regulatory authority established by the Cross-Border Road Transport Act No 4 of 1998, as amended, to:

- Improve the unimpeded flow of commercial freight and passenger road transport flows within the SADC;
- Introduce regulated competition in respect of cross-border road passenger transport;
- Reduce operational constraints for the cross-border road transport industry as a whole;
- Liberalise market access progressively in respect of the cross-border road freight transport;
- Strengthen the capacity of the public sector in support of its strategic planning and enabling functions; and
- Empower the cross-border road transport industry to maximise business opportunities and to incrementally regulate themselves to improve safety, security, reliability, quality and efficiency of services.

The Agency executes the mandate through the following four core functions:

- Advises the Minister of Transport, as well as other national and regional stakeholders on matters pertaining to cross-border road transport industry;
- Regulates the road transport industry's access to the cross-border road transport market;
- Facilitates on-going co-operative and consultative relationships and structures between the public and private sectors in support of cross-border road transport operations, and;
- Undertakes road transport law enforcement.

The work of the Agency is also informed by bilateral and multilateral agreements that were concluded by and between South Africa and countries in the region and they include:

- The Southern African Development Community (SADC) Protocol on Transport, Communications and Meteorology;
- Southern African Customs Union (SACU) Memorandum of Understanding (MoU) on Road Transport concluded by South Africa, Namibia, Botswana, Swaziland and Lesotho;
- Trans Kalahari Corridor (TKC) MoU on Road Transport concluded with Botswana and Namibia; and
- Bilateral Cross-Border Road Transport Agreements concluded with Malawi, Mozambique, Zambia and Zimbabwe.

In summary, these instruments obligate the parties to:

- Facilitate efficient and seamless cross-border road transport movements in the region;
- Reduce operational constraints that negatively affect the movement of goods, persons, equipment and services;
- Enhance intra-regional trade, regional integration, socio-economic development and security between countries; and
- Recommend and implement appropriate interventions for purposes of effective regulation and facilitation of cross-border road transport movements.

It is anticipated that stakeholders in the cross-border road transport value chain will, through adopting a partnership approach, implement recommended solutions to overcome cross-border road transport challenges identified in this report. By doing so, stakeholders will be able to play an active role towards improving the unimpeded flow of cross-border road transport movements and reducing inefficiencies that increase the cost of doing business for cross-border road transport operators. It is envisaged that ultimately, this will create a road transport industry that is capable of effectively linking countries in the region, enhancing regional trade and improving regional competitiveness.

However, the C-BRTA acknowledges that road transport operator's needs and challenges evolve at a rapid pace, even faster than the pace at which solutions are found and implemented. Thus, apart from providing a package of solutions, the ASCBOR goes further by presenting actions plans that indicate how each reform can be operationalised. It is recommended that both

the solutions and action plans presented in this report be tailor-made to suit the specific environment at the time of implementation.

1.2 Problem Statement

If SADC, just like many of the African Regional Economic Communities (RECs) is to overcome its socio-economic challenges and achieve strategic objectives set out in various regional agreements and protocols, the region needs to address shortcomings revolving around low intra-regional trade, ineffective regional integration and low regional competitiveness.

Whilst various agreements and protocols were signed, signalling the collective intention of transforming the region with respect to these objectives, reality on the ground indicates that attainment of the objectives is still far off. The inability by countries in the region to address challenges facing road transport is arguably one of the main issues that remains a challenge and requires urgent intervention if the region is to take intra-regional trade beyond the reported 12-14% and improve regional competitiveness that is heavily affected by high transport costs, contributing up to 40% of the cost of goods traded in the region.

Cross-border road transport plays an important role in facilitating the movement of goods, people and services between Member States (MS) within the SADC, particularly in light of the region's landscape. Six countries in the region (Botswana, Lesotho, Malawi, Swaziland, Zambia and Zimbabwe) are landlocked with no direct access to sea-borne trade and major foreign markets.

The landlocked countries rely on coastal countries for the greater share of their trade, thus making regional road transport corridors, which carries over 80% of goods traded in the region important in linking these countries to African as well as to foreign markets via the main ports in South Africa, Mozambique, Angola and Namibia. (Chibira, E & Mdlankomo, B. 2015: 658)

Despite the significant role played by cross-border road transport in the SADC region, regional road transport corridors and the industry faces a plethora of challenges which risks the attainment of the goals and objectives set out in various transport instruments, as well as bilateral and multilateral agreements concluded between MS. It is a fact that road transport carries the greatest share of the trade task in the region. Yet this sector faces many challenges that remain unresolved, pointing to the heightened need for stakeholder intervention at MS and regional level.

In recent years, Southern African countries have placed high priority on the development and upgrading of infrastructure with a focus on establishing efficient and seamless transport corridors. However, the pace in which prioritised transport programmes / projects is implemented remains slow.

Challenges facing the cross-border road transport sector go beyond road infrastructure upgrades. The regulatory framework that guides the regulation of cross-border road transport remains a huge constraint whilst a lack of integration and inefficiencies in the customs environment in some MS pose another obstacle to transport efficiency.

The main challenges experienced along regional road transport corridors in the SADC are listed below:

- Inefficiencies created by MS's belonging to different Regional Economic Communities (RECs) that result in administrative and operational constraints for cross-border operators;
- Inadequate funding frameworks which culminate in funding shortages for infrastructure investment;
- Ineffective, inefficient and fragmented road transport regulatory frameworks (policies, legislations, regulations, standards and practices);
- Ineffective border management systems;
- Out-dated and inappropriate ICT systems for the exchange of information;
- Poor and inadequate road infrastructure; and
- Lack of road network connectivity.

These challenges culminate in corridor inefficiencies that lead to poor corridor performance that negatively affect the viability, reliability, sustainability, safety, cost and productivity of cross-border operations. Ultimately, this leads to the non-realisation or delayed realisation of improved intra-regional trade, regional integration and socio-economic development in the SADC region.

Furthermore, the challenges lead to unreliable and unpredictable traffic flows which affect the entire cross-border value chain. Ultimately, it reduces the competitiveness of the region and discourages Member States (MS) from trading with each other, which is against the spirit and objectives of regional protocols, agreements and memoranda of understanding concluded by MS.

It is important to note that intra-regional trade in SADC region has for a long time revolved around 12-14% level, compared to about 40% in North America and about 60% in Western Europe. (http://www.trademarksa.org/our_work/trade_facilitation). The majority of SADC imports and exports are taking place with overseas countries, with Europe and North America as the major trading partners. Thus, SADC is a region that does not significantly trade with itself i.e. the region produces what it does not consume and consumes what it does not produce.

Without addressing these challenges, the region is not likely to achieve any higher intra-regional trade levels in the next decade or two. It is also important to note that the region will not be able to compete against other regions i.e. those with better transport systems as these regions are able to move people, goods and services faster than the SADC.

Further to the above, the SADC region urgently needs to find solutions to challenges and constraints that exist in the cross-border road transport sector. It is imperative that a holistic approach is adopted that addresses challenges along the entire cross-border value chain. This will ensure that rather than addressing challenges in a piecemeal approach, all challenges are systematically addressed, a feat that will transform the performance of the entire sector.

1.3 Purpose of Report

The purpose of this report is to:

- Present the state of cross-border operations to key stakeholders in the cross-border road transport value chain, paying particular attention to challenges that undermine the efficient functioning of three prioritised regional road transport corridors, namely the North-South Corridor, Maputo Development Corridor and Trans-Kalahari Corridor;
- Identify, discuss and inform relevant stakeholders of initiatives and developments that are being designed and developed or taking place in the region that will have an impact on the cross-border sector;
- Identify, discuss and inform relevant stakeholders of interventions implemented in other regions around the world that can also be considered by MS in the region; and
- Propose recommendations (interventions) and actions plans that may be considered in pursuit of addressing cross-border challenges and constraints that exist in regional road transport corridors.

It is envisaged that by taking this systematic approach, this report will provide a consolidated schedule of solutions to decision-making structures for consideration for implementation in their respective territories to improve the seamless flow of cross-border road transport movements within the SADC.

1.4 Report Methodology

This Report was compiled largely based on information obtained through qualitative research methods. A literature review of available materials (obtained through desktop study) was complemented with information obtained through engagements with some industry experts and practitioners. This was done with the view of obtaining a true picture of the current state of prioritised regional road transport corridors as well as trade and transport facilitation initiatives unfolding in SADC. This information served as input data into the determination of recommended reforms aimed at addressing identified challenges and improving the overall performance of the cross-border road transport industry.

The C-BRTA constantly participates in various technical and strategic regional and national committees and structures composed of industry experts tasked with the responsibility of finding lasting solutions to challenges facing the cross-border environment and shaping the future of the sector. These platforms provided invaluable information which was also used in compiling this Report, particularly with respect to identification and analysis of challenges and interventions articulated in this Report.

1.5 Focus of the Report

The discussions in this report are largely anchored on challenges experienced in the cross-border sector and along cross-border road transport corridors. Although there are eighteen major transport and development corridors that traverse the SADC region, the focus of this report is largely limited to the following major transport corridors:

- North South Corridor (NSC);

- Maputo Development Corridor (MDC); and
- Trans Kalahari Corridor (TKC).

The rationale for selecting the NSC, MDC and the TKC was informed by the significance of the corridors considering the cross-border traffic volumes and flow dynamics on these corridors. The three corridors serve as major gateways to most landlocked countries in the SADC region. Furthermore, it was assumed that any solution to challenges experienced along these major corridors would achieve similar results in less busier corridors in the region.

1.6 Scope of the Report

This Report is a consolidation of desktop research results as well as feedback received from stakeholders consulted during the execution of this Report. This ASCBOR addresses various areas and is structured as follows:

Chapter 1: Provides the introduction, outlines the problem statement and unpacks the report scope.

Chapter 2: Provides an overview of the role that transport and development corridors play in promoting trade and development among communities, towns and countries located along transport corridors. The chapter also identifies regional impediments to the seamless movement of traffic along transport corridors, spatial development initiatives implemented along the three focus corridors, and legal and regulatory frameworks that regulate cross-border road transport movements in the region.

Chapter 3: Builds on chapter 2 and provides a detailed description of the NSC, MDC and the TKC, inclusive of the route description, infrastructure impediments, traffic volumes, the positioning of weighbridges and the application of Road User Charges (RUC) along the three focus corridors.

Chapter 4: Articulates the importance of border posts in optimising corridor efficiency. The status of border posts located along the three prioritised corridors and infrastructure reforms unfolding at SADC border posts are key discussion points.

Chapter 5: Provides a high level overview of corridor and border post governance in the SADC region. Particular attention is directed at the role of Corridor Management Committees (CMS) in improving the efficient flow of traffic along the NSC, MDC and TKC. Furthermore, emphasis is placed on transport and institutional frameworks that guide the development of integrated transport infrastructure in the SADC region.

Chapter 6: Outlines progress made to date in implementing prioritised trade and transport reforms in the SADC region. This chapter also identifies impediments that undermine the execution of prioritised reforms.

Chapter 7: Outlines findings from desktop benchmarking conducted with respect to trade and transport facilitation reforms implemented by RECs in Asia, West and East / Central Africa with the aim of drawing on successes and lessons learned and to identify priority interventions for the SADC region.

Chapter 8: Outlines priority interventions that are recommended for implementation in the SADC based on lessons learned from the benchmarking exercise. This chapter also outlines how interventions can be domesticated at MS and / or regional level and what role the C-BRTA can play towards implementing the reforms.

Chapter 9 – Provides a list of findings and recommendations, inclusive of detailed actions plans for prioritised reforms.

It is envisaged that the information presented in this Report will enable stakeholders to reach a common understanding of existing conditions and developments unfolding in the cross-border environment, as well as interventions that they may consider to transform the cross-border environment.

2. THE STRATEGIC IMPORTANCE OF TRANSPORT CORRIDORS

This chapter focuses on the strategic importance of transport corridors, particularly with respect to Southern African region. There are eighteen major corridors that transit the Southern African region linking the interior to fourteen major sea ports. The major corridors also link landlocked countries to global markets via ports in South Africa, Mozambique, Angola and Namibia. Further to the above, chapter 2 provides a general overview of transport corridors to set the scene for a more detailed discussion of the three priority transport corridors.

Transport corridors generally follow well defined trade routes with road and rail infrastructure that is in a fair to good condition. It is important to note that regional road transport corridors serve a dual purpose:

- They serve as effective transport and communication networks that facilitate intra-regional trade and integrate regional countries; and
- They stimulate investment in sectors along the corridors and help develop the region as investment opportunities can be harnessed more easily due to quick access to resources, markets and ports.

The SADC region adopted a Corridor Development Strategy in 2008 that acknowledges the need for integrated transport systems and integrated transport policy framework(s) aimed at facilitating intra-regional trade and investment opportunities in sectors located in close proximity to transport corridors.

Table 1 below shows the top 18 corridors that bind the SADC region together. The NSC, MDC and Dar es Salaam Corridors are categorised as priority corridors and are considered most important, based on traffic volumes transported along the corridors.

Table 1: SADC Transport Corridors

SADC Transport Corridor		Corridor Member State
1	North South	South Africa, Botswana, Zimbabwe, Mozambique, Malawi, Zambia, DRC
2	Maputo	Mozambique, South Africa, Swaziland
3	Limpopo	Mozambique, Zimbabwe, Botswana
4	Beira	Mozambique, Zimbabwe, Malawi, Zambia
5	Nacala	Mozambique, Malawi, Zambia
6	Mtwara	Tanzania, Mozambique, Malawi, Zambia
7	Dar-es-Salaam	Tanzania, Mozambique, Malawi, Zambia, DRC
8	Central Transport	Tanzania, DRC, Uganda, Rwanda, Burundi
9	Trans Kalahari	South Africa, Botswana, Namibia
10	Trans Orange	Namibia, South Africa
11	Trans Caprivi	Namibia, Zambia, DRC
12	Trans Cunene	Namibia, Angola
13	Namibe	Namibia, Angola
14	Benguela	Angola, DRC, Zambia
15	Malange	Angola, DRC
16	Bas Congo	DRC, Angola
17	Maseru Durban	Lesotho, South Africa
18	Manzini-Durban	Swaziland, South Africa

Source: SADC. June 2015. Accessed in December 2016

Given the growing traffic volumes in the NSC, MDC and Dar-es-Salaam corridors, on-going investment will be required to address current constraints and in coming years to increase corridor capacity with a view to achieve the highest possible level of seamless flow of traffic movements along these corridors. At the same token, medium and low priority corridors will also require major investments to eliminate missing transport links (SADC Regional Infrastructure Development Master Plan. September 2010: 45).

2.1 The Role of Transport Corridors in Fostering Economic Growth and Development

Transport corridors have been around for centuries, but it is only in the last few decades that they have been recognised for what they are and, more importantly, what they can become as well as the value they can add to promoting economic growth and development in a country, region and the world.

As a point of departure, transport corridors are central to and are means of facilitating the realisation of key thematic issues in the regional agenda pertaining to regional trade, regional integration and regional economic development. Without transport corridors, the realisation of these issues will not be realisable in the near future.

In an effort to understand the transport corridor environment, it is important to keep in mind that transport corridors represent significant developmental importance, as they promote trade among communities, cities and countries along a transport corridor, support regional economic growth and enhance regional integration. Transport corridors are therefore essential engines for trade amongst communities and regions.

From an economic perspective, the function of transport corridors is to promote internal and external trade by connecting people to jobs, education and health services, and connecting industries to sources of raw materials, production points and markets. Furthermore transport corridors enable the supply of goods and services in regions and around the world and allow people to interact and generate knowledge and solutions that foster long-term growth. Thus, without transport corridors, no economic activity can take place, regions can never trade with each other or achieve meaningful economic development and society cannot function.

Given their strategic economic importance, the development of transport corridors is given high priority by countries around the globe, with various corridor reform programmes being initiated to improve route capacity and market access; inter alia, through improving the operational efficiency of border crossings and international gateways.

The case is not different for the SADC region. As far as the NSC, MDC and TCK corridors are concerned, the SADC Regional Infrastructure Development Master Plan (RIDMP) identifies various transport programmes / projects (e.g. road, rail, air, ports and air) which are earmarked for implementation in order to improve the operational efficiency of these strategic transport corridors. Most RIDMP programmes have a regional character, involving more than one MS. One implication of regional projects is that cooperation between all countries is paramount for ensuring that prioritised transport programmes are executed successfully.

Experience demonstrates that not all transport corridor initiatives are successful and their achievement is much dependent upon political support, adequate funding and the existence of properly capacitated corridor management structures which facilitates cooperation and coordination between all corridor stakeholders in an attempt to improve corridor performance. Chapter 5 of this report provides a detailed discussion of the corridor management institutions assigned to manage development along the NSC, MDC and TKC.

Although transport corridors fulfil a strategic role in facilitating intra-regional trade and addressing the special needs of landlocked countries, the drive to improve intra-regional trade through transport corridors cannot be separated from corridor management constraints. The next section provides a synopsis of major impediments that undermine the ability of African countries to trade with each other. For the purposes of discussion emphasis is placed on the Southern and East African regions since the 3 focus corridors transverse through these regions.

2.2 General Impediments to Corridor efficiency and Regional Integration in Southern and Eastern Africa

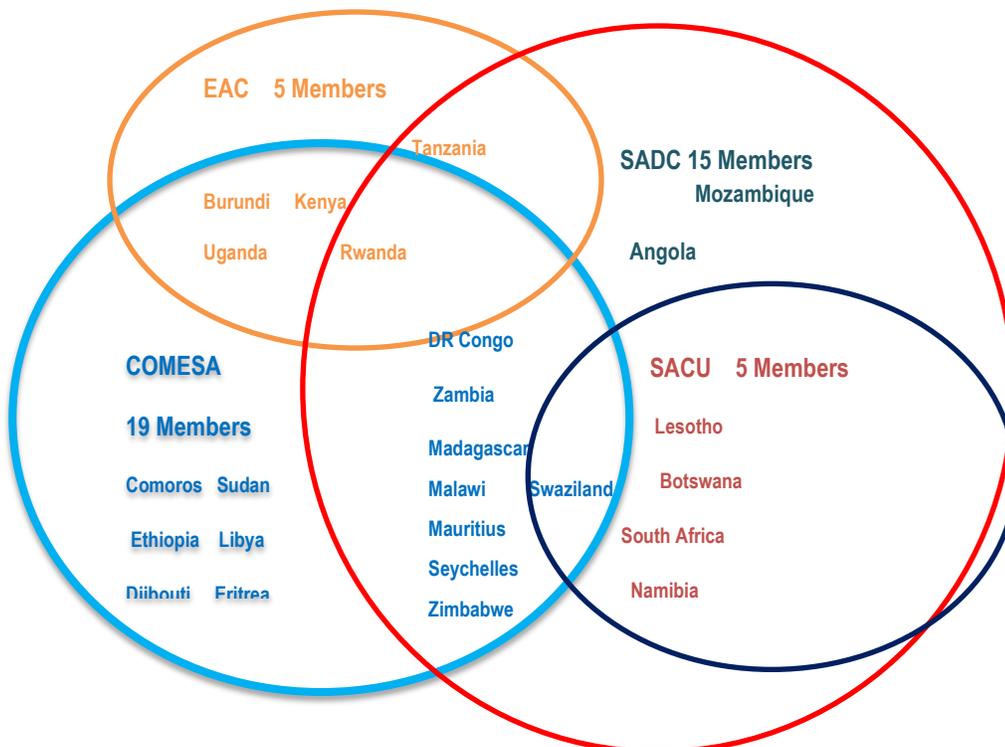
The Southern and Eastern African regions face various impediments that affect the movement of goods, people and services along regional road transport corridors. The major impediments are outlined hereunder:

2.2.1 Overlapping REC Memberships

The overlapping membership of countries with respect to belonging to different Regional Economic Communities (RECs) at the same time is associated with challenges that include the ratification of conflicting regulations, standards, processes and practices. This situation creates unnecessary administrative and operational constraints for transport operators, who have to conform and comply with different requirements as they move across different MS.

Ultimately, the transport operator incurs unnecessary delays and costs, which ultimately culminate in longer journey times, longer trip turnaround times, higher demurrage costs, missed trade opportunities and higher overall corridor costs. The net outcome is that corridor efficiency is negatively affected, leading to corridors failing to play their fundamental role of facilitating trade in the region. Figure 1 below shows the extent of overlapping membership of countries in respective RECs in Southern and Eastern Africa.

Figure 1: Country Membership to Regional Economic Communities (RECs)



Source: Figure created for study

The multi-memberships in RECs creates a complex web of competing commitments, which together with different rules and standards, results in high costs to intra-Africa trade and undermine trade facilitation efforts. As illustrated in Figure 1, 8 of the 15 SADC MS also belong to the COMESA whose total membership, since the withdrawal of Somalia, totals 19.

To illustrate the misalignment brought about by belonging to different RECs, while the vision for the SADC region has indicated that it would be a Free Trade Area (FTA) by 2012, the COMESA on the other hand, had long planned that it would have attained customs union status by 2004.

A practical example of a country which is caught up in this predicament is Zambia, which is a member of both the SADC and the COMESA regions. Under the SADC Trade Protocol, Zambia agreed to dismantle tariffs for SADC MS to zero. Consequently, since South Africa is a member of SADC, Zambia had agreed to remove tariffs for South African goods to zero. On the other hand, Zambia being a member of the COMESA Customs Union had agreed to a common external tariff regime for countries that are not members of the COMESA. Since South Africa is not a member of the COMESA, this arrangement did not apply to South Africa. This translated into the fact that Zambia had agreed to reduce tariffs for South Africa, under SADC conditions, but to maintain tariffs for South Africa under the COMESA provisions. This scenario leaves Zambia in a difficult situation. (Mapua, J & Muyengwa-Mapuva, L. 2012: 28-29).

The overlaps between SADC and COMESA and SADC and SACU regions create uncertainty as to the tariff rates and rules of origin that are applied to trade between two countries belonging to more than one REC. These disparities in tariff structures pose a challenge to any harmonisation initiative and are argued to increase transaction costs in trade through a web of agreement rules. Furthermore, dual membership puts a financial strain on MS as they have to pay membership fees towards sustaining two parallel Secretariats and sometimes similar programmes.

Another example is the non-alignment of third-party insurance systems that are applied across different RECs in Southern and Eastern Africa. Whilst COMESA, EAC and some SADC countries implemented the Yellow Card System for third party insurance, SACU countries implemented a fuel levy based system. The implication is that countries belonging to SACU and SADC are technically caught up between retaining the fuel levy based system and migrating to the Yellow Card Insurance system.

The effects are felt much harder and costly by transport operators conducting cross-border operations between countries using different third party insurance systems as they have to pay for both insurance systems at the same time. Ultimately, all consequential costs in the trade and transport value chains are recovered from the consumers.

Against this background, the COMESA, EAC and SADC Tripartite formed an overarching alliance structure to work towards alleviating the complexities caused by overlapping memberships. Currently, the Tripartite is developing programmes which aim to harmonise transport and trade policies and converge initiatives within and between the 3 RECs and

advance the aim of the African Economic Community (AEC) towards promoting economic, social and cultural development among the majority of African states.

2.2.2 The Heterogeneity of SADC Economies

The SADC region is characterised by acute economic imbalances and inequalities, especially with regards to the nature and level of economic development of MS. The heterogeneity of SADC economies is viewed as a challenge to regional integration efforts since stronger economies tend to dominate, dictating the terms of reference and operation to weaker members of the REC.

For example, in the South African Customs Union (SACU), South Africa plays a dominant role and occupies a decisive position in decision making processes within the REC. Similarly, within the SADC region South Africa has always presented a dominant voice and its economy has been able to attract trading partners outside the SADC region more than other MS.

The existence of different economies in the SADC has led to growing inequalities among MS, confirming the customs union theory that postulates that in such a scenario the more advanced economies are, the more they gain from investments. These economies grow faster than others and this trend exacerbates inequality.

Further to the above, the heterogeneity of SADC economies not only aggravates inequalities among MS of the same REC, but enables larger economies to thrive at the expense of their smaller counterparts. As a result, trade imbalances persist, leading to wider economic gaps among MS and those with larger economies continuing to dictate the pace of economic growth and the level of intra- and extra-regional trade.

On the positive side, the differences in the economies of SADC MS provide scope for developing different types of comparative advantage. Furthermore, it has been argued that Regional Trade Agreements (RTAs) are flexible legal regimes and as such provide a forum for cooperation on a whole range of objectives, including trade and transport liberalisation.

2.2.3 Different Levels of Economic Development

The difference in political backgrounds as well as the nature of resources found in SADC MS has resulted in differences in levels of economic development. It is undisputed that South Africa is the largest economy in the SADC region accounting for over 60% of all intra-SADC trade and about 70% of the SADC Gross Domestic Product (Mapuva, J & Muyengwa-Mapuva: 2014).

Given the vast economic power asymmetries between South Africa and other SADC MS, the country cannot be treated as an equal partner. South Africa has stepped forward as a dominant figure in negotiations, to an extent that it manages to break regulations without much protest from other MS.

Over the years, SADC's main economic challenge has been to create an environment suitable for the attainment of high and sustainable rates of equitable economic growth. With most MS still experiencing low growth rates of GDP and relatively low savings and investment rates,

economic development of the region has become increasingly uneven, a situation which tends to retard regional economic integration.

2.2.4 Rules of Origin

The application of rules of origin in the SADC was associated with various inconsistencies in the past. Currently the situation on the ground reveals that MS tend to promote their own economic and political interest contrary to the vision of the SADC encapsulated in the REC's ramification of Protocols in which each MS committed itself to "*operate, coordinate, harmonise and integrate policies and strategies in one or more sectors*".

Multiple and concurrent memberships influence the implementation of economic policies. For example, the SADC rules of origin on a number of products are more restrictive than those of the COMESA. This means that companies trading in countries which are members of both RECs are put in a precarious position since they would face a challenge with respect to determination of the rules that they should apply.

Restrictive rules of origin are not only regarded as a barrier to international competitiveness and regional integration, but are also costly in terms of ensuring conformity. The rules of origin in the SADC present a challenge to regional integration because they are considered not only to be relatively complex but prohibitive as well (Mapuva, J & Muyengwa-Mapuva: 2014).

2.2.5 Funding shortages

The funding of road transport projects is heavily reliant on government allocations, which are always inadequate and sometimes unavailable. There are many regional projects that were identified and approved for implementation in the region. However, perennial funding shortages remain a challenge to the region and consequently very few projects have been fully implemented. Each MS is responsible for the funding of regional projects that are located in their jurisdiction and funding is not always available. To some extent, the region relies on donor funding, which more often than not comes with terms and conditions that are unattractive to MS governments.

2.2.6 Poor road conditions

South Africa has the best road network in the region. However, sections of the Regional Trunk Road Network (RTRN) particularly on the NSC are not adequately maintained in some countries, inter alia because of funding constraints. Most SADC countries also do not have dedicated and ring-fenced road maintenance funding frameworks leading to erratic road network maintenance regimes. The road network in the North and Western parts of SADC (e.g. Democratic Republic of the Congo and Angola) is not adequately maintained, and this is exacerbated by the damages caused by conflict and neglect.

The lack of adequate road maintenance and poor road conditions that obtains in some countries increases the risk of vehicle breakdowns, accidents, cargo damage, discomfort, increased fuel consumption and longer journey times. Ultimately, this reduces the number of trips a vehicle can do per any given time, lower productivity and higher transportation and logistics costs.

The fact that the road network is not adequately maintained in some MS implies that savings made with respect to journey times and related costs in a few countries that adequately maintain their roads are forfeited once they enter territories of countries that do not adequately maintain their roads. Thus all benefits thereof are forfeited and the net impact on corridor efficiency is reduced.

2.2.7 Lack of road network connectivity

Connectivity is compromised in areas where there are missing road links. This problem is particularly severe in Angola, Tanzania and the Democratic Republic of the Congo (DRC). Missing road links increase the distance travelled by vehicles between origin and destination points, leading to longer journey times and higher operating costs whilst also reducing accessibility particularly with respect to key economic nodes in the respective countries.

Missing links means that the region cannot move goods, people and services as fast as the regions SADC competes with. Therefore, missing links contributes to poor regional competitiveness.

2.2.8 Lack of harmonised regulatory frameworks

Each MS has its own regulatory mechanism that determines market access and operating requirements which must be adhered to by cross-border road transport operators. As a result, cross-border road transport operators have to comply with different rules and standards that are not harmonised and which are enforced by different MS. This impediment leads to unnecessary complexities and requirements on transport operators that in most cases culminate in delays and additional transportation costs for them.

Currently, cross-border road transport regulation in the region is done through bilateral and multilateral cross-border road transport agreements that were concluded by and between the respective MS. These agreements primarily focus on controlling the supply of transport services in the market which is done through the issuance of cross-border road permits to transport operators. The current approach is characterised by fragmentation of the legislative and regulatory frameworks between MS. At country level integration is equally limited as reflected in duplication and overlaps in terms of roles and responsibilities.

2.2.9 Ineffective border management systems

Border management systems at most border posts in the SADC region is based on traditional approaches that perceives border posts as facilities for controlling movements across borders, rather than regarding them as facilities for the facilitation of efficient cross-border traffic flows.

The border posts are characterised by a multiplicity of stakeholders on either side of the border, operating in silos with minimum cooperation and integration of processes and procedures. Often, ICT systems are obsolete and customs and immigration systems are not integrated. As a result most processes are conducted manually with very little linkages between stakeholders. As a result, border processes are not tamperproof and are vulnerable to manipulation.

Ineffective border management systems result in congestion and lengthy delays at border posts with a resultant increase in the cost of doing business.

2.2.10 Road blocks and Inspection procedures

Law enforcement operations along SADC transport corridors are conducted by various stakeholders. Stakeholders rarely coordinate operations and it is therefore not surprising to find operations being conducted in close proximity to each other by different stakeholders. Currently vehicles are stopped at various inter and intra country road blocks even where there is no proof that traffic being transported is of a suspicious nature. This practice culminates in delays which unnecessarily increases journey times for cross-border operators. Furthermore, it is exacerbated by the mushrooming of informal road blocks in some MS.

2.2.11 Corruption practices

While most law enforcement operations and checkpoints in corridors are legal, some of them are not. Quick passage through inspection points is often facilitated by informal payments, which are far less than what would be payable for the offence committed. Corruption does not only take place at traffic inspection points but also at border posts and literally everywhere where enforcement and compliance are checked. Corruption does not only compromise road safety but also national security and it is a threat to legitimate cross-border trade in the region.

2.3 Spatial Development Initiatives along Regional Transport Corridors

The Spatial Development Initiative (SDI) initiative is a short-term investment strategy that aims to unlock inherent economic potential in specific spatial locations in Southern Africa. The programme uses public resources to promote private sector investment in regions with a high potential for economic growth.

The SDI initiative is not a new approach to infrastructure planning. The SDI approach was initiated in South Africa in 1996 as an integrated planning tool aimed at promoting investment in underdeveloped regions of South Africa that reveal potential for growth. The approach involves a process in which the public sector develops or facilitates conditions conducive to private sector investment and establishment of Public-Private Partnerships (PPPs).

Following from initial successes in South Africa, developments throughout SADC have followed the SDI model. Listed below are examples of regional development programmes that have been initiated to date:

- Limpopo Valley SDI (involving SA and Mozambique);
- Beira Development Corridor (SA, Mozambique and Zimbabwe);
- Zambezi Valley SDI (SA and Mozambique);
- Nacala Development Corridor (SA, Mozambique, Malawi and Zambia);
- Walvis Bay Development Corridor (SA and Namibia);
- Gariep SDI (SA's Northern Cape Province and Namibia);
- Mtwara Development Corridor (SA, Tanzania, Mozambique and Malawi);
- Central Development Corridor (SA, Tanzania and Rwanda); and
- Lebombo Investment Initiative (SA, Swaziland and Mozambique).

Of the above SDI programmes, the Lebombo Investment Initiative succeeded most noticeably. This initiative, which included the restoration of the historic trade route (MDC) between the landlocked provinces of Gauteng and Mpumalanga in South Africa to the port of Maputo in Mozambique, drew extensive investment into the sub-region. Initial upgrades to basic infrastructure proved profitable, which in turn spurred further public and private sector investment into transport and communications infrastructure. In addition, industrial infrastructure projects such as the BHP Billiton Mozal aluminium smelter were set up in Maputo, creating jobs and fostering further economic development.

Walvis Bay SDI gave rise to the SADC gateway terminal project that seeks to extend to the port of Walvis Bay, inter alia, through the building of a new container terminal between Walvis Bay and Swakopmund. Upon completion the new port will feature world class ship and rig repair yards, oil and gas supply base, an undercover dry bulk terminal, a car import and a passenger terminal.

To date, approximately 50% of the construction of the new container terminal at the Port of Walvis Bay has been completed. This terminal, which is scheduled for commissioning in early 2018, will have two berths, each 600 metres in length, will be big enough to accommodate container vessels of 8 000 TEUs and will be able to handle 750 000 TEUs per annum. (<https://southernafrican.news/2016/06/14/zimbabwe-making-progress-with-dry-port/>).

Infrastructure improvements at the port of Walvis Bay will impact positively on trade and traffic flows along the TKC, with trickle down effects expected to filter through Namibia, Botswana and South Africa.

2.4 Management of Transport Corridors in the SADC region

The SADC PTCM sets the regional agenda for development of the regional road network, provides the framework for management of regional corridors and provides for the establishment of planning committees to oversee development along strategic regional transport corridors.

In recent years, the notion of managing transport corridors gained tremendous momentum and is currently acknowledged as an important component of trade and transport projects in the SADC region. Essentially, corridor management is about getting the relevant parties to co-produce plans and policies and to implement interventions that are complementary to improving overall corridor performance.

Numerous stakeholders are involved in the coordination and efficient functioning of transport corridors in the region. These parties include government agencies responsible for infrastructure (roads and ports), service regulators (transport, customs and immigration) and private sector operators (terminal operators and freight forwarding agents). Section 5.4 of this report provides a detailed discussion of CMCs established to oversee developments along the NSC, MDC and the TKC.

2.5 Road Transport Legal and Regulatory Frameworks in the SADC region

Cross-border road transport in SADC is regulated through various legal instruments. Typically an instrument is an agreement among the parties that sets out the objectives, principles, practices and institutions for jointly managing the operation and execution of transport projects, systems, policies and regulations. The purpose of these agreements is to facilitate efficient and seamless cross-border road transport movements between MS from a policy, regulatory, law enforcement and operational perspective.

At regional level, SADC followed various routes in developing and signing legal instruments that govern road transportation. There are a number of instruments that were signed and / or ratified by MS and they include:

- The SADC PTCM, which sets the framework for the facilitation of efficient and seamless cross-border road transport movements, market access, the harmonisation of standards, rules and regulations, increased market liberalisation for road freight transport movements, provision and management of the regional transport network system;
- The Trans-Kalahari Corridor MoU on Road Transportation, signed by high-level representatives from South Africa, Botswana and Namibia intends to streamline and enhance transport operations along the TKC;
- The SACU MoU on Road Transportation entered into force to facilitate and maintain effective road transport arrangements between Botswana, Namibia, South Africa, Lesotho and Swaziland;
- Bilateral cross-border road freight and passenger transport agreements concluded between South Africa and Malawi, Mozambique, Zambia and Zimbabwe seek to promote the unimpeded flow of cross-border road transport movements between South Africa and the named countries.

In spite of the existence of various legal instruments, the domestication of road transport agreements at MS level has been slow. Twenty years after its signing, the SADC PTCM has not yet been ratified let alone fully implemented by all MS. This is partly due to the fact that the PTCM is not a legally binding instrument, and therefore does not compel MS to reform their policies, legislation and practices to enable the region to function as an integrated whole. The TKC MoU is another example of a legal instrument that has been signed by signatory parties but not yet been approved by all signatory parties.

Section 5.2 of this report presents more information on legal instruments / frameworks that guide cross-border road transport operations along the NSC, MDC and TKC.

2.6 Conclusion

Transport corridors can either stimulate or impede economic growth and development. Eighteen major transport corridors cross the SADC region. These corridors fulfil an important role in linking landlocked countries in the SADC to major ports in South Africa, Mozambique, Namibia and Angola.

Since transport corridors extend beyond the borders of two or more countries, a new approach has emerged in recent years that focus on adopting a regional approach to transport infrastructure development. As a result, various inter-country corridors have been transformed into regional development corridors aimed at facilitating intra-regional trade, while also stimulating development along less developed areas adjacent to strategic development corridors.

The MDC has emerged as one of the most important transport development corridors in the SADC region and serves as an example of a transport corridor that has acted as vehicle for stimulating economic growth and development along the entire corridor. The success of initial infrastructure upgrades, has spurred further public and private investment into the transport and communications infrastructure, thereby enabling Gauteng's importers and exporters shorter, faster and more cost-effective access to its nearest deep water ports.

With the exception of the MDC, most of the other transport corridors that pass through the SADC are plagued by various infrastructure inefficiencies that undermine their ability to stimulate economic growth and development between origin and destination points. Although this chapter only touched on some impediments (e.g. missing transport links along corridors, poor road conditions and slow pace of in which transport instruments are ratified), chapter 3 provides a more detailed discussion of the various hard and soft infrastructure constraints that undermine the efficiency of the NSC, MDC and TKC.

3. OVERVIEW OF THE NSC, MDC AND TKC CORRIDORS

3.1 Introduction

Chapter 3 provides a detailed assessment of the NSC, MDC and the TKC. The corridor assessment focuses on a number of themes, including:

- Condition of road infrastructure;
- Border posts;
- Corridor impediments;
- Positioning of weighbridges / truck stops;
- Traffic volumes; and
- Application of Road User Charges (RUC).

3.2 North South Corridor

3.2.1 Background

The NSC extends over the territories of 3 RECs, namely COMESA, EAC and SADC. Representing more a network of corridors than a single corridor, the NSC also connects South Africa to the region via 8,599 kilometre of road linking Durban to Dar es Salaam through Zimbabwe, Botswana and Zambia. (Byiers, B & Vanheukelom, J. 2014: 2).

The NSC transit eight countries in Southern and Eastern Africa and interconnects with various corridors such as the MDC and TKC. The NSC road network is the busiest transport network in the Tripartite in terms of both traffic and freight volumes. Literature sources point to the fact that approximately 95% of all freight on this corridor is moved by road, with only 5% by rail. (<http://www.trademarksa.org/publications/tmsa-ppiu-update-and-map-north-south-corridor-aid-trade-road-projects>).

Due to increasing traffic volumes, the NSC road network has come under increased pressure in recent years in relation to design capacity. In this respect, a surge in mining activity has resulted in an increase in the volume of mining commodities being transported along the NSC road network, adding to heavy loading on the road infrastructure (Transport World Africa. May/June 2014: 28).

3.2.2 Route Description

The NSC road network connects the port of Durban in South Africa to the Copperbelt regions of the DRC and Zambia, with extending links to Dar-es-Salaam and Malawi. From South Africa cross-border operators can cross the Beitbridge and Chirundu borders in Zimbabwe and Zambia to reach Dar es Salaam in Tanzania.

There is an alternative route that links South Africa to northern countries bypassing Zimbabwe. The route exits South Africa via the Martin's Drift / Grobler's Bridge border crossing into Botswana, then exits Botswana via the Kazungula border-post into Zambia from where it then connects into the DRC via the Kasumbalesa border post.

3.2.3 Condition of Road Infrastructure

The N3 and N1 highways form the main artery of the NSC in South Africa. Road infrastructure on these highways is in very good condition when compared to the general condition of road infrastructure on the whole of the NSC. The road has high carrying capacity owing to the high number of lanes in either direction. These favourable conditions are somewhat tainted by high levels of traffic congestion caused by the high number of heavy goods vehicles. The N3 and N1 highways also carry a high volume of private vehicles as they provide the main road link between the KwaZulu-Natal and Gauteng regions in South Africa.

The section of the NSC in Zimbabwe is characterised by a number of limitations which include, poor and deteriorating road conditions, poor road connectivity and difficulty in sourcing fuel and other transport needs. Recently, Zimbabwe undertook maintenance work on the Harare – Beitbridge road to improve road conditions. However, the patch-work which was done in some sections of the road is inadequate as ideally, reconstruction was needed. Although infrastructure upgrades have arguably impacted positively on road safety, the installation of manual toll booths over this stretch of road causes disruptions for cross-border operations in the form of time delays. This is exacerbated by the fact that the road is single lane in either direction.

Meanwhile, Zambia made significant progress in upgrading its trunk road network. Despite relatively low road densities, the findings of a World Bank study (2011:8) suggest that Zambia's primary and secondary networks provide basic regional and national connectivity. In 2011 more than 80% of Zambia's paved road network which form part of the NSC road network were found to be in a good or fair condition (World Bank. 2011: 8-9).

3.2.4 NSC Corridor Constraints

Infrastructure constraints experienced along the NSC are discussed below.

a) Ports

- The ports of Durban and Dar-es-Salaam experience capacity constraints. This constraint coupled with limited operational hours at both ports result in port delays and congestion;
- Capacity exceeds demand at the Durban port. This is inter alia due to the fact that larger vessels require different facilities, such as deeper ports and longer berths. Currently Durban port is not able to accommodate larger new-generation container ships; and
- Punitive storage charges at Durban port are regarded as very expensive.

b) Border posts

- Heavy congestion is experienced at most border posts as a result of cumbersome and repetitive border management processes. Different non-automated clearing systems are used by border stakeholders on either side of the border;
- Due to extreme delays experienced at NSC border posts, operators often spend several days waiting in line to cross these inland borders. In the absence of overnight facilities drivers are forced to sleep inside their vehicles;
- The existence of too many regulatory agencies that conduct regulatory and enforcement operations on either side of the border, coupled with inefficient border management contributes to border inefficiency;

- ICT systems and equipment is either non-existent or obsolete. This state of affairs hamper the effective exchange of data and information between stakeholders;
- A lack of systems integration between stakeholders on either side of the border hampers faster cross-border movements facilitation;
- Some border posts along the NSC are not operational 24 hours a day which leads to congestion and bottlenecks. Even where border posts operate 24 hours a day, customs operations do not operate around the clock;
- Limited and / or unskilled border post officials lead to slower processing times and increased time delays at border posts;
- There is a complete lack of Coordinated Border Management (CBM) at border posts along the NSC;
- Crossing fees are regarded too high when compared to the trade conditions that exist on the NSC, such as bad road infrastructure conditions and missing road links; and
- Due to border post congestion and delays illegal activities such as human trafficking and the importation of counterfeit goods (which are not declared to customs) occur at some border posts.

c) Road and border post infrastructure

- Road infrastructure on the NSC is inadequate for the volume of traffic that traverses the corridor. The road condition in some sections of the corridor is poor and associated with long travel times and high risks of breakdowns and accidents;
- Border post infrastructure is generally insufficient at the Beitbridge, Kazungula and Kasumbalesa border posts insofar these inland borders do not allow the seamless flow of traffic across borders. Border post facilities are generally in a poor condition and regarded as inadequate by corridor users;
- Approach roads to and from border posts are generally inadequate at all major border posts along the NSC. This leads to congestion at border entry points and in some cases vehicles park on road shoulders further restricting the safe passage of other vehicles and increasing the risk of accidents;
- Inadequate border post design results in congestion and restrained border post operations;
- Many law enforcement checkpoints, both legal and illegal exist on the corridor. These intermittent checks interrupt the smooth flow of traffic, increases journey times and the likelihood for corrupt activities to take place; and
- Insufficient ICT infrastructure is provided at border posts which limits the implementation of new or advanced processes.

d) Management of the corridor

- There is no centralised corridor management entity assigned with the responsibility to manage and develop the NSC. This creates a challenge with respect to the coordination of corridor stakeholders and programmes and retard progress with respect to the development of the corridor;
- Information dissemination with respect to corridor conditions and developments that influence cross-border road transport movements is either slow, or non-existent; and

- The NSC links 3 RECs, which brings another level of complexity to the management of the corridor.

e) Communication and information

- Out-dated ICT systems (where and when they are available) and absence of the right ICT systems impede the exchange of information by and between regulatory and law enforcement authorities operating on the corridor;
- Insufficient information (data) is available relating to corridor usage, delays, new procedures and requirements and trade and transport facilitation related matters; and
- In the absence of a dedicated corridor management institution, there is no centralised communication platform from which important corridor information can be disseminated to relevant stakeholders (e.g. cross-border road transport operators) for purposes of informed decision-making and improving operations.

f) Security

- Corruption and bribery is rife on the NSC especially where law enforcement operations are conducted at border posts. It is almost certain that underhand payments facilitate faster and quicker passage through every checkpoint, a case that defeats the very purpose of the existence of law enforcement. Corruption partly contributes to accidents, the importation of counterfeit goods and human trafficking along the NSC.

g) Human resources

- There is a general lack of skilled personnel serving at border posts and a lack of management and governance skills on the NSC.

The above constraints contribute to significant delays and costs in the course of undertaking cross-border operations along the NSC. Whilst transport operators, consignors and consignees are directly affected by delays and consequential costs, everyone in the value chain is negatively affected. Countries lose in terms of economic losses, regulatory authorities lose in terms of failed mandate execution and revenue, travellers lose in terms of long travel times and the common man bears the brunt of high cost of goods traded in the region.

3.2.5 High level overview of traffic and trade volumes

Up to date data regarding freight and passenger flows along the NSC is not readily available. This is mainly due to the fact that no institution consolidates the data and complexities facing traffic flows on this corridor, which prevent the upkeep and consolidation of statistics. Statistics provided in this section is based on the latest available information from credible sources.

Previous discussions revealed that the NSC is the busiest corridor in the SADC in terms of values and volumes of freight transported. Traffic on the NSC is characterised by the exportation of mining and agricultural products / equipment, engineering goods and chemicals and the importation of manufactured goods. Other commodities transported along the NSC include processed foods, coal, chemicals and beverages.

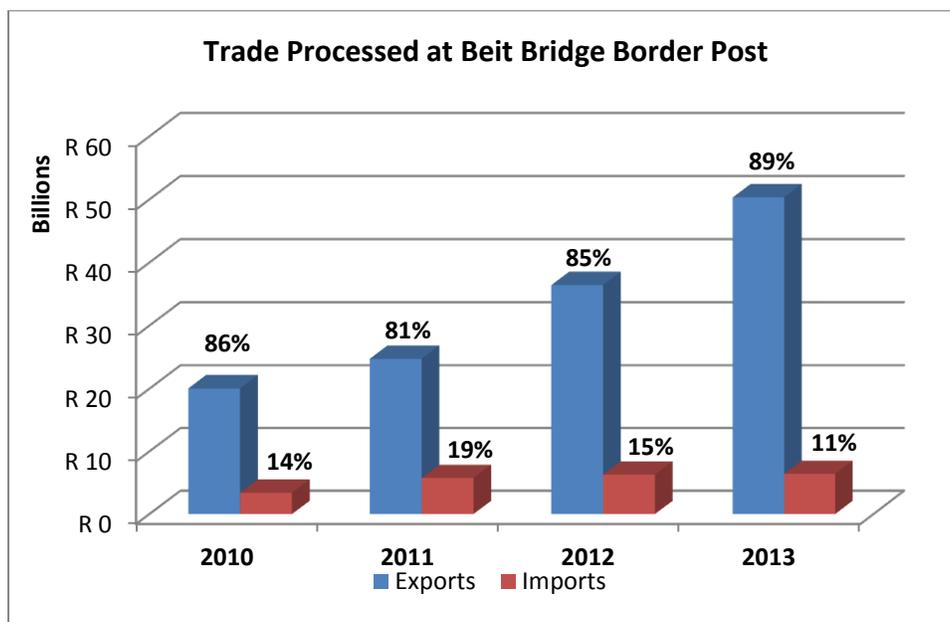
A problem associated with the NSC is that the corridor is too heavily skewed in favour of the exportation of primary commodities (agricultural and mining products), with low volumes of containerised cargo moving between South Africa and the DRC. ([http://www.transportworldafrica.co.za/2016/01/15/north-south-corridor-africas-main-vein/.](http://www.transportworldafrica.co.za/2016/01/15/north-south-corridor-africas-main-vein/))

Literature sources at hand indicate that approximately 19 million tons of cargo is transported along the NSC, 85% of which is road freight, and 15% rail freight. (<http://portandcorridor.org/wp-content/uploads/2013/03/South-Africa-corridor.pdf>). In recent years, steady increases in road traffic volumes have added pressure to the regional road network in relation to its design capacity. As a result, disruptions at fixed delay points (e.g. border posts) is a common occurrence

The key border posts along the NSC are Beitbridge (between South Africa and Zimbabwe), Chirundu (between Zimbabwe and Zambia), and Martin’s Drift / Groblersbrug (between Botswana and South Africa). Beitbridge is the region’s busiest border post.

Figure 3 illustrates the percentage of trade (imports and exports) processed at the Beitbridge border post between the years 2010 to 2013.

Figure 3: Percentage of Trade Processed at the Beitbridge Border Post



Source: SARS Data. Accessed in June 2016

Figure 3 show that the total value of goods processed by South Africa increased from R24 billion in 2010 to R30 billion in 2011. During the years 2012 and 2013 this figure increased to R43 billion and R57 billion respectively. The statistics clearly illustrate that exports constitute more than 80% of the goods processed at the Beitbridge border post.

3.2.6 Positioning of Weighbridges and Truck Stops

a) Weighbridges

There are multiple weighbridge stations located along the lengthy stretch of the NSC between Durban and the DRC. All heavy vehicles are required to pass through weighbridge stations to weigh the entire vehicle plus its content. This is done primarily to reduce damage to the road infrastructure. Despite the existence of various weighbridge stations, the positioning of these facilities is not evenly spread along the entire corridor, as depicted in Table 2 here-under.

Table 2: North-South Corridor Weighbridge Locations

Weighbridge	Number of Weighbridges	Number of Police Checkpoints
South Africa		
KwaZulu Natal		
<i>Westmead N3</i>	1	1
<i>1Mkondeni N3</i>	1	1
<i>Ladysmith N3</i>	1	1
Gauteng		
<i>Heidelberg North Bound N3</i>	1	1
Limpopo		
<i>Mantsole</i>	1	1
<i>North Bound N1</i>	1	
<i>Polokwane N1</i>	1	1
<i>Musina N1</i>	1	1
Zimbabwe		
<i>Beitbridge VID</i>	2	1
<i>Birchenough Br</i>	2	1
<i>Masvingo VID</i>	1	1
<i>Eastlea VID</i>	1	1
<i>Chirundu VID</i>	1	1
Zambia		
<i>Kafue</i>	1	1
<i>Kafulafula</i>	1	1
<i>Kapiri Mposhi</i>	1	1
<i>Ndola</i>	1	1
DRC		
<i>Whisky Village</i>	1	1
<i>Kasang (Entrance to Lubumbashi)</i>	1	1
<i>Kasumbalesa</i>		1
<i>Kisanga</i>		1

Source: C-BRTA. 2015. Accessed in November 2016

The introduction of weighbridges at frequent intervals along regional road transport corridors causes delays for corridor users, with a resultant increase in transport costs if not well managed.

Although weighbridges serve an important role in curbing overloading, they currently represent a NTB to cross-border operators. Many weighbridges in the region are not calibrated. Divergent readings at different weighbridge stations cause huge confusion and attract additional costs for transport operators.

Furthermore, most weighbridge stations accept cash only for payment of overloaded vehicles, often leaving truckers in a difficult position of having to abandon their vehicles to seek a cash point sometimes several kilometres away. This problem is aggravated by a lack of secure parking for vehicles. Bribery and corruption at weighbridge stations are other challenges that have been in existence for some time.

b) Truck Stops

Driver fatigue poses a significant risk to road safety in the SADC region. Given the vast geographical distance of the NSC, the importance of truck stops, their location at regular intervals along the main corridor to combat driver fatigue and accidents cannot be over emphasised.

Information on the positioning of truck stops along the NSC is not readily available. Literature sources indicates that the further north from South Africa transporters go, the less developed truck stop facilities become. Meanwhile, there is a big drive to improve the quality of truck stops especially those located in Zambia. (<http://www.transportworldafrica.co.za/2016/01/15/north-south-corridor-africas-main-vein/>). Table 3 illustrates the positioning of truck stops on the NSC stretch in South Africa between Durban and Musina.

Table 3: Positioning of Truck Stops between Durban and Musina

Name of Truck Stop	Spatial Location along the NSC	Route
Gateway Truck Stop	Limpopo (Musina)	N1
Limpopo Truck Stop	Limpopo (Musina)	N1
Silver Falls Truck Stop	Limpopo (Musina)	N1
Pro Tech Truck Stop	Limpopo (Musina)	N1
Waste and Cars Truck Stop	Limpopo (Musina)	N1
Dube Truck Stop	Limpopo (Musina)	N1
Sydney Road Truck Stop	KZN (Congela)	N3
Marian Hill Truck Stop	KZN (Pinetown)	N3
Manburg / Wozani Berg Gasoline	KZN (Port Shepstone)	N3
Warden Truck Stop	Free State (Warden)	N3
Balmoral	Free State (Harrismith)	N3
Monte Vista	Free State (Harrismith)	N3

Source: C-BRTA. Accessed in July 2016

3.2.7 Road User and Cross-Border Charges

Road User and Cross-border charges are often confused with each other. Road user charges are charges that are imposed upon all road users and include toll fees, fuel levies and licence fees, whereas cross-border charges are only levied on (commercial) cross-border road transport vehicles.

Article 4.5 of the SADC PTCM provides the framework for the development of a harmonised national road user charging systems and distinguishes between the following types of road user and cross-border charges that MS can introduce in their respective territories:

- Fuel levies (designated as road charges);
- Vehicle licence fees;
- Road tolls;
- Abnormal and awkward load charges;
- Weight-distance type charges;
- Cross-border road user charges;
- Entry fees payable by foreign registered vehicles; and
- Parking and traffic congestion costs.

Many countries in the SADC region implemented cross-border charges in their respective territories for cross-border vehicles post the signing of the PTCM in August 1996. The NSC traverses through 8 countries in the Southern and Eastern African regions, namely: South Africa, Zimbabwe, Zambia, Botswana, Malawi, Mozambique, Tanzania and the DRC. Other than South Africa these countries charge cross-border charges. Road user and cross-border charges were not obtained for Tanzania since this country was omitted from the NSC route description adopted for this study (refer to section 3.2.2).

Table 4 provides more information on some MS that have implemented cross-border charges to date.

Table 4: Countries imposing Cross-Border Charges

NSC Country	Mode of Transport		
	Freight Transport	Passenger Transport	
		<i>Bus</i>	<i>Taxi</i>
Botswana	X	X	X
DRC	X	X	No taxis
Malawi	X	X	No taxis
Mozambique	X	X	X
Zambia	X	X	No taxis
Zimbabwe	X	X	x

Source: C-BRTA. 2016. Accessed in February 2017

Information on the types of cross-border charges imposed by NSC countries has been obtained from the Africa Road Corridors Handbook (2014 publication) and the C-BRTA Business Case on the comprehensive levying of cross-border charges. Table 5 outlines specific cross-border charges imposed by the NSC MS.

Table 5: Specified Cross-Border Charges imposed in NSC Member States

RUC	Botswana		DRC		Malawi		Mozambique		Zambia		Zimbabwe	
	L	F	L	F	L	F	L	F	L	F	L	F
Transport Permit SACU		✓										
Permit application fee		✓										
Road safety tax Tractor and truck tractor		✓										
Motor vehicle accident fund charge		✓										
Entry levy p.p.				✓								
Border crossing fee			✓	✓					✓	✓	✓	✓
Parking fee			✓	✓							✓	✓
Govt. tax				✓								
Carbon tax			✓	✓					✓	✓	✓	✓
Visa vehicle card entry				✓			✓	✓				
Insurance			✓	✓				✓				
Disinfection charge			✓	✓								
Unspecified RUC			✓	✓	✓	✓		✓			✓	✓
Tourism yellow fever vaccination				✓								
Photocopies charge			✓	✓								
Carriers licence						✓			✓	✓		
Yellow card – truck tractor					✓	✓			✓	✓	✓	✓
Yellow card – semi-trailer					✓	✓						✓
Transport permit per entry							✓	✓				
Escort of loaded vehicles charge								✓				
Weighbridge charge							✓	✓				
Tete bridge charge							✓	✓				
New Limpopo bridge fee							✓					✓
Victoria Falls bridge fee							✓	✓			✓	✓
Toll fees							✓	✓				

RUC	Botswana	DRC	Malawi	Mozambique	Zambia	Zimbabwe
Municipality fee					✓	
RUC					✓	
Ferry fee					✓	✓
Goods inspection fee						✓

Key:

L- Local Operator

F- Foreign operator

Source: Africa Road Corridors Handbook (2014) & C-BRTA (2017). Accessed in January 2017

Based on the information presented in Table 5 above, it can be deduced that:

- There are disparities and inconsistencies in cross-border charges levied along the NSC, with different charges imposed by different NSC countries;
- Excessive RUCs, over and above those charges stipulated in the SADC PTCM, are imposed on foreign operators who enter the DRC and Zambia;
- In most cases, MS protect local (national) operators through exempting them from certain road user / cross-border charges; and
- South Africa does not levy cross-border charges on foreign operators who enter South Africa through the country's various border posts. The downside of this practice is that South African operators are put in a discriminatory position since they do not enjoy any benefits over foreign operators who travel on South African roads.

3.2.8 Wrap-Up Remarks

Overall, the NSC is the busiest and longest transport corridor crossing the SADC region. With the exception of the N1 and N3 national roads in South Africa which is in a good condition, the condition of road infrastructure in other MS (e.g. Zimbabwe) is inadequate to support traffic flows along the NSC, leading to severe congestion at certain touch points, in particular at border posts.

Only one OSBP (Chirundu) has been implemented to date and as a result congestion and extensive delays are still experienced at other border posts, in particular Beitbridge. In addition to hard infrastructure constraints, multiple soft infrastructure impediments undermine the optimal performance of the NSC.

3.3 Maputo Development Corridor

3.3.1 Background

The MDC connects the port of Maputo in Mozambique to Gauteng, the industrial heartland of South Africa. It is widely acknowledged as one of the most important examples of contemporary bilateral cooperation between Mozambique and South Africa.

The MDC gained prominence as a result of coinciding infrastructure developments along the entire corridor (e.g. infrastructure upgrades at Maputo port and construction of the N4 national road) and has emerged as one of the most successful SDI in the Southern African region.

3.3.2 Route Description

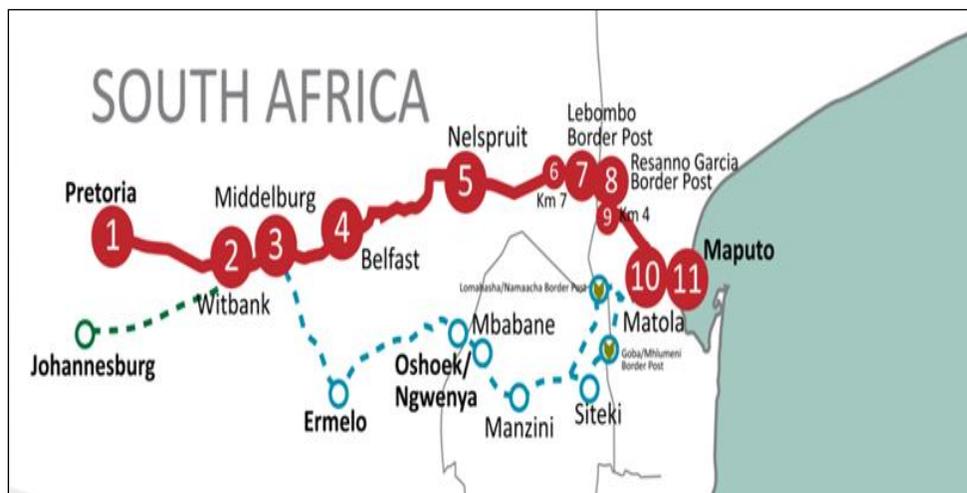
The MDC route connects the landlocked Gauteng, Mpumalanga and Limpopo provinces to the port of Maputo in Mozambique. This corridor is acknowledged as a major import / export route that connect the north-east provinces of South Africa with the capital and main port of Mozambique, while also serving Swaziland and southwest Mozambique.

The main road on the South African side of the MDC is the N4, a two- to four-lane national toll road. The N4 highway was the first major infrastructure project completed under the MDC agreement. In Mozambique the N4 becomes the EN4 after crossing the Mozambican side of the border and progresses to Maputo. The N4 and EN4 were completed in 2004, and are operated by TRAC, which is assigned with the responsibility to build, operate and maintain the road network under a Build-Operate-Transfer (BOT) agreement until 2028.

The EN4 is connected to the port in Maputo by a special access road completed in 2006, with a modern gate facility at the entrance to the port. The entire network is built to carry 56-ton trucks that are used to transport heavy international freight. The core components of the corridor comprise of roads, railway lines, border posts and terminal facilities all of which have some impact on the flow of freight.

To date large strides have been taken to improve the functioning of the corridor and reduce the turnaround times of freight moving between South Africa and Mozambique. Major infrastructure improvements include upgrades to the N4 highway, the implementation of the South African Revenue Services (SARS) modernisation process and upgrades to the ports of Maputo and Nacala. Figure 4 here-under depicts the MDC.

Figure 4: Route Description MDC



Source: C-BRTA. 2013. Accessed in June 2016

3.3.3 Condition of Road Infrastructure

The majority of traffic movements along the MDC corridor occur along the N4 and EN4 road networks. The condition of the road infrastructure of both highways is very good. The EN4 road, stretches over a distance of 92 kilometre straight to the port before terminating closely to the downtown area of Maputo (<http://www.mcli.co.za/mcli-web/mdc/mdc.html>).

The topography of the Lebombo / Ressano Garcia border post (constructed from 1997) makes it very difficult to develop or expand the border post infrastructure. As a result the border experiences high level of congestion, especially during peak periods. After only limited progress was made initially, a bilateral agreement was signed in 2007 with the intention to induce momentum to transform this traditional two stop border into an OSBP.

Although the Lebombo / Ressano Garcia border post still does not function as a fully fledged OSBP, combined activities such as joint border crossing inspections and monitoring is taking place between South Africa and Mosambique during peak periods.

A significant reform measure, aimed at addressing inadequate hard infrastructure on the MDC was the establishment of a designated cargo processing facility and a freight bypass road 7 kilometres before the border crossing in South Africa (referred to as Km7) and another in Mozambique, 4 kilometres away from the border (known as Km4). This resulted in significant traffic flow improvements through the border post.

3.4 MDC Corridor Constraints

Impediments experienced along the MDC are set out below.

a) Ports

- Utilisation at the port of Maputo is severely constrained by insufficient rail services to the port and port congestion that materialise in delays and negative perceptions about Mozambique;
- There is a lack of sufficient rail capacity along the MDC. Turnaround times are high, resulting in high costs for traders. In the absence of passenger rail services, commuters are forced to resort to road based vehicles when travelling between Gauteng and Mozambique.

b) Lebombo / Ressano Garcia border post

- A disconnect exist between the political will at executive level and the capacity for implementation at administrative level to transform the Lebombo border post into an OSBP;
- While the customs modernisation programme implemented by SARS and the implementation of a Single Electronic Window by the Mozambican customs authority, Alfandegas, have been fundamental to speeding up customs clearing processes, border post congestion and delays due to the lack of 24-hour operations has reached crisis levels;
- While the port of Maputo operate 24/7, the backlog of traffic backed up between midnight and 06h00 at the border post undermines the efficiency of the MDC;

- Within the border precinct, parking space for large vehicles is limited, giving rise to traffic flow challenges; and
- Current border post facilities are drastically in need of upgrade with figures indicating that double (12 000 people per day) the intended capacity (6 000 people per day) are crossing through the border on a daily basis (<http://www.iol.co.za/business/news/red-tape-graft-retard-maputo-corridor-1732302>).

c) Lack of bonded warehouses and truck stops

- There are no bonded warehouses on the route from the Lebombo border post to the port of Maputo to retain imported goods until duty owed is paid; and
- Only a limited number of truck stops are located along the MDC route.

d) Management of the Corridor

- Although the Maputo Corridor Logistics Initiative (MCLI) has achieved great success and provided strong management capacity, challenges remain as stakeholder demands change and on-going management is required to maintain the progressive momentum achieved up to now.

e) Safety and Security

- Corrupt activities take place along the MDC especially where law enforcement operations are conducted and at the Lebombo / Ressano Garcia border post and the net effects are similar to those experienced on the NSC.

f) Human resources

- There is a lack of trained logistics personnel to assist with exporting and importing operations between South Africa and Mozambique, coupled with insufficient skilled resources at the Lebombo / Ressano Garcia border post. As a result of human resources inefficiencies, cross-border operators and traders experience unnecessary delays and high transport costs;
- Logistics costs remain high due to inefficiencies as the majority of trucks travel from South Africa to Maputo with loads and return empty; and
- There is a lack of true logistics centres to drive efficient commercial transport operations along the MDC.

3.3.5 High level overview of traffic and trade volumes

The MDC is an extremely busy trade route despite being a short route, with a route distance of only 590 km from Johannesburg, and 560 km from Pretoria to Maputo. Over the past decade, the MDC has seen exponential growth in trade and investment across the border of the two countries.

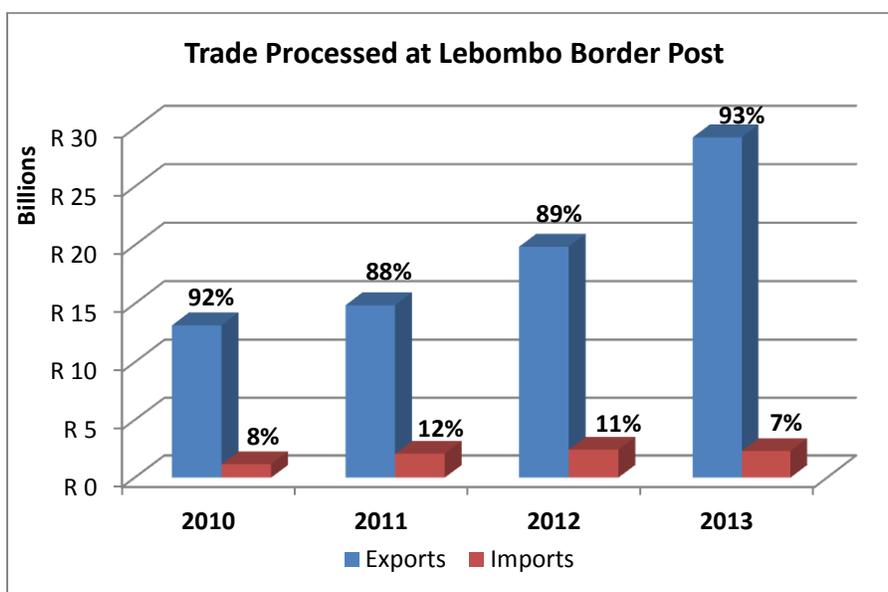
There are two main freight flows along the MDC:

- Road freight which consists of bulk and other commodities from Mpumalanga for export and goods from Gauteng for domestic consumption in Mozambique; and
- Rail freight which consists of bulk exports in Mpumalanga and Limpopo provinces destined for export through Maputo port.

The main commodities transported on the rail network are coal and magnetite. A variety of commodities such as timber, agricultural produce, containers, sugar, maize, gasoline and pulp are transported on the road network.

Trade volumes processed at this inland border between 2011 and 2013 are shown in Figure 5 below.

Figure 5: Percentage Trade processed at the Lebombo Border Post



Source: SARS Data. Accessed in June 2016

Figure 5 shows that exports constituted more than 88% of goods processed at the Lebombo border post annually for the period under review. On average (between 2010-2013), approximately 90% of the major export transactions processed at the Lebombo border post were destined for Mozambique signifying that most cargo passing through the border post is imported by Mozambique.

The value of goods exported from South Africa via the Lebombo border post is significantly higher than the value of goods imported into South Africa. The largest value of South African export commodities are destined for the Mozambican market, while other market destinations include China, Italy, Taiwan and the United States of America.

3.3.6 Positioning of Weighbridges and Truck Stops

a) Weighbridges

All the weighbridges on the N4 are managed by TRAC under contract with the South African National Roads Agency Limited (SANRAL). Although a number of weighbridges are located along the MDC, information pertaining to their exact location is not readily available.

Ten weighbridges (also referred to as load control centres) are managed by TRAC and these are located in close proximity to the MDC. Of the total, 7 weighbridges are located in South Africa, while 3 are in Mozambique. (<http://www.tracn4.co.za/weigh-bridges.html>). The names of weighbridges are indicated in Table 6 below.

Table 6: Weighbridges Located Along the MDC

Name of Weighbridge	Road	Country
Donkerhoek	N4	South Africa
Mideast	N4	South Africa
Midwest	N4	South Africa
Midwit	R555	South Africa
Machado	N4	South Africa
Farrefontein	N4	South Africa
Komati	N4	South Africa
Boane	EN1	Mozambique
Matola	EN4	Mozambique
Pessene	EN4	Mozambique

Source: Table compiled with info obtained from TRAC website (<http://www.tracn4.co.za/weigh-bridges.html>). Accessed in January 2017

Meanwhile, TRAC and the National Roads Administration of Mozambique (ANE) recently announced the addition of 2 new load control centres on the N4 toll road, inside Mozambique in the Matola and Boane areas, to be policed by the Mozambique traffic authorities. (<http://fleetwatch.co.za/previous/magazines/Aug2004/17-Overload-LoadBusters.htm>).

b) Truck Stops

There are no formal truck stops that are located in the MDC. However, a number of informal truck stops are located in close proximity to the N4 highway. An example is Cool Ideas Truck Stop, located 1 km from the N4 on the R35 Bethal road near Middelburg, Mpumalanga. Approximately 200 trucks per hour pass through this truck stop. (<http://www.mcli.co.za/mcli-web/members/cool-ideas.htm>).

3.3.7 Road User and Cross-border Charges

Table 7 indicates the countries along the MDC that charge cross-border charges.

Table 7: Countries imposing Cross-Border Charges

NSC Country	Mode of Transport		
	Freight Transport	Passenger Transport	
		Bus	Taxi
Mozambique	X	X	X
Swaziland	x	X	x

Source: C-BRTA. 2016. Accessed in February 2017

Table 8 illustrates the various types of cross-border charges that are imposed within the jurisdictions of South Africa, Mozambique and Swaziland on local and cross-border road transport operators.

Table 8: Specified Cross-Border Charges imposed in MDC Member States

RUC	Mozambique		Swaziland	
	L	F	L	F
Visa		✓		
Escort of loaded vehicle fee		✓		
Insurance fee		✓		
Weighbridge fee for late arrival	✓	✓		
Toll fees	✓	✓		
Charge per entry				✓
Charge per local haulage			✓	✓
Unspecified RUC				✓
Transport permit per entry		✓		

Note on Abbreviations

L: Local Operator

F: Foreign Operator

Source: Africa Road Corridors Handbook (2014) & C-BRTA (2017). Accessed in January 2017

From table 8 it is evident that Mozambique operators are exempted from a number of charges (e.g. visa, escort of loaded vehicle and insurance fees). In Swaziland, local transport operators are exempted from paying a charge per entry or the unspecified RUC.

Meanwhile, South African operators do not enjoy any benefits over foreign operators who use South African roads to conduct business. The same charges that are imposed upon foreign operators are also levied on South African operators. This illustrates an uneven playing field that puts South African operators in a disadvantaged position.

3.3.8 Wrap-up Remarks

Since its establishment, the MDC has established itself as the largest and most successful development corridor initiative thus far in the SADC. Infrastructure development along the entire corridor has contributed to its success and makes the corridor attractive to stakeholders and investors.

Meanwhile, the infrastructure reforms that were implemented in the corridor are a result of proper identification of constraints and the enthusiastic effort of MS, represented by the MCLI, to address corridor impediments. In this respect, the MCLI plays an instrumental role in facilitating co-operation between public and private stakeholders and provides a platform for different role-players to voice and address operational concerns. The MCLI has also played a key role in ensuring the successful delivery of various corridor and border management reforms.

In light of its accomplishments, the MCLI initiative can be presented as a case study to various audiences in Africa to allow other RECs to draw on its successes, thereby helping other corridor management committees on the continent to better manage strategic transport corridors.

3.4 Trans Kalahari Corridor

3.4.1 Background

The TKC is a joint corridor initiative between the governments of South Africa, Namibia and Botswana. Its existence was solidified by the signing of a tri-partite agreement by the governments of the three countries.

The TKC was specifically developed to facilitate seamless flow of cross-border road transport movements, enhance trade flow and increase throughput at the port of Walvis Bay, inter alia, through improving cargo-handling facilities and initiating various infrastructure development programmes along this corridor. This corridor is known for providing a short transport link across the entire breadth of the Southern Africa sub-continent.

3.4.2 Route Description

The TKC route is 1900 km long and forms part of the larger Walvis Bay corridor which consists of three trade routes namely the TKC, the Trans-Caprivi corridor and the Trans-Cunene corridor. The TKC route starts in Walvis Bay and passes through 2 main border crossings (Buitepos / Mamuno & Pioneer Gate / Skilpadshek) on route to South Africa and connects with the Maputo corridor in Pretoria. The corridor route and main corridor points are shown in Figure 6 below.

Figure 6: Trans Kalahari Corridor Route Description



Source: C-BRTA. 2014. Accessed in June 2016

3.4.3 Condition of Road Infrastructure

The TKC comprises a surfaced road that links the Port of Walvis Bay in Namibia with Botswana and the industrial powerhouse of South Africa, Gauteng. The road is in a good condition, although narrow on the Namibian side. Traffic volumes are not as high as on the other Walvis Bay corridors and capacity is still available although the Walvis Bay corridor volumes have increased in recent years.

3.4.4 TKC Corridor Constraints

a) Ports

- Walvis Bay port has limited freight loading / unloading capacity as well as limited freight storage facilities;
- The port operates 24 hours per day but the gate that provides the exit way from the port to the TKC is not operational 24 hours; and
- There is no electronic system to which enquiries regarding port and custom processes can be directed. The lack of accessibility to these processes constitutes an impediment.

b) Border Posts

- Border posts along the TKC are not operational 24 hours per day;
- Most clearance procedures still take place at the border posts itself, which causes bottlenecks when heavy traffic flows are experienced;
- Personnel providing border support services are not adequately trained and lack essential skills, which result in slower processing times and lengthy border delays; and
- Incidences of bribery and corruption takes place at border posts along the TKC.

c) Road and Border Infrastructure

- Road infrastructure impediments relate mostly to Namibia in the form of incomplete road works and narrow road infrastructure;
- There is a lack of safety and security along the TKC; and
- A lack of road signage in an environment where wild animals tend to cross the roads at night presents an impediment.

d) Communication and Information

- Progress made on the use of corridor ICT systems and the development of ICT infrastructure for the whole corridor is limited to the Namibia / Botswana border post only; and
- There is no information platform that enables the sharing of information vital to effective corridor and border management.

e) Regulatory Costs

- The introduction of specific processes, such as the compulsory purchase of third party insurance tokens at Pioneers gate (Botswana) and transit permits, leads to an increase in trade costs and increases delay time at this border post; and
- The TKC runs through a fragmented regulatory environment of three different countries which affects the capacity to harmonise and coordinate trade and transport processes across the corridor.

3.4.5 High level overview of traffic and trade volumes

In recent years the TKC has become the preferred trade route for Namibia and South Africa as it is more than 400 km shorter, compared to the longer traditional routes route via the South of Namibia to Johannesburg. Since 2007 until 2011, cross border trade via the TKC has grown with more than 150%. This was mainly due to the high demand for consumables and motor vehicles in Botswana transported via the port of Walvis Bay. (http://www.wbcg.com.na/fileadmin/user_upload/documents/Newsletters/September-December_2012.pdf)

Information regarding traffic flows along the TKC is not readily available. According to data released by the GAIN group, approximately 4,8 million tons of cargo was transported along the TKC in 2014. Forecasting estimates presented by this group indicates that cargo volumes can increase to approximately 23, 79 million tons in 2045 (David King. November 2015).

Current infrastructure expansion programmes at the port of Walvis Bay, notably the construction of the \$86 million Walvis Bay port expansion project will most likely bear a positive impact on traffic flows along all 3 Walvis Bay corridors. At present, the port of Walvis Bay receives around 3,000 vessel calls per year and handles approximately 5 million tonnes of cargo per annum. It is expected that container capacity at this port will double from around 375,000 TEU's per year to 750,000 TEU's once the Walvis Bay port expansion project has been completed in 2018 (<http://www.portfinanceinternational.com/categories/emerging-economies/item/2030-walvis-bay-expansion-on-track-for-2017>).

3.4.6 Positioning of Weighbridges and Truck Stops

a) Weighbridges

There are weighbridges that are located along the TKC at the towns of Dibete, Francistown, Kazangula, Manuno, Ngoma, Pioneer, Ramathlabama, Ramokgwebane, Sehitwa, Serule Martin's Drift, and Tlokweg (<http://www.wbcg.com.na/corridors/trans-kalahari-corridor.html>).

b) Truck Stops

Despite the fact that the TKC is predominantly a road transport corridor there are no properly designed truck stops along this corridor. As a result drivers generally sleep in their trucks and stop at multiple locations to rest, eat or access health services.

In April 2014 the Trans-Kalahari Corridor Management Committee (TKCMC) announced the findings of a feasibility study that was conducted into the establishment of new truck stops along the TKC. This study proposes the establishment of 4 new truck stops at an investment cost of approximately R55-million. This figure excludes the cost of the land, which is expected to be priced at municipal value (<http://www.engineeringnews.co.za/article/trans-kalahari-corridor-wants-more-truck-stops-as-regional-road-freight-increases-2014-04-29>)

3.4.7 Road User and Cross-border Charges

Table 9 shows the cross-border charges imposed by each TKC member state.

Table 9: Cross Border Charges Imposed in TKC Member States

TKC Country	Mode of Transport		
	Freight Transport	Passenger Transport	
		Bus	Taxi
Botswana	X	X	X
Namibia	X	X	X

Source: C-BRTA. 2016. Accessed in February 2017.

Further to the above, specific cross-border charges are imposed within the jurisdictions of Botswana and Namibia on foreign and local cross-border road transport operators, as shown in Table 10.

Table 10: Specified Cross-Border Charges imposed in TKC Member States

RUC	Botswana		Namibia	
	L	F	L	F
Transport permit SACU		✓		
Permit application fee		✓		
Toll fee				
Road safety tax truck tractor		✓		
Road safety tax Trailer		✓		
Motor vehicle accident fund charge		✓		
Carrier licence p.a.			✓	✓
Mass distance per 100km				✓

Note on Abbreviations
L: Local Operator
F: Foreign Operator

Source: Africa Road Corridors Handbook (2014) & C-BRTA (2017). Accessed in January 2017

It is evident that Botswana operators are exempted from all charges, whereas Namibia operators are also exempted from certain cross-border charges, e.g. mass distance fee and motor vehicle accident fund charges. South African operators do not enjoy any benefits over foreign operators that use South African roads. Since South African operators pay cross-border charges when traversing through the SADC, they are placed in a disadvantaged position that prevents them from competing on an equal basis with foreign counterparts.

3.4.8 Wrap-up Remarks

Over the years, the TKC established itself as an efficient transport corridor. The TKCMC is responsible for the management of the corridor, which responsibility includes introducing reforms aimed at improving corridor performance and trade facilitation. To date reform measures and initiatives coordinated and driven by the TKCMC have resulted in various improvements to corridor performance. Examples include improvements to the entire TKC road network, as well as the piloting of RSW at the Namibia / Botswana border post.

The successes achieved on the TKC must be contextualised within the context that the TKC carries substantially less traffic volumes than the other 2 corridors (NSC and MDC) covered in this report.

3.5 Conclusion

Transport corridors are embraced by RECs across the Africa continent as key development tools. All three transport corridors incorporating in the study scope are anchored in South Africa with objectives that go beyond the transportation of goods and people to encompass

development aims that focus on gaining access to new markets and fostering regional economic integration.

In line with this thinking, SADC has adopted a corridor approach that acknowledges the need for establishing an integrated transport system (that incorporates the use of all transport modes) to achieve regional economic goals. The corridor approach also entails establishing a forum to engage with different role-players (e.g. government agencies, private sector, informal traders, communities) along key transport routes to share corridor constraints and to find solutions to them.

Despite their strategic role in promoting regional trade, economic growth and development, all 3 corridors discussed are plagued by various hard and soft infrastructure challenges that undermine their operational efficiency. At corridor level, border posts act as the main blockage to the seamless flow of traffic across national borders. As a result of infrastructure impediments, cross-border operators experience lengthy delays when travelling along the NSC, MDC and TKC.

More information on the current status of border posts forming part of the focus corridors is presented in chapter 4.

4. IMPORTANCE OF BORDER POSTS IN OPTIMISING CORRIDOR EFFICIENCY

4.1 Introduction

Most intra-regional trade and transport movements occur along regional road transport corridors that cross national boundaries via inland border posts. The SADC region has many border posts of varying sizes, designs and capacity. Navigating through the borders is difficult as almost all land borders in the region are associated with various challenges that include inadequate infrastructure, uncoordinated inspection points and unstandardised procedures. As a result, most border posts have emerged as a major bottleneck to cross-border road transport movements and intra-regional trade.

An exception is the Chirundu border post that functions as an OSBP serving the northern, southern and eastern regions of Africa. Since the opening of the border, Chirundu witnessed a reduction in fraudulent activities. Various factors are cited for this, including the use of scanners during joint law enforcement inspections, which are based on the risk profiles of operators and supported by the sharing of intelligence data amongst Zimbabwean and Zambian border management agencies.

Traffic circulation and flow improved since 2009 as passenger coaches and other passenger vehicles now use the old bridge while commercial traffic (trucks) uses the new bridge. Given the fact that all vehicles crossing the border only stop once, there has been a significant reduction in the length of time spent at the border and consequently the volume of both passenger and commercial traffic passing through the border significantly increased. The findings of a study, commissioned by the World Trade Organisation reveal that prior to the establishment of the OSBP only two coaches moved through the border on a daily basis. Since the opening of the OSBP, this number increased to about 12 coaches as passenger traffic shifted from less efficient borders to Chirundu. (<https://www.oecd.org/aidfortrade/47379298.pdf>).

Although the completion of hard and soft infrastructure programmes at the Chirundu border post resulted in improved border post efficiency, the transformation of this border into an OSBP did not have significantly impact on the performance of the NSC as a whole, as congestion and delays shifted to other border posts in the corridor, in particular Beitbridge. This means that gains made at Chirundu are neutralised by downstream effects on the corridor.

4.2 Commercial Border Posts on Prioritised Transport Corridors

4.2.1 North South Corridor

Table 4.1 provides a snapshot of the current state of strategic border posts located along the NSC. Information from various sources was used to compile this table. Unfortunately statistics regarding Heavy Goods Vehicle (HGV) daily traffic flows was not readily available. In the absence of harmonised ICT systems, MS resort to different methods of capturing data, with some countries still using manual systems. HGV daily traffic flows outlined in the table below was extracted from the SADC Sector Plan Border Post Document (SADC. 2012:13-21).

Table 11: Border Posts along the NSC

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
Kasumbalesa	Trans Caprivi	DRC Zambia	<p>Kasumbalesa border post is one of the busiest borders in the SADC and caters for all commercial traffic going into and coming out of the DRC.</p> <p>Main traffic comprises of high value minerals, mining input and equipment, construction material, agricultural produce and food commodities.</p> <p>Recent infrastructure upgrades at this border post resulted in an increase of traffic crossing the border from approximately 400 trucks crossing either way of the border point to a maximum of 900 trucks crossing either way every day.</p>	<p>A number of impediments are experienced at the Kasumbalesa border post, including:</p> <ul style="list-style-type: none"> ✓ Reported instances of bribery by border officials; ✓ Excessive red-tape and the duplication of processes; ✓ Limited border operating hours. 	-	Prioritised for transformation into an OSBP
Tunduma	Dar-es-Salaam	Tanzania Zambia	<p>Tunduma is the busiest transit and entry point between the Southern and Central African countries and connects Zambia, the DRC and Malawi to the port of Dar-es-Salaam in Tanzania.</p> <p>Tanduma is a road and rail border crossing, with the border rail station at Tanduma located about 1 kilometre from the Tanduma road border.</p>	<p>Border post inefficiencies revolve around:</p> <ul style="list-style-type: none"> ✓ Extreme congestion arising from a lack of parking space on the Zambia side for Zambia-bound traffic cleared at Tunduma; ✓ Poor road infrastructure leading to the border post; ✓ inefficient clearance systems on the Zambia side of the border; ✓ Inefficient railway services 	318	Ann MoU has been signed for OSBP development and an institutional framework and joint working plan is in place.

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
				<p>offered by TAZARA;</p> <ul style="list-style-type: none"> ✓ A lack of perimeter fencing of the customs control zone; ✓ Disorderly movement of vehicles, traders and other people. 		
Songwe	Dar-es Salaam	Tanzania Malawi	The Songwe border post connects Malawi to the port of Dar-es Salaam. The majority of goods moving through this border are imports into Malawi.	<p>Border post inefficiencies revolve around:</p> <ul style="list-style-type: none"> ✓ Limited coordination amongst border agencies that results in the duplication of processes; ✓ Inadequate border post equipment (e.g. phones, faxes, internet, computers and scanners) which results in time delays and more physical inspections. ✓ Several separate payments are required for services rendered by different border agencies. 	30	<p>An OSBP feasibility study is been planned.</p> <p>Progress towards OSBP establishment is noted in attempts to establish ICT connectivity between customs agencies in Tanzania and Malawi.</p>
Victoria Falls	North South	Zambia Zimbabwe	The Victoria Falls border post provides access between Livingstone, Zambia and Victoria Falls in Zimbabwe. The Zambezi River borders both countries.	<p>Border post challenges include the following:</p> <ul style="list-style-type: none"> ➤ Limited border operating hours disrupt the seamless flow of traffic across this border; ➤ Various RUC's are imposed on foreign operators; ➤ A lack of skilled resources at the border delay the fast and efficient clearing of cross-border traffic. 	-	Not prioritised for transformation into an OSBP.

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
Chirundu	North South	Zambia Zimbabwe	<p>Chirundu is Zambia's highest volume border post and enjoys the status as the first OSBP in Southern Africa.</p> <p>Northbound traffic on average takes three times longer than southbound traffic to cross the border due to the types of goods moving in the respective directions. Transit and empty returns is a frequent occurrence on the southbound route.</p>	<p>One of the most significant challenges affecting the operational performance of the Chirundu border post is the lack of ICT connectivity between the Zambian and Zimbabwean sides of the border. Other impediments include:</p> <ul style="list-style-type: none"> ✓ Significant downtime experienced with the electronic customs systems; ✓ Insufficient office space to accommodate border post officials; ✓ A lack of appropriate signage on the approach road(s) to the OSBP, as well as inside the customs control zone. 	356	Chirundu has officially been opened as an OSBP in December 2009
Kazungula	North South	Zambia Botswana	<p>Kazungula is a busy border post that has become increasingly popular to transporters shipping freight between the major ports of South Africa, to and from Lusaka, the mining towns of Northern Zambia and the Katanga province of the DRC.</p> <p>Crossing at the Kazungula border post is done by a ferry moving only a limited number of trucks per day, which results in excessive delays at the border post.</p>	<p>Border post impediments revolve around:</p> <ul style="list-style-type: none"> ✓ A lack of security at the border Mouth, which results in criminal activities (theft); ✓ Excessive border post delays experienced by operators who use the ferry to cross the border post; ✓ At least 10 public sector agencies are located on the Zambia side of the border, which result in the duplication of processes and excessive border delays; 	116	<p>The construction of an OSBP commenced in 2014 with a scheduled duration of 4 years. The OSBP project includes the design and construction of a fixed road and rail bridge to replace the ferry and construction of OSBP facilities on both sides of the border.</p> <p>The construction of the bridge crossing has been halted in January 2016. As a result the completion of the OSBP project has been</p>

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
			The construction of the Kazungula Bridge that cross the Zambezi river to provide quick access between Zambia and Botswana has been halted in the early months of 2016 after Chilibwe Mining Company filed an injunction to restrain contractors from excavating quarry on its land for the project.	<ul style="list-style-type: none"> ✓ The border post on the Zambian side is almost impassible during the rainy season due to a lack of paved surfaces. 		delayed indefinitely.
Mchinji	Nacala	Zambia Malawi	<p>This border post is located along the Nacala corridor and provides access between Zambia and Malawi.</p> <p>The border itself has been referred to as chaotic, with the presence of many informal traders.</p> <p>The border crossing is operated 24 hours, however, the border closes earlier (around 18:00) for commercial truck traffic.</p>	<p>Border post constraints include, but are not limited to the following:</p> <ul style="list-style-type: none"> ✓ Criminal activity taking place at the Mchinji border, with informal traders often subjected to robbery and harassment by border post officials; ✓ Corrupt border officials taking advantage of traders' limited level of understanding of the customs processes, often confiscate goods illegally. ✓ Insufficient lightning is provided to support border operations throughout the day; ✓ Staff accommodation is provided at Mchinji town, and not at the border post. This results in additional daily vehicle movements to and from the border. 	34	<p>This border post is prioritised as an OSBP.</p> <p>The Zambian and Malawian governments have recently launched the US\$72 million Nacala road corridor development project which will see the construction the Mchinji OSBP.</p> <p>Bidders have already been invited in 2016 to submit tenders for the construction of the Mchinji OSBP. It is not clear whether construction work has commenced,</p>

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
Zobue	North South	Mozambique Malawi	<p>The Zobue border post is situated at the Eastern end of the Tete Corridor, approximately 118km from Tete.</p> <p>This border is the principal entry point for road and rail transport vehicles that travel between Malawi and Mozambique. Most of the trucks entering this border post is coming from, or going to the Beira port</p>	<p>The following border post impediments are experienced at the Zobue border:</p> <ul style="list-style-type: none"> ✓ Insufficient traffic lines are provided within the border precinct, a situation that aggravates traffic congestion; ✓ At the entry point to the border trucks must descend a steep slope, which creates traffic safety issues; ✓ The absence of scanner(s) and frequent power cuts necessitate manual inspections that delay the timeous clearance of traffic. 	105	Not prioritised for transformation into an OSBP
Dedza	Beira	Mozambique Malawi	<p>Traffic movements through the Dedza border post have increased in recent years due to improvement(s) of the road infrastructure in the Tete province in Mozambique.</p> <p>Most of the border crossing traffic is to and from the Durban and Beira ports. The majority of goods crossing this border post is made up of agricultural products</p>	<p>Border post constraints include, but are not limited to:</p> <ul style="list-style-type: none"> ✓ Insufficient buildings for border post personnel; ✓ Lack of weighbridge and scanner(s); ✓ Regular power cuts. 	80	Not prioritised for transformation into an OSBP.
Beitbridge	North South	South Africa Zimbabwe	<p>Beitbridge is one of the heaviest trafficked border crossings in the SADC.</p> <p>As a result of heavy traffic movements, delays at this border are a common</p>	<p>The following impediments are experienced at the Beitbridge border post:</p> <ul style="list-style-type: none"> ✓ The N1 highway in South Africa has a single approach lane that becomes inadequate during 	574	<p>This border is prioritised as an OSBP. To date the following milestones have been reached:</p> <ul style="list-style-type: none"> ✓ Joint institutional structures have been

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
			phenomenon. Approximately 75% of the northbound traffic through Beitbridge is transit traffic on route to Zambia, the DRC and Malawi.	<ul style="list-style-type: none"> peak periods; ✓ Minibus operators offload passengers at the border entrance which create safety concerns and aggravates congestion; ✓ A large number of “windows” disrupt the seamless flow of traffic within the border precinct; ✓ There is not a fast-lane for empty vehicles and accredited vehicles / operators that have been pre-cleared and have completed all other payment systems; ✓ Inadequate parking is provided for trucks and private vehicles. 		<p>established in South Africa and Zimbabwe to manage the Border Efficiency Management Project;</p> <ul style="list-style-type: none"> ✓ An action plan has been developed and adopted, but is still awaiting implementation.
Lobatse border post	Trans Kalahari	South Africa Botswana	The Lobatse border crossing (previously known as the Pioneer border post) provides access between Botswana and South Africa for cross-border operators travelling along the TKC.	<p>Constraints at this border revolve around</p> <ul style="list-style-type: none"> ✓ Border post officials bribing private travellers and cross-border operators; ✓ Various road user charges are imposed on foreign operators at the Lobatse border post. ✓ 	-	Not prioritised for transformation into an OSBP.
Kopfontein border post	Trans Kalahari	South Africa Botswana	The Kopfontein border post provides access between South Africa and Botswana and is mostly used by cross-border operators transporting commodities to and from the port of Walvis Bay.	<p>Examples of border post impediments include:</p> <ul style="list-style-type: none"> ✓ Customs officials treating border post clients in an unprofessional manner; ✓ Inadequate parking for cross-border vehicles; 	-	Not prioritised for transformation into an OSBP.

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
				<ul style="list-style-type: none"> ✓ Lengthy inspection times by law enforcement officers; ✓ Various RUC's are imposed on foreign operators at the border post. 		
Martins Drift	North South	South Africa Botswana	<p>The Martins Drift border is located in Botswana and provides access into Botswana via the Grobler's Bridge crossing, located in South Africa.</p> <p>This border crossing is mostly used by cross-border operators who transport commodities along the Walvis Bay corridor.</p>	<p>Border post impediments revolve around:</p> <ul style="list-style-type: none"> ✓ Inadequate positioning of border post employees that cause traffic disruptions within the border; ✓ Limited parking for cross-border vehicles result in traffic disruptions within the border precinct. 	-	Not prioritised for transformation into an OSBP.
Nyamapanda	North South	Mozambique Zimbabwe	<p>Nyamapanda is the border crossing between Zimbabwe and Mozambique.</p> <p>This border is a busy entry point, used by people travelling by road between South Africa, Malawi, Zimbabwe and Mozambique.</p>	<p>Listed below are examples of impediments that influence the efficient functioning of the Nyamapanda border post:</p> <ul style="list-style-type: none"> ✓ The centralisation of the Zimbabwean customs declaration system has resulted in delays in the clearance of customs documents. Bill of entry documents are no longer processed at the Zimbabwean border posts, but are distributed to Harare, Bulawayo and Masvingo. ✓ Zimbabwean borders are linked to the 3 centers by a telecommunications system. Differences in the bandwidth provided by telecommunication 		Not prioritised for transformation into a OSBP

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
				<p>providers delay customs clearing processes and interrupt the passage of vehicles at Zimbabwean borders;</p> <p>✓ Reported instances exist of bribery by border officials.</p>		

Source: Table compiled for study

b) Wrap-Up Remarks – NSC Border Posts

Of the 14 border posts located along the NSC, only 1 border post (Chirundu) is an OSBP, whereas 6 others (Kasumbalesa, Tanduma, Songwe, Kazungula, Mchinji and Beitbridge) have been prioritised at regional level as OSBP candidates. According to approved timelines, OSBPs will be implemented between the years 2012 and 2027.

All border posts along the NSC experience various operational barriers that obstruct the seamless flow of traffic within the SADC. Impediments vary from inadequate approach roads to, insufficient parking within the border precinct, excessive red tape, duplication of processes, bribery and corruption and poor ICT connectivity.

Border post reforms are often focused on a particular segment of a regional corridor only. This is especially true for OSBP projects, notably, the Chirundu border post. Although time delays at this border decreased dramatically since the completion of infrastructure programmes and its transformation into an OSBP, the impact of this initiative on the entire NSC was marginal since delays shifted to other points along the same corridor. This clearly illustrates that corridor and border management reforms that are corridor segment focused and implemented in isolation have a limited impact on trade and transport facilitation across regional corridors.

4.2.2 Maputo Development Corridor

The MDC connects three countries in the region - South Africa, Mozambique and Swaziland – with each other. The following border posts are located along the MDC corridor:

- Lebombo / Ressano Garcia (South Africa / Mozambique border);
- Lomahasha / Namaacha (Swaziland / Mozambique); and
- Jeppe's Reef / Matsomo (South Africa / Swaziland).

The Lebombo / Ressano Garcia border post links two of the three Maputo Corridor countries that generate the largest amount of freight traffic along the MDC. This border post is being developed into an OSBP and to date considerable progress has been made towards achieving this goal, notably the construction of the OSBP facility and access roads to Lebombo / Garcia. Although the OSBP facility was officially opened during Easter in 2013, the building is utilised as a passenger crossing and not as an OSBP facility. During peak times, the border functions as an OSBP facility.

The primary reason for the delay in full operation of the border as an OSBP lies in the complexity of establishing an international legal framework that will allow for the implementation of sovereign laws of each MS within another country's territory. This implies that the MS need to incorporate changes into domestic legislation to permit officers, deployed in foreign territory, to legally execute their respective duties.

The Lebombo / Ressano Garcia border post is unique in the sense that border post transit processes take place at various locations, i.e. both at the actual border post precinct, as well as at the commercial freight clearing facility situated at Km7 (7 kilometres from the border on the South African side), Km4 (4 kilometres from the border on the Mozambique side), Maputo Harbour and the Matola cargo terminal, also known as FRIGO. The dedicated freight clearing areas were established to accommodate large amounts of traffic (freight) during peak periods of the year. Private vehicles proceed straight to the border post where clearing takes place.

The Lomahasha / Namaacha border post is situated on the north-eastern corner of Swaziland. On the Swazi side it is known as Lomahasha and on the Mozambican side as Namaacha. The road between Swaziland and Maputo via Lomahasha / Namaacha is not part of the N4 / EN4 TRAC toll road, but is generally considered to be in a good condition. The road network furthermore provides quick access to the port of Maputo which serves as an alternative to the port of Richard's Bay, for Swaziland's importers and exporters.

Jeppe's Reef / Matsomo border post is located approximately 60 kilometres south of Malelane. On the South African side it is known as Jeppe's Reef and on the Swaziland side as Matsomo.

Table 12 provides a snapshot of the current state of the 3 border posts located along the MDC. Various sources were consulted for purposes of completing this table. Data regarding HGV daily traffic flows was obtained from the SADC Sector Plan Border Post Document (SADC. 2012:13-21).

Table 12: Border Posts along the MDC

<i>Border Post</i>	<i>Corridor Name</i>	<i>Countries</i>	<i>General Comments</i>	<i>Constraints</i>	<i>HGV Daily Traffic</i>	<i>SADC OSBP Candidate</i>
Lebombo / Ressano Garcia	MDC	South Africa Mozambique	<p>The Lebombo / Ressano Garcia Border Post is one of the busiest border posts in the SADC. Customs reforms at this border have resulted in the electronic and speedy processing of customs declarations on the South African side of the border. Although customs officials on the Mozambique side use another software package, SARS and the Mozambique Revenue Authority have engaged in a data exchange project since mid-2012 which has resulted in the successful exchange of test data.</p> <p>SARS also initiated the ICT connectivity initiative with Swaziland in 2012 that has resulted in the successful exchange of test data. This border functions as an OSBP during peak periods of the year.</p> <p>Although a fully OSBP has yet to be established, the initiative to establish cargo processing facilities away from the border post has resulted in significant operational improvements along the corridor.</p>	<p>Listed below are a listed of impediments that deter the seamless flow of traffic through the border post:</p> <ul style="list-style-type: none"> ✓ The border post is not ideally located from a geographic perspective. To the north is a river gorge and to the south are steep mountains which leave little room for border post expansion. ✓ Border post facilities are not suited for all weather conditions, forcing border stakeholders to work in a non-weather proof environment. ✓ Inadequate parking space within the border precinct deters the optimal flow of traffic within the border. ✓ The existence of various government agencies at the border post who operate independently from each other give rise to the duplication of processes between border stakeholders. ✓ Language barriers are experienced at the border post. Mozambique border officials 	150	<p>An agreement was signed between the Governments of Mozambique and South Africa on 17 September 2007 to establish an OSBP. To date the following milestones have been reached:</p> <ul style="list-style-type: none"> ✓ The OSBP facility and access roads to Lebombo / Ressano Garcia have already been built. ✓ Draft legal documents have been drafted and are pending review.

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
				<p>communicate in Portuguese, whereas South African border officials speak English.</p> <ul style="list-style-type: none"> ✓ This border is not open 24/7 and as a result long queues are experienced, especially during night. 		
Lomahasha / Namaacha	MDC	Mozambique Swaziland	<p>This border post provides the closest access to the port of Maputo for Swaziland importers and exporters.</p> <p>The road network, providing access to the port of Maputo is in a good condition.</p>	<p>The following constraints are experienced at the border post:</p> <ul style="list-style-type: none"> ✓ This border operates between 07:00-20:00. As a result of limiting operating hours, long queues are experienced at the border entrance during certain times of week, especially on Friday afternoons. ✓ A number of RUC's entry fee) are levied upon cross-border operators at the border post. ✓ Duplication of border processes results in time delays at the border. ✓ Informal trade activities at the border post poses safety / security threats and aggravates congestion at the border entrance. 	-	Not prioritised for transformation into an OSBP.
Jeppe's Reef / Matsomo	MDC	South Africa Swaziland	The pave carriageway to this border post is in a good condition.	This border operates between 07:00 and 20:00. Due to limited operating hours congestion is	-	Not prioritised for transformation into an OSBP.

Border Post	Corridor Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
				<p>experienced during peak hours.</p> <p>Limited cooperation between border agencies and a lack of systems integration between them result in the duplication of border processes, with associated time delays for cross-border road transport operators.</p>		

Source: Table compiled for study

b) Wrap-Up Remarks – MDC Border Posts

The Lebombo / Ressano Garcia border post is the busiest of the 3 borders along the MDC. The introduction of customs reforms on the South African side of this border has resulted in significant time savings for cross-border road transport operators. Despite engagements between SARS and the Mozambique and Swaziland customs agencies to facilitate the exchange of customs data, the SARS customs modernisation programme does not make adequate provision for integration with other South African, and regional border management processes. Furthermore, customs processes at the Lomahasha / Namaacha and Jeppe’s Reef / Matsomo border posts have not yet reached the same level of maturity as at the Lebombo border post. As a result the overall impact of the customs reform has been limited since time savings accrued by South African operators at the South African side of the Lebombo border post are lost due to time delays associated with the clearing of goods by other border agencies.

With the exception of the Lebombo border post where operations are extended to 24 hours per day during peak periods, the operating hours of the other 2 borders are restricted to 07:00-20:00. This practice results in bottlenecks during busy times of week / year, with significant time and financial losses to cross-border operators.

4.2.3 Trans Kalahari Corridor

The TKC connects 3 countries in the region, i.e. Namibia, Botswana and South Africa. The following border posts are located along the 1900 kilometre stretch of the TKC:

- Buitepos / Mamuno – (Namibia / Botswana); and
- Pioneer Gate / Skilpadshek – (Botswana / South Africa).

Table 13 provides a snapshot of the status quo of the strategic border posts located along the TKC. Information in the table below was extracted from various sources. Data regarding Heavy Goods Vehicle (HGV) daily traffic flows was obtained from the SADC Sector Plan Border Post Document. (SADC. 2012:13-21).

Table 13: Border Posts along the TKC

Border Post	Corrid or Name	Countries	General Comments	Constraints	HGV Daily Traffic	SADC OSBP Candidate
Buitepos / Mamuno	TKC	Namibia Botswana	<p>This border post, which provides access between Namibia and Botswana has witnessed a steady increase in traffic volumes in recent years.</p> <p>The harmonisation of customs procedures has resulted in the launch of a RSW system at this border post in December 2012. Which allow operators to submit freight information electronically for processing and clearing. Other border reforms include the adoption of a single administrative document (SAD) 500.</p>	<p>Examples of border post constraints are listed below:</p> <ul style="list-style-type: none"> ✓ Although Botswana and Namibia both use the ASYCUDA, network challenges remain a problem. As a result, customs officials from Botswana often experience difficulty in accessing the system operated by the Namibian Customs administration; ✓ Limited border operating hours (07:00-18:00) disrupt the seamless flow of traffic across the border. 	102	<p>This border post is earmarked as an OSBP candidate. Progress is noted in the following achievements:</p> <ul style="list-style-type: none"> ✓ Completion of a feasibility study for OSBP establishment; ✓ Setting up of institutional arrangements (e.g. f national negotiating committees) at MS level); ✓ Development of OSBP legislation and operating manuals.
Pioneer Gate/ Skilpadshek	TKC	Botswana South Africa	<p>The border post has witnessed an increase in traffic flows in recent years due to the completion of various infrastructure programmes along this corridor.</p> <p>Harmonisation initiatives along the TKC (e.g. implementation of the SAD 500) have resulted in a noticeable reduction of border clearance time.</p>	<p>Border post constraints include the following:</p> <ul style="list-style-type: none"> ✓ Foreign operators are subjected to a number of RUC's at the Skilpadshek border post while local operators are exempted from such charges; ✓ Limited border operating hours disrupt the seamless flow of traffic across the border post. 	-	Not prioritised for transformation into an OSBP.

Source: Table compiled for study

b) *Wrap-Up Remarks – TKC Border Posts*

The TKC witnessed a significant increase in trade and cargo volumes in recent years and indications are that the corridor will continue to grow in strategic importance once capital expenditure programmes at the port of Walvis Bay are completed. Of the 2 border posts along the TKC, the Buitepos / Mamuno border post is earmarked for transformation into an OSBP, while the other (Pioneer Gate / Skilpadhek) will remain a conventional two-stop facility. The implication of transforming only one border post into an OSBP is that time savings accrued by cross-border operators at the Buitepos / Mamuno border post will more likely be lost due to time delays experienced elsewhere along the corridor (e.g. at the Pioneer Gate / Skilpadhek border post).

4.3 Importance of Border Posts in Improving the Seamless Movement of Traffic along Regional Road Transport Corridors

4.3.1 Status Quo: Infrastructure Inefficiencies at Border Posts

The previous section alluded to the fact that all strategic border posts located along the NSC, MDC and TKC are plagued by various hard and soft infrastructure deficiencies. Examples of hard infrastructure constraints at the border posts include, but are not limited to:

- Inadequate and congested approach roads to border posts;
- Inadequate parking bays (although border posts are not meant to be places for holding transit vehicles);
- A lack of storage space for confiscated goods;
- Absence of dedicated lanes for commercial and non-commercial vehicles; and
- Lack of pedestrian pathways.

Hard infrastructure constraints create chaotic traffic flow at border entrances, as well as inside border posts, especially during peak periods of year. Further to hard infrastructure constraints, the operational efficiency of border posts is also influenced by soft infrastructure impediments, which include:

- Lack of efficient border management and governance systems;
- Lack of (domestic and international) cooperation and coordination among (many) stakeholders which results in the duplication of border post processes;
- Lack of systems integration that impedes data exchange and information sharing;
- Poor communication systems and information sharing;
- Lack of cooperation and coordination among stakeholders; and
- Bribery and corruption.

These challenges calls for urgent intervention by relevant decision-makers as currently almost all border posts in the region creates unnecessary bottlenecks to smooth flow of cross-border road transport movements and trade between MS .

4.3.2 Potential Impact of Border Post Improvements

As one of the role-players in the cross-border road transport industry, the C-BRTA initiated a business case study on corridor and border management reform in 2011. The aim of this study was to identify impediments that disrupt the seamless flow of traffic along the NSC, MDC and TKC and to find solutions to such constraints.

One key finding of the Business Case was that road transport impediments along regional road transport corridors culminate in delays for cross-border operators, with the majority of delays experienced at border posts. In order to quantify the cost of delays and determine the monetary impact of time savings once reforms are implemented, a cost-benefit analysis was performed.

The Business Case proposes a number of interventions that are aimed at addressing constraints faced by cross-border transport operators and traders in major corridors. Since the

completion of the Business Case in 2012, the C-BRTA conducted engagements at various national and regional platforms with the aim of advocating for and obtaining buy-in for proposed corridor and border management reforms proposed in the Business Case report. Currently, the Agency is leading the development of one of the reforms, entitled “Operator Compliance Accreditation Scheme”.

In addition to corridor and border post reforms initiated by individual role-players (C-BRTA and SARS), similar reforms have been identified in South Africa and within the SADC to improve the operational efficiency of regional road transport corridors. More information on national and regional border post reforms is presented in section 4.4 here-under.

4.4 Developments at Major Border Posts in the region

4.4.1 Regional Developments

a) *Movement towards establishment of OSBPs*

Section 4.2 alluded to the fact that strategic border posts along the NSC, MDC and TKC are plagued by various infrastructure inefficiencies and that intervention is required to address this situation.

The OSBP solution was approved at regional level as a tool to improve border management efficiency, inter alia through the joint control and management of border crossing facilities by border officials of both MS, the use of shared border facilities as well as streamlined processes.

The SADC RIDMP prioritises the establishment of 18 OSBP’s in the SADC region. A number of factors have guided the selection of OSBP candidates, including:

- Trade and traffic volumes along regional road transport corridors;
- MS interest and commitment into establishing OSBP’s;
- Strategic importance of border posts in the regional trade and transport value chain; and
- Sequencing of reform projects along a corridor.

Table 14 shows progress made to date with regards to the transformation of traditional two stop border post into OSBP’s.

Table 14: Progress on the development of OSBPs

Corridor	Border Crossing	Countries	Status
NSC	Chirundu	Zambia / Zimbabwe	<ul style="list-style-type: none"> • MoU signed in 2008. • OSBP infrastructure, processes and staffing in place. • Physically facilities re-designed and constructed. • OSBP law in place in both countries. • Officially opened in December 2009 as an OSBP.
	Kazungula	Zambia / Botswana	<ul style="list-style-type: none"> • Construction work started in 2014, which includes the building of a fixed road and rail bridge to replace the ferry and OSBP facilities on both sides of the border; • A project office has been established by Botswana / Zambia and is operational in Kasane, Botswana.
	Beitbridge	Zimbabwe / South Africa	<ul style="list-style-type: none"> • Draft MoU developed. • A Master Plan for the Beitbridge border post was released in June 2016 by the Department of Public Works in South Africa. • The South Africa / Zimbabwe joint institutional structure to manage the Border Efficiency Management Project has been established at operational technical, senior officials and ministerial levels – but little progress has been made. • An Action Plan has been developed and adopted but not implemented.
	Kasumbalesa	Democratic Republic of the Congo / Zambia	<ul style="list-style-type: none"> • Several diagnostics studies have been conducted, but never fully implemented. • No integrated OSBP plan is in place. • In Zambia the outsourcing of infrastructure provision and management has been reversed. • A Joint Programme under agreed MoU and institutions need to be developed to ensure a coordinated approach. • The critical border crossing is a major bottleneck in the region.
	Martin's Drift / Grobler's Bridge	Botswana / South Africa	<ul style="list-style-type: none"> • Not prioritised for transformation into an OSBP.

Corridor	Border Crossing	Countries	Status
Trans Caprivi	Katima Mililo / Wenela	Namibia / Zambia	<ul style="list-style-type: none"> • Feasibility study completed in 2007. • Implementation of OSBP conversion measures is slow. • No institutional arrangements are in place. • No funding support exists.
Trans Cunene	Oshikango / Santa Clara	Namibia / Angola	<ul style="list-style-type: none"> • Feasibility study completed in 2007, funded by JICA. • Implementation pending funding and establishment of institutional structure and adoption of Action Plan.
Trans Kalahari	Trans Kalahari / Mamuno	Namibia / Botswana	<ul style="list-style-type: none"> • Feasibility study completed for Trans Kalahari Mamuno border crossing. • Implementation plan developed. • MoU for OSBP development signed by the governments of Botswana and Namibia. • OSBP policy and legislation under development, including operating manuals.
Nacala	Mchinji / Mwami Mandimba / Chiponde	Zambia / Malawi Mozambique / Malawi	<ul style="list-style-type: none"> • OSBP are included in the Nacala corridor road studies project. • The OSBP has not yet been constructed.
Maputo	Ressano Garcia / Lebombo	Mozambique / South Africa	<ul style="list-style-type: none"> • MoU signed in 2007; • Draft legal documents ready and pending review and adoption.
Dar-es-Salaam	Tunduma / Nakonde	Tanzania / Zambia	<ul style="list-style-type: none"> • Zambia and Tanzania have established committees • MoU signed, institutional framework and a joint work plan are in place; • Zambia is constructing new facilities on its side.
	Songwe / Kasumulo	Tanzania / Malawi	<ul style="list-style-type: none"> • Feasibility studies planned; • Currently work is undertaken to establish ICT connectivity between the two customs agencies.

Source: SADC. June 2015. Accessed in July 2016

4.4.2 Developments in South Africa

a) *Establishment of a Border Management Authority*

Border management in South Africa is exercised and influenced through multiple organs of state. Since 2007, the Border Control Operational Coordination Committee (BCOCC) has overseen and coordinated the functions of all state agencies operating at South Africa's borders.

In the absence of binding legislation, the BCOCC has not been successful in establishing domestic integration amongst border stakeholders. The coordination model employed under the BCOCC makes it voluntary for border stakeholders to participate in border management coordination structures. The weaknesses in this approach resulted in a Cabinet decision to adopt the lead agency model as the appropriate model for coordinating and integration of border management processes and resources into a single lead department.

In June 2013, Cabinet announced the establishment of a Border Management Authority (BMA) that is led by the Department of Home Affairs (DHA). To date, the following milestones were achieved, under leadership of the DHA, towards establishment of the BMA:

- The signing of an agreement with relevant stakeholders;
- Completion of a feasibility study, undertaken to determine the mandate, functions and institutional format of the BMA;
- The execution of a Socio-Economic Impact Assessment for the BMA in 2015;
- Publication of the draft BMA bill for public comment in August 2015;
- Completion of a BMA Business Case in September 2015, which is aligned to the BMA Bill;
- Approval of the BMA Bill by Cabinet in 2015;
- Piloting of various transitional initiatives in anticipation of the establishment of the BMA in 2017;
- Finalisation and circulation of a Draft Integration Border Management Strategy (IBMS) to relevant role-players; and
- Cabinet resolution to implement a multi-party agreement between relevant organs of state during 2015. This Agreement seeks to strengthen the existing transitional collaboration and coordination initiatives in the border environment between the Parties and in view of the forthcoming BMA.

The findings of the BMA Business Case report (Department of Home Affairs. September 2015:1) reveals that a wide range of benefits can be achieved through the implementation of the BMA. Some of the benefits indicated include:

- Establishment of a single authority structure for border management operations at Ports of Entry (PoE) provides potential for more cost effective service delivery;
- A formalised relationship between the BMA and relevant organs of state can enhance security and management of the border environment;
- Improved information sharing, licencing, accreditation and enforcement can contribute towards an integrated border environment intelligence picture;
- A focused approach to the optimisation of border post operations can enhance efficiencies through maximum compliance and minimum administrative costs and delays;

- Creation of customer service efficiencies through streamlined, integrated operations at PoEs;
- Provision of more cost effective services;
- Optimisation of processes and compliance; and
- Effective utilisation of all resources in the border environment.

Six tasks team were established, composing of stakeholders from entities involved in the regulation and facilitation of cross-border movements and law enforcement. The aim of the task teams were to advise on technical matters towards the establishment of the BMA. Initially the following 6 task teams were established:

- Change management task team;
- Policy and legal task team;
- Stakeholder management and communications task team;
- Risk management task team;
- Operations task team; and
- Strategic pilot projects task team.

Due to the overlap in work, a decision was taken to reconfigure the above teams into the following 3 BMA task teams:

- Policy and legal task team;
- Change management and human resources (stakeholder relations) task team; and
- BMA operating and costing model task team.

The C-BRTA participates in all task teams discussions. According to the BMA Business Case (Department of Home Affairs. 2015: 87), enabling legislation will be in place by April 2017, with the BMA becoming operational thereafter.

4.5 Conclusion

Cross-border road transport operators are subjected to various impediments when traversing along regional road transport corridors. It is envisaged that OSBPs will ultimately transform border posts in the region, a feat that will go a long way towards reducing delays and consequential impacts on the cost of doing business especially to cross-border road transport operators.

At national (South African) level the establishment of a BMA to integrate border management process into a lead agency is envisaged to improve the efficiency of South African border posts. As one of the role-players in the cross-border environment, the C-BRTA supports the establishment of the BMA as this will establish a single authority that will oversee border operations and improve security at South African border posts.

5. CORRIDOR AND BORDER POST GOVERNANCE IN SADC

5.1 Introduction

Earlier sections of this report indicated that the SADC adopted a corridor approach to transport infrastructure development, whereby the region recognises the need for an integrated transport system and integrated transport policy framework(s) to achieve transport integration and prosperity in the region.

In response to this direction, the SADC RIDMP advocates that regional transport corridors should form the basic framework for cooperation and coordination in transport integration. The corridor strategy outlined in the RIDMP (SADC. 2015: 30) focuses on developing:

- Legal Instruments for the joint governance of corridors;
- Institutional frameworks for joint and coordinated management of transport corridors; and
- Critical corridor transport and logistics infrastructure.

Various legal instruments and frameworks have been approved by MS to govern corridor operations within the SADC. Furthermore, a number of Corridor Management Committees (CMCs) were established to address corridor constraints along regional road transport corridors. Section 5.2 provides more information on legal instruments / frameworks that apply within the SADC region.

5.2 Legal Instruments and Frameworks

The region developed various legal instruments that are aimed at establishing the framework for governing and managing transport corridor developments and operations. Typically, the instruments set out the objectives, principles, institutions and mechanisms for the joint management of the development and operations of transport projects, systems, policies and regulations. Examples of legal instruments that apply within the defined study focus area include, but are not limited to the following:

- SADC Protocol on Transport, Communications and Meteorology (PTCM);
- SADC Protocol on Trade in Services;
- SADC Regional Indicative Strategic Development Plan (RISDP);
- SADC Regional Infrastructure Development Master Plan (RIDMP);
- Bilateral agreements between MS;
- MoU for Trans Kalahari Corridor; and
- Memorandum and Articles of Association for the Maputo Development Corridor.

In addition to the above, a number of road transport and transit facilitation instruments have also been developed and technically validated at regional level, jointly with COMESA and EAC, and are awaiting approval by Ministers from respective MS, before implementation. A technical assistance programme, to be implemented between the years 2016 - 2020, and supported by the European Union (EU) under the 11th European Development Fund (EDF) has been

developed to assist MS to domesticate the harmonisation of laws, policies, regulations and standards. Examples of road and transit facilitation instruments include:

- Vehicle Load Management;
- Vehicle Dimensions and Equipment Standards;
- Vehicle Testing Stations and Procedures;
- Transport Operator Registration;
- Transportation of Abnormal loads;
- Transportation of dangerous goods;
- Training and licensing of commercial drivers;
- Third Party Motor Vehicle Insurance Schemes; and
- Road Transport Management Standards.

5.2.1 SADC Protocol on Transport Communication and Meteorology (PTCM)

SADC Protocols, mostly drafted and adopted in the mid-1990s, seek to establish goals, principles, strategies and structures to guide development within the region with the aim of achieving regional integration, economic growth and poverty alleviation. The SADC PTCM deals with transport systems and infrastructure, telecommunications, postal services and meteorology. It acknowledges that transport, communication and meteorology “are a prerequisite for the promotion of economic growth and development”.

The PTCM further sets out policy and institutional objectives for improved performance of each of the transport modes and for the development of an effective, integrated transport system. Its general objective is to “*establish systems which provide efficient, cost-effective and fully integrated transport infrastructure and operations which best meets the needs of customers and promote economic and social development while being environmentally and economically sustainable*” (SADC Protocol on Transport, Communications and Meteorology. 1998, Article 2.3).

Article 5.3 of the PTCM on road transport addresses issues of road transport regulation, market access and performance monitoring. It establishes the formation of road transport route management groups to support corridor committees in this regard. It also commits MS to adopt measures to facilitate the free flow of goods and persons in the region. Furthermore, the PTCM stipulates equal treatment of MS in the use of infrastructure as well as in the application of cross-border measures applied by customs and immigration authorities. It also identifies the need to establish coordination with other sectors to achieve well performing corridors.

Although the PTCM has potential to bring benefits to the countries involved should it be fully operationalised, it is not a legally binding instrument. For this reason, the PTCM does not tie or compel SADC MS to reform their policies, legislation, institutions and practices to enable the region to function as an integrated whole. Progress is dependent on the commitment and willingness of individual MS to drive the agenda forward.

To date, the SADC PTCM has only been partially implemented in the SADC region. No single country has fully implemented all the provisions of the PTCM. One of the objectives of the SADC PTCM is to liberalise market access for road freight operators. In practical terms this implies abolishing permits issued at MS level and replacing these permits with a single regional road freight permit. Currently the regional road freight market is still demarcated along national boundaries. Each MS issues cross-border road transport permits according to the stipulations of transport instruments (e.g. bilateral agreements, SACU MoU).

5.2.2 SADC Protocol on Trade in Services

The services sector in the SADC is characterised by moderate investment, relatively high cost and limited access to services by the general public. Most MS adopted services sector liberalisation policies in the 1990s providing limited market access to foreign services suppliers, including through foreign direct investment. With the exception of the Seychelles, all MS became World Trade Organisation (WTO) members during 1995, whereby they undertook binding liberalisation commitments through the General Agreement on Trade in Services (GATS).

In signing the SADC Treaty, MS undertook to develop policies aimed at the progressive elimination of obstacles to the free movement of capital and labour, goods and services. The RISDP recalls the objective of eliminating obstacles to the free movement of capital, labour and goods and services and the improvement of the region's economic management and performance through regional cooperation with the ultimate goal of eradicating poverty, and foresees the establishment of a common market through removal of barriers on factors of production.

The Protocol on Trade in Services was signed by Heads of State in August 2012. The Protocol sets out general obligations for all state parties with regard to the treatment of services and service suppliers from other state parties. It does not contain liberalisation obligations, but provides for a mandate for the gradual removal of discriminatory measures among SADC MS, both for cross-border trade and establishment (investment) in another SADC country.

Negotiations on the liberalisation of six priority sectors (communication services, construction services, energy-related services, financial services, tourism services, and transport services) were launched in April 2012 and are expected to result in market access commitments that will provide a predictable legal environment for trade and investment in the sector within the region. (<http://www.sadc.int/themes/economic-development/trade-services/>).

5.2.3 SADC Regional Indicative Strategic Development Plan

The RISDP was designed to set a 15 year strategic plan for SADC to achieve regional integration, economic development and poverty alleviation. This document is indicative in nature, implying that it outlines the necessary conditions that should be realised towards achieving pre-set goals and priorities.

The purpose of the RISDP is to deepen regional integration in SADC over a period of 15 years to achieve the aforementioned goals of regional integration, economic development and poverty alleviation. It provides SADC MS with a consistent and comprehensive programme of long-term economic and social policies and emphasises the importance of regulatory regimes to reduce interstate transport costs and enhance the economic competitiveness of the region.

Furthermore, the RISDP encompasses a comprehensive framework for regional integration and development. As such it contains target objectives to liberalise the regional transport market and to harmonise transport rules, standards and policies. The following are the key targets in the RISDP:

- Target 1: Liberalise regional transport market by 2008;
- Target 2: Harmonise transport rules, standards and policies by 2008;
- Target 3: Recovering of all costs of maintenance of infrastructure by 2008 with full infrastructure investment costs by 2013; and
- Target 4: Removal of impediments to the cross-border movement of people, goods and services by 2015.

As far as the above-mentioned target areas are concerned, none of the deadlines have yet been fully reached. The application of different road transport rules and standards and cabotage restrictions by MS inhibit the seamless movement of cross-border movements, viability and productivity within the region..

5.2.4 SADC Regional Infrastructure Development Master Plan

The RIDMP builds on the RISDP and acknowledges that although a degree of regional cooperation in infrastructure planning and operations exists, there is no coordination in these 2 areas. (SADC RIDMP 2010:2). This gap necessitated the development of a RIDMP that approaches infrastructure planning in an integrated way. The process of developing the master plan involved the following steps:

- Undertaking a detailed analysis of the current and planned status of regional infrastructure;
- Providing a long-term forecast of economic growth and trade development to provide a common basis for assessing the overall growth in demand for infrastructure services; and
- Identifying infrastructure investments and associated institutional actions necessary to support economic growth and to promote regional integration.

The RIDMP was released in August 2012 and serves as infrastructure development blueprint for the SADC. This document also contains the SADC Infrastructure Vision 2027 that focuses on *“providing transport infrastructure and services, as well as creating a policy and legislature enabling environment and supporting institutions to transform the transport sector”*.

The SADC Infrastructure Vision 2027 is based on the following 6 infrastructure pillars:

- Energy;
- Transport;
- Information and Communications Technology;
- Meteorology,
- Trans-boundary water services; and
- Tourism.

The RIDMP draws attention to the fact that the region is facing a number of challenges in each of the above-mentioned areas (pillars). As far as the transport sector is concerned, a number of challenges prevail. Of particular importance are the following challenges that all relate to the road transport sector (SADC RIDMP Executive Summary 2012:8):

- A widening gap exists in the provision of infrastructure in the surface transport sector (including the road sector) across the SADC region;
- An urgent need exists to intensify regional transport programmes that will enhance multimodal transport linkages and improve interconnectivity;
- While there is considerable capacity on most of the regional road network, projections for 2027 suggest the need for widening, construction and bypasses for major cities, passing lanes in hilly regions and more efficient border posts;
- Missing road links have to be paved in areas where the network is still gravel or earth;
- A lack of maintenance funding is a serious constraint and many of the proposed road transport projects relate to the rehabilitation of trunk roads, affected by overloading and a lack of regular maintenance; and
- The enforcement of harmonised load limits and related regulatory standards is a major component of many projects in order to preserve the road network and to accomplish safety improvements.

The RIDMP translates the SADC Infrastructure Vision 2027 into a number of rolling programmes for each of the 6 pillars. The Transport Sector Plan (TSP) presents the findings of the RIDMP for the SADC as it relates to the transport sector. This plan identifies 208 projects for the transport sector, all of which aim to address transport and institutional challenges (SADC. 2012: 13).

5.2.5 Bilateral Cross-Border Road Transport Agreements

Bilateral cross-border road transport agreements are very much *operational instruments* meant to promote, facilitate and regulate the movement of road freight and road passenger movements between MS. These agreements provide for and determine the conditions under which goods and passengers may be carried, vehicle documentation requirements, compliance to traffic regulations, market access and the establishment of structures (e.g. Joint Route Management Committees) responsible for resolving non-tariff barriers faced by operators along regional road transport corridors.

In addition, bilateral agreements seek to advance equal treatment of operators from the signatory states, as well as providing for reciprocity in handling cross-border operator matters. Bilateral agreements therefore exist to enable countries to cooperate and facilitate seamless cross-border road transport operations.

South Africa has bilateral cross-road transport agreements with four MS, namely: Malawi, Mozambique, Zambia and Zimbabwe. The Agency meets with SADC counterparts on a regular basis to discuss and address cross-border road transport operational matters. Despite constant engagements, the pace at which solutions are sought and implemented to address infrastructure inefficiencies is much slower.

5.3 Institutional Frameworks

Article 3.5 of the SADC PTCM, refers to institutional frameworks and states that *“MS shall establish institutional frameworks involving all transport modes to promote inter- and intra-modal cooperation between stakeholders and to support the development of regional development corridors facilitating unimpeded access and travel between the territories of MS”* (SADC. March 1998: 16).

The SADC region has adopted CMC as the basic model institution to ensure joint and coordinated planning, development, management and implementation of corridor infrastructure and operations. (SADC. June 2015: 3-34). A number of CMCs (also referred to as Corridor Management Institutions) have been established to date. These bodies have been instrumental in facilitating dialogue between corridor stakeholders, as well as in harmonising procedures and documentation used in transport and transit operations along corridors.

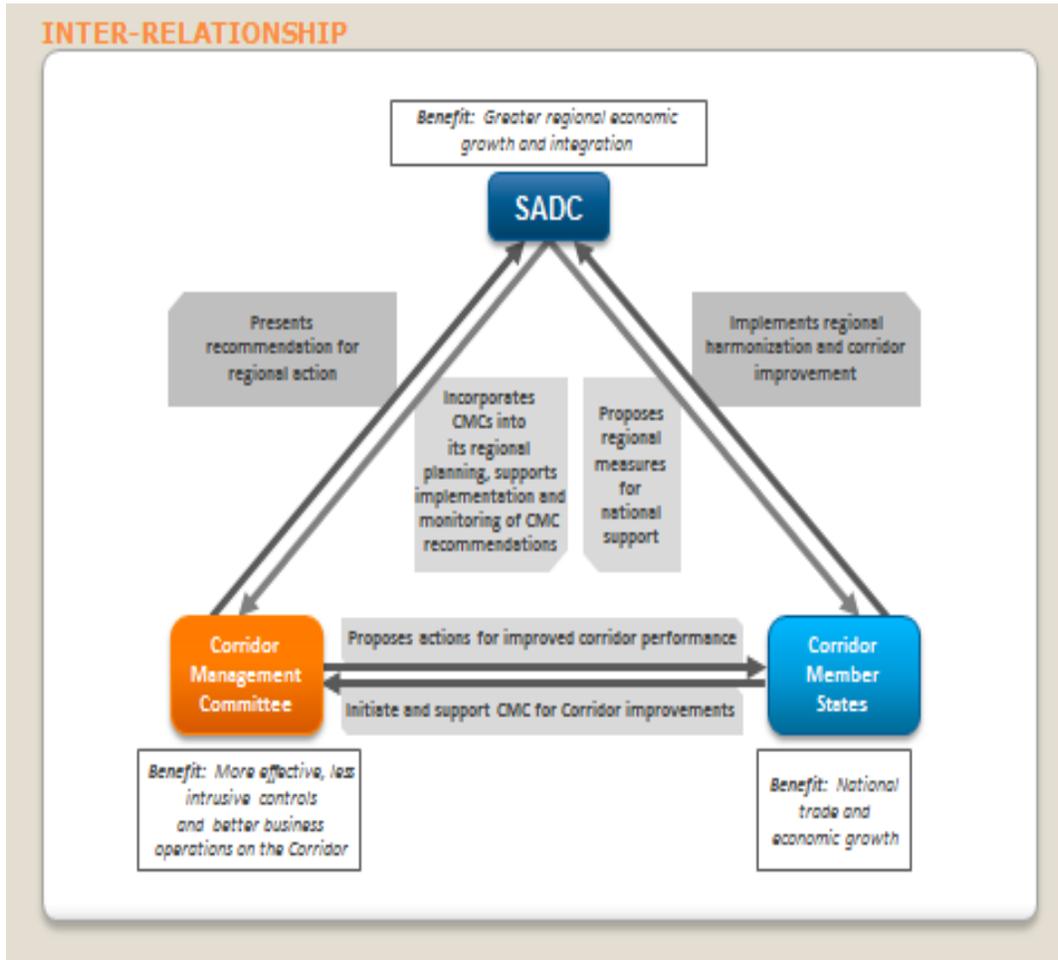
Joint regional CMCs are normally established at Ministerial, Technical and Secretariat levels. The SADC Secretariat is the principal executive institution of SADC, responsible for strategic planning, co-ordination and management of SADC programmes. The Secretariat is also responsible for the implementation of decisions of SADC policy and institutions. It is headed by an Executive Secretary and has its headquarters in Gaborone, Botswana. (<http://www.sadc.int/sadc-secretariat>).

At MS level, countries are required to set up national corridor coordination (NCC) units (in some cases referred to by different names) to facilitate trade and transport movements along regional corridors and to bring together stakeholders from the public and private sectors.

Joint Route Management Groups (JRMGs) came to existence to negotiate bilateral transport agreements, which provide for the extra-territorial recognition of road transport permits, issued by national authorities based on reciprocity. At the same time JRMGs focus on other road transport and road traffic issues (e.g. harmonisation of permissible axle loads). JRMG's are mainly represented by governments, transport operators and freight forwarders. Examples of JRMGs include the JRMG between South Africa and Zimbabwe.

The relationship between SADC, CMC and MS are shown graphically in Figure 7 below.

Figure 7: Relationship between SADC, CMCs and MS



Source: C-BRTA. 2011. Business Case Report. Accessed in September 2016

SADC adheres to the subsidiarity principle, which means that issues must be addressed at the lowest institutional level possible. As illustrated in Figure 7, MS participate in CMCs who, in turn, presents agreements / recommendations to the SADC Secretariat.

Section 5.4 here-under provides more information on CMC / institutions established in the SADC to improve trade and transport facilitation along the NSC, MDC and TKC.

5.4 Corridor Management Committees and Institutions

As already stated the SADC PTCM provides for the establishment of planning committees to manage development along strategic regional transport corridors. Numerous parties are involved in the coordination and efficient functioning of corridors, including government agencies (responsible for infrastructure provision and the regulation of transport movements) and private sector operators (e.g. terminal operators and freight forwarding agents).

This section provides more information on the established to date to oversee the efficient functioning and the seamless flow of road transport movements along the corridors under review.

5.4.1 North South Corridor

To date, no CMC has been established for the NSC. There are a number of potential challenges facing the successful introduction of a standard corridor management model for the NSC. These include the following:

- The number of countries affected by the NSC, each with its own policies and transport regulatory measures;
- The fragmented nature of the Southern and Eastern African regions, where various RECs are operational, each with its own vision and mission and objectives, but in many instances, very similar or closely related to those of other RECs in the same regions; and
- The fact that certain countries belong to more than one REC cause inter-regional complexities.

Although member countries have entered into bilateral agreements and regions have entered into RTA's to facilitate corridor management to an extent, the challenges listed above have to a large extent prevented NSC management to develop to the level where it is possible to identify and introduce a specific management model that would be most effective for the NSC.

The absence of a central corridor management entity is a factor that impacts adversely on the performance of the NSC. In the absence of a central management body, corridor and border management reforms undertaken in the past have only focused on specific segments of the NSC, such as infrastructure upgrades at the port of Durban and the transformation of the Chirundu border into an OSBP. These reforms have been successful in improving the flow of traffic along a specific segment where the reform measure was introduced. However, they did not improve the flow of traffic on the entire corridor due to other impediments that create bottlenecks and delays along other segments of the NSC.

There has been some development toward uniformity by the establishment of the COMESA-EAC-SADC Tripartite, consisting of the combined resources of the three RECs, which comprise 26 countries, with the intention to develop the Southern and Eastern African regions.

With regard to the institutional framework for the NSC, the Minister of Transport in South Africa and her SADC counterparts are in the process of negotiating a NSC MoU to lead the way for the establishment of the NSC Management institution (<http://www.thepresidency.gov.za/pebble.asp?reid=18887>).

5.4.2 Maputo Development Corridor

The Maputo Corridor Logistics Initiative (MCLI) was established in 2004 to create greater awareness for and foster better utilisation of the MDC. The MCLI is a non-profit organisation consisting of infrastructure investors, service providers and stakeholders from Mozambique,

South Africa and Swaziland who are focussed on the promotion and further development of the MDC as the region's primary logistics transportation route.

The incorporation in South Africa as a Section 21 (non-profit) membership organisation, (Reg. No. 2004/007466/08) positioned the MCLI advantageously to facilitate between all stakeholders (public and private), across national borders, aiming to co-ordinate the views of service providers and users of the corridor, engaging primarily the governments of South Africa, Mozambique and Swaziland to accomplish the following goals (<http://www.mcli.co.za/mcli-web/mcli/aboutmcli.htm>):

- Remove barriers along the MDC;
- Inform the market of developments on the corridor; and
- Market the strategic benefits and opportunities of using the MDC, thereby making this corridor the first choice for importers and exporters.

The legal instrument governing MCLI is the Memorandum and Articles of Association, corresponding to a company without a share capital, further practical governance being driven by the Constitution of the MCLI. MCLI membership is open to a wide range of interested stakeholders across South Africa, Mozambique and Swaziland, with membership fees based on affordability and size of the organisation.

The highest decision making body of the MCLI is the Board of Directors which constitute the key funding members and representatives from organised business. The MCLI Board can establish committees to work on specific matters. Four key groups have been established, with the MCLI ensuring the facilitation, coordination, integration and communication related to:

- *Border*: For operational efficiencies at the border post, aiming at extended commercial cargo clearing hours, and the establishment of a one stop border post to facilitate the efficient flow of goods and people;
- *Rail*: For railway capacity, operational efficiencies, and rolling stock;
- *Institutional framework and marketing*: To look into institutional matters and access to government funding, leading to the MoU between the MCLI, National and Provincial Governments; and
- *Shipping*: To deliberate on the frequency of ship calls and measures to develop economies of scale, which depend heavily on the removal of rail and border post constraints.

The institutional structure of the MCLI is currently under review. While the private sector nature of the organisation has been its greatest benefit, the lack of a formalised relationship with its government partners is problematic. It is of utmost importance that the MCLI partners with the respective corridor governments (South Africa, Mozambique and Swaziland) work together to ensure the integration of long term planning and interventions on the corridor. (<http://ecdpm.org/great-insights/africa-turning-point-mozambique-case/maputo-corridor/>).

A formalised PPP has been proposed as the most feasible option in ensuring that partners remain accountable at every level of the efficiencies at the corridor. This PPP would provide a workable platform for introducing a user pay principle on the corridor, which would provide sustainable funding in balance with ensuring the least possible costs on the MDC. (<http://ecdpm.org/great-insights/africa-turning-point-mozambique-case/maputo-corridor/>).

Further to the above, the World Bank's Sub-Sahara Africa Transport Policy programme has confirmed that it will support the MCLI in strengthening corridor management arrangements, restructuring the institution into an inclusive PPP, as well as in supporting the establishment of a corridor performance management system on the corridor. (Phosa, M. 4 February 2016).

5.4.3 Trans Kalahari Corridor

The Trans Kalahari Corridor (TKC) is a tripartite trans-boundary Corridor Management Institution, established in 2000 with a political and economic vision to pursue or contribute towards deeper regional integration programmes of various RECs, including the SADC and SACU.

In compliance with the SADC PTCM the three governments of Botswana, Namibia and South Africa, established a TKC Corridor Planning Committee in 1999. The PPP arrangement that exists today has its origin from a tri-lateral agreement among the three governments through a signed legal instrument in 2003, i.e. the MoU on the development and management of the TKC, hereinafter referred to as TKC MoU.

The MoU places the responsibility for its operationalisation under the custody and jurisdiction of the Trans Kalahari Corridor Management Committee (TKCMC) constituting its Executive Body. The TKCMC comprises of public and private sector stakeholders. A PPP serves as the transmission belt for the regulation and oversight of the development and implementation of seamless cross-border trade and transport facilitation measures that intend to enhance growth of corridor business.

Since its establishment, the TKC has managed to harmonise various cross-border road transport rules and procedures, including the harmonisation of axle load limits. Part of this organisations success can be attributed to the inherent political will by the three governments and the involvement of the private sector in a PPP arrangement. (<http://www.wbcg.com.na/about-us/trans-kalahari-corridor-secretariat.html>).

5.5 Institutional Challenges

A number of road transport instruments were concluded by SADC MS to guide the efficient operation of regional road transport corridors. At the same token a number of institutions (at member state and regional level) were established and exist to enable joint and coordinated planning, development, management and implementation of corridor infrastructure and operations.

Despite existence of road transport instruments and institutions, a number of institutional challenges undermine the quantity and quality of infrastructure services provision in SADC. The main challenges are depicted below.

a) Lack of Trust and Limited Cooperation between Institutions

Various private and public sector stakeholders operate within the cross-border road transport environment. From the public sector side, most stakeholders working in road transport corridors are regulatory and law enforcement authorities (e.g. law enforcement officials, Customs and Immigration officers). Stakeholders from the private sector include transport operators and operator associations like the Road Freight Association (RFA), clearing and forwarding agents and corridor management institutions. In the past corridors stakeholders have shown very little trust and confidence in each other and as a result cross-border road transport operations are characterised by a lack of coordination, cooperation and the duplication of processes.

The MCLI and TKCMC have had remarkable success in building sustainable relationships with corridors stakeholders along the MDC and TKC corridors. Traffic movements along the NSC do not reflect the same growth trajectory as the other 2 corridors. This is partly due to the absence of a dedicated corridor management institution managing traffic movements along the NSC. The absence of a CMC limits the ability of NSC stakeholders and role-players to coordinate and integrate regional corridor and border management reforms.

b) Institutional Skills Shortages

The general shortage of skilled resources at MS level presents another challenge and is partly to blame for the slow pace at which national and regional transport projects are implemented. In addition to inadequate human resources, institutions are also faced with limited financial resources, which hinder the timeous implementation of prioritised transport projects.

c) Absence of a Regional Legislative Authority

There is no regional legislative authority with the power to enforce the implementation of regional decisions and reforms introduced by SADC at national (member state) level once they have been approved. If transport interventions are not implemented by all MS, the potential impact of the measures on transport and trade facilitation is severely limited, and in many cases, nullified.

The establishment of a SADC Parliament is a reform measure that has been interrogated at regional level for a number of years. A regional legislature (Parliament), that will provide a forum for dialogue and consultation, will promote good governance, transparency and accountability throughout the region.

5.6 Conclusion

The effectiveness of the role played by transport is to a large extent dictated by the soundness of transport instruments and the capability of institutions to implement transport projects. Although various legal instruments have been developed and approved by governing structures in the SADC, the ratification of these instruments has been slow. The SADC PTCM serves as an example of this trend – to date no single MS has fully implemented all provisions of the PTCM.

In line with the SADC corridor strategy, dedicated CMCs / institutions have been established along the MDC and the TKC to facilitate stakeholder engagements in order to seek collective solutions to corridor constraints. To date, the MDC and TKC have achieved remarkable success in facilitating stakeholder engagements, which in turn has led to steady increases in traffic volumes along these 2 regional corridors. The same results have not been achieved by the NSC, inter alia because this REC does not have a CMC overseeing operations along its lengthy stretch.

Currently the regional road freight market is still demarcated along national boundaries where each MS issue cross-border road transport permits according to the stipulations of transport instruments (e.g. bilateral agreements). However, this state of affairs is likely to change in the near future. The COMESA-EAC-SADC Tripartite is currently pursuing a reform, which revolves around abolishing bilateral road transport agreements in favour of a single multilateral cross-border road transport agreement. More information on this initiative and other reforms currently unfolding in the SADC is presented in chapter 6 of this report.

6. STATUS OF TRANSPORT AND TRADE FACILITATION INITIATIVES IN THE SADC

6.1 Introduction

Chapter 6 provides a high-level overview of key transport and trade facilitation initiatives, approved and currently being implemented in the SADC region. Currently, a number of transport and trade facilitation initiatives (reforms) are managed and supported by various role-players (e.g. SADC Secretariat; MS governments and the private sector). Whilst reforms for the transport sector are particularly aimed at addressing hard and soft infrastructure constraints, trade facilitation initiatives are primarily aimed at simplifying customs processes and procedures, and harmonising trade procedures with a view to reduce delays and trade costs.

For the purposes of this discussion, the following reforms are noteworthy since they aim to reduce constraints for cross-border operators conducting operations on the NSC, MDC and the TKC.

- North-South Corridor Aid-for-Trade Programme;
- Establishment of truck stops along the TKC;
- Establishment of a corridor performance monitoring tool for the TKC;
- Development of a master plan for Beitbridge border post;
- Implementation of road transport and border post projects set out in the SADC RIDMP;
- Adoption of SADC tourism Univisa;
- Regional drive towards harmonisation of standards;
- Regional drive towards liberalisation of road transport markets;
- Automation and harmonisation of customs procedures; and
- Establishment of national and regional single window systems.

Each of the above initiatives is discussed in greater detail in the next section.

6.2 Transport Facilitation Initiatives

6.2.1 North-South Corridor Aid-for-Trade Programme

In 2009, the COMESA-EAC-SADC Tripartite launched a pilot transport corridor programme, the North-South Corridor Aid-for-Trade Programme, which spans 8 countries, 3 RECs and a total of 10,647 km of road. The NSC Aid-for-Trade road network includes the road corridors defined by SADC as the NSC, the Dar es Salaam Corridor and segments of the Trans-Kalahari and Nacala Corridors. This road network is the busiest transport network in the Tripartite region in terms of both traffic and freight volumes. (<http://www.transportworldafrica.co.za/tag/north-south-corridor-aid-for-trade-programme/>).

This North-South Corridor Aid-for-Trade Programme is unique insofar as it presents a regional approach to the development and rehabilitation of surface transport infrastructure along transport corridors. It therefore promotes a holistic approach to transport infrastructure planning and maintenance across national boundaries.

South Africa is tasked with championing the NSC Aid-for-Trade programme, as part of the Presidential Infrastructure Championing Initiative (PICI). In January 2015, President Jacob Zuma presented a report to the NEPAD Heads of State and Government Coordinating Committee on work done by the PICI.

At this event President Zuma indicated that of the 9 priority projects outlined in the NSC Framework report, two projects received full funding and has been moved to the post-financing stage for project monitoring and reporting. Furthermore, 3 additional projects have been included onto the priority project list. (<http://www.thepresidency.gov.za/pebble.asp?releid=18887>).

South Africa as the project champion of the NSC Aid-for-Trade programme has taken the lead in establishing working relationships with various role-players. The Minister of Transport and her SADC counterparts are in the process of negotiating a Memorandum of Understanding (MoU) to establish a NSC Management Institution (NSCMI). The MoU will be an Intergovernmental framework for the management of the NSC & the delivery of cross boundary infrastructure.

In summary, the NSC Aid-for-Trade Programme aims to improve the reliability of the focus corridors through addressing hard and soft infrastructure constraints and institutional and funding constraints that currently undermine the efficiency of the NSC and Dar es Salaam Corridor and segments of the Trans-Kalahari and Nacala Corridors. It is foreseen that the implementation of this initiative will boost trade and transport flows along the mentioned corridors.

6.2.2 Establishment of Truck Stops along the Trans Kalahari Corridor

A study into the establishment of truck stops along the Trans Kalahari, Trans Cunene and Trans Caprivi corridors resulted in the release of a feasibility report for truck stop establishment in June 2013. The proposed location of suitable site selections was informed by several factors, including:

- Distances between truck stops to optimise services that are offered;
- Land availability, zoning and ownership;
- Existing and supporting infrastructure and bulk utility services;
- The nature, extent and volume of truck traffic on the 3 corridors;
- Proximity of truck stops to main routes (and corridors) for easy access;
- Distance of truck stops from nearest fuel and services facilities and weighbridges;
- Qualitative and quantitative benefits of truck stops to the trucking industry and local community;
- Impact of truck stops on road safety;
- Impact of truck stops on the local economy;
- Investment required for the construction of truck stops versus expected income; and
- Possible interest from private investors.

The findings of the feasibility study distinguish between *prime sites* for immediate truck stop development, *secondary sites* for future truck stop development and *private initiative sites* for truck stop development along the Trans Kalahari, Trans Cunene and Trans Caprivi corridors. Table 15 summarises the prioritised truck stop establishment locations.

Table 15: Location Options for Truck Stops Establishment

Location of Truck Stop	Country	Corridor
Prime Sites		
Otavi	Namibia	Trans Cunene
Gobabis	Namibia	Trans Kalahari
Rundu	Namibia	Trans Caprivi
Kang	Botswana	Trans Kalahari
Secondary Sites		
Otjiwarongo	Namibia	
Oshikango	Namibia	
Jwaneng	Botswana	Trans Kalahari
Lobatse	Botswana	Trans Kalahari
Private Initiative Sites		
Walvis Bay	Namibia	Trans Kalahari Trans Cunene Trans Caprivi
Swakopmund	Namibia	Trans Kalahari Trans Cunene Trans Caprivi
Windhoek	Namibia	Trans Kalahari
Katima Mulilo	Namibia	Trans Caprivi
Zeerust	South Africa	Trans Kalahari

Source: Trans Kalahari Corridor Secretariat. June 2013. Accessed in November 2016

Documented information on the status of truck stop establishment along the Walvis Bay corridors is not readily available. In order to establish the status quo, interviews were conducted with the Trans Kalahari Corridor Secretariat (TKCS) in Pretoria in July and September 2016.

During these engagements, the TKCS reported that not much progress has been made with regards to the establishment of truck stops since the publication of the draft feasibility in 2013. Land use issues which revolve around authorities not willing to avail land for truck stop development, is cited as the greatest stumbling block towards implementing the truck stop reform along the Walvis Bay corridors.

Management changes within the TKCS also delayed negotiations with relevant role-players but this has since been resolved. Acknowledging the fact that the primary need for the establishment of truck stops is to serve truck drivers, the TKCS resuscitated negotiations with relevant role-players, including land boards in Namibia and Botswana to secure land for the construction of truck stops. Negotiations with private interests are also on-going to secure funds for construction.

According to the TKC Secretariat, the private sector s expressed interest in financing the building of truck stops in Walvis Bay, Gobabis and Kang, with negotiations still on-going. It is expected that the establishment of truck stops at these 3 locations (that are either located directly or in close proximity to the TKC road network) that will go a far way towards improving road safety along the TKC.

6.2.3 Establishment of a Corridor Performance Monitoring Tool for the TKC

The development and implementation of a corridor performance monitoring tool, is another initiative driven by the TKCS. Essentially this reform revolves around developing an analytical tool that provides one entry point for the submission and processing of data to analyse corridor performance in its multiple dimensions (e.g. price, time, uncertainties, volumes and infrastructure).

A corridor performance monitoring tool intends to obtain a clear understanding of the obstacles that impede the seamless flow of traffic along the entire corridor to identify solutions and implement remedial actions. Since corridor performance depends on a combination of various factors (both and soft infrastructure aspects) a thorough understanding of all impediments is required to determine the cause(s) for poor performance and not just treating the symptoms.

The Northern Corridor has successfully developed and implemented a monitoring tool titled, Northern Corridor Transport Observatory that measures corridor performance against 30 performance indicators. Raw data is collected from various role-players for processing. Disseminated data indicates how the corridor performs against each indicator and serves as basis for the identification of interventions to address corridor constraints.

The success of this reform depends on a number of factors, including the correct capturing of corridor data by corridor role-players and their willingness to share real-time data. Information sharing between corridor role-players in the TKC is problematic and worsened by the fact that many of them still capture information manually. This constraint points to the urgent need to standardise data capturing processes and systems and the TKC Secretariat is working with stakeholders to address it.

Furthermore the TKCS is continuing engagements with prioritised role-players to obtain their support and to obtain financial assistance to enable the implementation of this reform that will enable corridor role-players to identify and respond to corridor constraints in an urgent fashion.

6.2.4 Development of a Master Plan for the Beitbridge Border Post

Beitbridge border post is the busiest inland border in South Africa, facilitating more than 71 000 vehicles and 700 000 people (inbound and outbound) per month (Department of Public Works: 2016). As already stated in earlier sections of this report, the Beitbridge border post constitutes a key element of the NSC and therefore impacts directly on the operational efficiency of the NSC.

In response to various border post inefficiencies at the Beitbridge border (see table 11) the Border Control Operational Coordination Committee (BCOCC) identified a need for a Master plan to improve the operational efficiency of this inland border post. The BCOCC through its representative structures facilitated the engagement processes, which included consultations with various stakeholders. This process materialised in the release of the Beitbridge: Port of Entry Master Plan in June 2016 that provides a framework for the development of new Border post infrastructure (on the South African side of the border only).

A key element of the Master Plan is that it foresees the transformation of the Beitbridge border post into an OSBP. Essentially, this implies that all cross-border movements (pedestrians, commercial and public transport vehicles) only stop once at the border facility in a dedicated and shared environment, where all border formalities are conducted through a single window operation.

The development of the master plan was informed by the need to address challenges that include the following:

- Port of entry approach and on-site traffic flow - inefficient layout within the port which contribute to bottlenecks;
- Pedestrians – a lack of control facilities, separation and support facilities impede pedestrian flows at the border;
- Public transportation – a lack of separation within the port of entry and inefficient layout hinder the quick clearance of passengers;
- Heavy vehicle circulation – the truck facility layout and circulation is problematic. Only one through lane exists which serves pre-cleared trucks and trucks for inspection; and
- Parking – limited parking and a lack of manoeuvring space exist within the border.

In terms of design guidelines, the Master Plan complied with the following requirements:

- Separation of heavy, light and public transport vehicles and pedestrian routes;
- Provision of booths (toll gate type) for vehicles to clear, with separate nothing to declare and declare lanes;
- Inspection areas at all routes for ad hoc and scheduled inspections; and
- Centralised administration and operational buildings.

The following operational challenges had to be addressed in the master plan:

- Port of entry approach and on-site traffic flow - inefficient layout within the port contribute to bottlenecks;

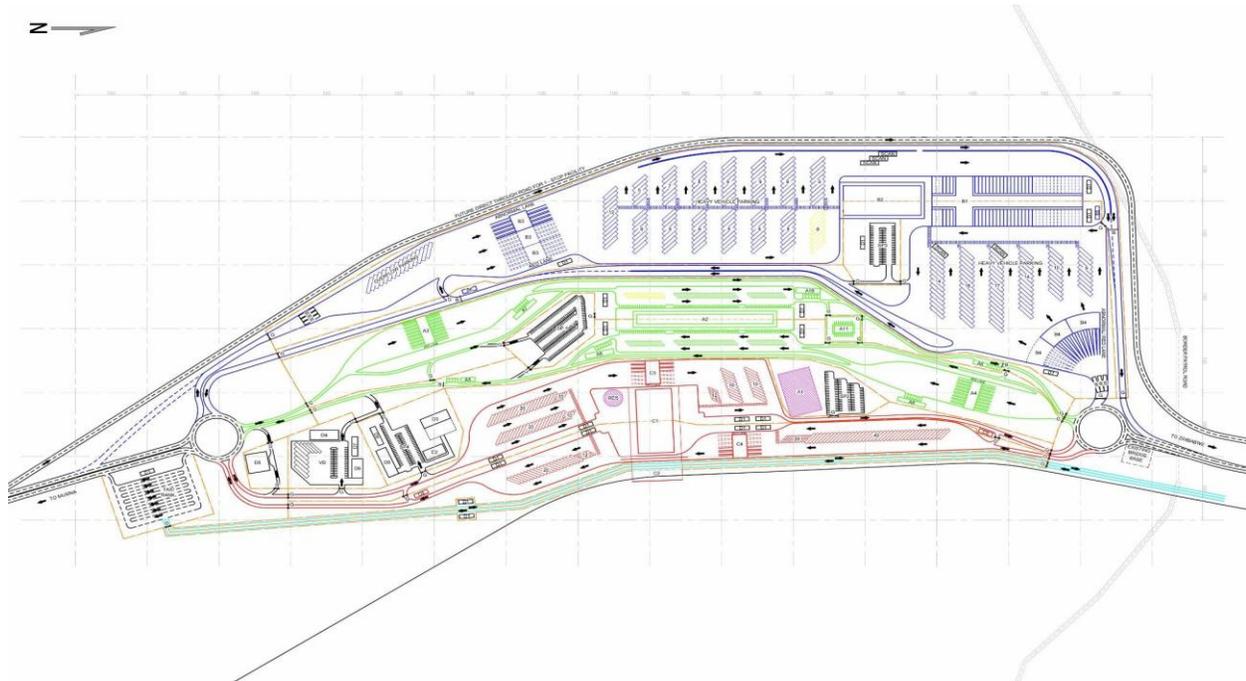
- Pedestrians – a lack of control facilities, separation and support facilities impede pedestrian flows at the border;
- Public transportation – a lack of separation within the port of entry and inefficient layout hinder the quick clearance of passengers;
- Heavy vehicle circulation – the truck facility layout and circulation is problematic. Only one through lane exists which serves pre-cleared trucks and trucks for inspection; and
- Parking – limited parking and a lack of manoeuvring space exist within the border.

Apart from finding solutions to the above operational constraints, the Master Plan development process was informed by other considerations, which include:

- Need to maintain the existing site as far as possible;
- Acknowledging that a new bridge will be required after 10 years;
- Acknowledging that the functionality of the old bridge should be maintained;
- Creating a buffer zone around the Beitbridge border post;
- Separation of commercial freight, light vehicle and public transport traffic;
- Proximity to engineering services; and
- Moving staff housing to Musina.

The Master Plan development process culminated in the release of two Master Plan layout alternatives (Figures 8,9 and 10), which are informed by international best practice. Both options propose more compact port operations that allow efficient circulation and the quick processing of goods and people.

Figure 8: Beitbridge Master Plan Layout: Option 1



Source: Department of Public Works. June 2016. Accessed in November 2016

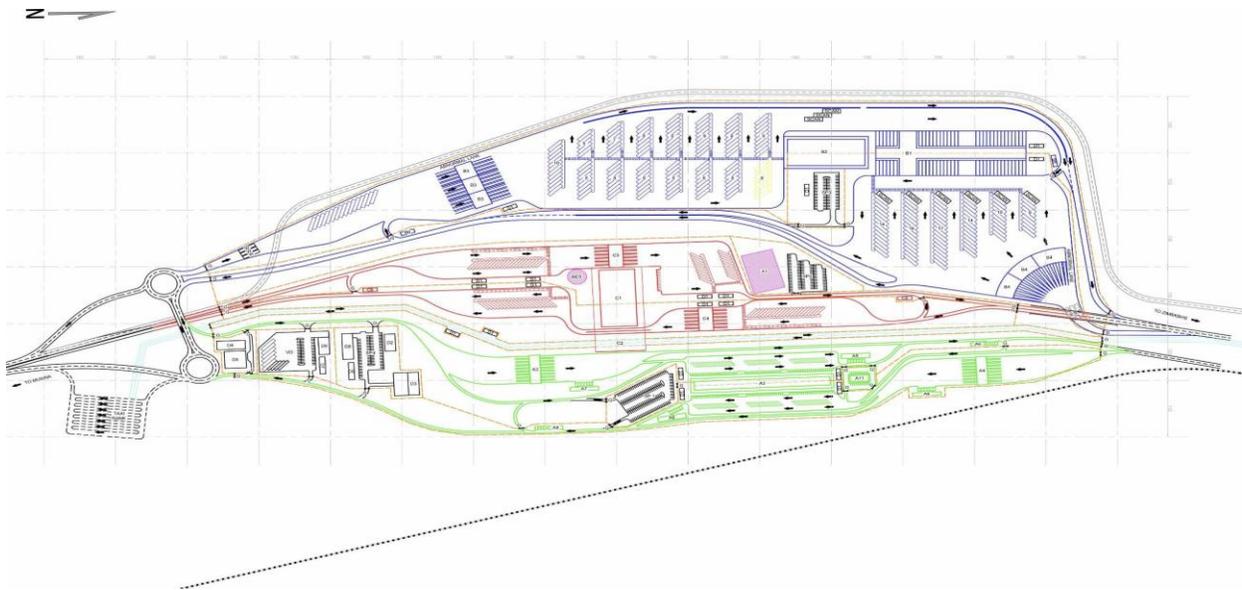
Figure 9: Beitbridge Master Plan Layout: Graphical Illustration of Option 1



Source: Department of Public Works. June 2016. Accessed in November 2016

The second layout option for Beitbridge border post is presented in Figure 10 below.

Figure 10: Beitbridge Master Plan Layout: Option 2



Source: Department of Public Works. June 2016. Accessed in November 2016

The main difference between the 2 layout options is that option 1 provides for the establishment of freight traffic clearance facilities on the western side of the border, whereas rail facilities will be located on the eastern side. With option 2, pedestrian movements are confined to the centre.

a) *Implementing the Beitbridge Master Plan*

The construction of new border post infrastructure and facilities will only commence once the following actions have been carried out:

- Approval of the Master Plan by the Parliament of South Africa;
- Approval and buy-in of the Master Plan by Zimbabwean counterparts;
- Drafting of a development framework for the Beitbridge border post;
- Acquisition of additional land to enable expansion of the border post;
- Proclamation of the new PoE;
- Application for township establishment;
- Relocation of existing staff housing; and
- Detailed planning and design.

Engagements with South African role-players indicated that Zimbabwean counterparts were not properly engaged during the Master Plan development process. This state of affairs poses a real risk that this reform may be rejected by Zimbabwean role-players in which event the construction of the new Beitbridge OSBP facility will either be delayed, or terminated. Failure to address border post inefficiencies may result in an even greater percentage of cross-border road transport operators avoiding using Zimbabwe as a transit country, using Botswana as an alternative route to reach Tanzania and the DRC.

It is envisaged that the execution of this reform will yield significant time and cost savings for cross-border road transport operators as this will significantly reduce delays at the border. Improved border post efficiency will also impact positively on trade and transport flows along the NSC.

6.2.5 Implementation of Prioritised Road Transport and Border Post Projects set out in the SADC RIDMP

Since the adoption of the SADC RIDMP, showcasing of infrastructure projects has been vigorously pursued in various regional and international platforms. During the SADC Heads of State and Government Summit, held in August 2014 at the Victoria Falls in Zimbabwe, the SADC approved US\$997 million towards moving ahead with the implementation of various transport projects in the road, rail, ports and air transport sub-sectors (Tralac. 28 August 2014).

In order to assist MS in obtaining funds for project execution; SADC launched the PPDF in November 2013 to assist MS in packaging projects to attract private sector funding. Furthermore, the PPDF has managed to secure funding from other sources (e.g. EU). The SADC Secretariat is also engaging other partners to attract more contributions so as to accelerate project preparation.

a) Road Transport Projects

The SADC RIDMP prioritises 73 road transport projects for implementation over a time interval of fifteen years. The majority of projects are focused on hard infrastructure improvements in the western and central parts of the SADC. For Angola alone, 18 projects are identified. These projects all revolve around road rehabilitation / maintenance and bridge construction.

Updated information pertaining to the current status of prioritised road transport projects is not readily available. According to the SADC RIDMP Implementation Status Report (SADC, June 2015: 42-44), the following road sections on the NSC are undergoing project preparation and procurement for construction under the coordination of the Tripartite Project Preparation and Implementation Unit (PPIU). These projects are all still in the planning phase and their execution depends of the ability of MS to secure sufficient funds to continue with project implementation:

- Serenje – Nakonde road, Zambia: Feasibility studies and detailed design and tender documents;
- Songwe – Karonga road, Malawi: feasibility study and detailed design and preparation of tender documents;
- Lusaka – Chirundu (link 4) road, Zambia: rehabilitation construction works and Kafue weighbridge construction and installation;
- Pandamatenga – Nata road, Botswana – Technical evaluation for feasibility and design completed awaiting “ No Objection”from the African Development Bank;
- Palapye – Martin’s Drift road, Botswana – Technical evaluation for feasibility and design completed awaiting “No Objection” from the African Development Bank;
- Lilongwe – Jenda road, Malawi – Contract negotiations for feasibility and design completed in April 2015;
- Bulawayo – Gwanda road – Contract negotiations for feasibility and design completed in April 2015; and
- Gwanda – Beitbridge road – Contract negotiations for feasibility and design completed in April 2015.

b) Border Post Projects

The SADC RIDMP identifies the establishment of 18 border posts. Prioritised OSBP projects are in various stages of development. During a meeting of the Committee of Ministers, responsible for Transport and Meteorology, that took place in Swaziland in October 2016, the following update was provided regarding the status of OSBP development in the SADC:

i) Chirundu Border Post

The Chirundu border post is already functioning as an OSBP. Since its opening, notable time saving were recorded at this border. Border post improvements are noted in the following accomplishments: (JICA 2014:8)

- Passengers travelling in private vehicles cross the border in 15 minutes;
- Public buses cross the border in less than one hour; and
- The commercial terminal clears 400 trucks per day, compared to the clearing of 150 trucks per day during the opening of the Chirundu OSBP in 2009.

ii) Mamuno / Trans Kalahari Border Post

The Mamuno border post is currently being developed to an OSBP. According to planning forecasts, Namibia will handle entry and exit clearance for commercial traffic whilst the Botswana side will handle entry and exit formalities for buses, private motorists and other travellers.

The governments of Botswana and Namibia have entered into a MoU on the development of an OSBP. Although Botswana has passed the required OSBP law, the draft legislation in Namibia is awaiting finalisation.

iii) Lebombo / Ressano Garcia Border Post

To date, the following milestones were achieved towards transforming the Lebombo / Ressano Garcia border post into an OSBP:

- Establishment of the commercial freight clearance facility away from the border at Km 4;
- Construction of a freight by-pass road;
- Construction of OSBP facility;
- Construction of separate passenger “corridor” and clearance facilities; and
- Separation of traffic, with passenger buses and private motorists using “old” road and main facilities.

The clearance of commercial freight away from the border (at km7) has yielded time and money savings for cross-border road transport operators since delays at the Lebombo / Ressano Garcia border post has been minimised due to quicker border clearance processes.

iv) Beitbridge Border Post

A MoU for the establishment an OSBP has been drawn up, but still awaits to be signed off by the governments of South Africa and Zimbabwe. South Africa released a Beitbridge: Port of Entry Master Plan in June 2016 that awaits approval by Parliament in South Africa.

The layout options of this Master plan supports OSBP establishment. Unfortunately, Zimbabwean role-players were not properly consulted during the Master Plan development process. As a result, it may be difficult to obtain political support from Zimbabwean authorities, which may delay or even derail the whole project at the border post.

v) Kasumbalesa Border Post

Progress towards transforming this border post into an OSBP is noted in the reconstruction of access roads, parking and office facilities on the Zambian side of the Kasumbalesa border post, under a BOT arrangement. Similar facilities are currently being constructed on the DRC side by the same service provider.

vi) Kazungula Border Post

Progress towards transforming the Kazungula border into an OSBP is noted in the following milestones:

- Establishment of a project management office;
- Development of a framework for corridor-related facilities and logistical systems;
- Construction of a 923 meter extra-closed cable-stayed bridge, with a 1.9 meter sidewalk on both sides; and
- Upgrade / construction of 3 km approach roads and railway lines.

Unfortunately the construction of the bridge crossing the Zambezi river which will link Zambia and Botswana was halted in January 2016, following the filing of an injunction by the Chilibwe Mining Company that restrain contractors from excavating quarry on its land for the bridge construction.

6.2.6 Movement towards adoption of Tourism Univisa

The SADC has witnessed a steady growth in the number tourists visiting MS in recent years. According to statistics released by the Regional Tourism Organisation of Southern Africa, the number of travellers to the region increased from 12.6 million in 2000 to around 23.2 million in 2013. (SADC, 2015: 14).

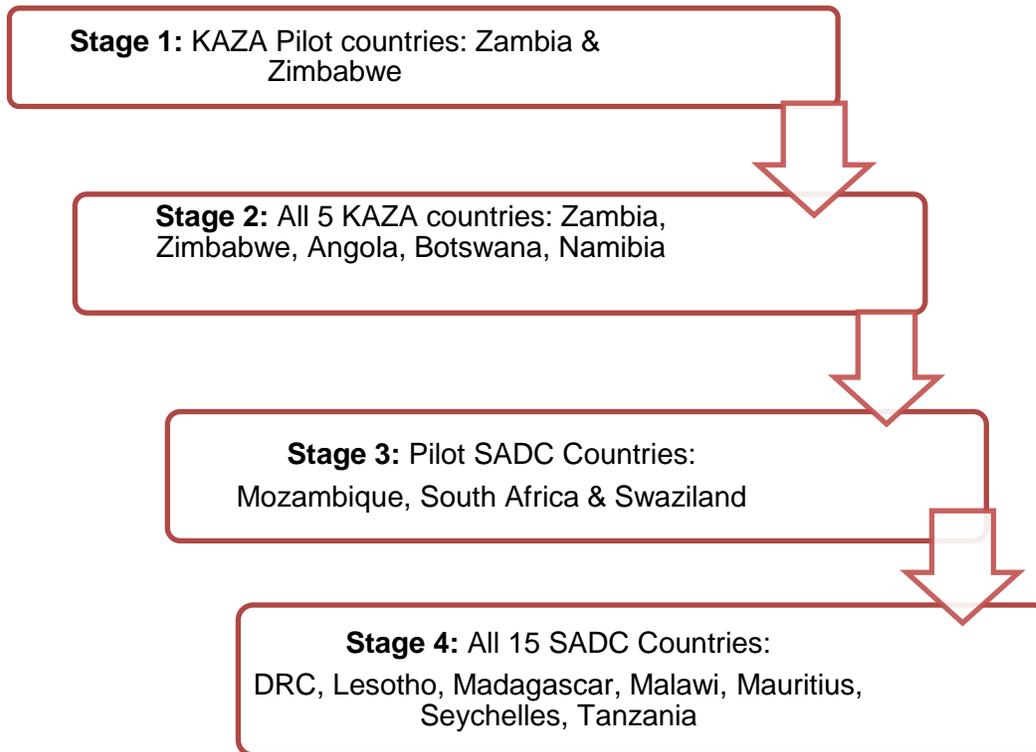
Travel to the SADC is promoted by the SADC Protocol on the Development of Tourism which recommends that visa requirements for visitors be abolished. In this respect, it calls on MS to create a “tourism Univisa” to facilitate the movement of international tourists in the region, thereby increasing the market and revenue accrued by the tourism sector.

The launch of the Kavango-Zambezi (KAZA) Visa between Zambia and Zimbabwe in November 2014 is the first step towards adopting a Univisa in the SADC. During the initial phase the KAZA visa allowed tourists from 40 countries to combine travel to these 2 MS without applying for travel documents separately. Valid for 60 days, the US\$50 visa gives tourist’s access to Zambia and Zimbabwe and allows entry to Botswana through the Kazungula border post which serves all 3 countries. (SADC. 2015:14).

Phase 2 of the Univisa initiative includes an extension of the tourist visa to fully cover member countries (Botswana, Angola and Namibia) that share the KAZA Transfrontier Conservation Area. The aim is to eventually extend this arrangement to all 15 SADC MS, thereby implementing a Univisa that allows tourists to move freely within the SADC.

It is expected that the Univisa will encourage tourists to stay longer in the SADC since they can easily access other SADC countries. Longer stays will have positive spin-offs in terms of job creation that will benefit local communities.

Figure 11: Univisa Stages



Source: SADC. 2015. Accessed December 2016

Although the Univisa pilot project between Zimbabwe and Zambia proved to be successful, this initiative has not yet moved beyond the first stage. (<http://southernafrican.news/2016/07/29/sadc-can-do-more-to-attract-tourists/>). This is mainly due to a lack of cooperation between prioritised role-players and limited insight into the benefits that can be obtained for the region as a whole, once the Univisa is extended to all 15 MS.

6.2.7 Regional Drive towards Harmonisation

Harmonisation is regarded as an important element towards establishing road transport integration and involves the adoption of harmonised transport policies, legislations, rules, standards and systems between MS on the basis of agreed minimum requirements to assure “fair” play amongst MS and to equalise the conditions of competition.

Although the harmonisation of transport policies, legislation, rules and standards in the SADC had to be accomplished in 2008, this ambitious goal was not achieved. The status quo impacts negatively on the seamless flow of cross-border road transport and traffic. Cross-border operators traverse through different SADC countries on route to their final destination. Although operators may comply with domestic legislative and regulatory requirements, they do not necessarily comply with regional requirements.

An on-going initiative within the Tripartite is the drive towards harmonising all road transport related policies, laws, regulations and standards amongst signatory states. This implies the adoption of harmonised transport policies, rules and standards by MS on transport matters, which relate to:

- Vehicle dimensions and equipment standards;
- Vehicle testing stations and procedures;
- Transportation of abnormal loads;
- Transportation of dangerous goods; and
- Cross-border third party insurance.

The implementation of harmonised transport policies will go a long way towards enhancing regulatory efficiency which in turn will reduce operational constraints faced by cross-border road transport operators within the Tripartite. Harmonisation can also be viewed as a stepping stone towards market liberalisation. It therefore supports the market liberalisation drive pursued under the Tripartite Transport and Transit Facilitation Programme.

6.2.8 Regional Drive towards Market Liberalisation

Article 5.3 of the SADC PTCM states that MS's shall progressively introduce measures to liberalise market access in their respective jurisdictions in respect to cross-border road freight transport. Liberalisation builds on harmonisation and entails the removal of tariff and non-tariff barriers amongst MS in order to reduce restrictive measures that control access to the market.

In line with international best practice that has shifted from quantity regulation to quality regulation, the Tripartite is currently pursuing a reform that entails implementing a single Multilateral Cross-Border Road Transport Agreement (MCBRTA) within the Tripartite that will require signatory states to introduce quality regulation in their respective territories.

Since SADC forms part of the Tripartite, the implementation of a MCBRTA will culminate in cross-border road transport operations being regulated differently in the region. The MCBRTA is currently in draft format and once MS's sign off the MCBRTA, individual countries will pursue the process of repealing bilateral cross-border road transport agreements and cross-border permits.

The MCBRTA also provides for the establishment of a common cross-border road transport operator registration system (for both freight and passenger), titled *Transport Register and Information Platform System* (TRIPS) that will capture information on cross-border operators, drivers and fleet.

It is envisaged that the TRIPS will enable regulators to improve their monitoring and enforcement functions via accessing real-time information on registered operators and vehicles, and through monitoring how operators conduct business in the Tripartite. Operator misconduct will be identified through operator profiling, audits and random inspections and will be registered against the operator's profile.

Validation workshops are currently being conducted to validate draft standards, where after the Council of Ministers of Transport from all signatory countries will be requested to sign off the MCBRTA, and thereafter, countries will initiate the process of reviewing their respective policies, legislations and regulatory frameworks. According to planning estimates, this reform will be operationalised between 2017 and 2022, with all signatory countries migrating to quality regulation by 2022.

6.3 Trade Facilitation Initiatives

Table 16 summarises key regional trade facilitation agreements that apply in the SADC.

Table 16: Key Regional Trade Facilitation Agreements

Category	Trade Facilitation Agreement	Description	Regional Example(s)
Customs Procedures & Border Management	CBM Guidelines & Systems	Assist MS to modernise border management systems and disruptions at border crossings and promote cooperation between border agencies	CBM systems in Malawi, Mozambique and Zambia
	OSBPs	Convert certain border posts to OSBPs to reduce the time and costs associated with clearing goods through border crossings.	Chirundu OSBP
	National & Regional Single Windows	Designed to integrate customs declaration and other processes by enabling parties engaged in trade or transportation activities to lodge all standardised information and documentation relevant to import, export and transit-related requirements in a single entry point.	Single windows systems have been piloted at selected border posts the SADC (Buitepos / Mamuno)
	Automation & harmonisation of customs administrations	Attempts to harmonise IT systems and customs administration systems. A SADC Customs Declaration and a Transit Control Form have been designed and approved by MS.	With the exception of South Africa and Tanzania, customs administrations in the SADC adopted the ASYCUDA system.
	Customs Reform and Modernisation Programmes	Provision of management tools for customs administrations to develop capacity to implement organisational improvements.	Mauritius, Namibia and South Africa.
Transit & Logistics	Regional Transport Management System	Act as instrument for harmonising and standardising procedures for the transit of goods within the SADC.	Attempts are made to establish a SADC regional transit bond guarantee (RTBG)
	SADC RIDMP	Framework to guide the coordinated and integrated development of trans-boundary infrastructure in the SADC.	TKC, MDC, NSC.

Source: African Transformation Forum 2016. Accessed December 2016

From the information displayed in Table 16 the interrelationship between trade and transport becomes evident. This is reflected in the similarity between trade and transport facilitation initiatives. For example, CBM and OSBP simultaneously intend to address trade and transport hindrances to improve the seamless movement of people, goods and services in the SADC region.

6.4. Impediments to the Implementation of Transport and Trade Facilitation Agreements in the SADC

Although a number of transport and trade initiatives are being implemented in SADC, evidence of the impact of such initiatives remains limited, outside of a few specific examples. This is due to a number of constraints, which include, but are not limited to the following:

6.4.1 Poor Level of Implementation

Although a number of trade and transport facilitation agreements have been approved at MS level, the implementation of these agreements remain a problem. Various reasons are cited for this tendency, notably a lack of political buy-in amongst MS and insufficient funding at national (member state) level to implement regional commitments.

6.4.2 Non-Alignment of National Legislative Frameworks to Regional Initiatives

The majority of regional trade and transport initiatives (e.g. OSBP reforms) require that MS review their respective transport policies, laws and regulations to align it to regional initiatives. MS therefore have to create a policy, legislative and regulatory environment that supports the implementation of regional initiatives, which they often fail to do.

Although an agreement was signed between the governments of Mozambique and South Africa in 2007 already to transform the Lebombo / Ressano Garcia border into an OSBP, the legal documents to enable transformation have not yet been approved and signed by all parties in South Africa and Mozambique.

6.3.3 Multiple Memberships to different RECs

Another impediment to the timeous implementation of regional trade and transport initiatives is to co-membership of many SADC countries in the COMESA and / or the EAC. Membership to more than 1 REC affect the ability of SADC countries to implement certain initiatives, such as the RTBG, and the SADC TMS, since they have already adopted transit instruments with other RECs. (African Transformation Forum. 2016: 8).

6.3.4 Variation in Customs Systems / Infrastructure

Variation in the automation of customs processes across SADC MS, coupled with human resources constraints and a lack of expertise in some countries poses a challenge to the implementation of customs initiatives aimed at harmonising customs procedures.

6.3.5 Funding Constraints

Regional trade and transport initiatives are costly and time consuming to implement. Furthermore, limited financial resources at MS level are cited as a reason for the poor implementation status of regional trade and transport facilitation initiatives. This gap emphasises the need to secure additional funds to enable MS to execute regional commitments.

6.3.6 Skills shortage

In addition to funding constraints, MS often lack technical expertise to drive the implementation of regional trade and transport facilitation initiatives. This limitation underpins the need to secure adequate funding to improve resource mobilisation at MS level to fast-track the implementation of trade and transport initiatives in the SADC.

6.4 Conclusion

Various trade and transport initiatives are currently pursued within the SADC. Documented info on the impact of trade and transport initiatives is not readily available. This is partly due to the fact that many initiatives (e.g. truck stop establishment along the TKC, Master plan for Beitbridge border post & implementation of SADC RIDMP transport projects) are still in the early stages of the project life cycle and their impact will only be visible once they have been implemented.

One initiative currently unfolding in the Tripartite that promises to change the cross-border landscape is the movement towards the adoption of a single MCBRTA. Essentially this initiative, which represents a shift in focus from quantity regulation to quality regulation, intends to remove all restrictive measures that control market access to create a single cross-border road freight market within the Tripartite.

In practical terms, the MCBRTA initiative will materialise in the repeal of cross-border road transport permits in favour of a single MCBRTA that will enable the unimpeded flow of commercial road freight movements in the Tripartite. Since cross-border road freight operators will spend less time at border posts, they will be able to move faster between origin and destination points and increase the number of journeys undertaken.

Unfortunately experience reveals that African countries have a poor track record when it comes to the implementation of regional commitments. Various reasons are cited for this, e.g. a lack of political will, funding constraints and memberships to different RECs. These constraints should be addressed before it will be possible to accurately measure the impact of trade and transport facilitation initiatives on the cross-border road transport industry.

The next chapter sheds more light on trade and transport facilitation reforms initiated and implemented by RECs in Asia and other parts of Africa. The information obtained from the benchmarking exercise will pave the way for the identification of priority reforms, which aim to improve the seamless flow of trade and transport movements within the SADC.

7. INTERNATIONAL BENCHMARKING

7.1 Introduction

This chapter articulates information obtained from desktop benchmarking on trade and transport facilitation initiatives implemented by RECs along strategic regional road transport corridors in Asia, West Africa, and East and Central African sub-regions. The purpose of the benchmarking was two-fold:

- To establish the initiatives that were implemented in other regions for improvement of cross-border road transport movements and trade, and learn from the successes achieved; and
- To identify priority reforms for recommendation for implementation in SADC region.

A number of criteria were used to select benchmarking candidates. During the selection process, specific emphasis was placed on RECs that reveal the same socio-economic development status and infrastructure challenges than the SADC. This process culminated in the selection of the following RECs for benchmarking:

- Greater Mekong Sub-Region (Asia);
- Abidjan-Lagos transport corridor (West Africa); and
- Northern coastal transport corridor (East and Central Africa).

The findings from the desktop benchmarking were used to guide the identification of trade and transport facilitation reforms for the SADC region, which are presented in chapter 8.

7.2 The Greater Mekong Sub-Region

7.2.1 Background

The Greater Mekong Sub-region (GMS) encompass five mainland Southeast Asian countries and two provinces in the Southern People's Republic of China, as indicated below:

- Cambodia;
- Lao People's Democratic Republic (Laos);
- Myanmar;
- Thailand;
- Vietnam; and
- People's Republic of China (specifically the Yunnan Province and Guangxi Zhuang autonomous Region).

The GMS is home to nearly 320 million people spread across a diverse geographic and economic terrain, and a land mass size of Western Australia. (Australian Government: 2009). It juxtaposes the modern city of Bangkok with the remote highlands of Laos, the established market economy of Thailand with the reforming socialist economies of China and Vietnam and the military dictatorship of Myanmar.

All members of the GMS exhibit widely varying levels of economic development. Thailand is by far the sub-region's biggest economy accounting for more than half of its GDP. Vietnam claims the largest population with 85 million people, although China's two regions combined host a population of over 90 million. At the opposite end of the spectrum, Laos has both the smallest population and the lowest GDP.

All signatory parties are heavily rural with the share of population in rural areas averaging approximately 70%. This means that agriculture is important throughout the sub-region and that great potential for economic gain attaches to the transfer of subsistence farmers into industrial and service sector employment.

7.2.2 Trade and Transport Facilitation Challenges

The GMS consists of 3 main corridors involving multiple routes. These corridors are all oriented toward seaports. For landlocked Laos and China's Yunnan province, these corridors provide access to world markets. The main road transport corridors are the:

- North-South Economic Corridor;
- East-West Economic Corridor; and
- Southern Economic Corridor.

The three corridors experience a number of infrastructure challenges that undermine the seamless movement of traffic within the GMS. The most significant challenges are listed below:

- Inadequate regional road network due to insufficient funds to construct and maintain sections of the regional road network in the poorer countries;
- Lengthy border delays, which pose a barrier to intra-regional trade;
- Limited ICT integration between border agencies, resulting in the duplication of border processes;
- Inadequate institutional support to oversee the implementation of trade and transport initiatives; and
- Limited private sector involvement to fund and provide technical expertise during the implementation of trade and transport programmes.

7.2.3 Greater Mekong Sub-Regional Programme

In response to the above infrastructure constraints, the GMS countries, with assistance from the Asian Development Bank's (ADB) entered into a programme of sub-regional economic cooperation in 1992. The objective of this programme is to enhance trade facilitation and transport infrastructure development within the GMS.

This process culminated in the following objectives for the transport sector:

- To develop prioritised transport corridors;
- To reduce non-physical barriers to transport movements; and
- To formulate and coordinate strategies to ensure that transport corridors evolve into economic corridors.

During the early years of 2000 it became clear that various non-physical barriers to the cross-border movement of goods, people and vehicles were still prevalent. At the time recognition was given to the fact that improvements to road transport corridors were nationally and not regionally based. Literature sources reveal that while national traffic has grown rapidly, intra-regional traffic movements grew at a much slower pace.

The GMS experienced inconsistent and difficult border crossing formalities and procedures noted in restrictive visa requirements, restrictions on the entry of motor vehicles; as well as the application of different standards on vehicles and drivers.

In response to the above-mentioned constraints, GMS countries agreed to work on a regional agreement to reduce transportation challenges. The outcome was the adoption of a Cross-border Transport Facilitation Agreement (CBTA) that entered into force with its ratification by all 6 GMS member countries in December 2003. More information on this agreement is presented in section 7.2.4 below.

7.2.4 Greater Mekong Sub-Region Cross-border Transport Facilitation Agreement

The CBTA is a flagship initiative under the GMS Economic Cooperation programme that aims to promote transport and trade facilitation, through consolidating in a single legal document all of the key non-physical measures to achieve the efficient cross-border road transport movement of goods, vehicles and people. This agreement promotes the elimination of intermediary stops as well as promoting reductions in the amount of time spend at border crossings.

The CBTA is a comprehensive multilateral instrument that incorporates all aspects of cross-border transport facilitation into one document and provides for:

- A single stop/single window customs inspection;
- Cross-border movement of persons;
- Transit traffic regimes, including exemptions from physical inspection, bond deposit and agriculture and veterinary inspections;
- Requirements that road vehicles have to meet to be eligible for cross-border road transport;
- Exchange of commercial traffic rights; and
- Infrastructure including road and bridge design standards, road signs and signals.

Designed in 3 tiers or components, the CBTA is flexible and highly adaptable to changing needs. The first tier is the main agreement which contains the core principles of the system. The second tier is made up of Annexes that outline the technical details and Protocols that have time variables. The third tier contains bilateral and trilateral MOUs and detailed implementation arrangements.

The CBTA implementation has not been an easy process. Harmonising the varying interests and circumstances of 6 countries proved to be challenging and time consuming. While all countries have signed the CBTA main agreement, in 2013 only 4 countries have ratified all

the Annexes and Protocols, with Myanmar and Thailand lagging behind at that time (Asian Development Bank. 2013: 9).

7.2.5 Progress on Transport and Trade Facilitation Initiatives in the Greater Mekong Sub-region

a) *Implementation of the Transport and Trade Facilitation Action Programme*

The GMS Transport and Trade Facilitation Action Programme (TTF-AP) is an integrated programme of advisory support and capacity, which builds on the GMS CBTA. Essentially this reform, which is currently being implemented, revolves around enhancing cross-border trade and transport in the GMS.

The TTF-AP core work focuses on the following main areas:

- Expanding transport and traffic rights along GMS transport corridors;
- Simplifying and modernising customs procedures and border management, including transit systems in the GMS; and
- Supporting enhanced transport and logistics in the GMS.

Each of these core areas is discussed in greater detail here-under.

Core Area 1: Expand Transport and Traffic Rights

Significant investments in the development of road networks and other physical infrastructure have stimulated growth in the GMS in recent years. However, in order to maximise the economic returns on investment, transport and traffic rights along GMS road transport corridors should be expanded to make the transportation of goods and people across the sub-region faster, cheaper and easier.

The core area of the TTF-AP comprises the following 3 key activities:

Activity 1: Complete mapping & define common templates for transport agreements

The CBTA serves as a regional framework for cross-border transport, which has been used by MS as a basis for various bilateral agreements to liberalise the movement of goods, passengers and vehicles. The TTF-AP applies a more unified framework to assist MS to better align the TTF measures with the CBTA, thereby enhancing their effectiveness.

Activity 2: Facilitate the extension of traffic & transport rights along GMS corridors

This activity assesses the need to extend current GMS corridors and add new ones to meet growing demand. Traffic rights negotiations are facilitated with the aim of increasing the number of vehicles allowed to operate across-borders and opening additional border crossing points.

Activity 3: Developing a road user charge scheme for Lao PDR

As a landlocked country, Lao PDR prioritises the development of overland transport. Under this activity, Lao PDR's strategic geographic position in the sub-region will be enhanced through the development of a sustainable financing mechanism to develop and maintain its international road network. This will be accomplished through improving the management of vehicle weights and enhancing road user charging schemes for different vehicle types.

Core Area 2: Simplifying and Modernising Customs Procedures

More efficient customs processing will pose substantive facilitation effects on the movement of goods in the GMS. The TTF-AP aims to introduce more efficient and better coordinated customs procedures to facilitate the intra-regional movement of goods and people.

The core area of the TTF-AP comprises of the following key activities:

Activity 4: Prepare member countries to implement electronic customs transit systems

As GMS customs administrations complete the process of customs automation, the introduction of a computerised or electronic customs transit system under this activity will bring their transit procedures in line with international best practices.

Activity 5: Align CBTA customs transit systems with international best practices

A robust sub-regional customs transit system that complies with international best practices will help minimise the need for duplicative import / export procedures, and the transshipment of goods at borders. This activity will enhance sub-regional trade by making sub-regional economies more competitive and by improving linkages with the international trading system.

Activity 6: Strengthen partnerships between customs and the private sector

Stronger partnerships between customs and private businesses, including accreditation and compliance systems such as Authorised Economic Operators schemes, will facilitate private sector customs compliance, enhance service standards and significantly improve the efficiency of cross-border transactions.

Activity 7: Extend coordinated border management and single stop inspections

More effective partnerships among GMS customs administrations and other government agencies will impact positively on trade facilitation. At the same time it will strengthen the enforcement of regulatory requirements, particularly with respect to CBM and single stop inspections at GMS border crossings, which will make border crossings faster, cheaper and easier for compliant companies transporting both goods and people.

Activity 8: Strengthen customs institutions in member countries

In order for customs administrations to support trade facilitation more effectively, institutional capacities will be strengthened by using Time Release Studies to diagnose transport and trade constraints and by enhancing operational skills in valuation, rules of origin, advance rulings, and risk management.

Core Area 3: Support for Enhanced Transport and Logistics

Although government agencies support trade facilitation measures, private sector operators are the key beneficiaries and end users who drive job creation, economic growth and social development. Better addressing private sector needs requires the development of a more integrated sub-regional market and production base, including efficient logistics systems that support integrated multi-modal transport networks.

Activity 9: Strengthen private sector transport and logistics services

Private sector trade and transport operations in the GMS are unevenly developed, due to the differences in the volume of domestic goods offered for trade, freight forwarding and logistics capacities, and the level of international involvement and investment.

This Activity focuses on developing cross-border transport services and trade logistics systems in MS to assist them to provide faster, cheaper and easier sub-regional trade and transport services that benefit business as well as consumers.

Activity 10: Enhance border trade agreements

This Activity concentrates on developing local cross-border linkages in areas that would benefit from further trade liberalisation measures within the sub-region. Border trade agreements will be explored as a means to encourage greater market integration through strategic alliances and joint ventures with local businesses, thereby increasing their access to new markets, and enhancing their competitiveness.

b) *Achievements recorded to date*

The phased implementation of the TTF-AP yielded the following achievements to date:

- Formation of National Transport Facilitation Committees in each GMS country;
- Streamlining of single-stop inspection procedures by border agencies which resulted in simplified inspection procedures and reduced clearance times for cross-border traders;
- Launch of pilot project on the exchange of traffic rights between Cambodia and Thailand;
- Exchange of traffic rights and opening of transport routes between PRC and Vietnam that resulted in the opening of 3 new routes. This enabled trucks and buses from the PRC and Vietnam to travel to destinations inside each other's country, thereby boosting trade and tourism between the 2 countries;
- Exchange of traffic rights between Cambodia and Vietnam lead to an increase in the transport permit quota for cross-border transport between the 2 countries to 500 (for

each country) for goods, vehicles and passengers and a total of 5 entry / exit border crossing points;

- Agreement on adding additional CBTA routes resulted in an agreement by GMS countries to include routes 8 and 12 in Protocol 1 of the GMS CBTA;
- Agreement on additional border crossings between Cambodia and Vietnam along the Southern Coastal Economic Corridor;
- Increase in bus and truck permit quotas between the PRC and Laos resulted in an increase in permit quotas by 50% for buses and 25% for trucks;
- Signing of the Thailand Cross-Border Transportation Act for Joint Inspections in Foreign territories, whereby Thai officers and their foreign counterparts are allowed to conduct joint inspections both inside and outside Thailand;
- Support provided towards establishing the GMS Freight Transport Association as a legal, self-funded entity to represent the private sector in its work to upgrade the standards of the GMS road transport industry; and
- Approval by GMS countries to adopt a sub-regional road transport permit in future.

7.2.6 Lessons Learned and Successes: Greater Mekong Sub-Region

The GMS countries have displayed strong political commitment in approving various trade and transport agreements, which all aim to improve intra-regional trade and traffic flows. Cross-border traffic is guided by the CBTA, a comprehensive multilateral instrument that incorporates all aspects of cross-border transport facilitation into a single document

The TTF-AP, which builds on the GMS CBTA is currently being implemented by GMS countries and has resulted in an increase in the exchange of traffic rights between MS. The addition of new routes and border crossings is also on the cards to improve intra-regional trade and transport flows within the Greater Mekong sub-region.

Although market access in the GMS is still determined through the exchange of permit quotas (permits), signatory states have agreed to move away from quantity regulation to quality regulation through abolishing bilateral agreements and permits issued between 2 MS towards adopting a single sub-regional road transport permit. Unfortunately information sources at hand do not specify when this initiative will be implemented.

Some of the GMS trade and transport initiatives, notably the movement towards single stop border post inspections, increase in the exchange of traffic rights between MS and movement towards the adoption of a single regional road transport permit reflect similarities to trade and transport reforms adopted in the SADC.

Based on the GMS benchmarking exercise, the following lessons learned are noteworthy for the SADC:

- Political commitment and willingness amongst GMS countries to cooperate on matters of mutual concern led to the approval and implementation of various trade and transport initiatives, notably the CBTA and the TTF-AP;

- The CBTA, a multi-lateral document that incorporates all elements associated with cross-border transport into a single document, represents a step closer towards the harmonisation of cross-border road transport rules and standards;
- Dedicated institutions (e.g. National Transport Facilitation Committees and a Regional Ministerial Joint Committee) oversee the implementation of strategic trade and transport initiatives;
- Agreement towards adopting a sub-regional road transport permit is aligned to international best practice that favours quality control as a means to enhance trade and transport facilitation within RECs; and
- The GMS Freight transport association is a legal, self-regulatory body that plays an important role in facilitating and promoting trade and transport in the GMS. Apart from assisting MS in reaching agreement on the rules and standards of freight transport, it also strives to uphold industry standards through the adoption of international best practices in transport and logistics.

7.3 West Africa Sub-Region: Abidjan-Lagos Corridor

7.3.1 Background

West Africa is one of the most diverse areas of the world, due to geographic, demographic, climatic, religious, cultural, and historical factors. It comprises of 15 countries namely; Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.

The current population in West Africa is estimated at about 260 million inhabitants, with Nigeria having more than half of the total. West Africa is also one of the poorest sub-regions of the world with a Gross National Income (GNI) per capita of about US \$744. (http://www.icafrica.org/fileadmin/documents/Knowledge/World_Bank/PID-Abidjan-Lagos-TradeTransportFacilitation-Prjt-SEPT-2009.pdf).

Although all 15 countries in West Africa are members of the Economic Community of West African States (ECOWAS), only Benin, Togo, Burkina Faso, Guinea Bissau, Mali, Niger, Senegal and Côte d'Ivoire are members of the West African Economic and Monetary Union (WAEMU). Both RECs have long recognised the importance of improving the efficiency and competitiveness of the main transport corridors in West Africa by:

- Better linking the landlocked countries (Burkina Faso, Mali and Niger) to seaports; and
- Boosting competition among the ports along a coastal corridor in an attempt to promote intra-regional and international trade, thereby stimulating growth and poverty reduction.

The transport sector in West Africa plays a key role in the economic development of the sub-region and generates about 6% of GDP in the region (http://www.corridor-sida.org/IMG/pdf/fiche_synthetiqueocal_english.pdf).

Acknowledging the fact that an efficient regional road network is an enabling infrastructure to improving trade and socio-economic development, ECOWAS and WAEMU MS have consistently committed themselves to the financing of designated regional road corridors. In many cases, bilateral arrangements have been concluded by MS to finance inter-state road improvement works. In many cases these bilateral arrangements involve a combination of two or more countries to jointly finance cross-border interstate roads.

7.3.2 Institutional Framework

The Abidjan-Lagos Corridor Organisation (ALCO) is a sub-regional intergovernmental organisation with legal personality that works in the following five West African countries: Côte d' Ivoire, Ghana, Togo, Benin and Nigeria. This body was established in November 2002 by the five countries to respond to the epidemic of HIV / AIDS and to improve trade and transport facilitation along the Abidjan-Lagos corridor.

The Government of Benin was designated as the headquarters of the ALCO. Coordination and monitoring functions are provided by a Steering Committee, which is mandated by the Heads of State. The composition and role of the Steering Committee are fully complying with governance and management of the Treaty of ALCO.

7.3.3 Transport Corridors in West Africa

West African corridors can be divided into two categories, namely: *transit corridors* and *intra-regional corridors*. Transit corridors link ports with landlocked countries and run from the North to the South. Examples of transit corridors include the following:

- Lagos-Kano-Jibiya;
- Cotonou-Niamey;
- Lomé-Ouaga; and
- Abidjan-Bamako

Intra-regional corridors on the other hand link multiple countries from East to West. Examples include:

- Bamako-Ouaga;
- Ouaga-Niamey; and
- Abidjan-Lagos.

For the purposes of this discussion, emphasis is placed on the *Abidjan-Lagos coastal corridor*, which form parts of the Trans Coast highway. This corridor is the major east-west transport corridor in West Africa, connecting the capital cities of Cote d'Ivoire, Ghana, Togo, Benin and Nigeria.

The strategic importance of the Abidjan-Lagos coastal corridor, which is prioritised as a PIDA flagship project, lies in the fact that it is the most travelled West African corridor on the African Regional Transport Infrastructure Network (ARTIN) and therefore recognised as an enabler for socio-economic development in West Africa.

Each year about 27 million passengers and 140 000 truckers travel along this coastal road network that handles approximately 65% of economic activity in the region. (http://www.corridor-sida.org/IMG/pdf/fiche_synthetique_ocal_english.pdf).

Despite its strategic importance, trade and traffic movements along the Abidjan-Lagos corridor is hindered by the existence of infrastructure impediments, which are discussed in greater detail in section 7.3.4 below.

7.3.4 Trade and Transport Facilitation Challenges

Regional trade in West Africa is characterised by hard and soft infrastructure constraints. Generally regional road networks and border crossings are inadequate and/or unequipped to accommodate the seamless flow of traffic movements. Soft infrastructure constraints on the other hand revolve around:

- The existence of illegal law enforcement checkpoints;
- Excessive border delays;
- Long, costly and non-harmonised customs procedures that result in lengthy delays at border posts;
- Lack of or insufficient automated customs procedures and adequate equipment at border posts; and
- Smuggling and corruption, largely generated by restrictive trade policies.

As far as law enforcement inspections are concerned, the location of 62 checkpoints located over a distance of 1 000 kilometres is common practice. This equates to law enforcement check points at 16 kilometre intervals. Furthermore, the average time that a truck spends at a border crossing along the Abidjan-Lagos corridors is 32 hours. (Danish International Development Agency. 2015: 14).

Further to the above, intermodal competition is limited due to the absence of a coastal railway system and limited coastal shipping. The effect of these infrastructure challenges materialise in delays for cross-border road transport operators, which hinder inter-regional trade activities.

One of the main barriers to expanding (legal) trade in West Africa is the restrictive trade regime in Nigeria, which includes import bans and numerous levies. Although Nigeria adopted the ECOWAS Common External Tariff (CET) in 2005 and lowered the average tariff duties, the scheduled phasing out of import bans and the decrease of levies on imports took place at a slow pace.

Although almost half of the banned import products were removed by October 2008, the impact of these measures on trade flows and trade facilitation proved to be limited since main items (e.g. garments, oil, and second-hand cars) remained prohibited for imports.

In response to the trade and transport challenges that exist, a number of programmes / projects were launched in recent years to improve the seamless movement of road traffic along the Abidjan-Lagos coastal corridor. More information on reforms is presented in section 7.3.5.

7.3.5 Trade and Transport Initiatives

a) *Establishment of Abidjan-Lagos Corridor Observatory*

As a result of numerous infrastructure inefficiencies (e.g. numerous inspection points & excessive waiting time at border posts) road transport operators travelling along the Abidjan-Lagos corridor, tend to be absent from their homes for long periods. This separation time encourages sexual relations with multiple partners during time on the road, which to a great extent negate efforts made by MS's to contain and minimise the impact of the HIV/AIDS pandemic on their populations.

The spread of HIV/AIDS, coupled with the existence of various other infrastructure constraints undermine the competitiveness of the Abidjan-Lagos corridor. In response, the ALCO developed a road transport observatory along the Abidjan-Lagos corridor to monitor abnormal practices concerning the free movement of people and goods along this corridor. The observatory performs the following functions:

- Collect and analyse data;
- Validate the results of data collection and analysis by relevant stakeholders, notably Inter-Border Facilitation Committees and the directorates of structures charged with facilitation in the five participating countries;
- Disseminate the results of data collection and analysis to relevant stakeholders;
- Make recommendations to decision-makers in the participating countries; and
- Follow up on the implementation of recommendations.

The Observatory has become more integrated in recent years following the recruitment of additional skilled resources and improved data collection methods by corridor stakeholders.

Since the launch of the observatory the ALCO has signed a MoU with the West Africa Trade Hub to collaborate on the coverage of traffic flows in West Africa. Although different methodologies are used to collect and analyse data in the respective geographic zones, the results are shared with large audiences through web sites, e-mails and joint workshops organised in the respective West African countries for the benefit of decision makers in the transport sector.

Through this partnership, irrespective of the fact that the ALCO and the West Africa Trade Hub apply different methodologies due to the specificity of their respective mandates, complementary data is produced that reflects the overall situation on the ground. The availability of real-time data poses many benefits, such as the quick identification of congestion for early

response and mitigation; improved public safety and time and money savings for commuters through road infrastructure improvements.

b) Establishment of a West African Transport and Facilitation Observatory

In September 2011, ECOWAS and the WAEMU, in collaboration with various donors and stakeholders, agreed in principle to establish a West African Transport and Facilitation Observatory (called “the Observatory”) to monitor, benchmark, and disseminate transport and logistics information to private sector and civil society stakeholders.

The Observatory is a specialised institution of ECOWAS and WAEMU covering the MS of these regional communities. At the same time it will act as a public international organisation operating in the general interest of the regional transport network system with a view to providing West Africa region-wide evidence through on-going corridor performance monitoring, benchmarking, and dissemination of real-time data to corridor stakeholders.

The purpose of the West Africa Transport and Facilitation Observatory is to:

- Support evidence-based policy making in the field of regional transport in West Africa;
- Support evidence-based advocacy for improved transport in West Africa;
- Provide guides, directories and other information to facilitate West Africa transport; and
- Provide capacity-building support for regional and national transport institutions.

Until such time as the West Africa Transport and Facilitation Observatory is established and fully functioning, it will operate under the shared auspices of ECOWAS and WAEMU as part of the Regional Transport Facilitation Program. Under this arrangement, it will be eligible for long and short-term technical and financial assistance from ECOWAS and WAEMU, in collaboration with their technical and financial partners

The Observatory will support informed policies aimed at removing barriers to trade and transport. Unlike existing data collection initiatives, the Observatory’s scope will extend to all ECOWAS countries and all major corridors. Additional types of data (e.g. data on products, truck fleets & transport costs) obtained from additional sources (e.g. customs, ports, etc.) will be shared with private and public corridor role-players.

Several stakeholder meetings have been held since 2011 to define the terms of reference of the Observatory.

c) Abidjan-Lagos Trade and Transport Facilitation Project

As already stated, the Abidjan-Lagos coastal corridor brings together 5 countries in West Africa in an environment characterised by globalisation and unbridled / uncontrolled competition. The governments of Cote d’Ivoire, Ghana, Togo, Benin and Nigeria have chosen regional integration as the mechanism to drive sustainable development along the Abidjan-Lagos corridor.

The political will displayed amongst MS governments provided an impetus for the implementation of the *Regional Trade and Transport Facilitation Project* along the Abidjan-Lagos corridor during 2010. Four years after implementation the Executive Secretariat of the ALCO, in charge of monitoring and evaluation, published a report that summarises the behaviour of 8 key performance indicators between August 2010 and June 2014. These indicators are shown in Table 17 and briefly discussed below.

Table 17: Performance Indicators Adopted – Abidjan-Lagos Trade and Transport Facilitation Project

	Indicator	Definition / Mode of Calculation	Collection Tools / Methods
1.	Establishment & implementation of Single Window System	100% of port transactions are processed by SW	Monthly monitoring of different steps of setting up the SW as agreed between the governments and port stakeholders
2.	Goods dwell time at the ports	Difference between the date of departure of the container /goods from the port and the date of unloading	Collection of data in the computer system of the shipping agents, stevedores and port authorities.
3.	Number of roadblocks per 100 km	Number of checkpoints with personnel present	Periodical count of checkpoints per road stretch of the corridor
4.	Border crossing time	Difference between the end time of formalities of the border post in the destination country and start time of the customs	Recording the dates and hours of arrival and departure from the border for a representative number of trucks loaded with goods
5.	Percentage of roads in good and acceptable condition	Measurement of the roughness index with a roughness meter	The conversion of the results of visual inspection into IRI
6.	Number of kilometres of roads rehabilitated	The number of kilometres of roads rehabilitated on IDA funding compared with the set goal	This is the percentage of roads in good and acceptable condition funded by IDA according to visual inspection or IRI
7.	Percentage of truckers familiar with at least 2 means of HIV / AIDS prevention	Number of drivers and others who report knowledge of at least 2 HIV/AIDS prevention methods in the surveyed population	HIV behavioural surveillance survey
8.	Percentage of truckers reporting the use of condoms with a casual partner	Number of drivers and others who report the use of condoms during the last sexual intercourse with a casual partner in the surveyed population	

Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed November 2016

• **Indicator 1: Establishment of Single Window at Ports**

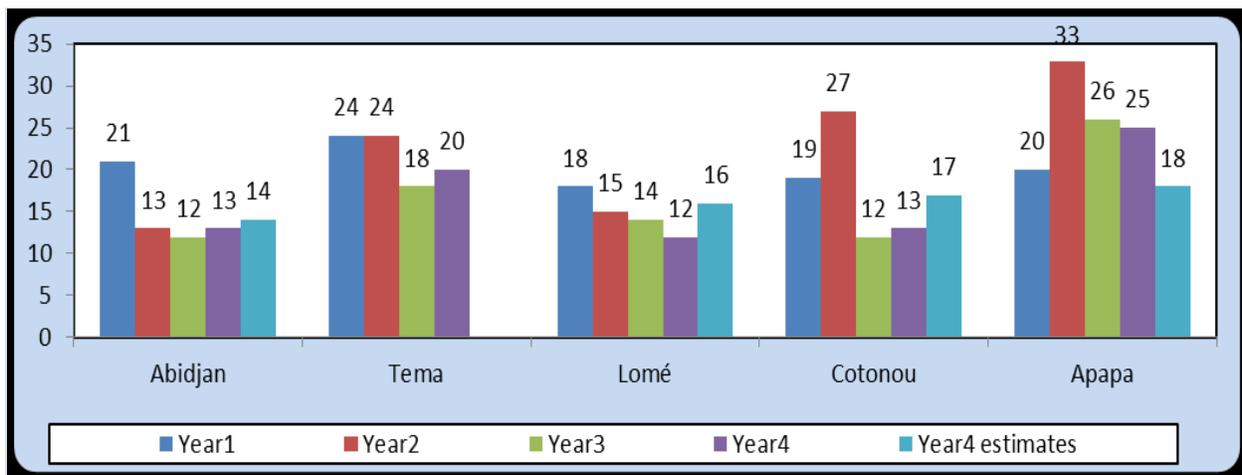
Ports in each of the 5 countries have made remarkable progress towards SW establishment, as reflected in the following accomplishments (Executive Secretariat Abidjan-Lagos Corridor Organization. 2014: 5):

- During October 2013, Lome port signed an agreement with the Bureau Veritas group for the operation of the Foreign Trade Single Window (FTSW). In February 2014, the activities of the FTSW operating company of Togo were officially launched by the Minister of Trade and Private Sector Promotion. By 2014, 600 hundred stakeholders have been trained;
- A Single Window at Cotonou port in Benin has been established and operationalised;
- In July 2013 the FTSW portal was commissioned in the Cote d'Ivoire. Manifests are transmitted by shipping agents to the FTSW which transfer them to relevant stakeholders, including customs. Since April 2014, all records are submitted online; and
- The interconnection of customs, banks, actors and port agencies were accomplished in September 2011.

• **Indicator 2: Goods dwell time at ports**

This indicator was calculated based on data collected at focal points. It takes into account the operations time of all stakeholders (e.g. customs, stevedores, shipping agents, customs clearing agents) in the port system.

Figure 12: Port Dwell Times



Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

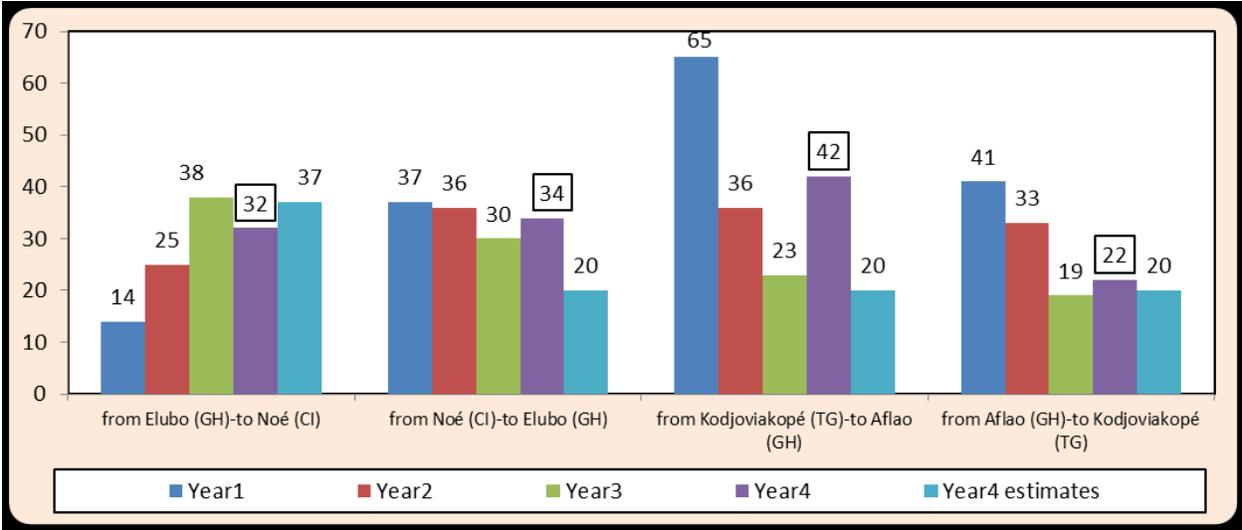
With the exception of the port of Apapa, the other ports all reflected a decrease in port dwell time between 2010 and 2014, with Abidjan reflecting the most significant improvement of 62%, followed by Cotonou with a 46% reduction in port dwell time.

Although available sources do not mention the reasons for operational improvements, it is assumed that 5 ports resulted in a reduction in port dwell times.

- **Indicator 3: Border Crossing Time**

Figure 13 shows the results of border crossing time indicators for the Cote d'Ivoire-Ghana (Elubo-Noé) and Togo-Ghana (Kodjoviakopé-Aflao) border post, measured in hours.

Figure 13: Border Crossing Time Indicators in Côte d'Ivoire, Ghana & Togo

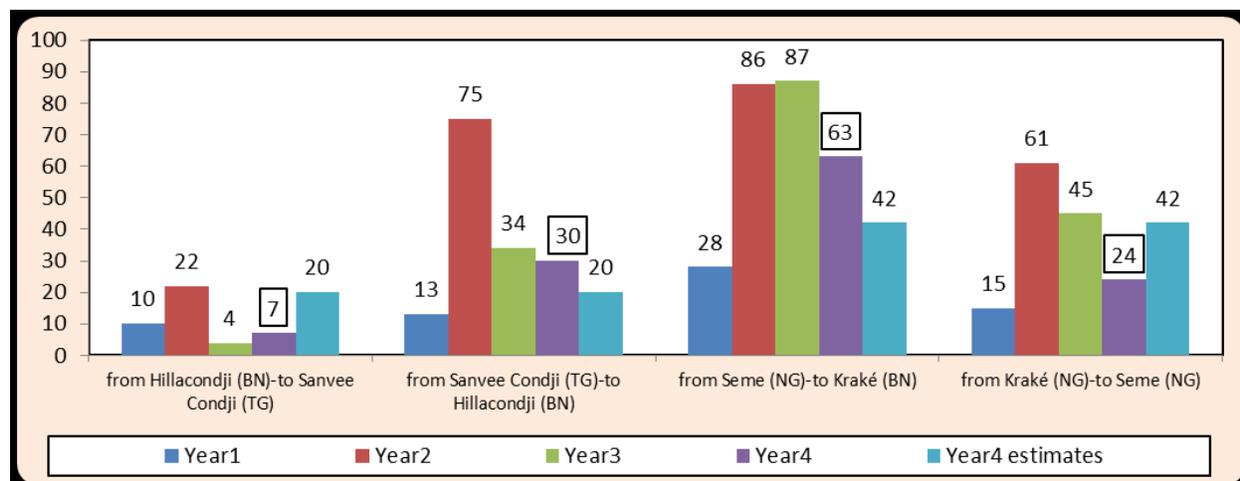


Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

From the information displayed in Figure 13 it is evident that greater time savings were achieved at the Togo-Ghana border post, with time savings of 54% (Kodjoviakopé to Aflao) and 86% (Aflao-Kodjoviakopé) respectively. The border post between Cote d'Ivoire-Ghana did not yield the same results. On the contrary, delays for cross-border traffic moving between Elubo-Noé more than doubled (101% increase), while traffic moving in the opposite direction (Noé-Elubo) were subjected to a marginal time saving of 8%.

Figure 14: Border Crossing Time Indicators in Togo, Benin & Nigeria

Figure 14 displays the hourly border crossing time indicators at the Benin-Togo (Hilla Condji-Sanvee Condji) and Nigeria-Benin (Seme-Kraké) border posts. Two border crossings are listed for Benin, namely Hilla Condji and Kraké.



Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

Traffic flows between Hilla Condji and Sanvee Condji reflected a time saving of 43%, while delays for traffic moving in the opposite direction (Sanvee Condji - Hillacondji) more than doubled from a time delay of 13 hours in year 1 to 30 hours in year 4.

Traffic delays between Nigeria and Benin increased over the 4 year period. Time delays for traffic moving from Seme to Kraké more than doubled (from 28 hours in year 1 to 63 hours in year 4), while traffic moving in the opposite direction (from Kraké to Seme) was subjected to a 60% increase in time delays.

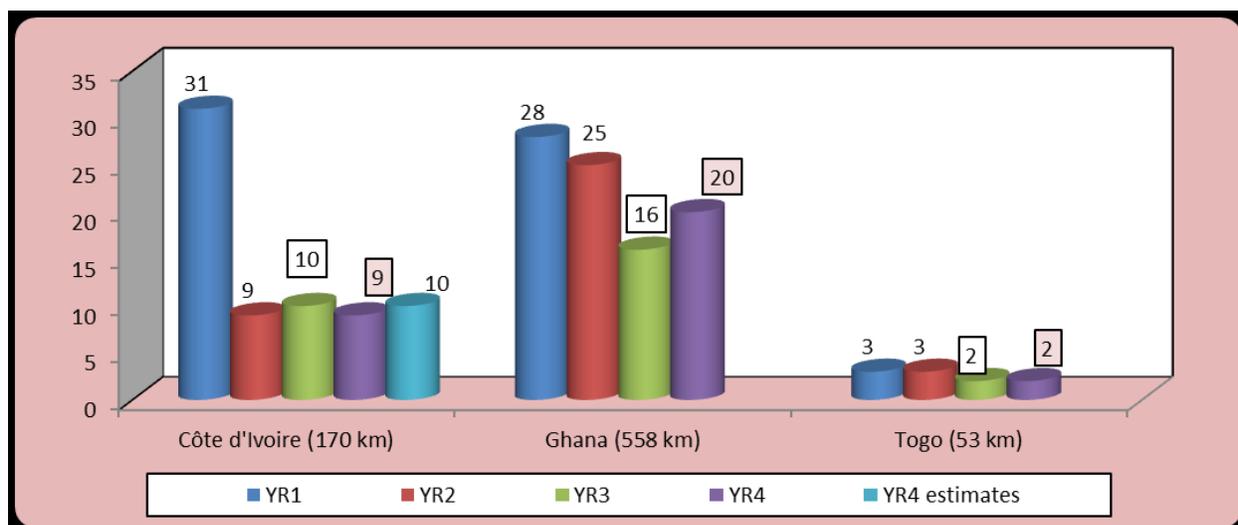
The situation at the Seme Kraké border post is very particular because the major part of the traffic is transhipped from Benin trucks to Nigeria trucks. The main reason for this is linked to customs and law enforcement practices in Nigeria, and not to a lack of proper agreement between Benin and Nigeria.

Goods on-route to Nigeria is cleared at the border, despite the fact that Nigeria does not have a domestic transit regime in place for the Benin-Nigeria route. Instead of using the value of the goods as the basis for the calculation of duties, Nigeria Customs applies a lump sum formula per truck that creates and incentive to load as many goods as physically possible on a single truck.

- **Indicator 4: Number of Checkpoints**

Figures 15 and 16 indicate the number of checkpoints in each of the 5 countries connected by the Abidjan-Lagos coastal corridor. All calculations of roadblocks are according to the 100 km denominator, except for Togo that only has a corridor length of only 53 km.

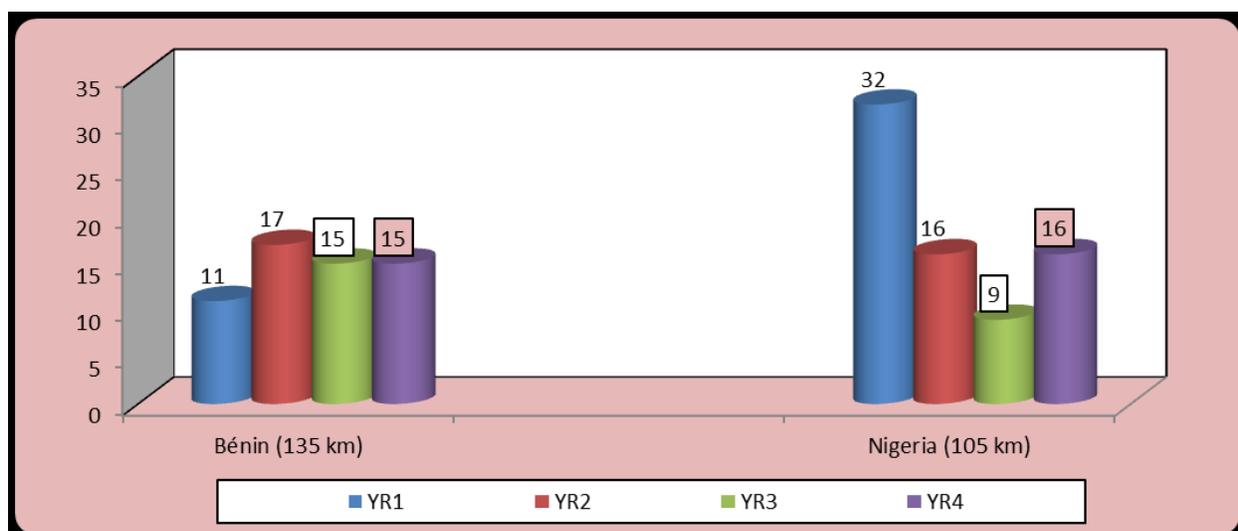
Figure 15: Number of Roadblocks per country: Côte d'Ivoire, Ghana & Togo



Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

The number of roadblocks in Côte d'Ivoire and Ghana reduced significantly (244% reduction for Côte d'Ivoire and 40% for Ghana) over the period under review. The low number of roadblocks in Togo should be seen in context, considering the fact that only 53 kilometre of the Abidjan-Lagos coastal corridor traverses through Togo.

Figure 16: Number of Roadblocks per country: Benin & Nigeria



Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

It is evident from the information displayed in Figure 16 that the number of road blocks in Nigeria was halved (from 32 to 16) between 2010 and 2014. The number of road blocks in Benin on the other hand, increased from 11 in 2010 to 15 in 2014.

• **Indicator 5: Percentage of Road in Good and Acceptable Condition**

The International Roughness Index (IRI) is the roughness index most commonly obtained from measured longitudinal road profiles. It is also used to evaluate new pavement construction. During 2014 approximately 1 785 km of were roads examined in both directions to measure their IRI. Results are displayed in Table 18 below.

Table 18: International Roughness Index per Country

Country	Road Section	Length	IRI	Average IRI per country	Roughness
Côte d'Ivoire	Abidjan-Noe	165,8	7,26	7.87	Mediocre
	Noe-Abidjan	166,08	8,49		
Ghana	Elubo-Agona-Takoradi	139,37	13,1	9.05	Bad
	Takoradi-Agona-Elubo	131,6	13,2		
	Takoradi-Accra	201,8	6,66		
	Accra-Takoradi	201,80	6,62		
	Accra-Aflao	176,40	8,17		
	Aflao-Accraa	176,05	6,53		
Togo	Kodjoviakope – Sanvee Condji	51,57	6,94	7.05	Mediocre
	Sanvee Condji – Kodjoviakope	51,57	7,17		
Benin	Hillacondji - Ouidah	50,4	7,96	6.77	Mediocre
	Ouidah - Hillacondji	49,6	6,86		
	Cotonou – Seme	40,3	6,14		
	Seme – Cotonou	40,4	6,15		
Nigeria	Krake-Lagos	71,34	12,9	12.61	Very bad
	Lagos-Krake	17,04	12,3		

Source: Executive Secretariat Abidjan-Lagos Corridor Organization. 2014. Accessed in December 2016

The Côte d'Ivoire, Benin and Togo have a poor level of comfort varying between 6.77 and 7.87 m/km. These countries need to launch periodic maintenance campaigns in order to obtain roughness scores between 0 and 3 on all linear, as requested by the technical document of the World Bank. (Executive Secretariat Abidjan-Lagos Corridor Organization. 2014: 22)

Comfort levels in Ghana and Nigeria is much worse with scores ranging between 9.05 and 12.61. In addition to normal road maintenance programmes these countries also need to launch projects that focus on the total rehabilitation of several road sections in order to meet the World Bank roughness score requirements. (Executive Secretariat Abidjan-Lagos Corridor Organization. 2014: 23)

- **Indicator 6: *The number of Kilometres of Roads Rehabilitated***

Indicator 6 is related to the number of kilometres of roads rehabilitated under the Abidjan Lagos Trade and Transport Facilitation Project on IDA funding. The following progress was reported during 2014 (Executive Secretariat Abidjan-Lagos Corridor Organization. 2014: 24-25)

- Ghana: Rehabilitation programmes in Ghana were been delayed. The relocation of public utility lines and compensation payments slowed down progress of work that was planned;
- Togo: The construction of the Aneho-Sanvee Condji road was completed. Furthermore, a customs warehouse and a large truck parking lot was completed but not operationalised as at end of 2014;
- Benin: The rehabilitation of the Godomey-Pahou road was delayed. This was due to delays in the relocation of public utility lines and heavy rains; and
- Côte d'Ivoire: A number of projects (e.g. strengthening of Moossou-Nzikro-Aboisso-Noe road section and secure parking areas) were planned but not implemented due to delays in the compensation process.

- **Indicator 7: *Percentage of Truckers Familiar with two means of HIV/AIDS***

A number of awareness campaigns were launched to educate truckers on HIV / AIDS. These campaigns focused on various themes; including the ways in which HIV can be transmitted, means of prevention, misconceptions about HIV, symptoms and ways to respond to symptoms.

This indicator was measured over a 3 year period only and yielded the desired results. During year 3 this indicator achieved a score of 95.1%, against the target of 83% set for the same year.

- **Indicator 8: *Percentage of Truckers Reporting condom use with a casual partner during last sexual intercourse***

This indicator was measured over a 3 year period. Truckers were interviewed at the various border posts along the Abidjan-Lagos corridor. The actual score achieved during year 3 (86.9%) was higher than the targeted score of 76%.

7.3.6 Lessons Learned and Successes: Abidjan-Lagos Corridor

The Abidjan-Lagos coastal corridor experiences similar infrastructure constraints than the NSC, MDC and the TKC that traverse the SADC region. The existence of multiple law enforcement checkpoints, backlog in road rehabilitation programmes, excessive delays at border posts and a lack of systems integration between border agencies are examples of corridor impediments experienced along the Abidjan-Lagos corridor that are also suffered along and NSC, MDC and the TKC.

A difference however is found in the establishing of strong political will by Abidjan-Lagos MS. Political consensus amongst the 5 countries led them to move beyond the signing of trade and transport facilitation agreements towards the implementation of such agreements.

Based on the Abidjan-Lagos benchmarking exercise, the following lessons are noteworthy for the SADC:

- Strong political will and cooperation between MS are a prerequisite towards implementing trade and transport facilitation initiatives;
- The ALCO was established as a sub-regional intergovernmental organisation with legal personality to monitor the implementation of the Abidjan-Lagos trade and transport facilitation programme. Currently, the SADC does not have a dedicated, autonomous regional institution that enforce and oversee the implementation of regional decisions at MS level; and
- The Abidjan-Lagos transport observatory collects, analyse and distribute real-time data on traffic flows to large audiences via electronic and personal means (e.g. e mails and workshops) thereby enabling decision-making authorities to base their decisions on evidence (facts). Investing in credible information is important since trust is easier to build when the facts are available to all parties. The absence of a regional transport database for the SADC undermines the ability of MS governments to detect and respond to corridor problems in an urgent fashion.

7.4 Northern Transport Corridor

7.4.1 Background

The Northern Corridor is the busiest and most important transport route in East and Central Africa, linking the land locked countries of Uganda, Rwanda and Burundi with Kenya's maritime port of Mombasa. Similarly, the Northern Corridor serves the eastern part of the DRC, Southern Sudan and Northern Tanzania.

The above countries are served by an extensive network of transport routes originating at the Port of Mombasa, running through Uganda before branching off to Rwanda, Burundi and the eastern parts of DRC. Imports to and exports from MS transit through the ports of Mombasa and Dar es Salaam. Routes ending or starting in Mombasa form part of the Northern Corridor, while those connected to Dar es Salaam belong to the Central Corridor.

The main Northern Corridor artery is served by a combination of transport modes and infrastructure facilities including, the port of Mombasa; road and rail networks, rail-lake transport; inland water routes; inland container depots; and an oil pipeline. All these form part of the Northern Corridor infrastructure used in facilitating the flow of goods within and across MS.

The entire Northern Corridor road network covers approximately 8,800 km across Kenya, Uganda, Rwanda, Burundi, and the DR Congo. Road transport is fully liberalised and accounts for more than 70% of the total transit traffic flow within the Northern Corridor. (<http://www.ttcanc.org/page.php?id=28>).

Combined transit and transshipment traffic through the Northern Corridor exceeds 2.2 million tonnes every year, and has been growing at a rate of 20 % annually. Transport costs along the corridor are high and account for approximately 30% of the value of goods transported along the

corridor, which in turn, results in higher prices for consumer goods. (<http://www.ttcanc.org/page.php?id=26>).

7.4.2 Institutional Framework

In order to overcome transit transport constraints affecting Northern Corridor MS, the governments of Burundi, Kenya, Rwanda and Uganda decided to negotiate a treaty, the *Northern Corridor Transit Agreement* (NCTA), with a view to establish an efficient, cost-effective and reliable transit transport system. Although the NCTA was signed in 1985 it only came into force in 1986 after MS ratified the agreement. The DRC became the fifth member after acceding to the Agreement in 1987.

The NCTA provides the legal framework for collaboration among member countries and its objectives are as follows:

- Ensure freedom of transit among MS;
- Safeguard right to access to / from the sea for landlocked countries;
- Develop and integrate regional transport facilities and services; and
- Facilitate inter-state and transit trade.

Literature sources point to the fact that the Northern Corridor is one of a few corridors in the East, Central and Southern African region with a *multilateral treaty* governing transit transport operations between a group of countries over access to and from the sea. The institution responsible for the management of the Northern Corridor is referred to as the Northern Corridor Transit and Transport Coordination Authority (NCTTCA). The Authority's three key organs comprise of:

- Council of Ministers,
- Executive Committee / Board; and
- Executive Secretariat.

In addition specialised technical committees were formed to synthesise and make appropriate recommendations to the Executive Committee. The Council of Ministers comprising of Ministers responsible for transportation matters in each of the MS is the top most policy organ of the Authority. It is the policy making body of the NCTTCA and its decisions are binding on all contracting parties.

The Executive Committee, resorting under the Council of Ministers, is an inter-governmental committee composed of Permanent Secretaries or their equivalents that are responsible for transport matters in each of the contracting states. The Executive Committee is primarily responsible for introducing general principles and policies governing the NCTTCA, as well as strategies for transport and trade facilitation, infrastructure development; and the harmonisation of national policies. The Executive Committee is also the organ responsible for resourcing the Secretariat, in terms of human and financial resources, and the supervision of the Secretariat.

The Executive Secretariat is the executing organ of the NCTTCA. Based in Mombasa the Secretariat is responsible for coordinating the implementation of the NCTA and any other decisions and resolutions made by the Council of Ministers and the Executive Board.

7.4.3 Corridor Constraints

Various infrastructure constraints are experienced by road transport operators while travelling along the Northern Corridor. Infrastructure inefficiencies revolve around:

- Space and physical limitations within the port of Mombassa that limit the ability to expand port facilities;
- Poorly maintained road network;
- Existence of corruption along the corridor;
- Numerous road blocks and weighbridges along the corridor;
- Excessive border delays that result in high transport and inventory costs; and
- A lack of intermodal coordination that has culminated in a decline in the demand for rail and inland waterways transport. These modes depend upon efficient intermodal operations and require a high-level of coordination.

The above impediments all contribute to high transport costs, measured at approximately 30% of the value of goods transported along the Northern Corridor. In response to infrastructure constraints, a number of trade and transport initiatives have been approved and are currently unfolding along the Northern Corridor. More information on these reforms is presented in section 7.4.4.

7.4.4 Trade and Transport Initiatives

a) *Movement towards establishment of a Single Customs Territory*

In order to ease the cost of doing business in Eastern and Central Africa, Northern Corridor MS approved the creation of a Single Customs Territory (SCT), to reduce the cost of doing business along the Northern Corridor. This aim is to be accomplished through:

- Eliminating the duplication of processes;
- Minimising administrative costs; and
- Reducing regulatory requirements and the risks associated with non-compliance on the transit of goods.

The objectives of the SCT are set out below:

- To enhance the seamless flow of goods to promote intra East African Community trade;
- To lower clearance costs of goods within the East African region;
- To shift physical controls to electronic clearance processes;
- To improve coordination between agencies responsible for the clearance of goods;
- To enhance compliance through a regional wide mechanism;
- To build a foundation for the East African Community Common Market and internal single market;

- To realise economies of scale and optimal use of resources associated with the clearance of goods; and
- To develop supportive institutional and legal frameworks.

The following major achievements were achieved to date in establishing a SCT (<http://www.ttcanc.org/page.php?id=15>):

- Clearance of goods under Home Consumption and Warehousing regime at the first port of entry (Mombasa);
- Interfacing of Revenue Authorities Systems of three MS (Rwanda, Uganda and Kenya);
- Integration of regional customs bond with revenue authorities systems;
- Deployment of MS (Rwanda and Uganda) revenue authority officers at the port of Mombasa;
- Waiver of port charges and demurrage fees on over stayed cargo at Mombasa port;
- Training and accreditation of clearing agents from partner states;
- Reduction of multiple customs bonds to a single bond;
- Reduction of clearance and movement of cargo in the Northern Corridor; and
- Reduction of multiple cargo declarations to a single declaration.

The SCT is a step towards a full customs union that will be achieved through removing restrictive regulations and reducing internal border controls for goods moving between MS. The ultimate goal of the customs union is the free circulation of goods that are traded in the region.

b) Roadside Stations

The NCTTCA recently embarked on a programme of turning the corridor into an Economic Development Corridor by utilising all the economic potential aimed at creating forward and backward economic development linkages between key sectors with transport infrastructure development.

The program for development of Road Side Stations (RSS) facilities along the transport corridor is underpinned by the Northern Corridor Infrastructure Master Plan, the Northern Corridor Spatial Development Program and the Port Charter.

The establishment of RRS comes as an added value to all the Northern Corridor MS efforts in curbing the loss of lives and cargo. The lack of adequate facilities for rest and recovery, for maintenance, for parking and sanitation have had a serious effect on drivers using the Northern Corridor and has resulted in high incidences of cross-border HIV and AIDS, the prevalence of prostitution and exposure of cargo to robbery due to a lack of secured parking areas.

Road accidents were a problem due to lack of resting facilities and designated areas to undertake minor urgent maintenance of vehicles. It is perceived that the establishment of RSS's will yield the following benefits:

- Minimising environmental impacts arising from ground contamination caused by the haphazard disposal of waste;

- Eliminating driver fatigue through the placement of well-designed secure RSS's at appropriate intervals that will allow drivers to rest;
- Improved security for drivers due to the provision of safe and secure rest facilities at RSS's;
- Improved health for crews, long-distance passengers and cargo; and
- Reduction in road accidents and loss of lives and cargo.

Since RSS will also address socio-economic dimensions in cross-border trade (e.g. improved road safety and health-related issues), recommendations were made to establish wellness centres alongside the RSS to address cross cutting social dimensions.

In terms of progress made, the NCTTCA has developed RSS Regional Guidelines that clearly specify how the RSS project will unfold. However, Northern Corridor MS should also develop specific operations manuals aligned to their national policies. Furthermore national manuals should be aligned to the Northern Corridor General Guidelines to ensure consistency. Table 19 below outlines the number of RRS that will be established in the respective Northern Corridor MS.

Table 19: Prioritised Roadside Stations along Northern Corridor

Country	Number			
	Total	Large	Medium	Small
Kenya	22	6	9	7
Uganda	27	7	12	8
Rwanda	7		3	4
Burundi	2		1	1
South Sudan	2			2
DRC	7	3		4
TOTAL	67			

Source: NCTTCA. Accessed in December 2016

Kenya has moved ahead with the development of a framework to attract investments in RSS's. The findings of a Task Force established by the Ministry of Transport and Infrastructure proposes that the government should embark on the development of 2 RSS's at *Sultan Hamud* and *Salgaa* that will act as pilot models for the roll out of RSS's along the entire corridor. (<http://www.roadsidestations.org/roadsidestations/northern-corridor-member-states-committed-to-integrate-roadside-stations-in-all-main-road-infrastructure-networks/>).

Sultan Hamud is strategically located for truck and long distance buses stop, hence an ideal resting place for truck drivers transporting goods to and from the port of Mombassa. The Sultan Hamud RSS will have sufficient parking spaces for trucks and buses as the land identified is large enough to accommodate a large RSS Design. The plan is that Salgaa will also be

developed as a large RSS. The land is still in the process of identification. Furthermore, discussions are under way with the Nakuru County Government to donate some of the land set aside for the construction of the RSS.

Both RSS's have high private sector financial potential, implying that they are feasible from a financial perspective and for PPP considerations. It is envisaged that these projects will easily attract private sector funding due to their bankability.

The successful implementation of RRS's along the Northern Corridor however requires involvement of multidisciplinary institutions from both the private and public sectors. Hence an agreement was reached into establishing a Task Force composed of institutions involved in the implementation of RSS's in each Northern Corridor country. MS should fast track the formation of Task Forces to enable the timeous implementation of the RRS programme. Furthermore, the responsibility vests with MS to designate National Coordinating Agencies to manage the implementation of RSS's.

At Regional level, the NCTTCA will provide overall advice, coordinate the establishment of RSS's in MS and ensure compliance to regional standards. The NCTTCA will also assist MS in securing investments for the construction of RSS's. From the perceived benefits associated with the establishment of RSS's it is clear that this initiative will go a far way towards improving the overall efficiency of the Northern Corridor. However, success, will be largely dependent upon the ability of MS to secure sufficient funding (mainly through PPPs) to enable the construction and implementation of all 67 RSS's along the Northern Corridor.

c) Northern Corridor Transport Observatory

As already stated, the Executive Secretariat is the executing organ of the NCTTCA. This body continuously seeks to provide sound advice to the NCTTCA and its Executive Committee concerning policy development and implementation initiatives aimed at facilitating cost-effective transport operations along the Northern Corridor.

To enhance its service to public and private sector stakeholders, the Secretariat has launched an electronic platform to measure the corridor's performance and monitoring the speed of cargo clearance at various fixed points (e.g. Port of Mombasa, Border posts and weighbridges) along the corridor.

The Northern Corridor transport observatory is a practical corridor performance monitoring system that measures 30 indicators on the performance along the corridor. The Observatory tracks the indicators using raw data collected from relevant stakeholders in all MS. Furthermore it measures corridor efficiency through a series of indicators on volumes, times, uncertainties, prices, costs, capacity and efficiency of logistics operators and control agencies.

The online tool and data collected is securely hosted in a data centre setup at the Mombasa headquarters of the NCTTCA Permanent Secretariat and accessible online under the web address: <http://top.demo.co.ke> or www.ttcanc.org. This website is navigable through items

grouped by context. Authorised features are accessible by left-clicking the appropriate active links, images or distinctly coloured headings as illustrated in Figure 17 below.

Figure 17: Northern Corridor Transport Observatory

English | French | Arabic


TRANSIT TRANSPORT CO-ORDINATION AUTHORITY OF THE NORTHERN CORRIDOR
AUTORITÉ DE COORDINATION DU TRANSPORT DE TRANSIT DU CORRIDOR NORD

Facilitating Transport Along the Northern Corridor through Mombasa Port

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Great Strides Made at the Port of Mombasa

The Northern Corridor comprises of the transport infrastructure, facilities and services in East and Central Africa linked to the Maritime Port of Mombasa. These primary transport network and facilities link the Port of Mombasa in Kenya to the Great Lakes countries of Uganda, Rwanda, Burundi and the Democratic Republic of Congo. The four countries are signatories to the Northern Corridor Transit Agreement (NCTA), whose main objective is to enhance and ensure seamless movement of trade and traffic across the region. ... [Read more](#)

News from the Northern Corridor

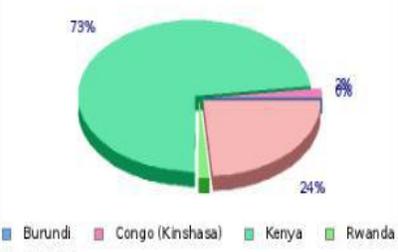
NORTHERN CORRIDOR STAKEHOLDERS CONSULTATIVE FORUM MEETS IN NAIROBI
 A meeting of the Northern Corridor Stakeholders Consultative Forum was held on 7th May 2009 at the Intercontinental Hotel in Nairobi, Kenya

REGIONAL CONFERENCE ON NORTHERN CORRIDOR TRANSPORT AND TRADE FACILITATION
 The Northern Corridor Transit Transport Coordinating Authority (NCTCA), in partnership with the Kenya Ports Authority (KPA),..

Featured Northern Corridor Indicators

Volume per country of destination

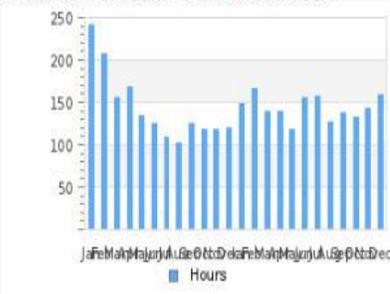
TC per Country of destination = Summation of all cargo's weight handled within the Port per Country of destination (Tonne)



Country	Percentage
Kenya	73%
Congo (Kinshasa)	24%
Uganda	2%
Burundi	1%
Rwanda	0%

Average cargo dwell time in Mombasa port

DT = Exit date/time from the port minus arrival date/time at the port.



Month	Average Dwell Time (Hours)
Jan	240
Feb	210
Mar	160
Apr	140
May	130
Jun	110
Jul	120
Aug	120
Sep	140
Oct	140
Nov	150
Dec	160

Upcoming Events

Increased Use Of The Mombasa Port
 When > 23 Jul 2012
 Where > NTTCA

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Source: http://top.ttcanc.org/download_doc.php?docid=1. Accessed in December 2016

The information extracted from the Northern Corridor Transport Observatory provides a clear picture on the performance of various indicators. In doing so it provides for the immediate identification of bottlenecks to facilitate quick response and mitigation.

d) *Impact of Trade and Transport Initiatives*

During a high-level meeting on sustainable transport of Landlocked Developing Countries (LLDCs), which took place in Santa-Cruz, Bolivia on 13-14 October 2016, workshop delegates from LLDC were urged to learn from the Northern Corridor best practices in an attempt to speed up cooperation initiatives and policy harmonisation processes, to easy trade facilitation for the benefit of LLDC. During this event, the Northern Corridor region was applauded for the success that its trade and transport facilitation programmes had in transforming 4 LLDCs from landlocked to land-linked, thereby enabling them to reap the benefits obtained from efficient and cost effective access to and from sea ports.

Between 2009 and 2014 various trade and transport initiatives were implemented along the Northern Corridor that has resulted in improved predictability along the entire transport logistics chain. Success was witnessed by a 56% reduction in transportation costs from Mombasa to Nairobi; whereas the transit section between Mombasa and Kampala reflected a 26% decrease. Furthermore transport costs along the transit sections between Mombasa-Goma and Mombasa-Juba was reduced by 38% and 37% respectively. (<http://www.ttcanc.org/news.php?newsid=73>)

7.4.5 Lessons learned and Successes

The Northern Corridor is not only the busiest corridor in Central and Eastern Africa, but also one of the most successful corridors in terms of the positive benefits accrued from the implementation of trade and transport reforms. The following successes are noteworthy for the SADC:

- The existence of a strong institutional framework. The NCTA provides the legal framework for collaboration between MS, whereas a dedicated body, the NCTTCA and its key organs oversee adherence to the NCTA. The SADC does not have an autonomous body that oversees the implementation of trade and transport agreements;
- Real-time information on various indicators is provided by the Northern corridor transport observatory. This monitoring tool measures 30 indicators on performance and therefore provides a clear picture of the efficiency of the entire transport supply chain. The availability of real-time data enables the fast detection of problems to enable quick response. Real-time data also enable decision-makers to base decisions on facts; and
- The establishment of RSS's at regular intervals along the Northern Corridor has been approved and awaits implementation. This reform will go a far way towards improving corridor efficiency. Furthermore the establishment of wellness centres at RRS's will also address socio-economic challenges, notably the spread of the HIV/AIDS virus.

7.5 Conclusion

Chapter 7 provided an overview of trade and transport facilitation reforms implemented by RECs in Asia, West and East and Central Africa to improve the seamless movement of traffic along heavy trafficked road transport corridors. This chapter also reported on the reforms that were implemented to address transport challenges, which are very similar to those experienced along the NSC, MDC and the TKC, including insufficient maintenance of strategic road networks, too many law enforcement checkpoints along corridors, excessive border post delays, bribery and corruption and limited integration of border post processes.

It can be deduced that the implementation of trade and transport facilitation reforms within the GMS resulted in the introduction of single stop inspections at border posts, an increase in the exchange of traffic rights between signatory states, the opening of new routes and general agreement amongst MS to fully liberalise the transport market through the adoption and implementation of a sub-regional road transport permit in the near future.

The implementation of trade and transport facilitation reforms along the Abidjan-Lagos and Northern Corridors resulted in the establishment of regional bodies with legal personality (the ALCO and NCTTCA) to oversee the implementation of reforms and the launch of the Abidjan-Lagos transport observatory to release real-time data on trade and traffic flows to corridor stakeholders. Another on-going reform along the Northern Corridor is the implementation of RRS's to improve road safety along this corridor.

Given the nature and similarities between the road transport challenges that the Greater Mekong, West African, Central and East African region faced and still face, and those that SADC faces, it can be deduced that the region can take lessons from both Asian and African regions benchmarked.

Key lessons can be drawn to overcome challenges that include the non-existence of a regional legislative authority mandated to oversee / enforce the implementation of trade and transport initiatives and the lack of real-time data on cross-border road traffic flows which undermines the ability of decision-makers at MS and regional level to address infrastructure impediments in a timely fashion.

The benchmarking exercise paved the way for the identification of initiatives that intend to minimise the multiplicity of transport challenges experienced along the NSC, MDC and TKC and these are discussed in Chapter 8.

8. MOVING FORWARD: IMPROVING CORRIDOR PERFORMANCE IN THE SADC

8.1 Introduction

The previous chapter provided insight into road transport impediments experienced along heavily trafficked transport corridors in Asia, West and East & Central Africa. The chapter also reported on the nature of challenges that are experienced in strategic corridors, as well as interventions deployed to address these challenges. In response to infrastructure inefficiencies, a number of trade and transport facilitation reforms were implemented in the GMS, as well as along the Abidjan-Lagos and Northern transport corridors.

Based on the successes and lessons learned, this study proposes a number of reforms that seek to address, or at least minimise hard and soft infrastructure impediments along strategic road transport corridors in SADC, including the NSC, MDC and the TKC. For the purposes of this discussion, proposed reforms are categorised under *existing* reforms (e.g. on-going reforms that are in various stages of implementation) and *new* reforms that are recommended for implementation in the SADC, based on the findings from the benchmarking exercise.

Section 8.2 provides more information on the domestication of the following recommended reforms:

- Reform 1: Establish an Independent Regional body;
- Reform 2: Fast-track the implementation of a Single Multilateral Cross-Border Road Transport Agreement;
- Reform 3: Transform Prioritised Border Posts into OSBP's;
- Reform 4: Establish Roadside Stations (truck stops) along Regional Road Transport Corridors; and
- Reform 5: Establish Corridor Road Transport Observatories.

Further to the above, political will should be established amongst all 15 MS before there will be any improvement with regards to the implementation of regional reforms. Although there is support for regional initiatives, the issue is to domesticate regional initiatives and to sustain concerted action with regard to their implementation.

8.2 Domestication of Reforms by Member States

8.2.1 Existing Reforms

b) Reform 1: Establish an Independent Regional Body – SADC Parliament

In line with the provisions of the PTCM, a number of CMCs have been established to manage traffic flows along regional road transport corridors in the SADC. Furthermore, a PPDF has been established at regional level to assist MS in packaging projects for private sector funding.

Despite the support provided by CMCs and the PPDF, the SADC does not have a regional legislature (Parliament) to provide oversight and to enforce the implementation of regional decisions (initiatives) at MS level. As a result, the implementation of regional commitments

depends on the willingness and political will of MS governments to carry out regional decisions at member state level. Currently, the SADC Parliamentary Forum (SADC-PF) composed of 12 Members of Parliament from national parliaments in all MS provides a framework for dialogue on issues of regional interest and concern.

The establishment of a regional parliament is a reform measure that is currently being interrogated at regional level where growing recognition exists that the regional executive and tribunal needs to be complimented with a regional legislature (Parliament). Alleged high levels of corruption, misuse of public monies, low levels of employment and poor implementation status of regional Protocols and initiatives which characterise the SADC, all point to the urgent need to fundamentally restructure the governance paradigm within the region.

A regional Parliament will encourage good governance, transparency and accountability, thereby consolidating democracy throughout the region. By providing a regional forum for dialogue and consultation, the Parliament would promote public participation in regional governance. Given its autonomous legal character the regional Parliament will be in a position to enforce the implementation of regional decisions (reforms) and impose sanctions upon defaulting MS.

This reform proposal supports the regional drive towards establishing a SADC Parliament. Figure 18 illustrates the actions that are proposed to enable the operationalisation of this reform.

Figure 18: Action Plan: Establish SADC Parliament



Source: Figure created for study

Strategic engagements should intensify at regional level to gain support from all role-players for the establishment of a SADC Parliament. Representatives from each MS should be encouraged to participate in regional platforms. Once buy-in has been obtained from participating parties, step 2 revolves around developing a draft Protocol on the establishment of a SADC Parliament, which will define the powers, functions and relational linkages among the proposed Parliamentary body, national Parliaments and other organs of the SADC.

Upon completion, the draft Protocol should be presented to MS for approval / ratification where after the SADC-PF will be transformed (elevated) into a fully-fledged regional Parliament that will enforce the domestication of regional laws at MS level. It is foreseen that regional laws will

be debated by national assemblies, where after they will be rectified and domesticated to form part of the legislature of SADC MS.

The importance of establishing political will amongst MS cannot be over-emphasised. Ultimately success depends on the willingness of MS to cede a degree of sovereignty by national parliaments and MS before the SADC Parliament will be empowered to legislate.

c) Reform 2: Fact-track the Implementation of a Single Multilateral Cross-Border Road Transport Agreement

The Tripartite has initiated a reform that revolves around adopting and implementing a MCBRTA within the COMESA-EAC-SADC Tripartite that will compel MS to introduce quality regulation in their respective territories. This new approach differs from the current way of doing business in the SADC, where transport instruments (e.g. bilateral agreements) still focus on controlling the supply of transport services through the issuing of cross-border road transport permits.

The C-BRTA supports the MCBRTA initiative since it builds on the SADC market liberalisation drive of establishing a single regional road freight transport market that will bring many benefits to cross-border operators, such as a reduction in time delays at border posts.

Acknowledging the fact that the Tripartite consists of 3 RECs and 26 member countries, it becomes clear that a number of challenges may prevent the timeous roll-out of this initiative. Establishing political will amongst all MS is critical since continued support, cooperation and action is required from all member countries throughout the reform execution process.

Since this initiative is on-going, a lot of ground work has already been covered and significant progress noted. Figure 19 illustrates key actions that should be performed to fast-track the operationalisation of the MCBRTA.

Figure 19: Action Plan: Establish Single Multilateral Cross-Border Road Transport Agreement



Source: Figure created for study

From figure 19 is it evident that political will should be established amongst COMESA-EAC-SADC MS to move countries from ratifying the MCBRTA to implementing it. Stakeholder engagements (step 2) are equally important as the adoption of a MCBRTA depends in all role-players (e.g. public and private sector, industry, logistics providers, transport operators and associations) agreeing to the terms & conditions and scope of the MCBRTA. Buy-in at country

level is equally important since MS will be compelled to validate draft standards and requirements in respect of quality regulation before they can conclude and domesticate the MCBRTA (steps 3 and 4).

Next, a review of structures at MS level is required to propose the most suitable institutional structure(s) for implementing the MCBRTA. These institutions should be equipped with appropriate staffing, facilities and budget in order to fulfil their functions effectively (step 5). The last step involves the implementation of the MCBRTA within the Tripartite.

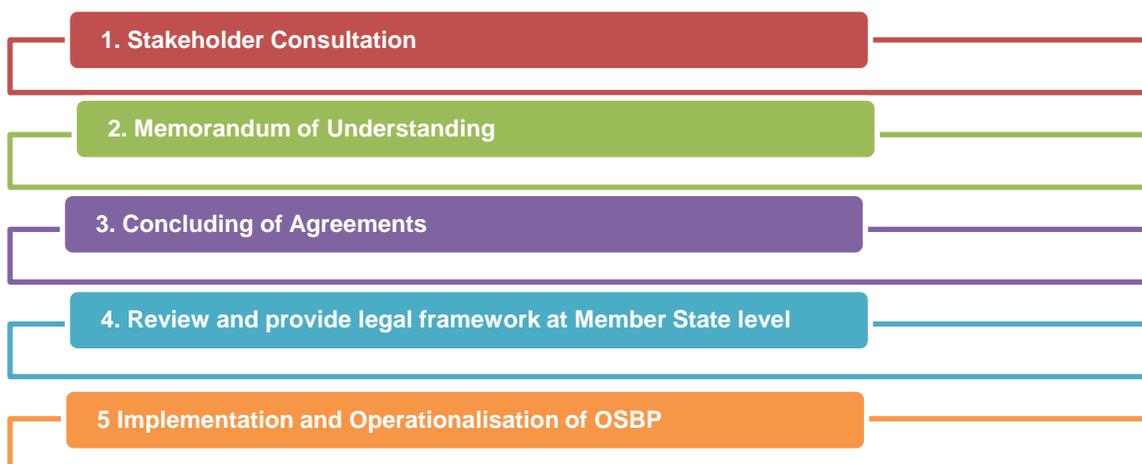
The development and implementation of a cross-border road transport operator registration system (TRIPS) that captures information on cross-border operators, drivers and fleet is a key to success since the MCBRTA initiative depends in the availability of real-time data to monitor operator conduct within the Tripartite. This reform therefore requires the development of ICT capacity to enable MS to access the TRIPS.

The C-BRTA is currently championing the development of the Operator Compliance Accreditation Scheme (OCAS) that will operationalise the MCBRTA in the SADC. Essentially OCAS is a risk based regulatory tool, principled on less regulation, cost effectiveness and the use of defined industry standards. Upon implementation, this scheme will recognise and incentivise good behaviour by cross-border road transport operators through subjecting complying operators to fewer stops at law enforcement checkpoints along regional road transport corridors.

8.2.4 Reform 3: Transform Prioritised Border Posts into OSBP's

Strategic border posts in the SADC face various hard and soft infrastructure inefficiencies, which culminate in excessive delays for cross-border road transport operators. In response to border post constraints, the SADC has approved the transformation of 18 border posts into OSBPs of which only 1 (Chirundu) currently functions as an OSBP. Figure 20 illustrates the steps that should be taken to operationalise the OSBP reform.

Figure 20: Action Plan: Establish OSBP's



Source: Figure created for study

Step 1 in the process is to conduct stakeholder engagements to provide a solid platform for planning and the exchange of information in preparation for the implementation of OSBPs. Political support already exists for the transformation of prioritised border posts into OSBPs. Moving forward, MS's affected by the regional OSBP initiative should sign MoU's and conclude bilateral agreement(s) with neighbouring countries that sets out the rules and conditions pertaining to the establishment and implementation of OSBPs (steps 2 and 3).

Step 4 involves a review of legal frameworks at MS level to provide the legal framework for member states to move forward with the construction of OSBPs. Step 5 involves the implementation and operationalisation of OSBPs. Once funding has been secured, TOR drafted and SP's appointed, the actual construction of OSBPs will commence. Technical and political champions should be appointed at MS level to scope OSBP projects and to fast-track progress.

Apart from investing in physical structures (e.g. OSBP buildings and inspection yards), attention should also be paid to improving soft infrastructure aspects. Of specific importance is the establishment of ICT connectivity and the harmonisation of border post processes. This implies that neighbouring countries should, for example, use the same customs clearing systems to enable customs information sharing between the 2 adjoining countries, thereby expediting the fast clearing of traffic.

8.2.2 New Reforms

In terms of its innovative role, the C-BRTA is mandated to develop solutions that respond to market needs, thereby creating benefits to cross-border road transport operators and the broader cross-border and trade community. In this context, this study proposes the implementation of 2 new corridor reforms that both aim to improve the efficiency of strategic road transport corridors. More information on these reforms is presented here-under.

a) *Reform 4: Establish Roadside Stations / Truck Stops*

Africa, like the rest of the world, is experiencing a road safety crisis. In order to take on the road safety challenge, various RECs on the continent have performed benchmarking exercises to establish which measures they can implement to improve the safety of people while travelling on African roads.

Approval has already been granted for the establishment of 67 RRS along the Northern corridor. A similar initiative is unfolding along the Walvis Bay Corridor, which comprise of 3 corridors, including the TKC. The findings of a feasibility report on truck stop establishment along the Walvis Bay corridor identify a number of location options suitable for truck stop establishment.

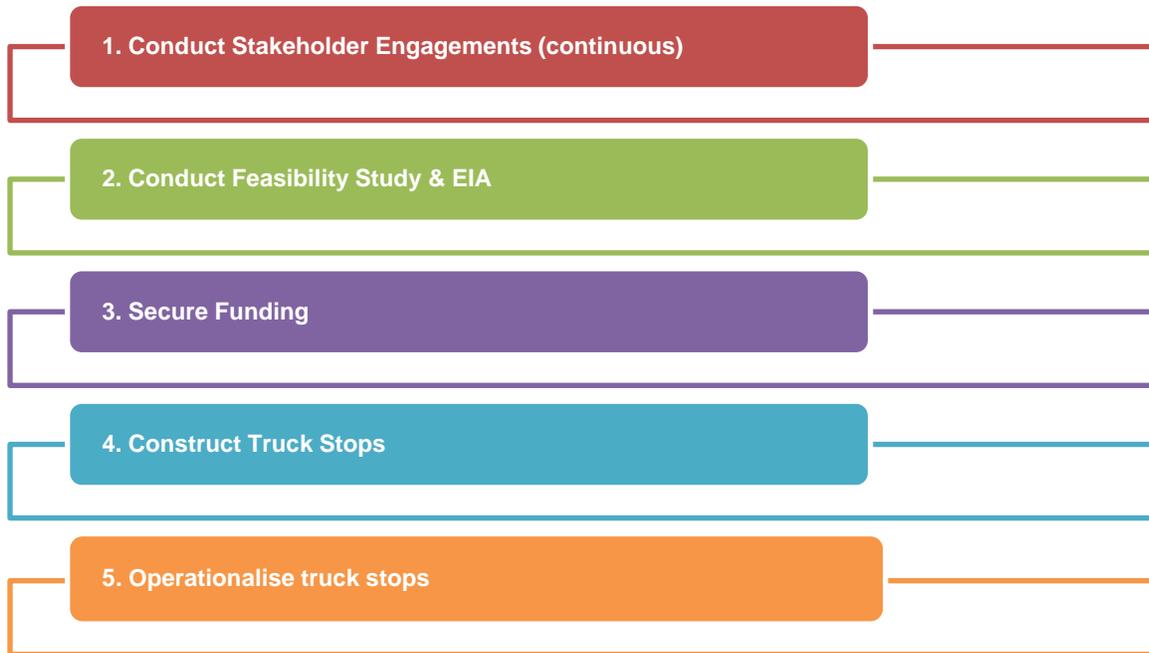
Essentially Roadside stations and truck stops serve the same purpose, namely to improve road safety via the placement of well-designed facilities equipped with rest and basic maintenance facilities, at regular intervals along regional road transport corridors.

This reform proposal recommends that the Walvis Bay corridor truck stop initiative be extended to the NSC and MDC corridors, which are characterised by high traffic volumes. As is the case with the other reforms, stakeholder buy-in is a pre-requisite to success. Failure by role-players

to avail land for construction and an inability to attract private sector support (in the form of PPPs) will prevent this reform from moving forward.

Figure 21 summarise the envisioned steps associated with the implementation of truck stops along the NSC, MDC and TKC.

Figure 21: Action Plan: Establish Truck Stops



Source: Figure created for study

As with the previous reform proposals, the first step towards implementing this reform is to create a single platform for stakeholder consultations (step 1). All stakeholders - private & public sector bodies, transport operators, CMCs, freight forwarders, logistics service providers & communities - should be invited to participate in discussions in an attempt to gain their support for this reform. Stakeholder engagements should be conducted throughout the entire project lifecycle (from planning to construction) to ensure that momentum is not lost on this initiative.

Once political will has been established for the truck stop initiative, detailed feasibility studies and Environmental Impact Assessments (EIA) should be performed along the NSC and MDC (this process has already been completed for the TKC) to determine the feasibility of moving forward with this initiative (step 2). The location of truck stops will be informed by factors such as distance of the corridor(s), land availability, zoning and ownership, condition of existing infrastructure and bulk utility services, volumes and type of traffic transported along the corridor(s), proximity to main routes (corridors) and the impact of truck stops on local economies.

If the findings of the feasibility study support the establishment of truck stops, the next step will be to package projects in in such a way that they attract private sector support, preferably in the form of PPPs. Given the huge financial impact associated with this reform, private sector participation is a prerequisite to success, not only to fund this initiative, but also to avail technical skills during the entire project life cycle. It is proposed that the construction of truck stops (step 4) take place in a phased manner according to a priority matrix (prime and secondary sites), where after this initiative will be operationalised (step 5).

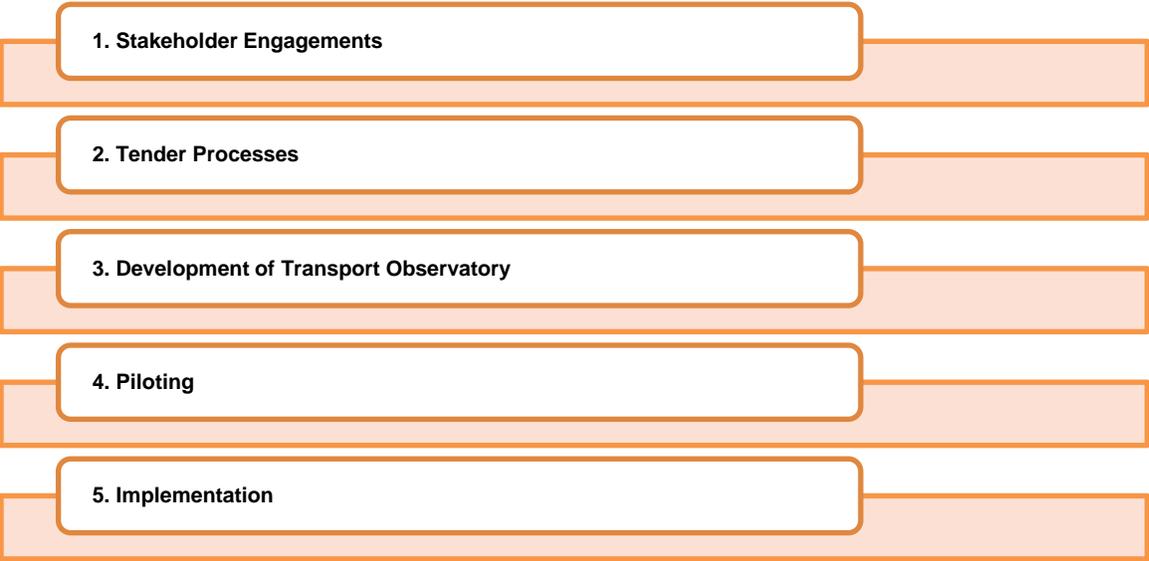
b) Reform 5: Establish Corridor Road Transport Observatories

Real-time information on road traffic flows in the SADC is scarce and hard to obtain. In the absence of reliable corridor data, decision-making authorities are often bound to base decisions on proposals that are not supported by facts. The implementation of road transport observatories along the Abidjan-Lagos and Northern Corridors yielded a number of results, including time savings for cross-border operators who are now in a position to respond to road conditions quickly and adjust their route(s) if necessary.

This reform proposes the establishment of road transport observatories along the NSC, MDC and TKC. Given the costs associated with this reform, it is proposed that a step-by-step approach be adopted whereby a road transport observatory be developed and piloted along 1 corridor first. Depending on the results, this initiative can then be extended to the other 2 corridors.

Figure 22 depicts the steps associated with the implementation of road transport observatories along the NSC, MDC and TKC.

Figure 22: Action Plan: Develop Road Transport Observatory



Source: Figure created for study

The importance of stakeholder engagements cannot be over emphasised. Over the years a silo mentality has developed in the SADC whereby corridor stakeholders capture traffic data (both manually and electronically) but keep (protect) that data in-house. During engagements, an inclusive approach should be adopted that involves all corridor role-players.

The need for and envisioned benefits associated with this reform should be shared with all parties to bring them on board and to obtain their support. It is important that MS's affected by this initiative enter into a formal agreement (e.g. MoU) that sets out the rules that each party should comply with, format in which information should be shared, institutional set-up and penalties that will be imposed upon non-compliant parties.

Given the fact that a transport observatory will be developed from scratch, the execution of this reform will be both time consuming and expensive. The public sector does not possess the financial means to fund this initiative alone. Therefore, a PPP arrangement is proposed whereby the public and private sectors work in concert during the entire project life cycle. Step 2 focuses on the tender process and include activities such as drafting the TOR, finalising the project scope and appointing a SP.

Next, the development process will commence. During this phase continuous support and cooperation from all corridor role-players will be required. Information on traffic / corridor flows will serve as input data into the system design phase and should be disclosed to system developers. The development phase also includes a selection and refinement of corridor indicators that will be used to measure corridor performance.

Pre-requisite(s) to success is the harmonisation of ICT systems to enable the capturing of information, compilation of active risk data bases and the sharing of corridor intelligence via a central electronic platform. The harmonisation of ICT systems may prove to be challenging and costly since ICT capacity varies from one MS to the next. This problem is exacerbated by the fact that different ICT software systems are currently used by the SADC countries. Strong institutional support is also required. Oversight can either be provided by existing CMCs (e.g. MCLI) or new structures should be established to perform this role.

Upon completion, the transport observatory should be piloted (step 4) to test for system failures and updated. Both the MDC and TKC are suitable corridors for the launch of this initiative since they stretch over a shorter route distance than the NSC, involving fewer countries and have active CMCs to manage corridor operations.

Once the piloting phase has been completed, the corridor transport observatory should be implemented (step 5). Progress should be monitored regularly according to a number of indicators (e.g. traffic volumes, times and cost) to measure the success of this initiative. This will determine when the corridor transport observatory should be rolled out to other strategic transport corridors.

8.3 Role of the C-BRTA in Improving Corridor Performance

The C-BRTA is one of many players operating within the cross-border road transport environment. Ultimate success in improving corridor performance depends on all stakeholders acknowledging the gaps which exist and working in concert towards solving them. Each stakeholder will have to play their part to ensure that challenges facing cross-border road transport and trade are effectively dealt with.

The C-BRTA supports current initiatives in the region, notably the establishment of a SADC Parliament, move towards signing of the MCBRTA and OSBP's since these reforms will improve the flow of traffic (goods and passengers) within and across MS, thereby stimulating intra-regional trade and development.

Given the strategic importance of these initiatives and the envisioned benefits they pose to the region (e.g. reduction in cost of doing business, enhanced trade and cross-border transport flows), it is imperative that the C-BRTA engages with South African role-players, notably the DOT, DHA, Department of Tourism and the Department of Trade to obtain local support and buy-in. This will ensure that South African role-players are united and voice their collective support for strategic initiatives when participating in regional forums.

Since all 6 reforms discussed and recommended display a regional character that involves more than one MS, ultimate success depends on the commitment from all corridor role-players (MS governments, private sector, CMC and community) to adopt the same vision and work together towards realising each reform.

As far as the 2 new reforms are concerned, it is proposed that the C-BRTA engages the DoT and the Minister of Transport first to obtain approval for the new reforms from the Agency's political principal. Thereafter, engagements should be extended to other South African role-players to obtain national buy-in for the establishment of trucks stops and road transport observatories along prioritised road transport corridors before extending engagements to the region. Given its advisory role, the C-BRTA is ideally positioned to provide advice to task team audiences on the advantages and potential risks associated with each reform.

9. MAIN FINDINGS AND RECOMMENDATIONS

Chapter 9 presents a number of findings and recommendations. These recommendations should be considered for implementation in order for the SADC to address cross-border road transport and trade facilitation challenges.

It is important to note that support will be required from stakeholders in the respective trade and transport value chains if the recommendations are to be successfully implemented. This will enable decision-making bodies within their respective jurisdictions to introduce or provide support for the implementation of the interventions, thereby enabling transport corridors to fulfil their rightful role in fostering sustainable cross-border trade, economic growth and development in the SADC region. It is envisaged that the downstream impact of these interventions will go a long way towards improving the socio-economic conditions in the region.

9.1 List of Findings

The findings are listed in no particular order of importance here-under:

9.1.1 Transport Corridors

- Transport corridors are established across the SADC as a tool to support economic integration as they facilitate intra-regional trade, open up markets and stimulate investment along corridors;
- The existence of hard and soft infrastructure impediments such as poorly maintained road networks in some MS, inefficient land borders and non-harmonised road transport policies, rules and procedures impede the seamless movement of cross-border traffic along regional road transport corridors;
- As the oldest corridor in the region, the MDC is a flagship SADC corridor, linking to other corridor initiatives, including the NSC and the TKC. The MDC, which builds on the SDI concept managed to attract significant investment to the corridor and region, maximise social development and social opportunities. It's overarching approach to development can be summarised as "holistic and participatory";
- The TKC established itself as a well-functioning corridor. The completion of road infrastructure programmes and the harmonisation of border post processes at TKC border posts have stimulated trade and traffic flows along this corridor. It is further expected that the completion of capital expenditure projects at the port of Walvis Bay will further boost traffic moving along this corridor;
- Of the 3 study corridors, the NSC is the worst performing corridor, with various infrastructure inefficiencies experienced along the entire corridor stretch. Memberships of NSC countries to different RECs and the absence of a dedicated management body are factors that impact negatively on the operational performance of the NSC; and
- The efficiency of the MDC and TKC to a great extent is attributed to the existence of dedicated CMCs, namely the MCLI and the TKCMC. These bodies oversee the efficient functioning of both corridors; inter alia through providing a platform for stakeholder engagements during which corridor impediments are discussed and solutions sought.

9.1.2 Strategic Border Posts

- Due to various hard and soft infrastructure constraints experienced at strategic border posts, inland borders in the SADC have emerged as one of the greatest impediments to intra-regional trade and travel;
- Various hard and soft infrastructure challenges are experienced at strategic border posts. Inadequate approach roads to borders, limited parking within the border precinct, a lack of separation between freight and passenger movements and the duplication of border post processes result in significant delays for cross-border road transport operators;
- Since regional transport corridors stretch across national territories, it is imperative that strategic border posts along a corridor function at more or less the same operational level to optimise trade and transport flows along the entire corridor;
- Border management reforms in the SADC are often corridor segment focused, which negates the overall impact of improvements on the entire corridor. Although time delays at the Chirundu border post decreased dramatically after its transformation into an OSBP, the impact of this initiative on the entire NSC was marginal since delays have been shifted to other points along the same corridor. This clearly illustrates that border management reforms that are implemented in isolation have a limited impact on trade and transport facilitation across regional transport corridors;
- In response to the poor performance of strategic border posts, the OSBP initiative has been approved at regional level to improve the uninterrupted flow of traffic across SADC borders. To date only 1 (Chirundu) of the prioritised 18 borders has been transformed and is functioning as an OSBP. At the Lebombo / Ressano Garcia border, the construction work of the OSBP facility has been completed. Outstanding is the ratification of legal instruments to enable the operationalisation of the OSBP;
- The establishment of strong political will amongst MS, is a pre-requisite to success. Without a shared belief that OSBP's is the solution, the implementation of OSBP projects will not materialise; and
- At national (South African) level, a number of border post initiatives are currently taking place. The establishment of a BMA will see the light during 2017. The C-BRTA supports the BMA drive since the Agency believes that the consolidation of border management functions under a single lead agency will not only improve safety at border posts, but will also speed up the clearance of commercial freight vehicles, with associated time savings for cross-border road transport operators.

9.1.3 Corridor and Border Post Governance in the SADC

- Various legal instruments / frameworks govern corridor operations within the SADC. Each MS has its own regulatory mechanism that determines market access and operating requirements. As a result cross-border operators must comply with various regulatory requirements, imposed by the different MS as they traverse along regional transport corridors;
- The fragmented regulatory framework culminates in delays and impose additional transport costs upon cross-border operators;

- Existing transport instruments provide for the establishment of CMCs to develop and manage transport operations along regional transport corridors;
- The MCLI and TKCMC are CMCs established to manage operations along the MDC and TKC. Since their formation, both management bodies have implemented various reforms that resulted in time savings for cross-border operators. Examples of reforms include the construction of OSBP at the Lebombo / Ressano Garcia border and the harmonisation of border processes (e.g. adoption of SAD 500) at the Buitepos / Mamuno border post;
- The NSC does not have a CMC looking after its affairs. However, some development towards uniformity is noted by the establishment of the COMESA-EAC-SADC Tripartite. Currently, the Minister of Transport in South Africa and her SADC counterparts are negotiating a NSC MoU to lead the way for the establishment of the NSC Management institution (NSCMI); and
- Following the successes achieved by the MCLI and TKCMC in facilitating stakeholder engagements and in promoting developing along both corridors, the expectation is that the establishment of a NSCMI will improve the performance of the NSC in coming years.

9.1.4 Trade and Transport Facilitation Initiatives in the SADC

- In response to the multiplicity of trade and transport impediment facing the SADC, a number of reforms have been approved by the SADC and COMESA-EAC-SADC Tripartite to improve the seamless flow of traffic (passengers and goods) along regional road transport corridors;
- Some initiatives are corridor focus (e.g. establishment of truck stops along the TKC), while other initiatives (e.g. MCBRTA) focus on a greater geographical area, which incorporates more than 1 REC;
- A holistic approach should be adopted to ensure that all role-players are consulted prior to as well as during the implementation of regional reforms to ensure their continuous support throughout the entire project life cycle;
- In line with the global movement towards quality regulation, the MCBRTA reform seeks to liberalise the cross-border landscape through creating a single road freight market within the Tripartite; and
- The SADC enjoys a bad track record insofar the implementation of regional commitments at MS level is concerned. This is partly due to the absence of sanctions against defaulting MS, as well as weak enforcement and implementation capacity.

9.1.5 International Benchmarking

The international benchmarking was conducted to draw on the successes and lessons learned by a number of RECs that implemented trade and transport facilitation initiatives along highly trafficked road transport corridors in Asia, West and East and Central Africa. This exercise guided the identification of corridor and border post reforms for the SADC.

a) Greater Mekong Sub-Region - Asia

- Trade and transport initiatives implemented in the Greater Mekong Sub-Region reflect similarities to reforms currently pursued in the SADC. Similarity is found in the introduction of single stop border inspections, automation of customs process and movement towards the adoption of a single regional road transport permit;

- Strong political will exists amongst GMS countries, as noted in the ratification and implementation of various trade and transport agreements (e.g. CBTA and the TTF-AP);
- Great strides have been made with regards to the harmonisation of transport rules, standards and procedures. Currently 1 single document, that incorporates all elements associated with cross-border transport, is used by GMS countries;
- Strong institutional support exists within the Greater Mekong Sub-Region where dedicated institutions at MS (e.g. National Transport Facilitation Committees) and regional level (e.g. Regional Ministerial Joint Committee) monitor the implementation of trade and transport initiatives;
- Agreement amongst GMS MS towards adopting a sub-regional road transport permit is aligned to international best practice that favours quality regulation as a means to enhance trade and transport facilitation; inter alia through the creation of a single transport market; and
- The GMS freight transport association is a legal, self-regulatory body that represents the interests of its members who are, in the main, road freight and logistics service providers. This facilitating body influences the state of the industry in several ways, i.e. through road safety campaigns.

b) *Abidjan-Lagos Corridor – West Africa*

Strong political amongst the 5 countries linked by the Abidjan-Lagos corridor materialised in the implementation of various trade and transport facilitation initiatives along this corridor. Listed below are accomplishments on which the SADC can capitalise upon:

- Strong institutional support exists. The ALCO, a sub-regional intergovernmental organisation with legal personality, oversees the implementation of the Abidjan-Lagos trade and transport facilitation programme. On the contrary, the SADC does not have a legal institution that oversees the roll-out of regional initiatives; and
- The Abidjan-Lagos transport observatory collects, analyse and distribute real-time data on traffic flows to large audiences. This enables cross-border operators to respond to corridor constraints quickly. At the same time the public sector can resort to credible information when conducting strategic planning processes. These benefits cannot be accrued by the SADC since the region does not have a credible transport database.

c) *Northern Transport Corridor – East and Central Africa*

Cooperation and political consensus between Northern Corridor MS have led to the ratification and implementation of various trade and transport facilitation agreements, including:

- At institutional level a dedicated body, the NCTTCA oversees the implementation of trade and transport reforms;
- A transport observatory (Northern corridor transport observatory) provides real-time data on corridor flows to relevant role-players. This monitoring tool which measures corridor performance according to 30 indicators provides a clear picture of the efficiency of the entire corridor; and

- The establishment of RSS's along the Northern Corridor has been approved and awaits implementation. The prediction is that the establishment of RSS's at regular intervals along the corridor will address issues associated with road safety.

9.2 Recommendations and Action Plans

The main recommendation is that the reforms presented in chapter 8 of this Report be presented to various structures and institutions in the SADC for approval and incorporated into their work programmes. It is envisaged that the implementation of the report reforms will enhance the seamless movement of traffic along the NSC, MDC and the TKC.

This section proposes a number of action plans that provide a high-level overview of the envisioned steps that public and private corridor stakeholders should take towards implementing the reforms. It should be noted that the establishment of political will is a pre-requisite to success. None of the report reforms will be fully operationalised if political support is not provided towards implementing the reforms.

9.2.1 Action Plan for Reform 1: Establish an Independent Regional Body

Table 20: Action Plan: Reform 1

Action Plan	Envisaged impact	Responsibility
✓ MS should establish a regional parliament.	<ul style="list-style-type: none"> ✓ Improved governance, transparency and accountability at MS level; ✓ Improved delivery of regional commitments. 	<ul style="list-style-type: none"> • SADC MS

9.2.3 Action Plan for Reform 2: Fast-track the Implementation of the MCBRTA

Table 21: Action Plan: Reform 2

Action Plan	Envisaged impact	Responsibility
✓ MS should implement the MCBRTA	<ul style="list-style-type: none"> ✓ Introduction of quality regulation in the Tripartite; ✓ Harmonisation of regulatory frameworks; ✓ Creation of a single regional road freight market; ✓ Improved intra-regional trade and transport flows; ✓ Sustainable economic growth and development in the Tripartite; ✓ Improved decision-making processes due to the availability of real-time data. 	<ul style="list-style-type: none"> • SADC MS

9.2.4 Action Plan for Reform 3: Transform Prioritised Border Posts into OSBP's

Table 22: Action Plan: Reform 3

Action Plan	Envisaged impact	Responsibility
✓ MS should implement prioritised OSBPs	<ul style="list-style-type: none"> ✓ Improved border management processes; ✓ Reduction in time spent at OSBPs; ✓ Reduction in travel time and cost; ✓ Increase in intra-Africa trade and transport flows; ✓ Economic growth and development. 	SADC MS SADC PPDF

9.2.5 Action Plan for Reform 4: Establish Truck stops along Regional Road Transport Corridors

Table 23: Action Plan: Reform 4

Action Plan	Envisaged impact	Responsibility
✓ CMC should implement truck stops along regional road transport corridors	<ul style="list-style-type: none"> ✓ Reduction in driver fatigue; ✓ Improved safety along regional road transport corridors; ✓ Boosting of local economies with a continuous stream of travellers passing through; ✓ Reduction in crime / fraudulent activities along regional road transport corridors; ✓ Protection of truck drivers against the transfer of HIV/AIDS and sexually transmitted infections. 	<ul style="list-style-type: none"> • CMC • MS • Private sector

9.2.6 Action Plan for Reform 5: Establish Corridor Road Transport Observatories

Table 24: Action Plan: Reform 5

Action Plan	Envisaged impact	Responsibility
<ul style="list-style-type: none"> ✓ CMS should implement corridor road transport observatories 	<ul style="list-style-type: none"> ✓ Availability of real-time data on traffic flows; ✓ Evidence based transport policy making by African RECs; ✓ Improved decision-making by public sector bodies and corridor users; ✓ Improved facilitation of trade and transport flows along strategic regional transport corridors; ✓ Improved transport competitiveness. 	<ul style="list-style-type: none"> • CMC • MS • Private sector

Further to the action plans for the respective report reforms, MSs should also develop funding frameworks to guide them in securing adequate funding for implementing reforms (table 25).

Table 25: Action Plan: Develop Funding Frameworks

Action Plan	Envisaged impact	Responsibility
<ul style="list-style-type: none"> ✓ Establish and Implement funding frameworks 	<ul style="list-style-type: none"> ✓ Improved delivery on regional commitments; ✓ Introduction of private sector technology and innovation through PPPs; ✓ Improved trade and transport flows; ✓ Economic growth and development. 	<ul style="list-style-type: none"> • MS

9.3 Conclusion

The implementation of the proposed study reforms will go a far way towards creating transport corridors that facilitate intra-regional trade, investment opportunities, regional economic development and regional integration. Furthermore, the creation of integrated road transport networks will stimulate the growth of the cross-border road transport sector, with cross-border road transport operators gaining access to new markets and enjoying the benefits of lower transportation costs, quicker turnaround times and increased profitability.

The successful execution of the 5 report reforms is very much dependent upon political support and adequate funding to enable their execution. Moving forward, an inclusive approach should be adopted that involves all role-players joining hands and working together throughout the project execution process. Since all reforms display a regional character, each MS has to mobilise stakeholders within their jurisdictions to act as implementation agents, whilst at

regional level, coordination will be required to ensure that there is a common purpose and convergence on the approach that will be taken to implement agreed reforms.

As one of the players in the cross-border environment, the C-BRTA should encourage an approach of facilitation and discussion to plant the seeds of change in the minds of political stakeholders that currently prevent or frustrate progress towards implementing prioritised transport reforms in the SADC.

REFERENCES

- Abidjan-Lagos Corridor Organisation. 2014. *Abidjan-Lagos Trade and Transport Facilitation Project. Year 4 Report.*
- Africa Development Bank. *Greater Mekong Subregion Cross-Border Transport Facilitation Agreement. Instruments and Drafting History.*
- Africa Institute of South Africa. 2012. *Regional Trade Integration, Economic Growth and Poverty Reduction in Southern Africa.* Africa Institute of South Africa.
- Ben Barka, H. January 2012. *Border Posts, Checkpoints, and Intra-African Trade: Challenges and Solutions.* African Development Bank.
- Byiers, B & Vanheukelom, J. February 2014. *What drives regional economic integration? Lessons from the Maputo Development Corridor and the North South Corridor.* Discussion Paper No. 157. European Centre for Development Policy Management.
- Bowland, C & Otto, L. August 2012. *Implementing Corridors: Lessons from the Maputo Corridor. African Perspectives.* Global Insights.
- C-BRTA. 2016. *Annual State of Cross-border Operations Report. Semester 1.* Unpublished.
- C-BRTA. 2014. *Business Case for Corridor and Border Management Reform.* Unpublished.
- C-BRTA. *Business Case on Comprehensive Levying of Cross-Border Charges.* 2016. Unpublished.
- C-BRTA. *C-BRTA Mandate Review Proposal.* 2016. Unpublished.
- C-BRTA. *Feasibility Study into Conducting Joint Law Enforcement Inspections at Weighbridge Stations.* 2015. Unpublished.
- C-BRTA. *Major developments in the COMESA, EAC and SADC Tripartite Region that affects the C-BRTA.* 2016. Unpublished.
- C-BRTA. *Road User Charges in the SADC Region.* 2015. Unpublished.
- Chibira, E & Mokonyama, M. September 2014. *SADC Giant leap in transport development overdue.* Civil Engineering.
- COMESA, EAC & SADC Tripartite. 29 July 2015. *Multilateral Cross-Border Road Transport Agreement Report.*
- Cronje, J.B. April 2015. *The road transport sector in the context of the SADC Protocol on Transport, Communications and Meteorology.* Trade Law Centre for Southern Africa.
- Curtis, B. 2014. *Africa Road Corridors Handbook.* 3S Media.

Danish International Development Agency. November 2015. *Accelerating Trade in West Africa. Stage 1 Report. Summary.*

Department of Public Works. June 2016. *Beitbridge: Port of Entry Master Plan.* Department of Public Works.

Department of Home Affairs. September 2015. *Business Case report. Version 4.*

Department of Home Affairs. 2016. *BMA Project Management Office.*

Government Gazette. 31 March 1998. *Cross-border Road Transport Act No 4 of 1998.*

Hagerman, E. 2012. *Challenges to Regional Infrastructure Development.* July 2012. Development Bank of Southern Africa.

Japan International Cooperation Agency. 29 April 2014. *Innovative Approaches for Accelerating Connectivity in Africa – One Stop Border Post Development.* Japan International Cooperation Agency.

Khumalo, S. 2014. *Unlocking South African cross-border transport challenges: A case study of Beitbridge border post.* Proceedings of the 33rd Southern African Transport Conference. 7-10 July 2014. Cross-Border Road Transport Agency.

King, D. 2015. *Connecting ports with multi-modal transport corridors in Sub-Saharan Africa.* African Ports Evolution Conference. 2-4 November 2015.

Mdlankomo, B. October 2016. *Liberalising market access in the road freight industry within the SADC – an analysis.* Civil Engineering.

Monyepao, K. 2015. *The impact of non-operationalisation of the SADC Protocol and International transport agreements on cross-border road transport movement in the SADC region.* South African Transport Conference.

Mutambara, T. 2008. *Regional transport challenges within the Southern African Development Community and their implication for economic integration and development.* Southern African Yearbook.

Pearson, M. *Trade Facilitation in the COMESA-EAC-SADC Tripartite Free Trade Area.* TradeMark Southern Africa.

Phosa, M. 4 February 2016. *Why MCLI and this Corridor Matter.* Address to the MCLI Annual General Meeting, Stakeholder Forum and Transport Forum Special Interest Group.

South African Development Community. April 2012. *SADC Sector Plan Border Post Document.* SADC.

South African Development Community. 2012. *Regional Infrastructure Development Master Plan Transport Sector Plan.* SADC.

South African Development Community. September 2010. *Formulation of the SADC Regional Infrastructure Development Master Plan. Revised First Draft Plan.* SADC.

South African Development Community. June 2015. *Regional Infrastructure Development Master Plan. Implementation Status Report.* SADC.

South African Development Community. Meeting of the Committee of Ministers Responsible for Transport and Meteorology. 17-21 October 2016. *Draft SADC Regional Transport Corridors: Progress and Status Report.* SADC.

Southern African Development Community. Volume 1, 2015. *SADC @ 35 Success Stories.* SADC.

TradeMark Southern Africa. January 2014. *Economic Benefits of an Efficient North-South Corridor.* TradeMark Southern Africa.

Tralac. *RIDMP: Funding sets the SADC integration on course.* 28 August 2014.

Trans Kalahari Corridor Secretariat. June 2013. *Draft Report: Feasibility Study for Establishment of Truck Stops along the Walvis Bay Corridors.* Trans Kalahari Corridor Secretariat.

Transport World Africa. May/June 2014: *North-South Corridor.*

USAID. 2008. *Maputo Corridor Summary Report. A Transport Logistics Diagnostic Tool Study.*

World Bank. 2010. *Development in the landlocked regions of the North South Corridor.* Africa Finance and Private Sector Development. The World Bank Group.

ELECTRONIC SOURCES

AllAfrica. *Zambia: Kasumbelesa Upgraded, Proves effective.* Accessed electronically. <http://allafrica.com/stories/201510220168.html>

DefenceWeb. *Border Management Authority to be operational in April next year.* Accessed electronically.

http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=43577:border-management-agency-to-be-operational-in-april-next-year--minister-gigaba&catid=87:border-security&Itemid=188

ECDPM. *The Maputo Corridor. Regional Integration that Works.* Accessed electronically. <http://ecdpm.org/great-insights/africa-turning-point-mozambique-case/maputo-corridor/>

Fleetwatch. *Road Busters – Concessionaires get touch.* Accessed electronically. <http://fleetwatch.co.za/previous/magazines/Aug2004/17-Overload-LoadBusters.htm>

Foster, V. and Domingues, C., *Zambia's Infrastructure: A Continental Perspective.* Accessed electronically. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2011/03/17/000158349_20110317140326/Rendered/PDF/WPS5599.pdf

Maputo Corridor Logistics Initiative. *Promoting Partnership, Efficiency and Progress.* Accessed electronically. <http://www.mcli.co.za/mcli-web/mcli/aboutmcli.htm>

Maputo Corridor Logistics Initiative. *Promoting Partnership, Efficiency and Progress.* Accessed electronically. <http://www.mcli.co.za/mcli-web/mdc/border.htm>

Maputo Corridor Logistics Initiative. *Promoting Partnership, Efficiency and Progress.* Accessed electronically. <http://www.mcli.co.za/mcli-web/mdc/mdc.html>

Mapuva, J & Muyengwa-Mapuva, L. 2012. *The SADC regional bloc: What challenges and prospects for regional integration?* Accessed electronically. http://www.idd.org.za/images/stories/Ready_for_publication/sadcmapuva.pdf

Mbabane, L.S. Business News. 8 August 2014. *Red tape, graft retard Maputo Corridor.* Accessed electronically. <http://www.iol.co.za/business/news/red-tape-graft-retard-maputo-corridor-1732302>

Northern Corridor Roadside Stations. *NC: Member States committed to integrate RSS in all main infrastructure networks.* Accessed electronically. <http://www.roadsidestations.org/roadsidestations/northern-corridor-member-states-committed-to-integrate-roadside-stations-in-all-main-road-infrastructure-networks/>

Northern Corridor Transit and Transport Coordination Authority. Accessed electronically. <http://www.ttcanc.org/index.php>

Northern Corridor Transit and Transport Coordination Authority. *Northern Corridor commented for ongoing sustainable transport partnership and trade facilitation initiatives to transform the regional block from landlocked to land-linked.* Accessed electronically: <http://www.ttcanc.org/news.php?newsid=73>

Porto De Maputo. *The port of Maputo sets new record in cargo handling.* Accessed electronically: <http://www.portmaputo.com/the-port-of-maputo-sets-new-record-in-cargo-handling-2/>.

Port Finance International. *Walvis Bay expansion on track for 2017.* Accessed electronically: <http://www.portfinanceinternational.com/categories/emerging-economies/item/2030-walvis-bay-expansion-on-track-for-2017>)

Southern African Development Community. *Trade in Services.* Accessed electronically. (<http://www.sadc.int/themes/economic-development/trade-services/>)

Southern Times. *Zambia, Bots Kazungula Bridge takes shape.* Accessed electronically <http://southernafrican.news/2016/04/14/zambia-bots-kazungula-bridge-takes-shape/>

Southern Times. *SADC can do more to attract tourists.* Accessed electronically: <http://southernafrican.news/2016/07/29/sadc-can-do-more-to-attract-tourists/>

The Africa-EU Partnership. *One Stop Border Posts make their way in Africa.* Accessed electronically. <http://www.africa-eu-partnership.org/en/newsroom/all-news/one-stop-border-posts-make-their-way-africa>

The Presidency. Republic of South Africa. *President update on the work of the NEPAD Presidential Infrastructure Championing Initiative (PICI) chaired by President Jacob Zuma, Addis Ababa, Ethiopia.* Accessed electronically. <http://www.thepresidency.gov.za/pebble.asp?reid=18887>

The Southern Times. *Zimbabswe making progress with dry port.* Accessed electronically. <https://southernafrican.news/2016/06/14/zimbabwe-making-progress-with-dry-port/>

Times Zambia. *Zambia: Kasumbalesa Upgraded, Proves Effective.* Accessed electronically. <http://allafrica.com/stories/201510220168.html>

TradeMark Southern Africa. *Trade and Transport Facilitation Programme for COMESA-EAC-SADC region.* Accessed electronically. http://www.trademarksa.org/about_us/programme_news/tmsa-supports-trade-and-transport-facilitation-programme-comesa-eac-sadc-reg

TradeMark Southern Africa. *PPIU Update and Map.* Accessed electronically. <http://www.trademarksa.org/publications/tmsa-ppiu-update-and-map-north-south-corridor-aid-trade-road-projects>

Trans African Concessions. *Self-sufficient Load Control Centre aims to curb overloading in Mozambique*. Accessed electronically. <http://www.tracn4.co.za/self-sufficient-load-control-centre-aims-to-curb-overloading-in-mozambique/>

Trans African Concessions. *Weighbridges*. Accessed electronically. <http://www.tracn4.co.za/weigh-bridges.html>

Transport World Africa. 8 January 2015. *North South Corridor Africa's main vein*. Accessed electronically. <http://www.transportworldafrica.co.za/2016/01/15/north-south-corridor-africas-main-vein/>

Transport World Africa. 12 September 2013. *Corridors & Infrastructure in the COMESA-EAC-SADC Tripartite area*. Accessed electronically. <http://www.transportworldafrica.co.za/tag/north-south-corridor-aid-for-trade-programme/>

Venter, I. April 2014. *Trans-Kalahari corridor wants more truck stops as regional road freight increases*. Accessed electronically. http://www.engineeringnews.co.za/article/trans-kalahari-corridor-wants-more-truck-stops-as-regional-road-freight-increases-2014-04-29/rep_id:4136

Walvis Bay Corridor Group. *Home \ Corridors*. Accessed electronically. <http://www.wbcg.com.na/corridors/trans-kalahari-corridor.html>

Walvis Bay Corridor Group. Home \ About us \ Trans-Kalahari Corridor Secretariat. Trans-Kalahari Corridor Secretariat. Accessed electronically. <http://www.wbcg.com.na/about-us/trans-kalahari-corridor-secretariat.html>

World Trade Organisation. Aid for Trade Case Study on the Chirundu One Stop Border Post. Accessed electronically. <https://www.oecd.org/aidfortrade/47379298.pdf>.