

### Analytical Comparative Transport Cost Study Along the Northern Corridor Region



prepared for:

**Northern Corridor Transit Transport Coordination  
Authority (NCTTCA)**

prepared by:

**CPCS Transcom Limited**

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## Appendix A: Terms of Reference

### TERMS OF REFERENCE FOR AN ANALYTICAL COMPARATIVE TRANSPORT COST STUDY ALONG THE NORTHERN CORRIDOR REGION

#### I BACKGROUND

1. The transport corridor linking the Kenyan seaport of Mombasa, on the Indian Ocean coast, with Uganda, Rwanda, Burundi, the Democratic Republic of Congo and Southern Sudan is referred to as the Northern Corridor. It is the busiest corridor in East and Central Africa handling in the region of 15 million tons of import/export cargo through the Port of Mombasa of the countries mentioned above. The corridor also handles a substantial volume of intra-regional trade estimated to be over 3 million tons per annum.
2. The Northern Corridor is a multi-modal transport corridor, combining surface modes of transportation, which include road, rail, waterways and pipeline. The corridor route network extends from Mombasa and links major urban centres, which include Nairobi, Kampala, Kigali, Bujumbura, Goma, Bukavu, Beni, Bunia and Kisangani. The Corridor also links Mombasa to Northern Tanzania, South Sudan and Ethiopia.
3. The institutional framework for the management of the corridor has been established by the Northern Corridor Transit Agreement (NCTA), a Treaty signed by the countries of Kenya, Uganda, Rwanda, Burundi, and DR Congo, for the facilitation of transit traffic and trade along the Northern Corridor. The Treaty created the Transit Transport Coordination Authority of the Northern Corridor (NCTTCA), a Council of Ministers in charge of transport from the signatory countries, as the supreme body for the implementation of the dispositions of the Treaty.
4. The NCTA provides the basic framework for cooperation among the contracting states in the facilitation of trade and traffic between their respective territories to and from the sea through the port of Mombasa. Prior to the treaty, transit trade operated on the basis of bilateral agreements, which did not offer a coherent framework for standardized services and transit trade procedures across the different member State territories
5. The Northern Corridor transport systems are dominated by road and rail transport modes. Road transport accounts for over 70% of all freight and rail transport accounts for less than 30%. Air transport is predominantly for passenger traffic between the member states of the Northern Corridor. However, due to the poor state of road infrastructure in the DRC and the lack of a rail network, goods are transported by rail/road up to Goma, Beni or Bunia and then airlifted to Kisangani, Kindu and other destinations within the eastern part of that country. As a result consumer prices are 3 to 4 times more expensive in places like Kisangani and Kindu.

## II PROBLEM STATEMENT

6. High logistics costs resulting in high cost of doing business. This affects the countries abilities to be competitive in the global market and mitigates against the eradication of poverty. There is need to fully understand and to quantify these costs with a view to designing policies and programs for their minimization or elimination. It is indeed known that a proportion of 35 to 45 % of CIF value of imported goods represents logistics costs.
7. It is estimated that land-locked developing countries suffer, on average, 50% higher international transport costs than their neighboring transit/coastal countries. There are several possible reasons for this, arising from border delays or transport coordination problems, uncertainty and delays creating higher insurance costs, and direct charges that may be made by the transit country.
8. Most of the East African Countries depend on transit trade, and particularly the most landlocked of them, are confronted with constraints that increase the logistics costs of their international trade.
9. The system inefficiencies and resulting high transport cost along the Northern Corridor have been identified as a major cause of high costs of production and marketing of goods, resulting in high consumer prices and the escalation of poverty. In addition, the international trade competitiveness of the sub-region is impacted negatively.
10. An optimal transport system would be an efficient system that minimizes total transport cost to the country in terms of economic resources, and total financial cost to the end user. System inefficiencies will lead to high transport cost. High costs should therefore be regarded as a symptom of system inefficiencies.
11. As regards the Northern Corridor transport routes, considering the long distance to be covered and the ever increasing volumes of cargo transported, it is high time that member States reviewed their policies that would result in an efficient and cost effective transport system.
12. However, in spite of the general knowledge that transport costs are high, policy makers, the Trade and Transport Community do not have a comprehensive document at their disposal identifying the factors contributing to high costs in order to formulate policies and measures to tackle such factors.
13. In addition to transport costs, member States of the Northern Corridor would like to have a good understanding of the costs of provision and maintenance of transportation infrastructure, relating to road, rail and pipeline modes. This will help inform investment decisions relating to these modes of transport, as member States strive to improve and expand transport infrastructure and facilities.
14. In fulfilment of the recommendation of the 15th meeting of the Authority, the study should avail to Northern Corridor Member States, a useful guidance for policy formulation in terms of investment in surface transport infrastructure.
15. For the purpose of this study, it is therefore useful to define logistics costs in terms of the following elements:
  - i. Shipping costs (maritime)
  - ii. Transshipment costs
  - iii. Port terminal costs (Handling, documentation etc.. )
  - iv. Inland route costs (Freight)

- v. Inland Terminal costs
- vi. Vehicle operating costs along the Corridor
- vii. Inventory costs due to unreliable delivery systems or inefficiencies along the Corridor logistics chain.
- viii. Any other costs affecting the movement goods and traffic along the Corridor

### III OBJECTIVES OF THE STUDY

The Objectives of the study are as follows:

#### Overall Objective

16. To Enable the Northern Corridor Transit Transport Coordination Authority to reformulate policy that would result in the reduction of high transport cost along the Corridor and to guide investment in the transport infrastructure, the study will
  - Determine the references of the total transport cost, including the invisible costs, along the Northern Corridor,
  - Undertake a comparative assessment of transport costs by comparing different Transport Corridors in Africa and elsewhere
  - Develop different strategies and necessary measures to improve the performances of the Corridor.

#### Specific Objectives

17. The Study will have the following specific objectives:
  - i. To quantify costs throughout the logistics chain along the Northern Corridor
  - ii. Provide comparison of the costs and freight rates in relation to the Central Corridor and other Corridors in Southern Africa, Asia and Latin America.
  - iii. To Conduct an analytical study of total logistics costs along the Northern Corridor including internal costs to carriers and external costs (mainly public facilities costs) but also with consideration to congestion, delays, storage, inventory and accidents.
  - iv. Based on the assessment, to propose a prioritized set of policy, institutional, financial and investment measures to reduce transport costs and improve efficiency along the corridor;
  - v. To quantify vehicle operating costs, as well as other factors contributing to transit costs along the Northern Corridor in comparison with the Central Corridor;
  - vi. Benchmarking of costs for the purposes of monitoring changes as result of policy reforms and the implementation Northern Corridor Programs and activities;
  - vii. To Compile and analyse data on intra regional trade freight volumes and logistics costs;
  - viii. To carry out an analysis in terms of relative reliability and safety of the road/rail and pipeline modes of transport.
  - ix. To use the findings of the study to propose necessary policy changes with the view to cutting down costs;

### IV DESCRIPTION OF THE TASKS (SCOPE OF WORK)

18. The study objectives listed above already, to some extent, describe the scope of work of the study. Given the above, the following are the scope of the work (activities) to be undertaken:
  - i. Develop an origin-destination flow and tariff matrix. For the dominant export and import commodities, collect information on volume of movement, by mode, by time, through the logistics chain (including origin, points of transshipment, delivery to warehouses and the final

consumption destination). For each link in the chain, collect information on freight tariff charged by different operators and forwarding agents. Examine cost of operation for domestic and international operators (including sea freight charge, port charges, rail and road transport charges, storage charge, financial cost of tied capital, handling cost, etc.). The information should be collected for:

- (i) International freight-volume and cost from point of origin to the port and from the port to the warehouse at destination;
- (ii) Domestic movement-volume and cost of delivery and storage from warehouse to the ultimate consumer.

The data on cost of operation should reflect "generalized cost" and include (besides tariff): costs imposed due to delays at ports, border posts, transshipment, storage and handling, reliability of service and other cost involved in moving goods from the supplier/producer to the point of final consumption.

- ii. Analyse traffic flows and volumes along the Northern Corridor Transport Chain:
  - Shipping Lines (Maritime lines)
  - Ports (Mombasa and Dar Es Salaam)
  - Railways (KRC, TRC and URC)
  - Roads (TTCA transport Road network)
  - Inland ports and Inland Container Depots
  - Bonded Warehouse
  - Pipeline transport
- iii. Collect information on operational characteristics and operating cost by vehicle type.
- iv. Examine relative share and the level of competition within and among different road transport operators from different countries of Northern Corridor Countries and how this affects freight costs.
- v. Compare external cost of rail and truck freight transport to estimate the price changes that would result from full-cost pricing and provide a rationale for policy measures for a level-field rail-truck competition.
- vi. Review the policy framework transport sector and identify measures to capture full benefits of the movements using the Northern corridor. Assess the direct and indirect impact of governments on transport industry- through regulatory and licensing bodies.
- vii. Analyse traffic and trade flows (current and projection) concerning intraregional (Inter-State) trade among the Northern Corridor Countries and international trade through main regional ports gateway.
- viii. Determine regional and international trade imbalance as well as the movement of container and its related cost (demurrage charges) and specify how this affect transport cost and tariffs.
- ix. Analyse and quantify various en-route delays on operating cost and determine its impact on the freight cost.
- x. Separate in-bound and out-bound costs
- xi. Quantify the cost of delays (In this case the Study will show the impact transit time and

vehicle operating cost)

- xii. Prepare an analytical addendum on hidden transport costs along the Northern Corridor
- xiii. Based on the above, develop a prioritized list of measures to reduce transport cost and improve efficiency and reliability along the corridor. Make specific reference to the role of trade and transport facilitation, technology and improvements in communications in mitigating transport constraints and containing high costs.

## METHODOLOGY

19. The Consultant should propose a working methodology detailing main stages of the study. This should include among others:
  - i. Review the existing literature on the subject, at the secretariat, from member States, national parastatal institutions/companies. Consultations with regional and specialized organisations are required.
  - ii. The consultant is expected to undertake field visits within member States and other relevant sites during the study.
20. A workshop should be organized by the consultant after submitting the draft final report in order to widely disseminate the findings and recommendations of the study and to review the draft final Report. The workshop should be attended by approximately thirty participants (6 participants per Northern Corridor Member State) and should be sponsored. The estimated budget for the workshop is approximately US dollars thirty (30) thousands.
21. The Final deliverables of the Study will comprise the following (hard copies and electronic) in quantities indicated in the section on reporting requirements:
  - Northern Corridor Transport Cost Study -Volume I Executive Summary in Publishable Format -Offset colour printing
  - Northern Corridor Transport Cost Study -Volume II
  - Main Report in Publishable Format -Offset colour printing
  - Northern Corridor Transport Cost Study -Appendices

## VII DURATION OF THE STUDY AND ESTIMATED KEY PROFESSIONAL STAFF

22. The Consultant shall avail services of well qualified, experienced and competent personnel for carrying out the study. The estimated input in terms of manpower is fourteen (14) man/months and should include at the minimum, the following key professional staff:
  - 1) Transport Specialist (Team Leader)
  - 2) Transport Economist
  - 3) Logistics Expert
23. The Consultant shall commence provision of services within 30 calendar days of the effective date of the contract. The effective date shall be the date of signature of consultancy contract agreement and completed within nine (9) months from the date of the signature of contract
24. The following tentative time schedule shall be observed in carrying out the study.

Signature of the Contract

D

Commencement of Services	D+ One (1) month
Inception report	D+ Two (2) months
Interim Report	D+ Five (5) months
Draft Final Report	D+ seven (7) months
Workshop and Comments	D+ eight (8) months
Final Report	D+ nine (9) months

## VIII REPORTING REQUIREMENTS

25. The Consultant shall prepare and submit the following reports. All reports shall be submitted in equal numbers in English and French language prepared on metric size paper A4.

### **Inception report**

26. An Inception Report shall be submitted within two months of the date of signature of contract. The Inception Report shall give a brief description of staff deployment, methodology employed in undertaking the assignment, programmes of works of all major activities, summary of initial findings, problems, and details of works to be executed and such comments deemed necessary. After incorporating the NCTTCA comments, the Inception report will be considered as part and parcel of the Terms of Reference. This report will be submitted in six (6) hard copies and six (6) soft copies on CD ROM's in PDF format.

### **Interim Report**

27. Three months after the submission of inception report, the Consultant shall prepare a progress report in six (6) hard copies and (6) soft copies on CD ROM's in PDF format, to submit to Northern Corridor Secretariat which contains progress achieved in each milestone, difficulties in the progress of the study and remedial measures suggested to overcome the difficulties.

### **Draft Final Report**

28. Seven months after the commencement of services of the Study, the Consultant shall submit a draft final report. In addition to the Executive Summary of all findings and recommendations, the Final Draft Report shall contain all the outputs in terms of findings, analyses' results, and recommendations, and shall also contain all supporting materials. These reports will be submitted in thirty (30) copies (hard and soft).
29. The Northern Corridor Transit Transport Coordination Authority Secretariat shall submit comments on the report to the Consultant within thirty (30) days from the receipt of the report. The consultant will also be required to organize, within the same period, a workshop and to present the draft final report during the said workshop in order to receive comments directly from key stakeholders, as well as the Member States.

### **Final Report**

30. After incorporating the comments, the Consultant shall submit the final Reports within one month from the date of receiving the comments. These reports in thirty (30) hard copies offset color printing and thermal binding and thirty (30) soft copies on CD ROM's in a format acceptable shall be submitted to the NCTTCA at the end of the assignment. The reports shall be in a fully publishable format.



## **IX ORGANIZATION AND MANAGEMENT OF THE STUDY**

### **Implementing Organ**

31. The study will be undertaken under the supervision of the TTCA Secretariat, which is the implementing agency.
32. The Northern Corridor Secretariat, in collaboration with Ministries in charge of transport of all member States shall designate a focal point within each country. The latter will play the role of national coordinating officer of the study.

## **X PARTIES OBLIGATIONS**

### **Scope of the Consultant's Service**

33. The Consultants shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultants shall always act, in respect of any matter relating to this Terms of Reference or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-consultants or third parties.

### **Northern Corridor (NCTTCA) Obligations**

34. The NC TTCA Secretariat in collaboration with Member States of the Northern Corridor, will put to the disposal of the Consultant any existing documentation and/or reports pertaining to the modes of transportation, likely to facilitate the smooth accomplishment of the mission. The NC TTCA shall also facilitate the organization of the workshop(s).
35. The Member States Authorities will endeavour to intervene whenever possible in order to facilitate the gathering of information as well as the access into technical and administrative offices concerned in view to supporting the Consultant in his work.

## Appendix B: Results from Kick-Off Meeting

CPCS met with the NCTTCA staff on Wednesday, 18<sup>th</sup> November and Friday, 20<sup>th</sup> November, 2009, during our Inception Mission to Kenya. The following points were noted during the meetings which had an impact on our approach and methodology to undertake the study.

### ***Consideration of domestic, regional and international traffic***

The TOR required that CPCS develop an origin-destination flow matrix for dominant import and export volumes through the logistics chain along the Northern Corridor (TOR, Scope of Work, 18, i). The NCTTCA and CPCS Team discussed the approach to development of the origin/destination traffic matrix in order to obtain agreement on definitions insofar as 'domestic' traffic is concerned. It was agreed that the focus on the study would be primarily on the traffic flow of cross-border traffic between two countries, rather than the traffic flow of domestic goods produced and transported exclusively within one country's borders.

The reason for this approach is two-fold: i) the objective of the study is to concentrate on the logistics costs supported by the landlocked countries, rather than the internal (domestic) challenges to transporting general goods from one town to another within the same country; and ii) there is likely to be a major paucity of data regarding domestic O/D traffic within borders. It was agreed, however, that the exception to this rule is the case of Kenya, where much of what the country produces and consumes is imported / exported via the Port of Mombasa and other borders, and therefore is a critical component of the Northern Corridor analysis.

### ***Coordination with other Consulting Studies underway***

There are two other consulting studies underway which deal with transportation and transit logistics across the Northern Corridor region. In correspondence prior to the Kick-Off meeting, the NCTTCA urged the CPCS Team to discuss potential means of collaboration with the two other studies to ensure synergies, and to avoid overlap in efforts. At the same time, the NCTTCA emphasized that they would hold CPCS strictly to the TOR for this study and that these would not be adjusted. Prior to the Inception Mission, the CPCS Team spent considerable time discussing coordination of work with the two other consulting firms, Louis Berger and Nathan Consulting.

With respect to the Louis Berger Master Plan study (also funded by the African Development Bank), it was agreed that there was little overlap with the work of our study. However, it was agreed that the infrastructure investment and maintenance costs required as *inputs* to deliver part of our TOR would be provided by Louis Berger. The task to establish long-term cost of provision and maintenance of infrastructure relating to road, rail and pipeline modes of transport was included in the *initial* draft of the TOR for this study (version May 2008). However, this task was removed from the *final* TOR of the study (January 2009), with the understanding that the specific task of analysing and estimating the cost of infrastructure provision and maintenance was included in another study (the Louis Berger Master Plan study). While the task to develop these costs ourselves was removed from our TOR, we still would have required the information as an input to our study to estimate infrastructure investment and maintenance costs.

We agreed to include the information from Louis Berger when available. However, there was a recognised risk that the Louis Berger infrastructure cost information would not be available in time to coincide with the timing of our work (which in practice was the case – the

information is not yet available as at June 2010). For this reason we in parallel agreed to try and obtain core infrastructure maintenance costs from the public authorities along the Northern Corridor. This data would include capital expenditures for construction, rehabilitation and maintenance of infrastructure along the corridor.

With respect to coordination regarding the Nathan Consulting study (funded by USAID), there is some potential for overlap and collaboration. At the Kick-Off Meeting, the CPCS Team agreed with the NCTTCA that we would coordinate on an 'operational level' with Nathan Consulting, with technical experts sharing their approaches and information. In fact, a preliminary meeting was held in person in Nairobi with the Team Leader for the Nathan study the week following the Kick-Off meeting. The preliminary areas for collaboration were agreed as followed:

- Sharing of Inception Reports to ensure clarity and identify areas for collaboration once the approach is fully complete
- Nathan is establishing a collective server to host and share all documents / reports obtained
- CPCS will share a list of stakeholders interviewed as part of the Study
- The next time the two Team Leaders are in the field they will meet to discuss potential sharing of information and methodology
- We would plan a meeting towards the end of study to discuss and share policy recommendations.

## Appendix C: Stakeholders Interviewed (November 2009 – May 2010)

### Kenya

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
A O Bayusuf & Sons Transporters	Transporter	Mr. Hassan Awadhi Bayusuf	Director	<a href="mailto:info@aobayusuf.co.ke">info@aobayusuf.co.ke</a>	041 2223249
A.K. Abdulgani Transporters	Transporter	Mr. Mohamed Rafik Pasta	Managing Director	<a href="mailto:info@abdulganiibrahim.com">info@abdulganiibrahim.com</a>	0722 516 295
Ali Transporters	Transporter (small)	Mr. Ali	Director	n/a	n/a
Andy Forwarders Ltd.	Forwarding & Clearing Agent	Mr. Ben Kioko	Operations Manager	<a href="mailto:bkioko@andy.co.ke">bkioko@andy.co.ke</a>	020827084
Awale Transporters	Transporter	Mr. Abdi Awale	Director Operations	<a href="mailto:awaletransporters@africaonline.co.ke">awaletransporters@africaonline.co.ke</a>	0722 412668
Ayoob Noor Transporter	Transporter (small)	Abdulrazer Ayoob	Director	n/a	n/a
Central Furniture & Transporters	Transporter	Tajinder Singh Pandhal	Director	<a href="mailto:pandhal@iconnect.co.ke">pandhal@iconnect.co.ke</a>	0733412246
Corrugated Group (Nyumba)	Shipper	Mr. Jitendra Shah Mr. Akram Mohamed	Shah: Director Mohamed: Manager	<a href="mailto:jitu@nyumba.com">jitu@nyumba.com</a> <a href="mailto:csi@nyumba.com">csi@nyumba.com</a>	0722 204 848
East African Packaging Industries Ltd.	Shipper	Mr. Hassan Abubakar	Group Export Manager	<a href="mailto:ha@eapi.co.ke">ha@eapi.co.ke</a>	0203955333
Eveready East Africa Ltd.	Shipper	Mr. Steve Smith	Managing Director	<a href="mailto:Steve.smith@eveready.co.ke">Steve.smith@eveready.co.ke</a>	0202216139
Fresh Produce Exporters Association of Kenya	Shipper	Dr. Stephen Mbithi	CEO	<a href="mailto:info@fpeak.org">info@fpeak.org</a>	0204451488
Frigoken Ltd.	Shipper	Karim Dostmohamed	Director	<a href="mailto:karim@frigoken.com">karim@frigoken.com</a>	020 8560096
Grain Bulk Handlers	Specialized Company	Mr. Aziz M. Ramzan	Terminal Manager	<a href="mailto:aramzan@grainbulk.com">aramzan@grainbulk.com</a>	0412230183

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Homegrown Kenya Ltd. And Finlays Tea	Shipper	Mr. Flavio Pelizzoli, Homegrown/Finlays	Logistics Consultant	Flavio.Pelizzoli@f-h.biz	0728 633089
Interfreight Kenya	Clearing and Forwarding	Mr. Nainesh Patel	Nairobi Branch Manager	<a href="mailto:Nainesh.patel@interfreight2000.com">Nainesh.patel@interfreight2000.com</a>	0202055578
Jiwani Impex Ltd.	Transporter	Mr. Mohammed Yousuf	Managing Director	<a href="mailto:jiwaniimpex@gmail.com">jiwaniimpex@gmail.com</a>	0722412081
Kenfreight	Clearing, Forwarding and Transport	Mr. Paul Bletterman Mrs. Fatma Omar	CEO, Manager	<a href="mailto:pbletterman@kenfreight.co.ke">pbletterman@kenfreight.co.ke</a> <a href="mailto:fomar@kenfreight.co.ke">fomar@kenfreight.co.ke</a>	041 2316800
Kenoil Kobil	Private (Petroleum sector)	Mr Steve Muthuma	Group Trading & Supply Manager	<a href="mailto:muthuma@kenkob.co.ke">muthuma@kenkob.co.ke</a>	020318916
Kenya International Freight Warehousing Association <sup>1</sup>	Private Sector Association	Mr. John Mathenge	CEO	<a href="mailto:jmkibs@yahoo.com">jmkibs@yahoo.com</a>	0722990719
Kenya Maritime Authority	KMA	Mr. John Omingo	General Manager	<a href="mailto:info@maritimeauthority.co.ke">info@maritimeauthority.co.ke</a> <a href="mailto:omijod@yahoo.com">omijod@yahoo.com</a>	041 231 8398/9
Kenya Ministry of Transport	Public	Mr. Duncan Hunda	Senior Economist	<a href="mailto:hundagd@yahoo.com">hundagd@yahoo.com</a>	0721356870
Kenya National Highways Authority	Public	Eng. Samuel Okech Omer	General Manager, Special Projects	<a href="mailto:Samuel.omer@kenha.co.ke">Samuel.omer@kenha.co.ke</a>	0208013842
Kenya National Single Window System Project	KRA / KPA	Mr Alex Kabuga	Project Implementation Team Leader	<a href="mailto:akabuga@kpa.co.ke">akabuga@kpa.co.ke</a> / <a href="mailto:alex.kabuga@kra.go.ke">alex.kabuga@kra.go.ke</a>	0722526383
Kenya Pipeline Company	Pipeline	Mr. Tom K. Mailu	Chief Planning Officer	<a href="mailto:Tom.mailu@kpc.co.ke">Tom.mailu@kpc.co.ke</a>	0733824917
Kenya Ports Authority	KPA	Mrs Mwanamaka A. Mabruki	Corporate Development Manager	<a href="mailto:mmabruki@kpa.co.ke">mmabruki@kpa.co.ke</a>	0720 389873

<sup>1</sup> Mr John Mathenge is also Regional CEO for the Federation of East African Freight Forwarders Association

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Kenya Ports Authority	KPA	Samuel O Helu	Principal Planning Officer	<a href="mailto:sohelu@kpa.co.ke">sohelu@kpa.co.ke</a>	0721155547
Kenya Ports Authority	KPA	Eng. Joseph O. Atonga	Chief Operations Manager	<a href="mailto:jatonga@kpa.co.ke">jatonga@kpa.co.ke</a>	0720312211
Kenya Ports Authority	KPA	Mrs. Evelyn Umazi Mwamure	Manager Conventional Cargo	<a href="mailto:echibule@kpa.co.ke">echibule@kpa.co.ke</a>	0727254590
Kenya Ports Authority	KPA	Mr. James O. Rarieya	Container Terminal Manager	<a href="mailto:Krarieya@kpa.co.ke">Krarieya@kpa.co.ke</a>	0722559655
Kenya Ports Authority	KPA	Mr. K. Muema	Logistics Manager	<a href="mailto:kmuema@kpa.co.ke">kmuema@kpa.co.ke</a>	0724 253085
Kenya Ports Authority	KPA	Mohamed Yural Faruk	Senior Statistical Officer	<a href="mailto:mfaruk@kpa.co.ke">mfaruk@kpa.co.ke</a>	0722906439
Kenya Railways	KRC	Eng. Vitalis A. Ong'ong'o	Deputy Managing Director	<a href="mailto:dmd@kenyarailways.co.ke">dmd@kenyarailways.co.ke</a>	0724406595
Kenya Railways	KRC	Eng. Maxwell K. Mengich	Infrastructure Manager	<a href="mailto:mmenigch@krc.co.ke">mmenigch@krc.co.ke</a>	07023939324
Kenya Railways	KRC	Mr. George Muia	Systems Administrator	<a href="mailto:georgemuia@yahoo.com">georgemuia@yahoo.com</a>	
Kenya Railways	KRC	Eng. Joster Imbuchi	General Manager	<a href="mailto:jimbuchi@co.ke">jimbuchi@co.ke</a>	
Kenya Revenue Authority (Mombasa)	KRA	Mr. Kamau Ng'ang'a	Senior Assistant Commissioner – Customs	<a href="mailto:Kamau.ng'ang'a@kra.go.ke">Kamau.ng'ang'a@kra.go.ke</a>	0412225811
Kenya Revenue Authority (Nairobi)	KRA	Alice M. Ndung'u	Client Services Project – Reforms	<a href="mailto:Alice.ndungu@kra.go.ke">Alice.ndungu@kra.go.ke</a>	0723703157

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Kenya Revenue Authority (Nairobi)	KRA	Mr. Lawrence Siele	Assistant Commissioner – Reforms – Customs	<a href="mailto:Lawrence.Siele@kra.go.ke">Lawrence.Siele@kra.go.ke</a>	0722222388
Kenya Revenue Authority (Nairobi)	KRA	Mr. Duncan Mutithis			072104300716
Kenya Shippers Council	Private Sector Association	Mr. Gilbert Langat; Ms. Christine Munywe (Asst. Executive Officer)	CEO	<a href="mailto:Gilbert.langat@kenyashippers.org">Gilbert.langat@kenyashippers.org</a> <a href="mailto:Christine.munywa@kam.co.ke">Christine.munywa@kam.co.ke</a>	020 3746005
Kenya Ships Agents Association	Private Sector Association	Mr. James Knight	Chair	<a href="mailto:jknight@africaonline.co.ke">jknight@africaonline.co.ke</a>	0412313776
Kenya Transport Association	Private Sector Association	Eunice Mwanyalo	Executive Officer	<a href="mailto:Eunice@ktamsa.com">Eunice@ktamsa.com</a>	0412312958
Kidima Enterprises Ltd.	Clearing and Forwarding	Mr. George W. L. Kidima	Managing Director	<a href="mailto:kidima@kenyawe.com">kidima@kenyawe.com</a>	0722411837
Leo Hauliers	Transporter (small)	Altaj Alibhai	Manager	<a href="mailto:leohauliers@yahoo.com">leohauliers@yahoo.com</a>	0722704033
Linton Park Plc (Also Eastern Produce Kenya)	Shipper	Warren Spring	Regional Manager	<a href="mailto:wspring@lintonpark.co.ke">wspring@lintonpark.co.ke</a>	0204440399
Long Distance Truck Drivers Welfare Association	Private Sector Association	Mr Githire and Mr Peter Mwaura	Manager, Legal Officer	<a href="mailto:kenyatruckdrivers@yahoo.com">kenyatruckdrivers@yahoo.com</a>	0729490985
Mabati Mills Rolling	Shipper	George Arodi	Export Managers	<a href="mailto:arodi@mabati.com">arodi@mabati.com</a>	733 728874
Mabati Mills Rolling	Shipper	Mr. Stephen Ndege	Manager Trade and Strategic Affairs	<a href="mailto:ndege@mabati.com">ndege@mabati.com</a>	0206427222
Maersk	Shipping Line	Mandeep Singh	GM, Operations	<a href="mailto:kenopsmng@maersk.com">kenopsmng@maersk.com</a>	0721492929
Maritime Freight Co Ltd.	Clearing, Forwarding, Shipping and Transportation	Mr. P. J. Shah	Managing Director	<a href="mailto:md@marficol.com">md@marficol.com</a>	0412220075

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Mbaraki Warehouse & Clearing	Clearing and Customs Bonded Warehouse	Mr. Joseph Otiengo	General Manager	otieno@mbaraki.com	n/a
Ministry of Roads and Public Works	Public	Mr. J. M. Kimani	Principal Economist, Planning, Roads Dept.	<a href="mailto:mukimani@yahoo.com">mukimani@yahoo.com</a>	0202727327
Munir Thabit	Private Sector	Munir Thabit	Group Finance Officer	mnr.thabit@gmail.com	0720810999
Musthafa Enterprises Limited	Transporter	Mr. Jean-Baptiste Gasangwa	General Manager	<a href="mailto:musthafa@africaonline.co.ke">musthafa@africaonline.co.ke</a>	0722410272
Nakumatt Supermarket	Shipper / Importer	Karanja Mwatha	Operations Manager	<a href="mailto:ikaranja@nakumatt.net">ikaranja@nakumatt.net</a>	020 3599991
Ngozi Limited	Forwarding & Clearing Agent	Mr. John Gardner	Manager	<a href="mailto:info@ngozi.co.ke">info@ngozi.co.ke</a>	0729749363
Pelse Transporters	Transporter (small)	Mr. Else Gevers	Director	<a href="mailto:elskigome@yahoo.com">elskigome@yahoo.com</a>	0722 648697
Port Management Association of East and Southern Africa (PMAESA)	Port Management Association	Jemimah Mwanyumba	Project Development Officer	pmasea@pmasea.org	412223245
Port Management Association of East and Southern Africa (PMAESA)	Port Management Association	Mr. Jerome Ntibarekerwa	Secretary General	<a href="mailto:jntibarekerwa@pmaesa.org">jntibarekerwa@pmaesa.org</a>	041 2223245
Rift Valley Railway	RVR	Mr. Ishmael K. Ranote	Planning and Control Manager	<a href="mailto:ishmael.ranote@rvr.co.ke">ishmael.ranote@rvr.co.ke</a>	0202044476
Rift Valley Railway	RVR	Mr. James K Siele	General Manager (Eastern)	<a href="mailto:James.siele@rvr.co.ke">James.siele@rvr.co.ke</a>	020341164
Rift Valley Railway	RVR	Ms. Jackline Maina	ICD Officer (KLI, Mombasa)	<a href="mailto:Jackline.maina@rvr.co.ke">Jackline.maina@rvr.co.ke</a>	0721634588



Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Rift Valley Railway	RVR	Mr. James Q. Ng'ang'a	Ag. Chief Marketing & Commercial Manager	<a href="mailto:James.gnganga@rvr.co.ke">James.gnganga@rvr.co.ke</a>	0202044476
Rift Valley Railway	RVR	Mrs. Dorothy N. Muluka	Business Department	<a href="mailto:Dorothy.muluka@rvr.co.ke">Dorothy.muluka@rvr.co.ke</a>	020 2044476
Rift Valley Railway	RVR	Mr. Sammy H. Gachuhi	Concession Compliance Manager	<a href="mailto:sammy.gachuhi@rvr.co.ke">sammy.gachuhi@rvr.co.ke</a>	
Rift Valley Railway	RVR	Mr. James G. Nyambari	General Manager	<a href="mailto:James.nyambari@rvr.co.ke">James.nyambari@rvr.co.ke</a>	720630043
Roadtainers Transporters	Transporter	Mr. Ibrahim Pasta	Managing Director	<a href="mailto:info@roadtainers.co.ke">info@roadtainers.co.ke</a> / <a href="mailto:ipasta@roadtainers.co.ke">ipasta@roadtainers.co.ke</a>	0721600299
Rongai Transporters	Transporter	Vanessa Edwards	Operations Director	<a href="mailto:rongiaws@wananchi.com">rongiaws@wananchi.com</a>	0733 740926
Samsy International	Forwarding / Clearing	Mr. Sam Njoroge	CEO	<a href="mailto:info@samsyinternational.com">info@samsyinternational.com</a>	020828653
SDV Transami	Transporter and Forwarder Agent	Mr. Nicolas Dupart	General Manager – Mombasa	<a href="mailto:Nicolas.dupart@bollore.com">Nicolas.dupart@bollore.com</a>	041 3434051
Seaforth Shipping (Kenya) Ltd.	Ship's Agent	Mr. James Knight	Executive Director	<a href="mailto:jknight@africaonline.co.ke">jknight@africaonline.co.ke</a>	0412313776
Shell Limited (Kenya)	Private (Petroleum sector)	Mr Peter Murungi	Terminal Manager – Coast	<a href="mailto:Peter.p.murungi@ksl.shell.com">Peter.p.murungi@ksl.shell.com</a>	0412495041
Shell Limited (Kenya)	Private (Petroleum sector)	Mr Jimmy Mugerwa	Country Chairman – Kenya	<a href="mailto:Jimmy.j.mugerwa@ksl.shell.com">Jimmy.j.mugerwa@ksl.shell.com</a>	0203205555
Simba Commodities	Shipper	Mr. Yusuf Alibhai	Director	<a href="mailto:Yusuf.alibhai@mansugar.co.ke">Yusuf.alibhai@mansugar.co.ke</a>	041 2312596
Transpares (Kenya) Transporters Ltd.	Transporter	Mr. Abdulgani Pasta	Director	<a href="mailto:abdulgani@transpares.com">abdulgani@transpares.com</a>	0722537050
United Clearing	Clearing & Forwarding	Mr. Hitesh Kara	Manager	<a href="mailto:Hitesh@unitedclearing.co.ke">Hitesh@unitedclearing.co.ke</a>	041 2225882

Company Name	Type of Company	Contact Person	Title	Email	Phone number (Country code 254)
Vegpro	Shipper	Johnnie McMillan	Group Operations Director	<a href="mailto:johnnie@vegpro-group.com">johnnie@vegpro-group.com</a>	020822831
Waki Clearing	Clearing and Transportation	Elizabeth Wanjiru	Operations Manager	<a href="mailto:waki@clearing.co.ke">waki@clearing.co.ke</a>	0203577470
WEC Lines	Shipping Line	Roger Dainty	General Manager	<a href="mailto:Roger.dainty@ke.wecline.com">Roger.dainty@ke.wecline.com</a>	0412311071
World Bank SSATP	Public	Jean Kizito Kabanguka	SSATP Regional Coordinator East & Southern Africa	<a href="mailto:jkabanguka@worldbank.org">jkabanguka@worldbank.org</a>	0203226337
World Food Programme	Shipper	Dragica Pajevic	Logistics Officer	<a href="mailto:Dragica.pajevic-alp@wfo.org">Dragica.pajevic-alp@wfo.org</a>	0207622805

### Uganda

Company Name	Type of company	Contact Person	Title	Email	Phone number (Country code 256)
Afri-Freight (U) Ltd	Transporter	Mr. Francis K' Odongo	n/a	n/a	0782- 889 750
Aponye (U) Ltd	Transporter	Mr. Vicent Olwenyi	Transport Manager	n/a	0752- 755 993
Appliance World Ltd	Shipper	Ms. Miriam	-	n/a	0772 622 706
Bata Shoe Company (U) Ltd	Shipper	Ms. Esta Mamboka Mr. Mulundu Patrick	Merchandise Department	n/a	0752- 8191030&0772/0759 - 311 016
Bolax Enterprise Ltd	Transporter	Mr. Boaz Mategyero	Director	<a href="mailto:bolax@infocom.co.ug">bolax@infocom.co.ug</a>	0772- 200 183
Britania Allied Industries Ltd	Shipper	Mr. Ssessanga / Jagadish Kumathe	/ General Manager- Commercial	<a href="mailto:jagadish@dawda.co.ug">jagadish@dawda.co.ug</a>	0772- 453 727
DESBRO (U) LTD	Shipper	Mr. T. S. Kumar		<a href="mailto:desbro@desbro.co.ug">desbro@desbro.co.ug</a>	0312- 260 296
DHL (U) Ltd	Transporter	Ms. Alison	Operations Manager	n/a	0758/0772 505 400
General Lubricants Ltd	Shipper	Hajji Yakubu Kasadha	Marketing Manager	n/a	0772 423 995

Company Name	Type of company	Contact Person	Title	Email	Phone number (Country code 256)
General Machinery/ Victoria Motors Limited	Shipper	Mr. David Otti	Administrative	<a href="mailto:david.otti@victoria-motors.com">david.otti@victoria-motors.com</a> <a href="mailto:info@victoria-motors.com">info@victoria-motors.com</a>	0712- 509 780
Great Lakes Coffee Co. Ltd	Shipper	Mr. L. Odysseos	Operations Manager	<a href="mailto:glc@imul.com">glc@imul.com</a>	041- 286 961
Green Skyways Ltd	Transporter	Mr. Karim	-	<a href="mailto:Anshur55@hotmail.com">Anshur55@hotmail.com</a>	0772 491 165
Ibero Uganda Ltd	Shipper	Mr. Eugene Nsereko	General Manager, Commercial and Operations	<a href="mailto:procurement@ibero.co.ug">procurement@ibero.co.ug</a>	0772-200 463
Interfreight (U) Ltd	Transporter	Mr. Musa Ssemwoger Ms. Gorret Zzalwango	Operations Manager Administrator	n/a	0772- 614 320
Kawacom (U) Ltd	Shipper	Mr. Baguma Richard		<a href="mailto:rlugone@ecomtrading.com">rlugone@ecomtrading.com</a>	0772- 744 964
Kenfreight (U) Ltd	Transporter	Ms. Flavia	-	n/a	0712 657 273
Kyagalanyi Coffee Ltd	Shipper	Mr. Robert Byaruhanga	Head of Logistics	<a href="mailto:rbyaruhanga@kyagalanyi.com">rbyaruhanga@kyagalanyi.com</a>	0772 700 714
Maersk /DAMCO (U) Ltd	Transporter	Mr. Elijah Nkusi	Commercial Manager	<a href="mailto:Elija.Nkusi@damco.com">Elija.Nkusi@damco.com</a>	0772- 700 215
Mansons Uganda Ltd	Transporter	Mr. Jas	Transport Officer	n/a	0755- 900 711
Ministry of Works and Transport	Public	Mr. Patrick Sanya	Commissioner Transport Regulation	<a href="mailto:psanya@works.go.ug">psanya@works.go.ug</a>	0712 950 710
Mukwano Group of Companies Ltd	Transporter	Mr. B. W. Rwabogo	General Manager, Operations	<a href="mailto:rwab@mukwano.com">rwab@mukwano.com</a>	0772- 744 743
Multiple ICD Ltd	Transporter	Mr. Kawalya Charles	Operations Manager	<a href="mailto:info@multipleicd.com">info@multipleicd.com</a>	0772- 591 952
Nordic Freight Intl Ltd	Clearing agent	Mr. Kassim Omar	Excutive Director	<a href="mailto:alliancefr@yahoo.com">alliancefr@yahoo.com</a>	0772670370
Rift Valley Railways	RVR	Mrs Christina Sigowa-Wadulo	General Manager – Western Region	<a href="mailto:Christina.wadulo@rvr.co.ug">Christina.wadulo@rvr.co.ug</a>	0772 787 811
Sadolin Paints (U) Ltd	Shipper	Mr. Jabwor Francis	-	<a href="mailto:francis.jabwor@sadolinuganda.com">francis.jabwor@sadolinuganda.com</a>	0772- 433 400
Sameer Agriculture & Livestock Ltd	Shipper	Mr. Urmish Antani	Financial Controller	<a href="mailto:urmish@creambell.com">urmish@creambell.com</a>	0717 111 888
SDV Transami Ltd	Transporter	Mr. Koen Rombours	Operations Manager	n/a	0752- 722 108

Company Name	Type of company	Contact Person	Title	Email	Phone number (Country code 256)
Shell Uganda Ltd	Shipper	Mr. Nathan Kagiri	Transport Manager	<a href="mailto:Nathan.n.kagiri@sul.shell.com">Nathan.n.kagiri@sul.shell.com</a>	0772-754 079
Spedag (U) Ltd	Transporter	Mr. Godfrey Odaga Orwotho	Operations Manager	<a href="mailto:Godfrey.odaga@ug.spedag.com">Godfrey.odaga@ug.spedag.com</a>	0772-348 396
Tata (U) Ltd	Shipper	Mr. Dev Chitale	Senior Manager – Auto Mobile	<a href="mailto:dev@tatauganda.com">dev@tatauganda.com</a>	0772 744 380
Threeways Shipping Services Ltd	Transporter	Mr. Ronald Kanyerezi	Manager Projects & Strategy	<a href="mailto:rkanyerezi@threewaysshipping.com">rkanyerezi@threewaysshipping.com</a>	0772- 463 389
Total (U) Ltd	Shipper	Mr. Paul Sajjabi	Transport Officer		0414- 336 100
Ugacof Ltd	Shipper	Mr. Waswa. W	-	n/a	0772 461 341
Uganda Breweries Ltd	Shipper	Mr. Ochaki/ Mr. Daniel Ssemboga	Logistics Officer /Corp. Relations Manager	<a href="mailto:daniel.ssemboga@diageo.com">daniel.ssemboga@diageo.com</a>	0772- 721 313
Uganda Export Promotion Board	Shipper	Mr. Othieno Odoi	Senior Trade Promotion Officer	n/a	0772- 586 635
Uganda Freight Forwarders Association	Association	Mrs. Agnes N. Wadda		<a href="mailto:uffainfo@gmail.com">uffainfo@gmail.com</a>	0772- 589 433
Uganda National Roads Authority	Public	Mrs. Justine Ongom Odongo	Road Maintenance Manager	<a href="mailto:Justine.ongom@unra.go.ug">Justine.ongom@unra.go.ug</a>	0752 695324
Uganda Railways Corporation	URC	Mr Emmanuel Iyamulemye	Acting CEO	<a href="mailto:eyyamulemye@yahoo.com">eyyamulemye@yahoo.com</a>	0772 702748
World Food Programme	Shipper	Mr. Philip Hovman	Logistics Officer	n/a	0312- 242 009

### Burundi

Organisation Name	Type of Organisation	Name	Function / Title	Email	Phone number (country code 257)
AMI International Limited	Transitaire	Bankimbaga Eric	Directeur		+ 257 76 830 888
BRARUDI	Usine	Hicintuka Libérât	Directeur Commercial	<a href="mailto:liberat_hicintula@heineken.nl">liberat_hicintula@heineken.nl</a>	+257 22 24 1237 + 257 77 755 251

Organisation Name	Type of Organisation	Name	Function / Title	Email	Phone number (country code 257)
BRARUDI	Usine	Ndayishimiye Aloys	Business Department	<a href="mailto:alloys_ndayishimiy_e@heineken.nl">alloys_ndayishimiy_e@heineken.nl</a>	+257 22 21 5131 + 257 77 744 633
Burundi Commercial Society	Association	Karabaye Sylvestre	Managing Director	<a href="mailto:karabayesyl@yahoo.fr">karabayesyl@yahoo.fr</a>	+257 79 920 177
BUTCO	Transporteur	Ntasano Oscar	Directeur		+ 257 77 741 618
Clearing and Forwarding Agents of Burundi	Transitaire	Ntibibuka Déo	Président de l'Association des Transitaires et Agences en Douane	<a href="mailto:dntibibuka@usan-bu.net">dntibibuka@usan-bu.net</a>	+257 22 24 3015 + 257 78 850 408
Consultant Indépendant	Private	Ntamutumba Callixte	Consultant à l'Office du THE du Burundi		+ 257 76 660 313
Consultant indépendant		Kabunda Grégoire	Consultant en Transport		+257 77 705 805 <a href="mailto:kabundag@yahoo.fr">kabundag@yahoo.fr</a>
COTRACOM	Transitaire	Sindayihebura Salvator	Directeur		+257 79 910 378
EBP	Association	Yofani Léonard	Administrateur-Directeur	<a href="mailto:leonardyofani@yahoo.fr">leonardyofani@yahoo.fr</a>	+ 257 22 22 47 31
Entreprise GETRA	Transporteur	Ndereyimana Albert	Directeur Général	<a href="mailto:albert.ndereyimana@getra.bi">albert.ndereyimana@getra.bi</a>	+ 257 22 24 27 49 +257 79 922 297
Etablissement Bayireme	Transporteur	Bayireme Abraham	Directeur		+ 257 79 922 225
Etablissement Bondo	Transporteur	Bondo Jean	Directeur		+ 257 79 968 096
Etablissement Gahungu	Transporteur	Gahungu Béatis	Directeur		+ 257 79 954 318
Etablissement Hakizimana	Transporteur	Hakizimana Anselme	Directeur		+257 22 25 21 81 +257 77 757 321
Etablissement Ndimurukundo	Transporteur	Ndimurukundo Hilaire	Directeur		+ 257 22 25 21 81 + 257 78 833 949
Etablissement Rama Salum	Transporteur	Rama Salum	Directeur		+257 22 24 24 51 + 257 79 280 303

Organisation Name	Type of Organisation	Name	Function / Title	Email	Phone number (country code 257)
Etablissement Sinavyigeze	Transporteur	Niyonizeye Charles	Directeur – Gérant		+257 79 922 083
Etablissement UWAMWEZI	Transporteur	Uwamwezi Assumpta	Directrice		+257 79 924 627
Fonds Routier National	Public	Ndayisenga Aloys	Chef de Service Administratif et Financier	<a href="mailto:Andayisenga5@yahoo.fr">Andayisenga5@yahoo.fr</a>	+ 257 77 731 682
INTERCARGO	Transitaire	Bizimana Matthieu	Directeur et Secrétaire de l'Association des Transitaires et Agence en Douane	<a href="mailto:intercargo@usan-bu.net">intercargo@usan-bu.net</a>	+257 22 22 93 88 +257 79 926 257
Les Services Techniques Municipaux (SETEMU)	Public	Barampama Rémy	Directeur Général		
Ministry of Trade, Industry and Tourism	Public	Bizindavyi Léopold	Conseiller		+257 79 932 070
Ministry of Transport and Communication	Public	Nyandwi Edouard	Conseiller	<a href="mailto:nyandwiedouard@yahoo.fr">nyandwiedouard@yahoo.fr</a>	+ 257 77 777 197
Ministry of Transport, Post and Communication	Public	Narakwiye Vital	Directeur Général	<a href="mailto:narakwiye vital@yahoo.fr">narakwiye vital@yahoo.fr</a>	+ 257 77 745 735
Ministry of Transport, Post and Communication	Public	Ntandikiye Melchior	Directeur des Transports Internationaux	<a href="mailto:ntandikiior@yahoo.fr">ntandikiior@yahoo.fr</a>	+ 257 77 757 755
OBR	Public	Ndonkeye Parfait	Directeur des Services Douaniers	<a href="mailto:ndonkeparfe@yahoo.fr">ndonkeparfe@yahoo.fr</a>	+257 77 747 147
OBR	Public	Kanyamuneza Spès	Vérificatrice des Douanes		+257 77 769 950
SAVONOR	Usine	Suguru Olivier	Haut Cadre		+257 78 660 338

Organisation Name	Type of Organisation	Name	Function / Title	Email	Phone number (country code 257)
SDV Transami Burundi s.a	Transitaire	Steppe Tomas	Directeur Général	<a href="mailto:tomas.steppe@sdv.bu.com">tomas.steppe@sdv.bu.com</a>	+ 257 22 22 61 40 + 257 79 44 59 36
Société A.B.M	Transporter	Biranyuranwa Jean	Président Directeur Général	<a href="mailto:Bizis54@yahoo.fr">Bizis54@yahoo.fr</a>	+257 22 22 9820 + 257 77 787 787
Société d' Assurances du Burundi (SOCABU)	Association	Ntunzwenimana Charles-Luanga	Chef du Département Automobile	<a href="mailto:rwangacl@yahoo.fr">rwangacl@yahoo.fr</a> <a href="mailto:socabu@cbinf.com">socabu@cbinf.com</a>	+ 257 22 22 3214 + 257 77 78 77 70
Société d' Assurances du Burundi (SOCABU)	Associaton	Ndikubwayo Athanase	Conseiller de l'Administrateur Directeur Général	<a href="mailto:Athanasendikubwayo@yahoo.fr">Athanasendikubwayo@yahoo.fr</a>	+ 257 22 22 65 20 + 257 79 927 459
Société d'Entreposage des Produits Pétroliers (SEP)	Association	Nahimana Libère	Administrateur Directeur Général	<a href="mailto:libere@sep.co.bi">libere@sep.co.bi</a>	+ 257 22 24 31 10 + 257 76 821 146
Société INTERPETROL	Transporter	Bashir Munir	Managing Director	<a href="mailto:interpetrol@usan-bu.net">interpetrol@usan-bu.net</a>	+257 22 22 2570 +257 79 913 457
Société Pétrolière GLIC s.a	Transporter	Rwankineza Aimé	Administrateur-Directeur de la	<a href="mailto:almost@onatel.bi">almost@onatel.bi</a>	+257 22 24 26 53 + 257 78 803 803
SODETRA	Transitaire	Ntisigana Antoine	Directeur	<a href="mailto:sodetraoperations@cbinf.com">sodetraoperations@cbinf.com</a>	+257 22 22 5431 +257 79 939 390
SODETRA	Transitaire	Ntawurushira Daniel	Directeur des Opérations et Logistiques	<a href="mailto:sodetraoperations@cbinf.com">sodetraoperations@cbinf.com</a>	+257 22 22 5431
SOSUMO	Usine	Ntaconzoba Alexis	Managing Director	<a href="mailto:directeurgeneral@sosumo.net">directeurgeneral@sosumo.net</a>	+257 22 50 7003
STAR CARGO	Transitaire	Ndikuriyo Joseph Kennedy	Directeur	<a href="mailto:starcargobu@yahoo.fr">starcargobu@yahoo.fr</a>	+257 79 914 233

Rwanda

Organisation / Company	Type of Organisation	Name	Function /Title	Email	Phone Number
AFS Sarl	Transitaire	Ntagwabira Antoine	Directeur de l'Africa Freight Services	<a href="mailto:carriersmail@yahoo.fr">carriersmail@yahoo.fr</a>	+250 78830 6637
ATELEC	Transporter	Moudgli Sanjeev	Operators Manager	n/a	+250 78830 5262
ATELEC	Tranporter	Mwambaye Innocent	Chargé du Logistique	n/a	+250 78830 7634
DHL Danzas Rwanda	Transporter	Tugirimana John	n/a	n/a	+250 78850 3820
DHL Express Rwanda	Transitaire	Ndayishimiye Jeannine	n/a	n/a	+250 78826 1335
DHL Global Forwarding	Shipper	Tugirimana John	Air & Ocean Executive,	<a href="mailto:danzas@dhl.co.rw">danzas@dhl.co.rw</a>	+250 78850 3820
DISCENTRE	Société Pétrolière	Rubangura Rose	Directrice Administrative et Financière	<a href="mailto:S_distribution@yahoo.fr">S_distribution@yahoo.fr</a>	+250 78830 1263
ENGEN RWANDA	Transporter	Uwihanganye Jean Marie Vianney	Operators Manager	<a href="mailto:jeanmarie.uwihanganye@engen.rw">jeanmarie.uwihanganye@engen.rw</a>	+250 78830 1287
ETELC	Transporter	Gakuba Alain	n/a	n/a	+250 78830 0052
International Maritime Agency	Association/ Shipper	Nassau Xavier	Country Manager	<a href="mailto:Nassau@iima.co.rw">Nassau@iima.co.rw</a>	+250 78830 5233
KENFREIGHT Rwanda S.A.R.L	Shipper	Njoroge Moses	Country Manager	<a href="mailto:mnjorige@kenfreight.co.rw">mnjorige@kenfreight.co.rw</a>	+250 7830 3348
KOBIL	Société pétrolière	Sehmi Lakhbir Singh	Head Marketing &Operations	<a href="mailto:sehmi@kobil.co.rw">sehmi@kobil.co.rw</a>	+250 78830 2594
KOBIL	Société Pétrolière	Rutayisire Eugène	Clearing Manager	<a href="mailto:Eugene@kobil.co.rw">Eugene@kobil.co.rw</a>	+250 78830 8117
M+R SPEDAG GROUP	Transitaire	Shmitz Bastian	Managing Director	<a href="mailto:Bastian.schmitz@rw.spedag.com">Bastian.schmitz@rw.spedag.com</a>	+25078 830 1195
M+R SPEDAG GROUP	Transitaire	Dushime Cédric	Operations Manager	<a href="mailto:Cedric.dushime@rw.spedag.com">Cedric.dushime@rw.spedag.com</a>	+250 78854 7768
MAGERWA	Public	Sanyu Odette	Chef de Service Statistique	<a href="mailto:sanyuodette@hotmail.com">sanyuodette@hotmail.com</a>	+250 78354 7814



Organisation / Company	Type of Organisation	Name	Function /Title	Email	Phone Number
Ministère des Infrastructures	Public	Kanyamuhanda Jean	Coordonnateur du Secteur du Transport au	<a href="mailto:kanyamuhanda@yahoo.fr">kanyamuhanda@yahoo.fr</a>	+25078 830 32 14
Ministère des Infrastructures	Public	Rurangirwa Dominique	Juriste Professionnel des Transports	<a href="mailto:domirura@yahoo.fr">domirura@yahoo.fr</a>	+25078 850 0756
Ministère des Infrastructures	Public	Munyaruyenzi Philippe	Coordonnateur du Projet de Chemin de Fer Isaka-Kigali/Keza-Gitega-Musongati	<a href="mailto:munyaruyenzi@yahoo.fr">munyaruyenzi@yahoo.fr</a>	+25078 858 9299
Ministère des Infrastructures	Public	Mwenedata	Chef de Département Technique du FER	n/a	n/a
Ministère des Infrastructures	Public	Kabogoza Innocent	Professionnel du Transport	<a href="mailto:kakinnoc@yahoo.fr">kakinnoc@yahoo.fr</a>	+25078 856 1775
Ministry of Infrastructures	Public	Mr. Jean Kanyamuhanda	Coordinator	Kanyamuhanda@yahoo.fr	250 583 145
OCIR-Café	Public	Munyankera Pontien	Directeur de la Planification et Recherche	<a href="mailto:pontienm@yahoo.fr">pontienm@yahoo.fr</a>	+250 78830 3709
OCIR-Thé	Public	Rwigamba Wilfrid	Chargé des Statistiques	<a href="mailto:w.rwigamba@rwandatea.com">w.rwigamba@rwandatea.com</a>	+ 250 7852 8034
PETROCOM et UFAMETAL	Société Pétrolière/ Usine	Gashumba Jean	Directeur Commercial	<a href="mailto:petroc@rwanda1.com">petroc@rwanda1.com</a>	+250 78830 2820
Private Operator	Operator	Ntawungimana J. Damascène	Opérateur privé	n/a	+250 78857 1037
RF Works	Transporteur				+250 78830 7179
RWACOF	Usine	Akiba Emmanuel	Export Manager	<a href="mailto:rwacof@rwanda1.com">rwacof@rwanda1.com</a>	+250 78851 9297
Rwanda Furniture	Transporter	Manipuzha	Directeur Administratif et Financière	<a href="mailto:rwafur@rwanda1.com">rwafur@rwanda1.com</a>	+ 250 78830 7179
Rwanda Private Sector Foundation	Association	Bayigamba Robert	Président du Secteur Privé	n/a	+250 8830 0053
Rwanda Revenue Authority	Public	Bizimungu Jean Baptiste	Chargé de la Section des Statistiques	<a href="mailto:bizijbkit@yahoo.ca">bizijbkit@yahoo.ca</a>	+250 78848 0372

Organisation / Company	Type of Organisation	Name	Function /Title	Email	Phone Number
SDV/ TRANSAMI Rwanda	Transitaire	Irinzi Jean	Chargé des opérations de dédouanement	<a href="mailto:Sdvtransamirwanda@sdv.co.rw">Sdvtransamirwanda@sdv.co.rw</a>	
Société Mutangana & Sons Transporteur International	Transporter	Byaraje Théobald	Directeur	<a href="mailto:tbyaraje@yahoo.fr">tbyaraje@yahoo.fr</a>	+250 78830 1943
SOPETRAD	Transporter	Gakuba Rubojo Egide	General Manager		250 73953
SORWATRACO	Transporter	Kayombaye A Robert	Directeur General	<a href="mailto:Kkrobert54@yahoo.fr">Kkrobert54@yahoo.fr</a>	250578479
STIPPAD	Transitaire	Peter	Directeur Général	n/a	+250 78830 6941
Transporteur Privé	Transporter	Murekezi Vincent	Transporteur Privé	n/a	+250 78850 2973

**East RDC (GOMA)**

Organisation / Company	Type of Organization	Name	Function	Email	Phone Number
'Association des Chauffeurs du Congo	Transporteur	Cyiza Jean Bosco	Président Provincial Nord Kivu	<a href="mailto:acco_nk@gmail.com">acco_nk@gmail.com</a>	+243 80 830 63 26
AFRICOM OIL	Société Pétrolière				+243 81 313 5 41
AMI CONGO	Transitaire	Mayembe Jean Chrysostome	Directeur des Agences Nord Est		+243 99 704 59 18
CSTRAGA	Transporteur				
Division Provinciale des Transports et voies de Communication, Nord Kivu	Public	MUGABO KAHISA Jérôme	Chef de Division	<a href="mailto:divinktranscoms@yahoo.fr">divinktranscoms@yahoo.fr</a>	+243 81 312 84 59
Etablissement JAMBO SAFARI	Chargeur				
Etablissement MAISON GRACE A LA GLOIRE	Chargeur	Chumbaka Patient	Directeur		

Organisation / Company	Type of Organization	Name	Function	Email	Phone Number
Etablissement N R	Transporteur	Ndayambaje Rugomeza			
Etablissement NIYETU	Chargeur				+243 99 862 56 01
Etablissement SISCKAS	Chargeur				
Etablissement TUKUTUKU	Transporteur	Bagalwa	Directeur	<a href="mailto:etstukutuku@yahoo.fr">etstukutuku@yahoo.fr</a>	+243 85 372 38 35
Etablissement TUPENDANE	Transporteur				
Fédération des Entreprises du Congo, Division du Nord Kivu	Chargeur	Segahungu Sésiré	Président	<a href="mailto:fec_nk@yahoo.fr">fec_nk@yahoo.fr</a>	+243 99 779 47 51
Maison MBIZA	Transporteur	Matoleo Guillaume	Directeur		+243 99 862 31 11
NZOLI	Chargeur				
Office de Gestion du Fret Multimodal (OGEFREM)	Public	Samuswa Hakizumwami Patient	Directeur Régional	<a href="mailto:ogefremdre@yahoo.fr">ogefremdre@yahoo.fr</a>	+243 978 70088
Office des Douanes et des Assises	Public	Mbaya Tshama Paul	Inspecteur des Douanes au Nord Kivu		+243 99 866 66 19
Office des Douanes et des Assises,	Public	Biengimana landry	Vérificateur des Douanes		
Office des Douanes et des Assises, Direction Provinciale du Nord Kivu	Public	Basubiyungu Géorges	Sous- Directeur	<a href="mailto:georgesyungu@yahoo.fr">georgesyungu@yahoo.fr</a>	+243 812 562 665
Office des Routes, Nord Kivu	Public	Elihu Wanga Adolphe	Directeur Provincial	<a href="mailto:eliu_wanga@yahoo.fr">eliu_wanga@yahoo.fr</a>	+243 813 100 092
OGEFREM	Association	Wilondja Jean Paul	Bureau Assistance aux Chargeurs		+ 243 9933 16112

Organisation / Company	Type of Organization	Name	Function	Email	Phone Number
PAM , Nord Kivu	Chargeur	Mathe Isaac	National Logistics Officer	<a href="mailto:isaac.mathe@wfp.org">isaac.mathe@wfp.org</a>	+243 80 856 0558
PREMIUM FOODS	Chargeur				
RANGI	Chargeur				
SDV Agetraf	Transitaire	Bonamy Eric	Manager Eastern DR Congo	<a href="mailto:eric.bonamy@bollore.com">eric.bonamy@bollore.com</a>	+243 99 150 86 19
SIMBA PETROLEUM	Société Pétrolière				
Société TMK	Transporteur	Esselen José	Directeur	<a href="mailto:tmkcongo@skynet.be">tmkcongo@skynet.be</a>	+243 80 830 27 43
Société UMOJA – SHOP		Banyanga Olivier	Associé chargé du Transport		+243 81 813 71 83

## Appendix D: Benchmarking of Northern Corridor with International Corridors

This Appendix provides our full analysis of comparison between the Northern Corridor and other international Corridors. It is an expanded version of the summary included in the Main Final Report.

### 1.1 Benchmarking Objectives and Methodology

When evaluating and assessing the performance of any system, it is always useful to compare performance with other similar systems elsewhere in the world. A comparative analysis across transportation logistics systems can help identify performance differences and the underlying factors behind them, helping policy makers place their particular situation in context.

The TOR for this study require the CPCS team to undertake a comparative assessment of transport and logistics costs in the Northern Corridor with other transport corridors in Africa and elsewhere, considering the costs and freight rates of the Northern Corridor in relation to other corridors.

We have selected the following five corridors for comparison to the Northern Corridor:

- East Africa: Central Corridor (Dar es Salaam to Rwanda, Burundi, DRC)
- Southern Africa: Southern Corridor (Mozambique to South Africa)
- West Africa: Tema (Ghana) to Ouagadougou (Burkina Faso)
- Asia: East West Corridor (Vietnam, Laos, Thailand, Myanmar)
- Latin America: Bolivian Corridor

For each of these corridors, we undertook desk-based research on institutional and operational structures of the transport industry and transport and logistics costs. Where available we presented data on the time and cost of each stage of the logistics chain, from port entry to final destination. In our comparisons, we use the example of movement of **twenty-foot equivalent (TEU) import containers from ports going inland, by road.**

We chose this type of movement for comparison for three reasons: 1) it is the most relevant for comparison to the Northern Corridor, as the majority of traffic on the corridor involves inbound (imports) to landlocked countries from the Port of Mombasa; 2) TEU containers are a standardised size which makes comparison across regions more meaningful; and 3) the best data available from other studies and reports uses the example of TEUs (rather than 40' containers or bulk) as the standard for comparison.

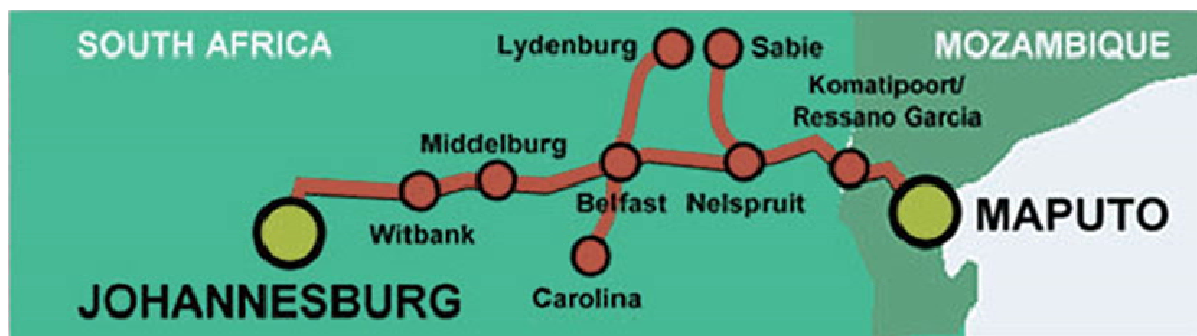
In the remainder of this chapter, we present our analysis, concluding with a comparative review of all of the corridors with the Northern Corridor in the final section.

## 1.2 The Maputo Corridor

The Maputo Corridor connects the Port of Maputo in Mozambique to Gauteng province, the industrial heartland of South Africa. It comprises a concessioned road, a railway line and since very recently, a gas pipeline. It has emerged as one of the most successful implementations of the Spatial Development Initiatives (SDI) concept, a concept developed in the mid-1990s by the South African Trade Department and the Development Bank of South Africa (DBSA).

The corridor runs through some of the most industrialized and productive regions of southern Africa, particularly Johannesburg and Pretoria on the western end of the corridor. It supports a very high volume of traffic throughout the year, and unlike the Northern Corridor, this corridor sees more exports (South Africa to port) than imports (Maputo port inwards). The figure below illustrates the main Maputo to Johannesburg corridor.

Figure D-1: The Maputo Corridor



Source: [www.portmaputo.com](http://www.portmaputo.com)

### Road Network

The 550 km road between Maputo and Johannesburg consists of the N4 highway on the South African side, and the EN4 in Mozambique. The N4 is a two-to four-lane national toll road which becomes EN4 after crossing the Mozambique border and progresses to Maputo. The EN4 which was completed in 2004 is currently operated by the concessionaire Trans African Concessions (TRAC) which is responsible for building, operating, and maintaining the road until 2028.

### Rail Network

The rail network runs between Mozambique and South Africa, over a total distance of approximately 675 km. From Maputo to the South African – Mozambique border, the rail runs a total distance of about 88 km while from Maputo to Johannesburg is about 587 km.<sup>2</sup> In South Africa, the rail lines are owned and operated by the South Africa national railway Spoornet while in Mozambique Caminho de Ferro de Mocambique (CFM-Sud) operates the line.<sup>3</sup> An analysis of the rail traffic flow indicates that cargo consists primarily of coal exports

<sup>2</sup> Spoornet Rail Distance Calculator <http://www.transnetfreightrail.co.za:70/CalculateDistance.asp> accessed May 5, 2010.

<sup>3</sup> Maputo Corridor Summary Report: A Transport Logistics Diagnostic Tool Study (USAID, March 2008)

from South Africa through Matola Coal Terminal (TCM); magnetite exports through TCM; general traffic from South Africa to Maputo; passenger trains from South Africa to Komatipoort; and small flows from Maputo to South Africa.<sup>4</sup>

### Port of Maputo

The corridor includes the Port of Maputo in Mozambique which has two terminals: Maputo and Matola.

The Maputo Terminal covers a total area of approximately 129ha with 3,000m of continuous wharves ranging in depth from 8-12m including citrus, sugar and container terminals. This terminal handles all general cargo, containers, and some specialized bulk cargos. The Maputo Terminal has a throughput of approximately 100,000 TEUs per year, and 1,060,000 tonnes of other cargo (citrus, sugar, molasses, etc).

The Matola Bulk Terminal, 6 kilometres upriver from the Maputo Terminal, is a deep water bulk terminal associated with export and manufacturing industries, including the new Mozal Aluminum Terminal and the Oil Terminal. The terminal handles bulk cargo such as coal, aluminum, light and heavy fuels, mineral oil products, and cereals. The Matola terminal has a throughput of approximately 4,250,000 tonnes per year (grain, aluminum, petroleum, coal).

The channel to the Maputo and Matola ports is continually dredged to a depth of 10.3 meters which allows ships of up to 60,000 DWT to enter the ports<sup>5</sup>.

Both terminals were concessioned in 2003 to the Maputo Port Development Company (MPDC), for a period of 15 years, with a 10 year extension option. Under the Agreement MPDC has been granted the rights to finance, rehabilitate, operate, manage, maintain, develop and optimise the port concession area. MPDC is vested with the powers of port authority and is responsible for marine operations, towage, stevedoring, terminal and warehousing operations as well as port planning and development (for all terminals, other than existing independent terminals).

#### 1.2.1 Institutional Arrangements

In 1995, the Ministers of Transport in Mozambique and South Africa entered into an agreement to re-establish the Gauteng-Maputo link. Subsequently, in 1996, a Framework Agreement for the establishment of the **Maputo Development Corridor (MDC)** was signed by Mozambican and South African governments, with three ancillary agreements: a protocol on the operating framework for the N4 Witbank to Maputo Toll road; a Statement of Intent regarding the establishment of a Corridor Company; and a Statement of Intent to establish joint ventures for the development of the rail infrastructure and the upgrading of Maputo harbor.

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<sup>4</sup> Maputo Corridor Logistics Initiative: Second Annual Freight Logistics Conference

<sup>5</sup> [www.portmaputo.com](http://www.portmaputo.com)

The MDC was launched as an SDI in 1996, with the Maputo Corridor Company (MCC) established as the legal corridor management entity to engage the public and private sector players in South Africa, especially at provincial level. The aims and objectives of the MDC as initially defined were:

- To rehabilitate, in partnership with the private sector, the primary infrastructure network along the Corridor, including road and rail links between South Africa and Maputo, the border post between the two neighbors, and Maputo Port.
- To maximize investment in the Corridor area using added opportunities that infrastructure rehabilitation would create.
- To maximize social development and employment opportunities, and increase participation of historically disadvantaged communities.
- To develop policies, strategies and frameworks to promote holistic, participatory and environmentally sustainable approaches to development.

However, the MCC was not functioning effectively in coordinating stakeholders and mainstream shippers. As a result, the corridor lacked a strategic planning focus and an action plan and in early 2004, the Maputo Corridor Logistics Initiative (MCLI) was launched as a public private sector partnership to create greater awareness and foster better utilization of the corridor. The MCLI is incorporated in South Africa as a non-profit organisation with members from both South Africa and Mozambique. 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 MCLI.

The MCLI seeks to become a logistics stakeholders' coordinator, contributing to the objectives of the MDC. This will be achieved by working towards a logistics corridor based on a cost effective, continuous, reliable logistics route with positive returns for all stakeholders. It also aims to create a favourable climate for investment and new opportunities for communities along the Maputo Corridor. Its objectives are specifically to:

- Coordinate the views of the investors, service providers and users to promote development and change to make the Maputo Development Corridor the first choice for the Maputo Corridor importers and exporters alike; and
- Inform the market about the Corridor and promote the strategic benefits and opportunities offered by the Corridor.

The South African Department of Transport (DOT) is one the key members of the MCLI. A memorandum of understanding is in place through which the DOT makes a contribution towards MCLI to assist the Province of Mpumalanga, which borders Mozambique. The MCLI and the DOT are now working to formally establish a public-private partnership corridor institutional framework at a trilateral level with Mozambique and Swaziland.



## 1.2.2 Performance Indicators

The following performance indicators draw heavily from an analysis conducted in 2007 for USAID on the Maputo Corridor<sup>6</sup>.

### Port

Evaluation of the Maputo Port indicates that the time spent in the port for both handling and customs is relatively low, although the reliability of the port and customs is relatively poor due to variations in time.

**Figure D-2: Maputo Port Performance for Containerized Imports, per TEU Container**

Port Component	Maputo Corridor
Ship berthing time (including unloading)*	32 hrs
Total port handling costs	US \$350 (formal) US\$ 35 (informal)**
Customs time	24 hrs
Customs costs	US \$285 (formal) US\$ 28.50 (informal)**
Total average dwell time (including customs)	3 days
Total Port costs (including customs)	US \$698.50

\*Average unloading time per container accounts for half of the average time for ship berthing time.

Source: Maputo Corridor Performance Assessment: A Transport Logistics Diagnostic Tool Study (Nathan, 2007)

\*\* Unofficial costs along the corridor estimated to be 10%

### Road

Road transport logistics performance in the corridor is fair to good as measured by transport time, but costs are relatively high per kilometre, at US\$2/TEU-km (or US\$2.5 / TEU-Km for shorter distances). Reliability is relatively poor with a lot of variability, but still substantially better than the rail option. Road transport is more expensive than rail, but is used extensively because it is more reliable.

**Figure D-3: Inbound Road Transport Performance for Containerized Freight**

Performance Component	Maputo – Johannesburg
Average cost per TEU-km (US\$2* / TEU-km)	US\$1,100 (formal) US\$ 110 (informal)**
Average speed	60 km/h
Average time (Maputo – border, 60km)	1 hour
Average time (border – Johannesburg, 490km)***	8 hours

<sup>6</sup> USAID Maputo Corridor Performance Assessment: A Transport Logistics Diagnostic Tool Study (Nathan Inc, 2007)

\* For very short haul distances, e.g. from Maputo to the border (60km), the cost is higher at approximately US\$2.5 / TEU-km. Source: Maputo Corridor Performance Assessment: A Transport Logistics Diagnostic Tool Study (Nathan, 2007)

\*\* Informal costs estimated to be 10%, based on 2007 Nathan study.

\*\*\* CPCS assumption, based on average speed of 60 kph exhibited in Mozambique. Although the roads are likely better in South Africa, thereby increasing the speed in some places, there is also likely to be greater congestion in some places, particularly around Johannesburg, thereby lowering the average speed.

## Rail

Rail costs between Maputo and Johannesburg are relatively high per kilometre, and reliability of the line is known to be very poor in terms of transport time<sup>7</sup>.

The following figure is a cost indicator for containers transported by rail between City Deep terminal and bridge port in Johannesburg, and Maputo, a distance of 587 km.

**Figure D-4: Cost indicators for container transport**

Route	Container-type	Total Cost (US\$)	Cost per ton-km	Cost per TEU or container / Km (US\$)
Maputo – Johannesburg (either direction)	TEU (21.5 tons)	639	0.051	1.25 / TEU-km
Maputo – Johannesburg (either direction)	40' (26 tons)	1110	0.727	2.18 / 40'-km

Source: Maputo Corridor Logistics Initiative

## Border Post Clearance

The border crossing at Komatipoort / Ressa Garcia is relatively efficient for most of the year, but reliability is considered poor because of congestion at certain times of the year and of the day. The figure below indicates the average cost and time to cross the border.

**Figure D-5: Border Post Performance of the Maputo Corridor for Inbound and Outbound Containerized Freight**

Performance Component	Maputo – South Africa (Inbound)	South Africa –Maputo (Outbound)
Average cost per container*	Formal: US\$200 Informal: US\$ 20**	Formal: US\$200 Informal: US\$ 20**
Average transit time*	4 hrs	8 hrs

\*Numbers include border posts on each side of border

\*\* Informal costs estimated to be 10%, based on 2007 Nathan study.

Source: Maputo Corridor Performance Assessment: A Transport Logistics Diagnostic Tool Study (Nathan, 2007) and West Africa Transport Logistics Analysis Using FastPath: Tema-Ouagadougou Corridor Final Report (Nathan, 2010)

<sup>7</sup> Maputo Corridor Performance Assessment: A Transport Logistics Diagnostic Tool Study (Nathan, 2007) and West Africa Transport Logistics Analysis Using FastPath: Tema-Ouagadougou Corridor Final Report (Nathan, 2010)

**Figure D-6: Cost for Road Transport of TEU Container, Maputo - Johannesburg, 21.5 tons, 550 km**

Operation	Formal Cost (\$/TEU)	Informal Cost (\$/TEU)*	Total Cost (\$/TEU)	% of total cost	Average Time	% of total time
Port Clearance (berthing to unloading)	350	35	385	18%	32 hours	46%
Customs Clearance	285	28.5	313.5	15%	24 hours	35%
Road Transport, (@\$2 / TEU-km)	1,100	110	1,210	57%	9 hours	13%
Border Crossing	200	20	220	10%	4 hours	6%
<b>Total (average)</b>	<b>1,935</b>	<b>193.50</b>	<b>2,128.50</b>	<b>100%</b>	<b>69 hours</b>	<b>100%</b>

\* Informal Cost estimated are 10% of total costs. Source of data: CPCS Analysis and Corridor Performance Assessment, A Transport Logistics Diagnostic Tool Study (Nathan, 2007)

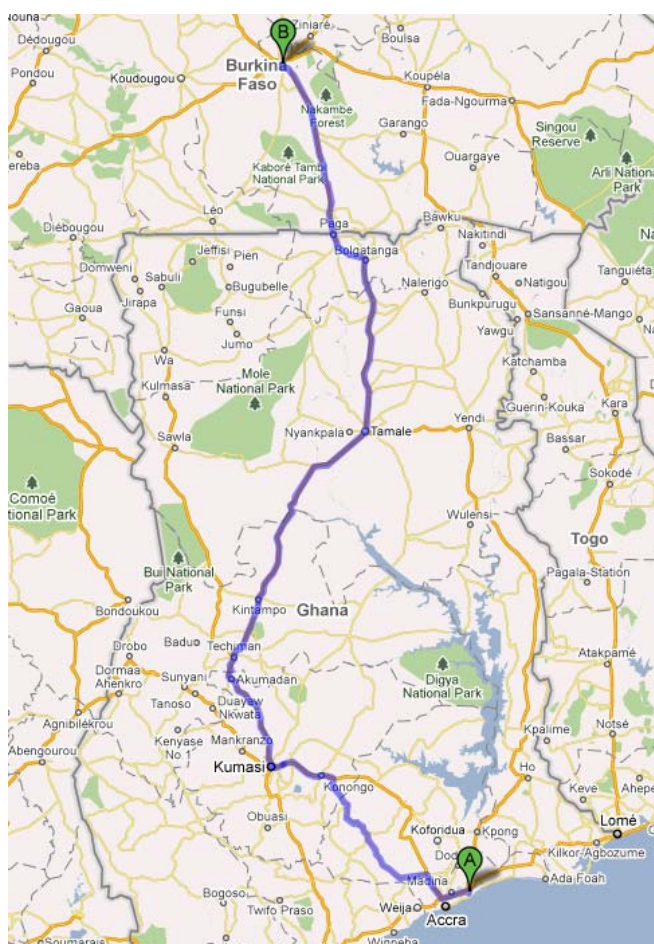
### 1.3 Tema – Ouagadougou Corridor, West Africa<sup>8</sup>

#### 1.3.1 Description of Corridor

This 1,057 km road corridor runs from the port of Tema in Ghana near Accra, to the Burkina Faso capital of Ouagadougou. About 881 km (83%) of the road is in Ghana, and the remaining 176 km (17%) in Burkina Faso, and is considered in fair condition overall.

The road corridor is the only surface transport mode used to transport transit goods from Tema to Ouagadougou. Although there are rail and inland waterway links in Ghana, these are not used for transit goods between the two countries. The corridor crosses one border, at the towns of Paga (Ghana) and Dakola (Burkina Faso). The figure below shows the road corridor from Tema, running north to Ouagadougou.

Like the Northern Corridor, there is a



<sup>8</sup> Much of the information in this section is drawn from two very recent and detailed reports: 1) USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010, and 2) Nathan Inc, USAID West Africa Transport Logistics Analysis Using FastPath, Tema-Ouagadougou Corridor Final Report, April 2010.

major trade imbalance along the corridor, with imports from Tema to Ouagadougou far exceeding exports from Ouagadougou to Tema, in both volume and value terms. In 2006, Burkina Faso import traffic through Tema port amounted to 320,000 metric tons. In the same year, export traffic about to about 40% of this amount, 130,000 metric tons.<sup>9</sup>

### 1.3.2 Institutional Arrangements

The main multilateral institutions active in West Africa are the Union Economique et Monétaire Ouest Africaine (UEMOA), headquartered in Ouagadougou, and the Economic Community of West African States (ECOWAS), headquartered in Abuja, Nigeria. These two organisations have a multitude of cross-cutting programmes dealing with everything from trade and transport, to education, to conflict prevention.

The two institutions have overlapping membership; ECOWAS has membership of 15 countries, and UEMOA has 8 member states<sup>10</sup>. Burkina Faso is a member of both ECOWAS and UEMOA, while Ghana is only a member of ECOWAS.

Established in 1975, ECOWAS aims to promote co-operation and development in all fields of economic, as well as social and political arenas. In the areas of transport and trade, ECOWAS has established a number of conventions and programmes for regional integration and interstate transport and transit facilitation. Four which affect the Tema-Ouagadougou corridor are described below.

Both ECOWAS and UEMOA have adopted these four conventions / programmes<sup>11</sup>:

- ECOWAS Interstate Road Transit Scheme (ISRT), 1982 and 1990:** The ISRT stipulates that transport of all transit goods should take place under the cover of an "Inter State Road Transit Declaration (ISRT)" booklet from start to end of a journey. A supplementary ISRT convention from 1990 stipulates that a guarantee should be provided by a guarantor (a financial establishment or institution) of the transit country who acts like a "national guarantor". This guarantee provided must cover at least the sum of duties and taxes payable on goods being transported through the country. The concept is that if goods are illegally diverted or dumped in a transit country, the country who is due the taxes can recover the taxes and duties by calling on the guarantee. In practice today, this system of one guarantee covering multiple countries is not fully functional. One guarantee is not being issued for an entire journey, due to problems of trust and divergent interests of national guarantors. The guarantees provided by national guarantors only cover transport in the national territory, ending at the border point where the declaration ends. At the border, a

<sup>9</sup> USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

<sup>10</sup> UEMOA membership : Benin, Burkina Faso, Cote D'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. ECOWAS membership includes all UEMOA members, plus Cape Verde, Ghana, Guinea, Liberia, Nigeria, Sierra Leone and Gambia.

<sup>11</sup> All summaries are drawn from USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

new declaration is prepared and new guarantee obtained. *This is much like the case in the Northern Corridor, where is separate transit bond is required for each country.* This process creates additional costs, paperwork and delays. We understand that Ghana, Burkina Faso and Mali have recently been negotiating modalities for a single guarantee premium for the Tema-Ouagadougou-Bamaka corridor, and that a draft document is pending signature.

- **ECOWAS Interstate Road Transport (IST), 1982:** This convention regulates the conditions of interstate road transport, including the number of road checkpoints, loading policies, road safety and allocation of freight between trucks from different countries. The convention stipulates the maximum axle loading for interstate transportation should not exceed **11.5 tonnes per axle**, but these restrictions have generally not been strictly enforced (until very recently). A 2008 study found that 85% of trucks travelling from the Ghanaian border to Ouagadougou were overloaded by an average of 52 tonnes.<sup>12</sup> We understand, however, that there have been reductions in overloading in the past year due to Ghana enforcing the ECOWAS limits in mid-2009. The IST freight sharing regulations stipulate that cargo destined for landlocked countries must be shared between truck owners from the landlocked and the port country on a two-thirds / one-third basis. The freight-sharing system is managed by the *Conseil Burkinabé des Chargeurs (CBC)*. This cargo sharing arrangement is usually accompanied by a cargo/truck allocation system whereby, in principle, the first truck in line at Tema port is the first to obtain cargo. The first-come, first-served system in Tema is managed by the *Organisation des Transporteurs Routiers du Faso (OTRAF)*. This system is viewed as highly inefficient for a number of reasons, including encouraging the use of older, poorly maintained trucks and a glut of trucks in the market<sup>13</sup>. The system also encourages bribery to get to the 'head of the line'. We understand that in practice, the freight-sharing system is not strictly implemented on the Tema-Ouagadougou corridor. However, there is still a need for greater deregulation and introduction of competition on the corridor through an abandonment of the queuing system, and introduction of incentives to use newer vehicles.
- **ECOWAS Brown Card insurance scheme, 1982:** The ECOWAS Brown Card is a motor-vehicle insurance scheme designed to facilitate free movement of goods and persons among ECOWAS member states through a common insurance cover. Twelve of the 15 ECOWAS countries adhere to the convention, including Burkina Faso and Ghana. There are some implementation problems with the scheme, including major delays in settlements of claims and non-payment among some bureaus of the scheme. In many instances, vehicle owners are called upon to pay direct compensation to victims, not through the insurance scheme.

<sup>12</sup> "Etudes des impacts de la réduction des charges des véhicule de poids lourds", October 2008, Europa/D/125136/D/SER/BF.

<sup>13</sup> Teravaninthorn S. & G. Raballand (2008), Transport prices and costs in Africa: a review of the international corridors World Bank.

- **ECOWAS / UEMOA Regional Trade Facilitation Programme:** In August 2003, ECOWAS and UEMOA launched this joint programme to facilitate synergies for the facilitation of interstate road transport and transit. The programme aims to remove physical and non-physical barriers to trade, improve maintenance of priority infrastructure, harmonize technical standards and safety regulations, and create regional infrastructure. The Paga-Dakola border crossing on the Tema-Ouagadougou corridor is one site earmarked for establishment of a joint border post, with officials from both countries expected to work together to process transit shipments. The programme is also pursuing adoption of a uniform and unique customs document.

The 1994 treaty establishing **UEMOA** calls for a harmonized approach to improvement of transport infrastructure and implementation of a regional transportation policy. An action programme on infrastructure and road transport was approved in 1997. One of the most important conventions signed by UEMOA's members is the 2005 **Axle Load Limit Policies** (Regulation No.14/2005/CM/UEMOA). These outline axle loading limits for a range of different truck sizes and are in line with the relevant provisions of the ECOWAS IST convention. Ghana has adopted the UEMOA axle load policy standards, even though it is not a member of UEMOA, for practical reasons.

### 1.3.3 Description of Logistics Corridor

#### Tema Port

Tema port is Ghana's main gateway to international trade and the country's most important port for transit traffic to the Sahelian landlocked countries, specifically, Burkina Faso, Mali and Niger. Located 30 km east of Accra, the port has 12 berths located on two quays with a total paved quay apron of 2,196 metres-squared. Depths Berths 1 and 2 make up the container terminal, which is fitted with seven gantry cranes. Berths 3 to 11 are multi-purpose berths, and berth 12 is a clinker berth. There is also one dedicated oil berth, and one berth operated by the Volta Aluminium Company (Valco). The minimum and maximum depths range from 8 to 11.5 metres, respectively<sup>14</sup>.

The Ghana Port and Harbour Authority (GPHA) operates as a landlord and regulator of the port. In 2004, the GPHA signed a 20-year concession agreement with Meridian Port Services (MPS), a private company owned 30% by GPHA. The concession agreement grants MPS the exclusive right to the stevedoring and related shore handling for any vessel entering the port with more than 50 containers. MPS currently handles about 70% of import/export cargo, while GPHA handles the remaining 30%, including all bulk cargo shipments. GPHA has privatized about 75% of its stevedoring activities to nine private operators to introduce competition.

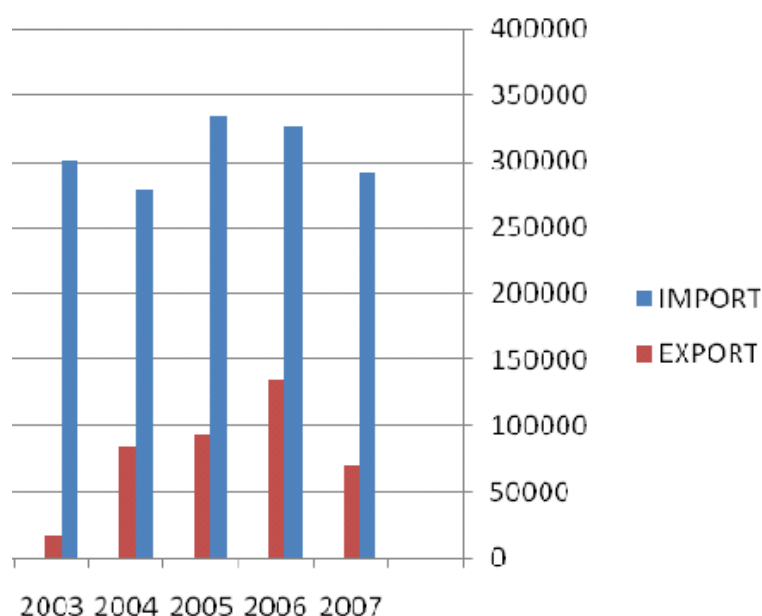
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<sup>14</sup> Ghana Ports Authority website: <http://ghanaports.gov.gh>

In 2008, Tema handled approximately 8.7 million tonnes of cargo, of which 7.86 million tonnes (90%) was domestic, 554,000 tonnes (6%) was transit containerised, and 311,000 tonnes (4%) was transit non-containerised. Goods destined to Burkina Faso account for more than half of the total transit volume. Imports make up about two-third of the total traffic handled, with exports accounting for one-third. In terms of containers, the port handled close to 550,000 TEUs in 2008.

The figure below shows *transit traffic* through Tema Port to Burkina Faso from 2003 – 2007.

**Figure D-7: Transit Traffic through Tema Port to Burkina Faso, tonnes**



Source: Conseil Burkinabé des Chargeurs, sourced from USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

### Port and Customs Clearing Processes

Ghana customs requires that imports through Ghanaian ports are cleared by certified brokers, known in Ghana as freight forwarders. Forwarders must be members of one of three national freight forwarders' associations. *This is not currently the case in Kenya, where clearing agents are not required to belong to any particular professional association.* The three Ghanaian associations maintain standards within the profession and periodically publish recommended tariffs for their members as a guide for the freight-forwarding market. There is, however, a free market in freight forwarding services and these tariffs are not mandatory.

Upon arrival at Tema, the importer of cargo hands over all documents to the forwarder who handles the cargo-clearance process at Tema and declares the details of the cargo. The forwarder enters details of cargo clearance using the **Ghana Community Network Services Ltd (GCNet)**, a public private partnership which began operations in 2003. The

GCNet web-based system captures details of the transit consignment, transit truck and driver details, and issues an electronic transit bond from the State Insurance Company (SIC), Ghana's national ISRT guarantor. Satellite-tracking transponders are attached to trucks carrying transit goods, allowing customs to know the location of all trucks until they reach the border. The charge for the obligatory transponder is US\$45 (GHC 50). Prior to the GCNet electronic system, an escort system was used, which led to additional delays as trucks could not leave the port until the customs convoy was ready. Trucks are currently given five days to reach the Burkina Faso border by Ghana customs after exiting Tema Port, a total distance of 1,057 km.

Much like in the Northern Corridor, cargo in transit to Burkina Faso is not subject to payment of import duties or taxes in Ghana. Rather, transit cargo travels under customs bond, the ISRT guarantee system, until it reaches an exit border point. To ensure the process is respected, customs agents seal bonded cargo before it leaves the port, and the seals are checked at the border customs point. If a container is used for onward transport to Ouagadougou, it usually has to be returned within 21 days of being unloaded, although policies on this time vary for each shipping line.

In total, procedures to clear import transit containers at the port (from docking to loading on a truck and exiting the port) require 16 major steps, involving customs, the port authority, shipping lines, banks, etc. These are presented in the Figure overleaf. In total, the average time from the vessel docking to goods being unloaded is about **2 days**. The time for customs clearance at the port is about **8 days**.



Figure D-8: Transit Procedures for Clearance of Import Containers at Tema Port



Source: Figure 16, USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

## Road Transport: Tema to Ouagadougou

Once the port is cleared, goods travel 1,057km from Tema to the Ouagarinter facility in Ouagadougou. Ouagarinter is the central customs clearing complex for Burkina Faso, located in Ouagadougou, not at the border. Virtually all transit goods must be cleared at Ouagarinter, not at the border, except in limited instances. The average speed of trucks travelling along the corridor is 40 km / h.

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Prices for trucking services on the Tema-Ouagadougou corridor are not formally regulated. However, the OTRAF publishes annual indicative tariffs from West African ports to Burkina Faso as a guide to its members, which we understand are within 10 % to 15% of those actually charged in the market. The transport charges for a journey from Tema to Ouagadougou are illustrated in the Figure below.

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**Figure D-9: OTRAF Reference Trucking rates, Tema to Ouagadougou, 2007**

Load Type	XOF	US\$
20' Container (up to 15 tonnes)	900,000	2,142
2 x 20', or 1 x 40' (up to 30 tonnes)	1,300,000	3,094
Additional containerised cargo per tonne	30,000	71
Average bulk per tonne	30,000	71

Source: OTRAF records 2008. Sourced from USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

The implementation of the OTRAF-managed 'first come, first served' rule means that older and poorly maintained Burkinabe trucks stay in business longer than they otherwise would, as cargo is always guaranteed if you wait in line. Although the formal ECOWAS IST freight sharing rules stipulate that two-thirds of transit goods should be transported on the trucks of land-locked countries, in practice this does not always happen in the Tema-Ouagadougou corridor. Ghanaian trucks are often in better condition than the Burkinabe trucks, and a shortage of Burkinabe trucks often compels the *Conseil Burkinabé des Chargeurs (CBC)* – who are responsible for implementing the freight-sharing rules – to use Ghanaian trucks. In practice, **more than 50% of the transit cargo to Burkina Faso is carried on Ghanaian trucks**, in spite of the cargo sharing rule.

The journey between **Tema and Paga**, at the border, takes between 3 to 5 days on average, over 881 km. It can take longer – more than a week - in instances where breakdowns occur, which is frequent for older vehicles. Over this distance, transporters face an average total of 15 informal and formal checkpoints and bribe spots, including from police, customs agents, transport association and union checks. The average total informal bribe amounts paid over this section is **US\$11.84**, but the various checkpoints cause almost 3 hours of delay along the journey<sup>15</sup>.

<sup>15</sup> 5th Improved Road Transport Governance Report, UEMOA and West Africa Trade Hub

Once past the border, the 176 km journey between **Dakola and Ouagadougou (Ouagarinter)** takes less than one day. During this time, there are approximately 6 checkpoints, leading to solicitation of informal costs of **US\$21**, and delays of almost 2 hours.

### **Border procedures**

The customs clearance procedures at **Paga (Ghana)** are relatively straightforward. The customs agents simply check the transit documents and verify the customs seal is still intact. There is no customs declaration required on the Ghanaian side. The process, including any delays, takes an average of **2 hours**. There are no formal costs, although informal 'facilitation' costs are about **US\$ 24** per container. In this instance, the driver usually pays a middleman at the border who in turn pays the border agent to facilitate review of documents and passing of the truck. Well established, larger companies have their own staff on salary to perform this facilitation role.

The Burkina Faso customs clearance process at Dakola is lengthier, not least because the border has different and shorter opening hours than the Ghanaian side. Dakola is connected electronically to the Burkinabé customs' automated Customs Data system (ASYCUDA), a similar system to the GCNet online system used in Ghana. Customs requires that a licensed freight forwarder handle the clearing process – the truck driver cannot do this himself. There are a total of 10 clearing steps to follow which take an average of **5 hours** to complete. The formal cost to pass the border averages **US\$68**, while informal costs are about **US\$17**, per TEU.

After clearing customs, the truck must wait for a customs escort to leave in convoy to the Ouagarinter facility in Ouagadougou. Waiting for convoys can add several hours of delay (or an overnight stay) to the journey.

### **Ouagarinter (Ouagadougou)**

Ouagarinter is a clearance and transit complex for international road traffic in Ouagadougou. It is managed by the *Chambre de Commerce, d'Industrie et d'Artisanat du Burkina Faso*. Virtually all import cargo into Burkina Faso must be checked and cleared at customs here, not at the border. When a truck arrives at Ouagarinter, the customs escort gives all necessary documents to a customs agent for processing. Goods are inspected by a Cotecna Inspection agent, the company contracted by the government to inspect cargo. A freight forwarder can only enter the customs declaration online into the ASYCUDA system when the goods have physically arrived at Ouagarinter, which slows down the process. If the information could be entered online once the cargo reaches the border at Dakola, it would save importers 1 to 2 days of transit time.

This process to clear customs at Ouagarinter is quite cumbersome, involving 17 different steps, and an average delay of **48 working hours (6 days)**. The main delays are caused by the customs-inspection equipment required, slow inspection processes and insufficient

computers dedicated to the ASYCUDA system. There is an average formal customs payment of **US\$ 943**, there is also an average informal payment of **US\$ 205**, to speed up the clearing process<sup>16</sup>.

#### 1.3.4 Performance Indicators

The Figure below summarises each step described above, and the costs and time required. The example shown is for an import TEU container, from Tema to Ouagadougou, weighing a typical 18 tonnes. **The total logistics costs to transit a 20' import container from ship docking to clearing in Ouagadougou over 1,057 km is US\$4,053. This transit takes 21 days on average.**

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<sup>16</sup> USAID West Africa Trade Hub, Transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

Figure D-10: Cost for TEU Container, Tema to Ouagadougou, 18 tonnes, 1,057 km<sup>17</sup>

Operation	Formal Cost (\$/TEU)	Informal Cost (\$/TEU)	Total Cost (\$/TEU)	% of total cost	Average Time <sup>18</sup>	% of total time
Port Clearance* (from berthing to unloading)	474	32	505	12.4%	41 hours (2 days)	9%
Customs Clearance	90	25	115	3%	65.5 hours (8 days)	38%
Road Transport (Tema-Ouagadougou)	2,142**	33 ***	2,174	54%	4.15 hours informal (0.4 days) 32 hours driving (4 days)	21%
Border Crossing (Paga)	0	24	24	0.6%	2 hours (1/4 day)	1%
Border Crossing (Dakola)	68	17	85	2%	5 hours (1/2 day)	2%
Ougarinter Customs Clearance	943	205	1,148	28%	48 hours (6 days)	28%
<b>Total (average)</b>	<b>\$ 3,717</b>	<b>\$336</b>	<b>\$4,053</b>	<b>100%</b>	<b>21 days</b>	<b>100%</b>

\* Includes: Port & transit yard procedures (\$90.5); forwarding (\$281), and shipping line release (\$102.3).

\*\* OTRAF rates, 2007

\*\*\* Bribes, police checks, customs en route, of which \$11 Tema – Paga, and US\$21 Dakola-Ouagadougou.

\*\*\*\* 160 minutes delays Tema-Paga; 89 minutes delays (Dakola – Ouagadougou)

<sup>17</sup> All logistics costs and delays from USAID West Africa Trade Hub, transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

<sup>18</sup> Port clearance time works on 24 hour clock, remaining times based on 8 hour day.

## 1.4 Central Corridor (Dar Es Salaam to Rwanda, Burundi, DRC)

### 1.4.1 Description of Corridor

The Central Corridor starts at Dar es Salaam port in Tanzania and comprises road and rail/lake links to Burundi and DRC (via Lake Tanganyika), rail/road routes to Rwanda, and a road/rail/lake link to Uganda through Lake Victoria. The Central Corridor is one of a number of Regional Spatial Development Initiatives across Africa.

The Central Corridor infrastructure consists of the following:

- The 1,254 km central line operated by the Tanzania Railways Limited (TRL) from Dar es Salaam to Kigoma port on Lake Tanganyika, followed by trans-shipment to lake barges destined to Bujumbura;
- The Mwanza rail/lake route consisting of a 1,229 km railway from Dar es Salaam to Mwanza on Lake Victoria (using the central line until Tabora);
- The Dodoma road route from Dar es Salaam through Rusumo Falls (Tanzania-Rwanda border) to Kigali (1,486 km), and through Kobero (Tanzania-Burundi border) to Bujumbura (1,538 km); and
- The Isaka rail/road route, which consists of the train from Dar es Salaam to Isaka, with a transfer to trucks at an Inland Port at Isaka for onward delivery by road to Rwanda, Burundi or DRC<sup>19</sup>.

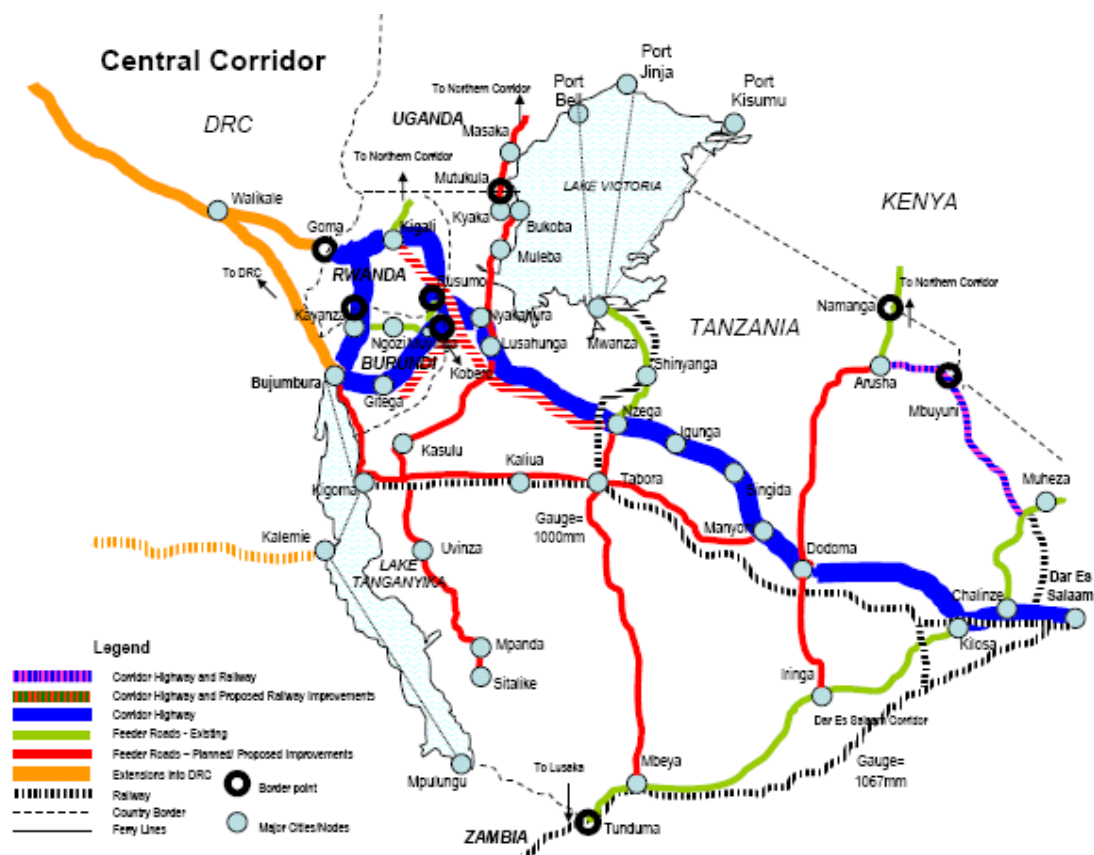
Transit containers to (eastern) DRC account for the largest volume of transit movements from Dar es Salaam to inland countries, followed by Burundi. Dar es Salaam port is the main entry port for both countries, while Rwanda uses both the Central and Northern Corridor for its imports / exports<sup>20</sup>. Uganda traffic passes primarily through the Northern Corridor, especially given the current limited ferry services active across Lake Victoria.

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<sup>19</sup> Construction of a railway link from Isaka to Kigali is underway, with completion expected by 2013.

<sup>20</sup> Marine Logistics Ltd, "Integrated Transport Strategy – Lakes Tanganyika and Victoria", Central Development Corridor Regional Spatial Development Initiative Programme, Volume 1, Recommended Transport Strategy, February 2009.

Figure D-11: Map of East Africa showing the major components of the Central Corridor



Source: East Africa Corridor Diagnostic Study (USAID, 2009)

### 1.4.2 Institutional Arrangements

The main policy and institutional framework for transit transport cooperation exists through bilateral and multilateral agreements. These agreements include the East African Community Treaty, the Third East African Community Development Strategy (2006 – 2010), and the Central Corridor Transit Transport Facilitation Agency. These institutional arrangements are described below:

- Treaty for the Establishment of the East African Community (as amended on 14<sup>th</sup> December, 2006 and 20<sup>th</sup> August, 2007).** This treaty governs the East African Community<sup>21</sup> which is currently made up of the Uganda, Kenya Tanzania, Burundi and Rwanda. Chapter 15 of the treaty stipulates cooperation among member states in infrastructure and services including Common Transport and Communications Policies (Article 89); Roads and Road Transport (Article 90);

<sup>21</sup> The EAC was first established in 1967 and later dissolved in 1977. The current EAC treaty came into force on 7 July 2000 with three founding states (Kenya, Uganda, and Tanzania). Burundi and Rwanda joined the EAC on July 1, 2007.

Railways and Rail Transport (Article 91); Civil Aviation and Civil Air Transport (Article 92); Maritime Transport and Ports (Article 93); and Inland Waterways Transport (Article 94); Multimodal Transport (Article 95). These articles provide for cooperation among these various transport sectors, as well as harmonization of policies to ensure smooth transport of goods and services.

- **The Second East African Development Strategy.** The East African Development Strategy was set up as a means to gradually implement the provisions of the East African Community Treaty and achieve its aims and objectives. The First East African Development Strategy (1997 – 2001) was succeeded by the second EAC Development Strategy (2001 – 2005) which expired in December 2005. The Third EAC Development Strategy began in 2006 and will expire in December 2010. These strategies create a framework for assessing works already implemented and mapping the way forward. The current development strategy underscores the importance of infrastructure, noting the catalytic role it plays in the functioning of economies. The Strategy outlines infrastructure challenges and proposes interventions for the region.
- **The Central Corridor Transit Transport Facilitation Agency (TTFA).** The TTFA was established following the signing of an agreement among Burundi, DRC, Rwanda, Tanzania and Uganda. Much like the Northern Corridor TTCA, the TTFA is a collaborative arrangement of governments and stakeholders from member countries and the aim of the agency is to ensure that the Central Corridor is available to importers and exporters from landlocked states of Burundi, Rwanda, Uganda and DRC as an efficient and economic addition to other trade routes, with the aim to provide the most cost-effective transport services.
- **EAC Secretariat Protocol on the Establishment of the East African Customs Union.** This protocol was enacted pursuant to the provisions of Article 75 of the Treaty for the Establishment of the EAC Customs union establishment provisions. The protocol aims, among other things, to eliminate tariffs and other barriers to trade as well as provide for customs co-operation and freeports. The protocol further provides for trade facilitation including ensuring adequate co-ordination and facilitation of trade and transport activities within the Community.

In addition to the above institutions and policy regimes, there is also the High Level Standing Committee on the East African Road Network through which the EAC has facilitated sector reforms which include the formation of Roads Boards/Agencies, participation of the private sector, harmonization of regional policies and axle loads control in the road sub-sector.

#### 1.4.3 Dar es Salaam Port

The port of Dar es Salaam is Tanzania's major coastal port, which handles the majority of traffic passing along the Central corridor. The Port has 11 berths and a total quay length of about 2,000 meters. It has a handling capacity of 10.1 million tonnes cargo per annum



divided as follows: 3.1 million tonnes for general cargo; 1.0 million tonnes for containers; and 6 million tonnes for liquid bulk.

Over 2006/7 and 2007/8, the port handled 7.476 million and 7.432 million tonnes of cargo, respectively.<sup>22</sup> Much like the Port of Mombasa, Dar es Salaam handles more imports than exports. In 2007/8, imports accounted for 5.697 million tonnes (76%) of the total cargo handled, while in 2006/7 imports accounted for 5.896 million tonnes (79%) of total cargo handled. The following figure categorises the imports and exports according to type of cargo.

**Figure D-12: Import and Export Cargo in tonnes**

	2006/07			2007/08		
	Imports	Exports	Total	Imports	Exports	Total
Dry Bulk	993,295	-	993,295	975,127	-	975,127
Break Bulk	2,852,811	953,840	3,806,651	2,531,604	1,185,581	3,717,185
Liquid Bulk	2,050,821	74,782	2,125,603	2,190,322	77,870	2,268,192
Transshipment	-		506,671	-		516,114
<b>Total</b>	<b>5,896,927</b>	<b>1,028,622</b>	<b>7,432,220</b>	<b>5,697,053</b>	<b>1,263,451</b>	<b>7,476,618</b>

Source: Tanzania Ports Authority Annual Report & Accounts for the year ended 30<sup>th</sup> June, 2008.

The port has the capacity to handle 250,000 TEUs per year, and over the past three years the terminal has experienced a shortage of space resulting in congestion problems. During the 2007/08 period, the port handled a total of 348,695 TEUs carrying 3.277 million tonnes of cargo. Of this traffic, 309,494 TEUs (88.7%) were handled by the privately run Tanzania International Container Terminal Services (TICTS), at the container terminal. Imports were 163,065 TEUs and exports were 146,429 TEUs. In a bid to alleviate the congestion problem, the port has undertaken a number of investment measures including procurement of container handling equipment, expansion of the berths to handle more containers, and extension of working hours to 24/7. As a result, the terminal now has capacity to handle 307,000 TEUs per year, which should contribute to easing congestion, ship turn-around and container dwell time.

### Container Dwell Time

The 2007/08 *target* for container dwell time (time between off-loading from the ship and leaving the port) was 12 days per container on average. The *actual* average dwell time attained was 21.17 days per container. The delays were a result of the continuing congestion at the container terminal, as highlighted above. The delays were longer for transit container clearance, as highlighted in the figure below. The figures provide the average dwell time for cargo at the TICTS terminal for 2008 and 2009, for imports.

<sup>22</sup> Tanzania Ports Authority Annual Report & Accounts for the year ended 30<sup>th</sup> June, 2008.

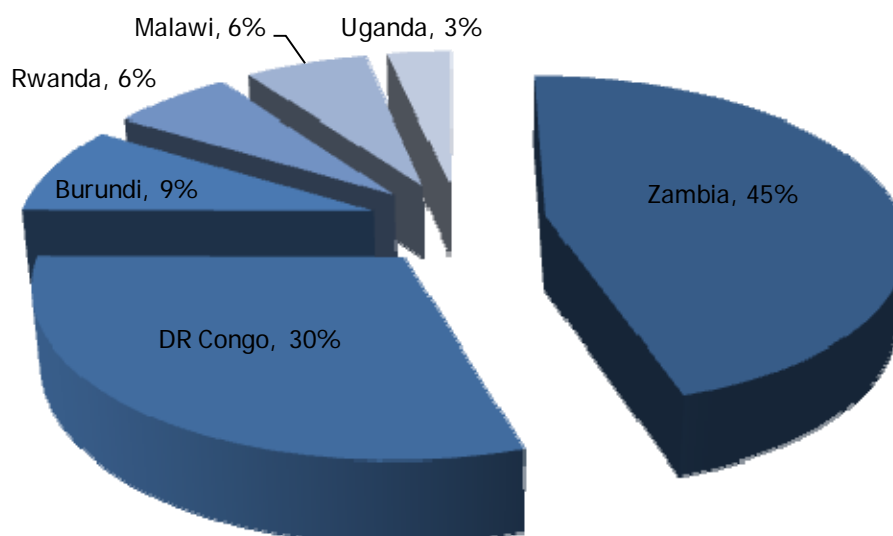
**Figure D-13: Average Dwell Time of Containers, Imports (days)**

Destination	2008	2009
Local	22	18
Zambia	33	20
Burundi	32	19
Rwanda	27	14
Congo	33	25
Malawi	39	25
Uganda	23	27

Source: Tanzania Ports Authority Annual Report & Accounts for the year ended 30<sup>th</sup> June, 2008.

### Transit Traffic from Landlocked Countries

Of the total 7.5 million tonnes handled by Dar es Salaam port in 2007/8, about 30% of traffic was transit goods travelling to / from landlocked countries in the region. During 2007/08, a total of 2.157 million tonnes of cargo came from or went to landlocked countries in the region, with the breakdown according to country set out in the figure below.

**Figure D-14: Transit Traffic through Dar es Salaam (%)**

Source: Tanzania Ports Authority Annual Report & Accounts for the year ended 30<sup>th</sup> June, 2008.

### Port Clearing Costs

Port tariffs are regulated by the *Tariff Book of Harbour Dues and Charges, Marine, Shipping and Stevedoring Charges, Wharfage, Shore Handling and Miscellaneous Services on Deep Sea Going Vessels and Coasters* which came into effect on July 1<sup>st</sup>, 1997. The Dar es Salaam

Terminal Tariff published by TICTS stipulates the tariffs applicable to container shipments and applies to services provided by TICTS at the Container terminal, the customs examination area and Kurasini Inland Container Depot (KICD).

**Figure D-15: Container Tariff Charges at the TICTS, US\$ (2009)**

Import Containers	Stevedoring		Handling	
	20'	40'	20'	40'
<b>Domestic (Full Container Load) FCL</b> Discharge from ship to Container Terminal Yard (CY), store free of charge for a period of 7 days and deliver to road transport or load to train at terminal railhead	71	107	79	119
<b>Domestic (Less than Container Load) LCL</b> Discharge from ship to CY, deliver to CFS, strip and place the empty container in stack and store free of charge for a period of 5 days	142	226	4.0 per freight tonne*	
<b>FCL Transport Containers (to Inland Countries)</b> Discharge from Ship to CY, store free of charge for a period of 21 days and deliver to road transport or load to train at terminal	80	120	70	105
<b>LCL Transit Containers (Cargo to Inland Countries)</b> Discharge from ship to CY, deliver to CFS, strip and place the empty container in stack and store for free of charge for a period of 5 days	160	255	3.50 per freight tonne**	
Export Containers	Stevedoring		Handling	
	20'	40'	20'	40'
<b>Domestic FCL</b> Receive to CY from road transport, store free of charge for a period of 7 days and load to vessel	71	107	79	119
<b>Domestic LCL</b> Receive empty container at CFS, stuff cargo and transfer laden container to CY, store free of charge for a period of 7 days and load to vessel	142	226	3.50 per freight tonne***	
<b>FCL Transit Containers (from Inland Countries)</b> Receive to CY from road transport or from train at terminal railhead, store free of charge for a period of 21 days and load to vessel	80	120	70	105
<b>LCL Transit Containers</b> Receive empty container at CFS, stuff cargo and transfer laden container to CY, store free of charge for a period of 21 days and load to vessel	160	255	3.50 per freight tonne****	

\*Handle cargo from container to warehouse and store free for a period of 7 days, then deliver to road transport (direct delivery to road/rail transport)

\*\*Handle cargo from container to warehouse and store free of charge for a period of 21 days, then deliver to onward transport (direct delivery to road/rail transport)

\*\*\*Receive from transport and transfer to stuffing yard

\*\*\*\* Receive from transport and transfer to stuffing yard

In addition to the port charges above, importers will incur the following charges, on average, from shipping lines:

- US\$ 72 for a 20' container
- US\$ 84 for a 40' container

### Customs Clearance

The majority of importers also use clearing and forwarding agents for their shipments through Dar es Salaam. In fact, Rwanda and Burundi have their own clearing and forwarding agents stationed in Dar es Salaam. The charges for using a clearing agent to clear a container through Dar es Salaam port are approximately as follows:

- US\$ 190 for a 20' container
- US\$ 262 for a 40' container

Finally, there are often informal payments made at the port to smooth the flow of shipment processing. Estimates suggest these are approximately US\$ 12 for a 20' container, and US\$ 20 for a 40' container. The figure below summarises all of the costs associated with clearing an import transit container through the Port of Mombasa.

**Figure D-16: Port and Customs Clearance, Import Transit Container, US\$ (current)**

Activity	20' Container	40' Container
Handling	80	120
Stevedoring	70	105
Shipping Line charges	72	84
Clearing and Forwarding Agent	190	262
Informal payments	12	20
<b>Total Costs</b>	<b>424</b>	<b>591</b>

#### 1.4.4 Border Posts

The main border post between Tanzania and Rwanda is at Rusomo Falls. By volume, Rusomo is the second busiest entry point into Rwanda, and in addition to traffic destined for Rwanda, also serves some transit of goods to Burundi, DRC and Western Uganda. Complaints at the border post include that clearance time is slow and infrastructure inadequate. In March 2010, the two countries signed a bilateral agreement to see establishment of a one-stop Joint Border Post at Rusomo, with support from the Japan International Cooperation Agency (JICA). The treaty will also extend the application of national laws relating to border controls of each party in the other state, thereby enabling border control Officers of each partner state to legally perform statutory functions outside their national territory and within the territory of the other state<sup>23</sup>.

<sup>23</sup> The New Times, Tanzania, March 26, 2010

The Tanzanian border with Burundi crosses at Kabanga / Kobero, in north-eastern Burundi. All Burundian border posts are supervised by the Director of Customs.

We understand the delays at border crossings into Rwanda and Burundi is approximately **three to four days** if all documentation is in order. It could be longer if any documentation is missing. The informal payment to facilitate movement of cargo across the border is US\$30 for a 20' container, and US\$ 45 for a 40' container, again, if all documentation is correct.

#### 1.4.5 Road Performance

Once containers are cleared at the Dar es Salaam, there are two options for transporting the container out of the port to landlocked countries: by rail or by truck. There is a free and open (competitive) market for trucking services in Tanzania, and approximately 95% of transit traffic along the Central Corridor travels by road<sup>24</sup>. The following figure shows the average transit times and charge from Dar es Salaam to major destinations along the corridor by road for a 20' container, weighing a maximum of 18 tons. The costs are inclusive of any hidden costs along the way (e.g. small bribes at police checks / border posts / weigh bridges).

**Figure D-17: Truck Rates and Time, 20' Container, 18 tons**

Origin	Destination	Distance	Tariff (US\$)	US\$ Charge per TEU-km	Driving Time
Dar es Salaam	Isaka (Tan)	987 km	2,600	2.64	2.5 days
Dar es Salaam	Mwanza (Tan)	1,142 km	3,111	2.72	3.5 days
Dar es Salaam	Kigali (Rwa)	1,486 km	3,972	2.67*	5 days
Dar es Salaam	Bujumbura (Bur)	1,542 km	4,122	2.67*	6 days

Source: CPCS analysis and research in Tanzania

\* Based on average charge per TEU-km of US\$2.67 for transit destinations

#### 1.4.6 Rail Performance

Tanzania Railways Limited (TRL) is a private firm resulting from the concession of Tanzania Railways Corporation which was formed in 1977 after the break-up of the East African Railways Corporation. TRL is owned by RITES Ltd. of India whose concession will operate for a period of 25 years from 2007. Two companies were formed through the concession agreement one being TRL where the Government of Tanzania has a 49% share, and Reli Asset Holding Company (RAHCO) which is 100% owned by the Government. While TRL is responsible for managing the day-to-day activities of the rail transport business and development of superstructure, RAHCO on the other hand is responsible for overseeing and monitoring the Concession Agreement to ensure its compliance with the concession agreement and to monitor performance of TRL while at the same time supervising implementation of future investments in the railway

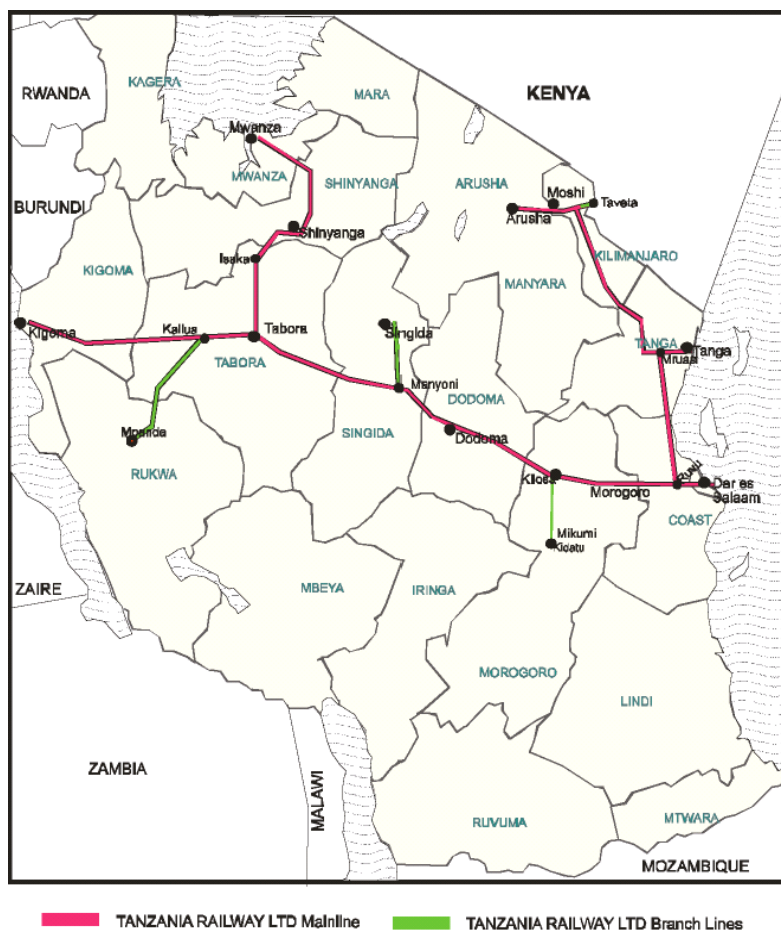
<sup>24</sup> Marine Logistics Ltd, "Integrated Transport Strategy – Lakes Tanganyika and Victoria", Central Development Corridor Regional Spatial Development Initiative Programme, Volume 1, Recommended Transport Strategy, February 2009.

infrastructure. TRL's gauge is 1000 mm with a total length of about 2,700 km composed of four main segments and four branch lines as indicated below.

**Figure D-18: Tanzania Railway Line Distribution**

Segment Name	Length (km)	Remarks
<b>Main Lines</b>		
The Central Line from Dar es Salaam to Kigoma	1,250	Primarily traffic destined for DR Congo and Burundi
Mwanza line from Tabora to Mwanza (via Isaka)	397	Transit transfer point at inland port at Isaka for traffic destined for Rwanda
Tanga Line from Tanga to Arusha	438	Currently operating only to Moshi
Link line from Ruvu Junction on the Central line to Mruasi Junction on the Tanga Line	188	
<b>Branch Lines</b>		
Kilosa to Kidatu	108	With a transit facility with TAZARA at Kidatu
Kaliua to Mpanda	210	
Singida Line from Manyoni	115	
Kehe to Taveta	18	Linking with Kenya Railways

**Figure D-19: Tanzania Railways Lines**



The TRL provides various services for both freight and passengers including services for cargoes coming from and going to the landlocked countries in the region: Burundi, Rwanda, Uganda, and DRC. Cargo carried or transhipped through the TRL includes containerized cargo, general dry cargo, petroleum products and refrigerated products. It also provides transshipment services, most notably at Isaka Dry Port, where there is an important road link to Kigali. The following figure shows the handling costs associated with the use of the railway.

**Figure D-20: Rail Handling Charges (2009)**

Particulars	Handling Charge US\$ per container
1 x 20' Empty	26
1 x 40' Empty	43
1 x 20' Loaded	60
1 x 40' Loaded	102
Conventional Cargo	102

Source: Addendum to Special Traffic Notice No. 01 Revision of Tariff *effective 1 July, 2009*.  
 Converted to US\$ with a rate of 1 TZS = US\$.00073.

The concession-holder, RITES, does not publish any formal tariff book for freight movements. Rather, the company negotiates rates with individual customers. However, it is

possible to get a rough estimate of the average charge per tonne-km for rail service by an analysis of the performance of TRC's freight business from the perspective of revenues. The figure below shows total freight tonnes, tonne-kilometres transported, and freight revenues for 2008 and 2009. In the final column we have calculated the estimated average tariff per tonne-km (using revenue / tonne-km as a proxy for tariffs charged).

**Figure D-21: Rail Handling Charges (2009)**

Year	Tonnes	Ton-Kms	Revenue*	Tariff/Ton-Km**
2008	504,765	509,059,560	US\$ 31,390,428	US\$ 0.062
2009	453,333	501,558,986	US\$ 28,752,755	US\$ 0.057

Source: Tanzania Railway Freight Performance Statistics

\* Original amounts in Tanzanian shillings: 2008, TSH 38,289,609,175; 2009, TSH 38,665,340,739

\*\* Calculated by dividing revenue by ton-kms

#### 1.4.7 Summary of Central Corridor

The figure below summarises the cost and delays for movement of an import TEU transit container by road from Dar es Salaam port to Kigali.

**Figure D-22: Cost for TEU Container, Dar es Salaam to Kigali, 18 tonne 20' container, 1,486 km**

Operation	Formal Cost (\$/TEU)	Informal Cost (\$/TEU)*	Total Cost (\$/TEU)	% of total cost	Average Time	% of total time
Port Clearance (including shipping line charges)	222	12	234	5%	14 days	62%
Customs Clearance	190	Included above	190	4%	Included above	-
Road Transport (Dar > Kigali, driving time only)	3,972	Included in formal price	3,972	90%	5 days	22%
Border Crossing (Rusomo)	-	30	30	1%	3-4 days	16%
<b>Total (average)</b>	<b>4,384</b>	<b>42</b>	<b>4,426</b>	<b>100%</b>	<b>22 – 23 days</b>	<b>100%</b>



## 1.5 Greater Mekong Subregion East-West Corridor<sup>25</sup>

### 1.5.1 Description of Corridor

The Greater Mekong Subregion (GMS) Economic Cooperation Programme is a programme that began in 1992 with support from the Asian Development Bank, and involves six countries in Asia: Thailand, Vietnam, China, Laos, Cambodia and Myanmar (Burma). The strategic thrust of the programme is to strengthen infrastructure linkages, to facilitate cross-border trade and investment, to increase private sector participation, and to develop labour competencies.

The GMS programme focuses on three economic and transport corridors:

- East West Economic Corridor, connecting Vietnam, Laos, Thailand and Myanmar
- Southern Corridor, connecting Thailand, Cambodia and Vietnam
- North-South Corridor, connecting southern China through Laos or Myanmar to Thailand

All of these corridors include fixed routes and border points, as illustrated in the Figure below. The East West Corridor, the focus of our comparative analysis for this chapter, is outlined in the box. In practice, although the corridor extends from coast to coast, the vast majority of activity (traffic movement) takes place in Vietnam, Laos and Thailand, not in Myanmar.

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<sup>25</sup> Much of the comparative cost analysis in this chapter is drawn from the recent study: Asian Development Bank Study, *GMS East West Corridor Logistics Benchmark Study*, 2008.

Figure D-23: Greater Mekong Subregion Economic Corridors



Source: GMS Cross-Border Transit Agreement, Protocol 1 Attachment. Box added by CPCS.

The East West Corridor (EWC) is approximately 1,350 km long and stretches from Danang Port in Vietnam to Mawlamyine Port in Myanmar. The corridor is the only direct and continuous land route between the South China Sea and the Indian Ocean (Andaman Sea). The road corridor is currently being utilised, although there are some missing links. The busiest parts of the corridor are those used as part of the other main transit route between Bangkok (Thailand) and Hanoi (Vietnam). The Second International Mekong Bridge (Friendship Bridge) between Mukdahan in Thailand and Savannakhet in the Lao PDR was inaugurated and opened on 20 December 2006. This has had a major positive impact on transit times along the EWC.

The EWC corridor passes through four countries, and three border crossings:

- Myawaddy (MYA) – Mae Sot (T)
- Mukdahan (T) – Savannakhet (LAO)
- Dansavanh (LAO) – Lao Bao (VN)

The EWC road comprises both 2-lane and 4-lane roads, with 4-lane highways located primarily in Thailand. The figure below illustrates some basic macroeconomic information on the four countries, and the status of the EWC in each country.

**Figure D-24: Macroeconomic Indicators and Road Condition, EWC Countries, 2008**

Country	EWC Road Length *	Road section (west to east)	Status of Road*	Population (2008)**	GDP per capita (current US\$) **
Myanmar	200 km	Mawlamyine - Myawaddy	2-lane highway in places, significant upgrading required along the road.	49,563,019	\$255 (2005 <sup>26</sup> )
Thailand	650 km	Mae Sot – Phitsanulok – Khon Kaen – Kalasin – Mukdahan	380 km is 4-lane, remainder mostly 2-lane all weather. Further upgrading scheduled over next 5 years.	67,386,383	\$4,043
Laos	230 km	Savannakehy – Dansavanh	Recently refurbished (2006), all 2-lane roads. High maintenance costs expected.	6,205,341	\$893
Vietnam	260 km	Lao Bao – Don Ha – Hue- Danang	Half of road is Class III Road, upgraded in 2006.	86,210,781	\$1,051

Source: \* Asian Development Bank, GMS East West Economic Corridor Logistics Benchmark Study, 2008. \*\* World Bank Development Indicators, unless indicated otherwise.

## Ports

The EWC is connected by two ports, Danang Port in Vietnam, and a port in Mawlamyine.

In Vietnam, Danang port is the largest sea port in central Vietnam, with a port capacity of 5 million tonnes per year. The port is made up of two terminals:

- Tien Sa terminal: a deep sea terminal with a depth of 10m – 12m, accommodating 965m of berth space. The terminal can accommodate cargo ships up to 45,000 DWT, 2,000 TEU container ships and passenger ships up to 75,000 GRT.

<sup>26</sup> Source: Asian Development Bank, Presentation by Mr Ronnie Butiong, "Issues and Challenges for the Regional Transport Infrastructure Network". Asian Development Bank Institute, November 2007.

- Song Han terminal: is 528m in length, and favours cargo transportation for local customers in the city of Danang.

The port's traffic is summarised in the Figure below. In 2008, the port handled 61,881 containers (TEUs), up from 34,383 in 2005. The increase in port traffic reflects Vietnam's growing importance as an economic and industry hub in Asia.

**Figure D-25: Danang Port Traffic, Tons**

Year	Import	Export	Domestic	Total
2002	802,75	511,17	760,131	2,074,048
2003	824,31	554,15	800,136	2,178,588
2004	724,67	739,85	844,455	2,308,973
2005	595,17	778,44	882,461	2,256,068
2006	414,79	892,081	1,064,152	2,371,024
2007	489,272	1,241,204	1,006,460	2,736,936
2008	525,906	1,230,793	985,558	2,742,257

Source: Danang Port, [www.danangportvn.com](http://www.danangportvn.com)

In Myanmar, the Mawlamyine port is managed by the Myanmar Port Authority, under the management of the Ministry of Transport. It is one of nine major ports in the country, but is not a deep-sea port. Mawlamyine is the third largest city in Myanmar, and capital of Mon province. There are limited statistics available on this port traffic. According to the Asian Development Bank, to complete the physical connections of the EWC, there is a need for upgrading or development of a deep-sea port at Mawlamyine port<sup>27</sup>.

### Traffic Flows

Currently, there is a large variety of commodities moving across the GMS countries. The main commodities include garlic, iron and steel, fuel, minerals, garments, wood products and auto-parts are among the major import and export commodities moving on the EWC.

## 1.5.2 Institutional Arrangements

### GMS Cross Border Transport Agreement (CBTA)

The governments that are part of the GMS sought to eliminate a number of non-physical barriers to regional movements, including difficult border formalities, restrictive visa requirements and vehicle entry, and a lack of effective transit regimes (transit traffic was difficult / or not allowed in some instances). To eliminate these non-physical barriers on the three corridors, the **GMS Cross-Border Transport Agreement (CBTA)** was developed in 1999, originally ratified by Laos, Vietnam and Thailand only. By 2003, China, Myanmar and

<sup>27</sup> Asian Development Bank, GMS East West Economic Corridor Logistics Benchmark Study, 2008.

Cambodia had also ratified the agreement, with implementation starting in 2005 and still ongoing (according to a set timeframe).

The CBTA is a comprehensive multilateral agreement covering all relevant aspects of cross-border transport movement of goods, vehicles and people, including. The CBTA only covers transportation by road (including trucks on ferries), and is made up of one main agreement (17 pages), with 20 annexes and protocols<sup>28</sup>. The most important provisions of the CBTA are summarised below:

- Commitment to establishing **single-window inspections** of people, vehicles and goods, with inspections carried out jointly and simultaneously by respective authorities in each country at the border. Annex 12 to the CBTA sets out the specific minimum requirements that the countries must establish in terms of border crossings and transit facilities.
- **Exemption from physical customs inspection, bond deposit and escorts** for cargos in international transit. This includes exemption from routine customs physical inspection at the border, customs escorts in the national territory and deposit of a bond as a guarantee for the customs duties (see also notes on Transit and Inland Customs Clearance Document below).
- Freedom of transit for transit traffic to/from all countries within the GMS, with this traffic exempt from duties and taxes (in most instances).
- **Priority border clearance** for perishable goods.
- All vehicles must satisfy weight, axle loads and dimensions of the host country they are passing through.
- Transport operators (truck operators) may undertake transport operations into, from, or across the territory of other countries, but not within the borders of one country (cabotage) unless special authorisation is received.
- Pricing for cross-border transport is free and determined by market forces, but subject to antitrust restrictions and supervision of the Joint Committee to avoid excessively high or low pricing.
- Commitment to limit the number of documents and reduce, to the extent possible, procedures and formalities required for cross-border traffic transit operations.

### Transit and Inland Customs Clearance Document

The CBTA exempts cargos in international transit from physical customs inspection, bond deposit and escorts, subject to use of an all-encompassing "Transit and Inland Customs Clearance Document" (TICCD). Annex 6 of the CBTA sets out the procedures for a TICCD, which is a document issued by an authorised/guaranteeing institution. The guaranteeing organisation/institution guarantees the payment of customs duties, taxes and interest on goods where any customs regulations are breached or there are other irregularities. The guaranteeing organisation is jointly liable with the transport operator to pay import and

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<sup>28</sup> The main agreement and Annexes can be accessed from this Asian Development Bank website: <http://www.adb.org/GMS/Cross-Border/default.asp>

export duties, taxes and interest, if the regulations are breached. The guaranteeing organisation will pay the fines / taxes first, and then can claim the reimbursement from the transport operator. The TICCD is valid for one journey only. This central document effectively acts as a common clearance document which is accepted by all signatories to the CBTA.

### **Common Control Areas (CCA)**

The Common Control Area (CCA) is a specially assigned restricted area at border crossings, aimed at facilitating single-stop and single window inspection, with cargo, warehousing and inspection facilities. These CCAs reflect the missions of the CBTA. The Japan Bank for International Cooperation (JBIC) provided a loan to develop the CCA for clearance between Laos and Thailand, on the Laos side of the Mekong Bridge (Mukdahan (T) – Savannakhet (LAO)). The CCA was completed in June 2008. However, at the time there were still institutional constraints in Thailand which forbid Thai government officials performing their duties outside of Thailand, as well as forbidding foreign officials to perform their duties in Thailand. We are not sure if these institutional barriers have since been removed<sup>29</sup>.

The CCA between Laos and Vietnam has been in operation since 2005, with customs officials from both countries jointly checking and inspecting goods crossing the border point (Dansavanh (LAO) – Lao Bao (VN)).

The existence of these CCA common border posts is a key reason for a quicker border crossing time along this corridor, as compared to the Northern Corridor.

### **1.5.3 Performance Indicators**

The performance indicators in this section refer to the three most active countries of the EWC: Vietnam, Laos and Thailand. Statistics on Myanmar are very limited due in part of lack of data collection. Furthermore, the EWC traffic flowing through that country is also relatively limited compared to the other three countries, and the country also suffers from political conflict and a relatively closed economy which makes data gathering difficult.

#### **Import / Export Performance**

The three figures below summarise general import / export performance for the three core EWC countries. Thailand possesses a more facilitating environment, with less complicated and time consuming procedures, which are cheaper than processes in Laos and Vietnam. To provide regional context, the case of Singapore is also included, illustrating a much higher performing environment compared to all three EWC countries.

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<sup>29</sup> Asian Development Bank, GMS East West Economic Corridor Logistics Benchmark Study, 2008.

Figure D-26: Average Time for Export / Import (Days, 2008)

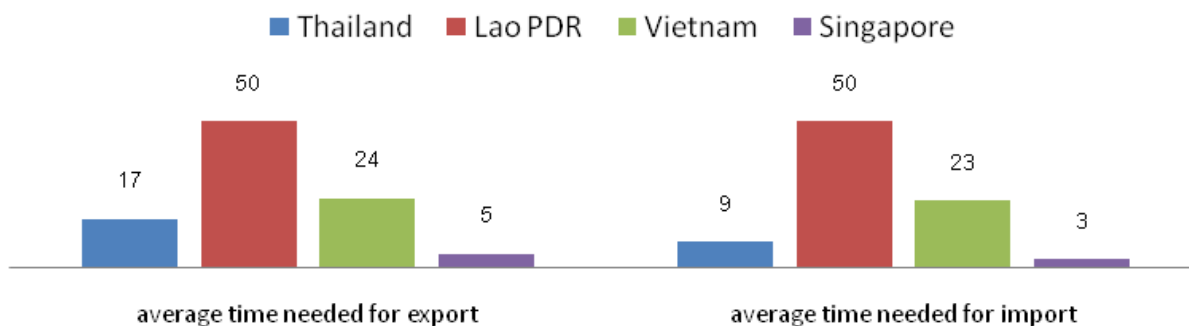


Figure D-27: Average Number of Documents for Export/Import (2008)

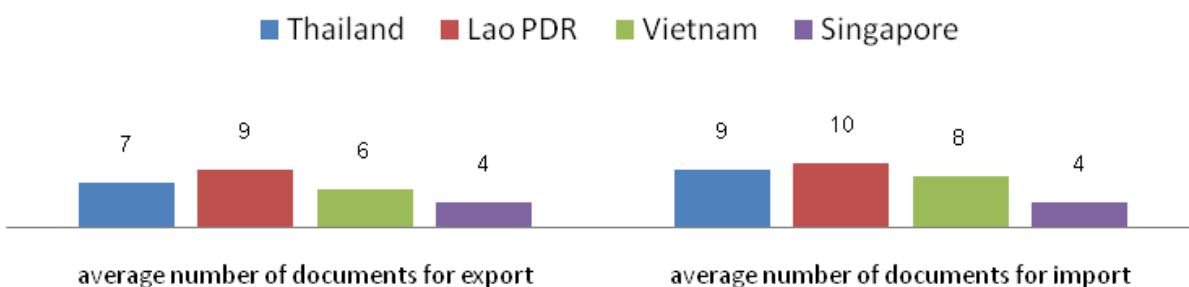
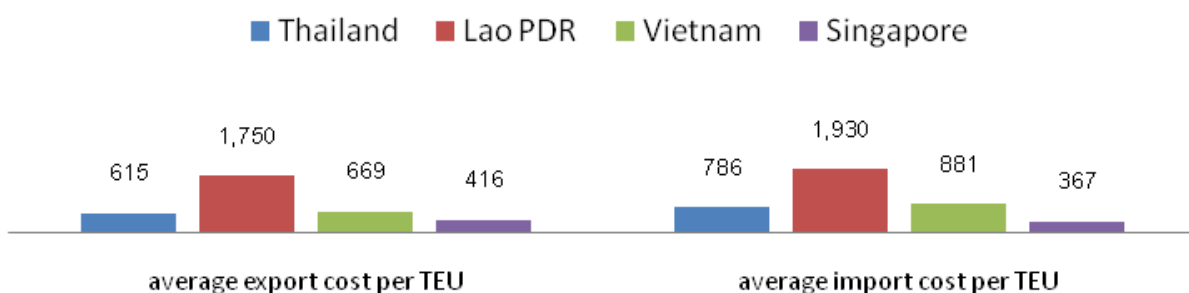


Figure D-28: Average Export/Import Cost per TEU (US\$, 2008)



Source for figures: ADB, GMS East West Economic Corridor Logistics Study, 2008; and *World Bank, Doing Business 2008*.

### Transit Performance and Costs (Vietnam – Thailand)

The EWC corridor (excluding Myanmar) runs from Danang Port in Vietnam to Tak (near the border with Myanmar). At Tak, the EWC connects with the main north-south road linking Bangkok to Kunming (China), as illustrated in **Error! Reference source not found.**

Starting from Danang port and moving west, goods travel 260 km inland to the Lao Bao / Dansavanh border with Laos. After passing the border point, goods will travel a further 230 km in Laos before arriving at the Mekong River at the 2<sup>nd</sup> Thai-Lao Friendship Bridge and the border with Thailand at Sawanakhet / Mukdahan. The final distance between Mukdahan and Tak is about 620 km.

The figure below illustrates a number of key performance indicators (time and cost) for each segment of this 1,110 km journey. **The total average cost to transit a container from Danang Port to Tak is \$1,847 per TEU, and the average journey takes 41 hours.** The costs below include the payment of illegal / informal facilitation payments (bribes, etc). These informal costs vary considerably according to the type of commodity being transported, and are estimated at 10 % – 15% of total transport costs.

**Figure D-29: EWC Corridor Performance, Danang (Vietnam) to Tak (Thailand), 2008**

From / To	Documents / Operations	Distance (Km)	Average Time	Range of Time	Average Cost (US\$/TEU)	Range of Cost (US\$ / TEU)
Danang Port	Unloading, customs clearance	n/a	5 hrs	4 hrs – 1 day	60	35-70
Danang – Laoboa border	Road Transport	260	6 hrs	5 hrs – 7 hrs	500	450-600
Vietnam Customs (Lao Bao)	Border clearance (exports)	n/a	2 hrs	2 hrs – 6 hrs	70	60-100
Laobao – Dansavanh	Road Transport	0.6	5 min	-	-	n/a
Lao customs (Dansavanh)	Border clearance (imports)	n/a	6 hrs	4 hrs – 8 hrs	250	200-350
Dansavanh-Sawanakhet	Road Transport	229	5 hrs	n/a	280	n/a
Sawanakhet (Friendship Bridge)	Transloading from Vietnamese to Thai truck	n/a	1 hr	1 hrs– 4 hrs	200	200
Lao Customs (Sawanakhet)	Border clearance (exports)	n/a	2 hrs	n/a	150	n/a
Friendship bridge	Bridge Fee	1	15 mins	n/a	30	n/a
Thai Customs at Mukdahan	Border clearance (imports)	n/a	2 hrs	n/a	57	n/a

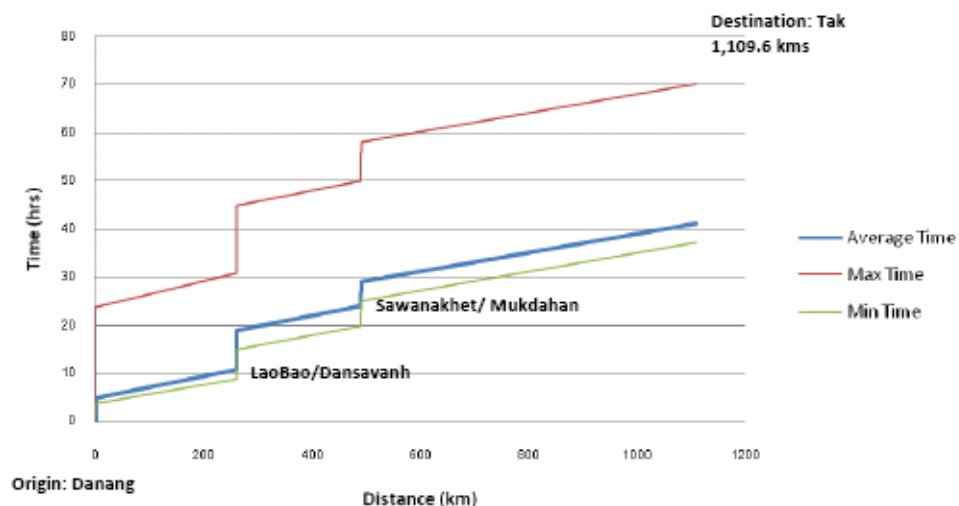


Mukdahan-Tak	Road transport	619	12 hrs	n/a	250	n/a
<b>Total (average)</b>	-	<b>1,110 km</b>	<b>41 hrs</b>	-	<b>\$ 1,847</b>	-

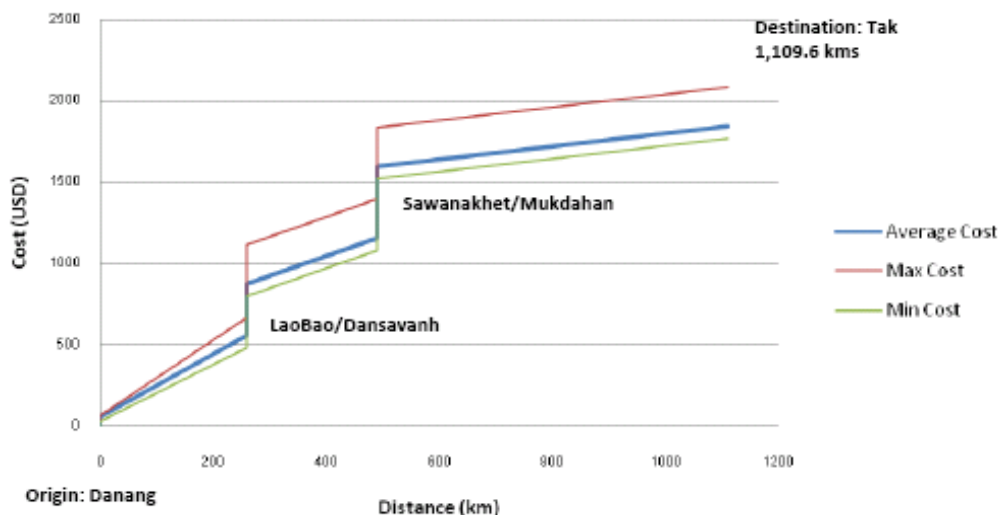
Source: Industry Sources and local logistics providers interviewed as part of Asian Development Bank Study, *GMS East West Corridor Logistics Benchmark Study*, 2008.

The figures below illustrate the snapshot of performance along the Danang – Tak route, considering time and cost per km travelled. The most salient observations from this route are summarised after the figures.

**Figure D-30: Danang – Tak, Time for journey (Hours)**



**Figure D-31: Danang – Tak, Cost for journey, US\$ / TEU**



Source: Asian Development Bank Study, *GMS East West Corridor Logistics Benchmark Study*, 2008.

### Summary of Performance

An analysis of the data shows the total average cost to transit a TEU container from Danang Port to Tak over 1,110km is **\$1,847 per TEU**. These costs **include** the payment of illegal / informal facilitation payments (bribes, etc). These informal costs vary considerably according

to the type of commodity being transported, and are estimated at 10 % – 15% of total transport costs (average of 12.5%). From a cost perspective, approximately 43% of the door to door transport costs occur at customs and border crossings.

The average journey time for the same route is **43 hours (5.4 days)**, with nearly half of this time spent at customs or border crossings. Thailand has the best infrastructure and truck conditions, with goods moving at an average speed of **51.58 km/h**. In contrast, freight moved across Laos and Vietnam moves at **45.8 km/h and 43.33 km/h**, respectively. This works out to an average speed of 45.7 km/h, considering the length of corridor in each country. At these speeds, if road transport was seamless and there were no customs and border delays, it would be possible for goods to move from origin to destination in 24 hours. Other than speed restrictions due to road conditions, delays are caused by the fact that cargo needs to be loaded and unloaded several times and that trans-loading is needed due to vehicle nationality restrictions. The lack of synchronisation at some border points is also delaying the smooth flow of goods.

Figure D-32: Cost for TEU Container, Danang to Tak, 1,110 km <sup>30</sup>

Operation	Formal Cost (\$/TEU)	Informal Cost (\$/TEU)*	Total Cost (\$/TEU)	% of total cost	Average Time <sup>31</sup>	% of total time
Port Clearance* (from berthing to unloading, including customs)	\$53	\$7	\$60	3%	5 hours	12%
Customs Clearance	Included above	Included above	Included above	-	Included above	-
Road Transport (Danang-Tak)**	\$1,093	\$137	\$1,230	67%	24 hours	59%
Border Crossing (2 borders)	\$495	\$62	\$557	30%	12 hours total	29%
<b>Total (average)</b>	<b>\$1,642</b>	<b>\$205</b>	<b>\$1,847</b>	<b>100%</b>	<b>41 hours</b>	<b>100%</b>

\* Informal costs vary by commodity, but are estimated at 12.5% of total costs

\*\* Including transloading from Vietnamese to Thai Truck

<sup>30</sup> All logistics costs and delays from USAID West Africa Trade Hub, transport and Logistics Costs on the Tema-Ouagadougou Corridor, Technical Report # 25, April 2010.

<sup>31</sup> Port clearance time works on 24 hour clock, remaining times based on 8 hour day.

## 1.6 Bolivian Corridor<sup>32</sup>

### 1.6.1 Description of Corridor

Bolivia is one of only two countries in Latin America that is land-locked, the other being Paraguay. Its most productive and densely populated area is very mountainous, with rough terrain, making it particularly difficult to access and increasing its international transport and logistics costs.

The Bolivian economy has the following share of value added by sector: 14% in agriculture, 34% in industry and 52% in services<sup>33</sup>, with the mining and hydrocarbon sector being one of the most important 'traditional' export sectors. In 2006, Bolivian exports were valued at about US\$2 billion, of which 77% were from the minerals (zinc, silver, tin and gold) and the hydrocarbon (natural gas) sector. Soy is also an increasingly important agricultural export commodity. The value of imports in 2006 was about US\$ 2.4 billion, consisting mainly of capital goods, with machinery and equipment accounting for about 20%.

In spite of being one of the more liberalised economies in Latin America, Bolivia still faces significant barriers to trade. In recent years, the government has taken a major interest in export diversification, moving beyond reliance on the country's traditional mineral and natural gas exports. However, the government also realises that improving infrastructure is one of the critical components of this drive.

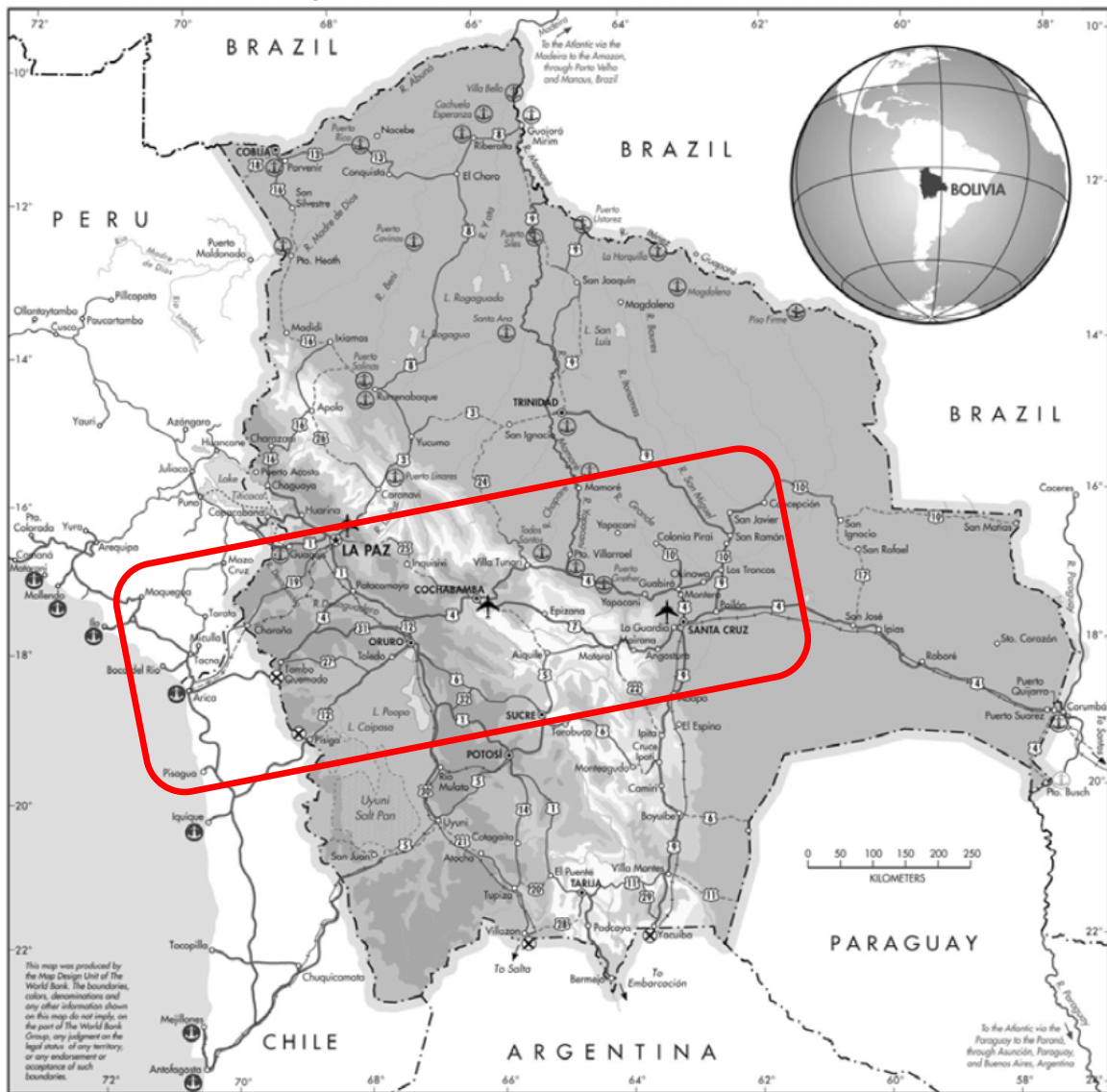
Unlike the other corridors analysed in this chapter, there is no well defined corridor concept for Bolivia yet. There is no formal corridor authority or institution established, nor any specific corridor transport and trade programmes. However, there is information on some of the key routes from Bolivia to reach the ocean. The corridor routes we will analyse in this section are those from Arica port in Chile up to La Paz, Cochabamba and Santa Cruz in central-eastern Bolivia. The figure overleaf shows a map of Bolivia with these main corridor routes highlighted.

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<sup>32</sup> Much of the data in this section is drawn from the recent World Bank Country Study, "Strengthening Bolivian Competitiveness: Export Diversification and Inclusive Growth", June 2009.

<sup>33</sup> World Bank Development Indicators, 2006.

Figure D-33: Infrastructure Network in Bolivia



Port of Arica

The bulk of Bolivia's transit cargo to and from countries outside South America passes through six ports: Arica and Antofagasta in Chile, Matarani in Peru, Rosario and Buenos Aires in Argentina, and Santos in Brazil. The main port used is Arica port.

Total tonnage handled at the port of Arica was 1,778,623 in 2009, of which 1,306,487 was containerised (109,572 TEUs), 58,751 was break-bulk and 413,385 was bulk cargo. Of the total, 1,356,937 tonnes (over 75%) was transit cargo, illustrating the importance of the port as a transit port for neighbouring countries, and Bolivia in particular, rather than a critical port for Chile<sup>34</sup>.

### **Rail system**

The Bolivian rail system is in two sections, the western or Andean section which is 2,274 km in length, and the eastern branch, which is 1,424km long. Unfortunately, the rail system is considered extremely inefficient and largely inadequate, with many of the rails no longer in use. The difficulties in the system can be attributed to low levels of investment, a lack of connection between the two rail networks and a lack of forwarders to consolidate traffic, thereby limiting the amount of container traffic.

Rail transport was traditionally more important than road transport, but recent repairs to the road, and declining investment in the railways, had meant rail transport is less and less important (with the exception of a few specific commodities). In the case of the Bolivia – Arica corridor, railway links to Arica are currently under major repairs and the railway is closed.

### **Road Transport**

Bolivia has one of the poorest road networks in South America, due in part to low investment, difficult (mountainous) topography, low population density, export of minerals by rail, and weak management systems. However, there have been improvements in recent years in the country's internal links and to the port of Arica. The whole centre of Bolivia, from La Paz to Santa Cruz, has benefitted from greater access with the opening of a paved road from Patacamaya (near Oruro) to Arica, and between Cochabamba and Santa Cruz. The now fully connected paved road from Arica to Santa Cruz is considered in generally good condition, and travel time from Arica to Santa Cruz (1,148 km) is approximately three days (36 hours of driving time).

#### **1.6.2 Institutional Arrangements**

Bolivia is party to a number of trade and transport integration schemes, although there is still no formal regional corridor passing through the country. In Latin America there is a long

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<sup>34</sup> [www.puertoarica.cl](http://www.puertoarica.cl)

history of cooperation in trade and transport through regional integration schemes, leading up to the present, well-established ones: the Andean Common Market, the Latin American Integration Association (ALADI), the Río de la Plata Basin Treaty, and the Southern Common Market of Argentina, Brazil, Paraguay and Uruguay (MERCOSUR).

The **Andean Pact or Cartagena Accord** established a common market covering Bolivia, Colombia, Ecuador, Peru and Venezuela, with 98 million people, now a leading market for Bolivia's non-traditional exports. The **Río de la Plata Basin Treaty** (Cuenca del Plata) was agreed in 1969. Bolivia and Paraguay joined with Argentina, Brazil and Uruguay to establish a framework for the promotion of the harmonious development and physical integration of the Plata River Basin.

Under the **Latin American Integration Association (ALADI)**, Bolivia and Paraguay have signed bilateral trade agreements with other Latin American countries, eliminating or reducing tariffs on limited lists of products. ALADI applies a common external tariff ranging from 0 to 20 per cent for most goods. Bolivia has been an associate member of the South Common Market (Mercosur) since 1996, a regional trade agreement between Argentina, Brazil, Paraguay and Uruguay founded in 1991<sup>35</sup>. All these arrangements provide a useful framework for streamlining cross-border procedures, including border payments for transit services.

Most relevant for the Bolivian / Chilean corridor is the **Peace Treaty of 1904** between Bolivia and Chile. This treaty gives Bolivia special rights in connection to movement of Bolivian cargo through Chilean ports. In the treaty, Chile recognised in perpetuity Bolivia's full right of commercial free transit through Chile's territories and ports, with no exceptions. The treaty also allows both countries to establish customs agents at Chilean ports, which is the case now. These rights were confirmed and updated in further agreements signed in 1912 and 1937. A bilateral integrated transit system (SIT) was introduced in the port of Arica in 1975, and in 1978 was extended to the port of Antofagasta. The SIT is a set of procedures for handling the documentation associated with the unloading, temporary storage, reloading and dispatch of goods in transit to and from Bolivia.

The TIT convention – **Acuerdo de Transporte Internacional Terrestre** - is the general legal instrument governing registration of road transport operators for carrying cargo to and from Bolivia, supporting the provisions in the Peace Treaty. Only Bolivian trucks may carry Bolivian cargo in transit to / from *Arica port*, whereas only Chilean trucks may carry bilateral traffic from *elsewhere* in Chile into Bolivia. The Ministry of Transport is responsible for legislation and regulations governing transit services, with the *Superintendencia de Transporte* being responsible for enforcing these qualifying truck regulations for international transport. Registration of trucks for international haulage can be done in Bolivia's five largest cities: La Paz, Santa Cruz, Cochabamba, Oruro and Potosí.

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<sup>35</sup> Chowdhury, A. and Erdenebileg, S., "Geography Against Development: A Case for Landlocked Developing Countries", UN-OHRLLS, 2006.

### 1.6.3 Logistics Indicators

#### Port

The Port of Arica is considered generally well run, with good equipment for loading and unloading containers. The Port tariffs are clearly listed on the port's website<sup>36</sup>. As of October 2009, the charge for loading/unloading a full or empty TEU container is US\$98, or US\$140 for a full or empty 40' container.

#### Road

There is a free market for road transport trucking services, and cargo owners and trucking firms make their own contracts for haulage between the coast to Bolivia and back, without recourse to any queuing system. In spite of the difficult and mountainous terrain, and the relatively low traffic levels, the long-distance trucking industry offers surprisingly low tariffs per ton-km. For imports, the tariffs range from US\$ 0.05 – US\$ 0.10 per tonne-km for 20' containers, and between US\$ 0.07 – US\$0.11 per tonne-km for 40' containers.

The figure below indicative tariffs between Arica and four major cities in Bolivia. The difference in import and export tariffs is typical of trade corridors where there are more imports than exports – and transporters will lower their tariffs to attract the limited backhaul cargo. **These rates include transport, dispatch and border payments.**

Figure D-34: Typical Truck Tariffs, 2008, US\$

Corridor	Distance (Km)	20' container (up to 23 tons)	20' Cost per ton-KM	40' container (up to 27 tons)	40' cost per ton-km
<b>Imports</b>					
Arica – La Paz	501	1,140	0.10	1,440	0.11
Arica – Oruro	580	1,200	0.09	1,400	0.09
Arica - Cochabamba	668	1,380	0.09	1,620	0.09
Arica – Santa Cruz	1,148	1,440	0.05	2,040	0.07
<b>Exports</b>					
La Paz – Arica	501	600	0.05	660	0.05
Oruro – Arica	580	750	0.06	900	0.06
Cochabamba – Arica	668	900	0.06	1,100	0.06
Santa Cruz – Arica	1,148	1,400	0.05	1,500	0.05

Source: World Bank Country Study, "Strengthening Bolivian Competitiveness: Export Diversification and Inclusive Growth", June 2009.

Based on the figures above, the truck tariff for an import TEU movement is an average US\$ 1.92 / TEU-km.

A number of factors tend to keep the truck tariffs per tonne-km low:

<sup>36</sup> [www.puertoarica.cl](http://www.puertoarica.cl)



- Wage costs are low as drivers receive no social benefits
- Profits are kept low as the trucking industry is characterised as non-monopolistic
- Diesel fuel is heavily subsidised at a set price (in December 2007, it was only US\$0.50 cents per litre)
- The capital cost of running most trucks is low as they are brought in second hand from wealthier countries, particularly Sweden
- Maintenance costs are low because spare parts are also imported second hand and labour is cheap
- Overloading is widespread and minimally controlled.

One of the common complaints moving goods along the corridor to Arica is the prevalence of government road toll stations. Between Santa Cruz and the border with Chile, there are between 8 – 10 road toll stations, which draw about US\$100 in formal fees per trip. The tolls are paid to cover the maintenance costs of road wear and tear. The road tolls cause delays for transit movement, and their removal / replacement with an alternative system of revenue collection would improve transit times.

## Borders

Bolivian customs – *Aduana Nacional de Bolivia (ANB)* – has eleven (11) border stations: four with Chile, three with Argentina, and four with Brazil. The Tambo Quemado border crossing en route to Arica port is the second busiest in the country. The border crossing is open from 8am to 8pm, 7 days a week, with 2 hours off for lunch.

Border controls have been noted to impinge on imports, with unpredictable processing times and delays on trucks bringing in imported goods. Another widespread problem is the smuggling of imported consumer goods which has created mistrust between border control agencies and importers.

Bolivia uses an online ASYCUDA customs clearing system, with UN standard documentation formats in use. These both appear to be working well. Customs practices require trucking firms to put up a transit guarantee to cover duty owed on imports when transporting goods through a transit country. Bolivia's current system required a bank guarantee (or equivalent) for values up to US\$ 15 – US\$ 20,000, using a smart card with an electronic embedded chip. This system is quite simple to use and has the benefits for deterring trucking operating from failing to declare their inbound cargo.

### 1.6.4 Summary of Performance

There is inadequate information available through desk-based research to estimate the full costs of the logistics chain for Bolivia. The most relevant statistic we can draw for comparison to the Northern Corridor is the average trucking tariff for a TEU import of US\$ 1.92 / TEU-km.

## 1.7 Comparison Across Corridors

The figure below summarises the comparison of performance between the Northern Corridor and four other corridors analysed in detail in this chapter. **The time comparisons exclude driver resting / break time, only considering working / moving hours.**

**Figure D-35: Comparison of performance Across Corridors, TEU Import Container, by Road**

Performance Indicator	Northern Corridor: Mombasa-Kigali	Central Corridor : Dar es Salaam-Kigali	Southern African: Maputo – Jo'burg	West Africa: Tema – Ouagadougou	Asia: Danang – Tak
Road distance from Port - Destination	1,700	1,486 km	550 km	1,057 km	1,110 km
Average Port Clearance time from docking (hours)*	48 hours (excluding CFSSs and customs)	336 hours (including customs)	32 hours	41 hours	41 hours
Formal Port handling costs (\$/TEU)	US\$222 (for transit containers)	US\$ 222	US\$ 350	US\$ 474	US\$ 53
Informal Port handling costs (\$/TEU)	US\$28	US\$ 12	US\$ 35	US\$ 32	US\$ 7
<b>Total Port handling Costs (\$/TEU)</b>	<b>US\$250</b>	<b>US\$ 234</b>	<b>US\$ 385</b>	<b>US\$ 505</b>	<b>US\$ 60</b>
Customs clearance time at port (hours)	68 hours	Included in port clearance	24 hours	65 hours	Included with port clearance
Formal Customs costs (\$ / TEU)	US\$185	US\$ 190	US\$ 285	US\$ 90	Included with port clearance
Informal Customs costs (\$ / TEU)	US\$30	Included in port clearance	US\$ 28	US\$ 25	Included with port clearance
<b>Total Customs handling Costs (\$/TEU)</b>	<b>US\$215</b>	<b>US\$ 190</b>	<b>US\$ 313</b>	<b>US\$ 115</b>	<b>-</b>
Road Transport Average Speed (Km/h)	35 km/h	37 km / h	60 km/h	40 km / h	45.7 km/h
<b>Road Transport costs (\$/TEU-km)</b>	<b>\$6,500 over 1,700 KM = \$3.82/ TEU-km</b>	<b>\$3,972 over 1,486km = \$2.67 / TEU-km</b>	<b>\$1,100 over 550 km = \$2/TEU-km</b>	<b>\$2,174 over 1,057 km = \$2 / TEU-km</b>	<b>\$1,230 over 1,110 km=\$1.10/TEU-km</b>
Number of border crossings	2	1	1	1	2

Performance Indicator	Northern Corridor: Mombasa-Kigali	Central Corridor : Dar es Salaam-Kigali	Southern African: Maputo – Jo'burg	West Africa: Tema – Ouagadougou	Asia: Danang – Tak
Border crossing time (average per border crossing)	8 hours	28 hours	4 hours	7 hours**	6 hours
Formal Border crossing costs (\$/TEU), avg per border	US\$120	None	US\$ 200	US\$ 68	US\$ 247
Informal Border crossing costs (\$/TEU), avg per border	US\$28	US\$ 30	US\$ 20	US\$ 41	US\$ 31
<b>Total Border Crossing Costs (\$/TEU)</b>	<b>US\$148</b>	<b>US\$30</b>	<b>US\$ 220</b>	<b>US\$ 109</b>	<b>US\$ 278</b>

\* Port time works on 24 hour clock, other logistics components work on 8 hour day.

\*\* Excludes Ouagarinter clearance: Final clearance for transit goods in Burkina Faso is done at Ouagarinter clearing complex near Ouagadougou, with only basic review of documents at the border. The clearing at Ouagarinter takes an average of 48 hours (6 days), and costs \$1,148 per TEU.