# Logistics Review of Beira and Nacala Corridors

#### DRAFT FINAL REPORT

Key Findings and Recommendations

Beira, Mozambique 26<sup>™</sup> June 2012





#### Agenda

- Key findings
  - Ports
  - Customs
  - Shipping
  - Roads
  - Border post
  - Special export terminals
- Key findings



#### Purpose of the Workshop

- The main purpose of this workshop is to validate the findings.
- The stakeholders' views on the ground should have the final say on what actually is happening on the ground.
- Thus our aim should not be to rebut any challenges on findings but have these findings confirmed and validated before we finalize the report.



#### Key Findings in Ports

 Compared to their peers Beira and Nacala Ports underperforms at the gate, terminal and quay

Benchmarking Analysis, 2010						
Port	TEU	Crane	Crane	Dwell	Truck	
	Throughput	Productivity	Productivity	Times	Cycle	
	('000s)	(Tons/hr.)	(moves/hr.)	(days)	Time	
Beira	105.7		8.6	26	3	
Maputo	1,000		15	22	4	
Nacala	71.1		8	14.6	6	
<b>Durban Container</b>	2,510.0		22	3.93	35	
Port Elizabeth	249.7		27	6	18	
Cape Town	690.7		22	6	15	
Durban Pier			21	6	15	
Mombasa	696.0		15	5.7	10	
Djibouti	0.008		28	8	12	
Dar es Salaam	341.0		19	19	5	
Global Best		>30	20-30	<7	1	

#### Key Findings in Ports

- Dwell times for both ports are exceedingly high, with annual average of 26 days for Beira Port 14.6 days for Nacala Ports.
- Neither Beira nor Nacala Ports use a common set of KPIs despite both ports operated under concession agreements drawn by CFM
- Both ports exhibit remarkable inefficiencies and low productivity when benchmarked against several KPIs affecting port operations, including delivery, storage, transfer; and loading and discharging cargo



#### Key Findings in Ports

A key indicator used to measure the performance of a port's gate is truck cycle time. Cycle time can be broadly defined as the time it takes a truck to enter and exit the port's gate or from A-check to P-check, including the time to drop off and the loading time for a container.

Comparison of Truck Cycle Times						
Port	Cycle Time	<b>Best in Class Comparison</b>				
Beira	3 hours to 1 day	3 times more inefficient				
Nacala	6 hours	6 times more inefficient				
Maputo	4 hours	5 times more inefficient				





#### Key Findings in Ports cont.

- CFM functions both as the regulator and an equity owner in ports and railways concessions.
- Lack of adequate equipment, especially cranes, tractors and trailers, etc. The situation is worse at Nacala Port where the equipment availability is less than 35 percent.
- Limited capacity at container terminals.
  - □ Beira Port exceeded its terminal capacity of 100,000 TEUs, by 60 percent in 2011.
  - In 2011 Nacala Port handled 89,719 TEUs, exceeding its terminal capacity of 75,000 TEUs by 20%
  - ☐ Efforts underway for expanding container terminals and building new coal terminal.





 Both Beira and Nacala ports have repositioned themselves as regional ports and receiving direct calls that connect to East Africa and East Asia.

Shipping	Lines Serving	Beira and	<b>Nacala Port</b>

Shipping Line	Liner services
CMA CGM	Container
Fairseas International	General Cargo
Maersk	Container
MSC	Container
PIL	Container
Safamarine	General Cargo





- Direct calls for Beira port largely enabled by channel dredging completed in July 2011.
- There are multiple local charges by shipping lines
  - ☐ High cost margins
  - ☐ Effect on increasing costs of goods, especially for exports that have to compete in the international markets.



### Terminal Handling Charges/Stevedoring (Dry cargo) US\$

	Beii	ra	Naca	la
	20'	40'	20'	40'
Port	80	144	74	133
Shipping line				
(average)	98	175	91	165
Variance	18	31	17	32
Variance (%)	22%	22%	23%	24%





### Terminal Handling Charges/Stevedoring (Reefer) US\$

	Beir	Nacala		
	20'	20' 40'		40'
Port	100	180	85	153
Shipping line (average)	145	234	142	228
Variance	45	54	57	75
Variance (%)	45%	30%	67%	49%





#### Key Findings in customs

- Implementation of a Single Window Electronic System (SEWS) underway in Beira and Nacala.
  - ■Will considerably cut time lead for customs clearance from 1-2 days to 1-6 hours.
- Full pre-clearance of goods has not been authorized in Mozambique. The law provide issue of "contramarc", without which customs clearance cannot be accomplished.
- Scanning charges are made on full load consignment and not on the actual cargo scanned.
- Critical regional facilitation instruments e.g. Regional Transit Bond Guarantee not implemented.
- Customs business forum not established.



#### Key Findings in Roads

- Poor road conditions on main road arterials:
  - ☐ Beira-Inchope (135km), Mocuba-Milange (192km),
  - □ Nampula-Cuamba-Mandimba-Lichinga (748km).
  - ☐ Impacts heavily on vehicle operation costs,
  - ☐ Impacts on transportation costs and transit/driving time
- Vehicle overloading
  - □estimated 25-35% of trucks overloaded.
  - □Overload unsafe and increases up maintenance costs.





#### Key Findings at Border Posts

- Border crossings have long clearing times
  - ☐ Average 1 day for all borders crossings
  - ☐Range of 0.5 2 days
- Multiple and cumulative border costs which includes
  - □road toll fees
  - □Insurance
  - □ carbon tax
  - □vehicle permit
  - □port health permit
- Border charges not harmonized despite being members of SADC





#### Key Findings in Railways

- Railway systems exhibits poor performance due to:
  - □ Lack of maintenance leading to deterioration of the line and increased in turnaround time of the rolling stock;
  - ☐ Shortages of both wagons and locomotives
- High tariffs contributes to diversion of cargo from railways to the roads, especially on Beira railway system
- Lack of KPIs on railway operations
- The railway systems have not exploited the economies of scale in bulk haulage and long distances due to their poor performance.





#### Key Findings in Railways

Road and Rail Transport Comparative Analyses									
		Road			Railway				
Route	Dista nce	Cost per ton-km (US\$)		US\$ per	Cost per ton-km (US\$)			US\$ per	
	(km)	TEU	FEU	Break -bulk	TEU-km	TEU	FEU	Break- bulk	TEU-km
Beira- Chimoio- Machipanda	285	0.27	0.24	0.21	5.96	0.07	0.1	0.09	1.46
Nacala- Cuamba- Mandimba- Lichinga	795					0.04	0.08	0.09	0.96
Nacala- Cuamba- Mandimba- Blantyre	799	0.18	0.16	0.13	4.03	0.08	0.13	0.10	1.80
Nacala- Cuamba- Mandimba- Lilongwe	988	0.16	0.14	0.12	3.47	0.09	0.14	0.10	1.96

#### Key Findings in Special Export Terminal

- Customs service order requiring operations related to exports through Nacala Port to be carried out at a special export terminal for customs control.
- Arrangements for special export terminal resulted to higher tariffs to exporters.
  - ■NCL handling charges are US\$87 and US\$156 higher than Nacala Port's handling charges for 20' foot and 40' foot containers, respectively.
  - □44% more expensive in handling charges at NCL in both categories of containers.
- Additional logistic movements and handling costs resulted from requirement to clear export cargo through the special terminal.

### Key Recommendations and Programs in Ports

- Shippers' behavioral change on ports as storage areas to reduce dwell time through: policy and pricing changes on free periods and tariffs; and sensitization
- Establish Port User Groups or forums for users of Beira and Nacala Ports
- Establish standards, collection, use and publication of standardized productivity and efficiency indicators
- Ports operational efficiency: additional port handling equipment; integrated management system; provide additional gates





# Key Recommendations and Programs in Shipping

- Establish corridor shipping councils that will comprise all stakeholders, including ports and shipping lines, that will consider optimal solutions for various costs and operation efficiency.
  - ☐ Councils will look at many other matters geared to increase trade and make the corridors competitive
- Establish a market oriented regulatory authority that will guide on optimal charges.
- Beira and Nacala ports undertake to collect stevedoring charges.
  - ■Will have immediate impact to reduce cost mark-ups and lower terminal handling charges





### Key Recommendations and Programs in customs

- Review of regulation to allow cargo pre-clearance by repealing requirement to provide a sequential entry number of vessel (contramarca) for import cargo.
- Establish customs forum that brings together all stakeholders involved in undertaking customs formalities.
- Provide and make available the regulation and criteria for random scanning of goods (instead of full shipments)
- Eliminate scanning charges, which are considered customs operations costs





### Key Recommendations and Programs in customs

- Eliminate the Single Electronic Window System charges, which are considered customs operations costs
- Produce and make available Standard Operating
  Procedures Manual for all customs clearance regimes
  - Produce
  - Update
  - Make available to all relevant stakeholders





### Key Recommendations and Programs in Roads

- Urgent need by the Government and ANE to rehabilitate identified road links to reduce their impact on transport costs and time.
- ANE to provide adequate weighbridges for overload control.
- The Government and ANE ensure corridor links are considered and included in the programs for SADC and regional development partners



### Key Recommendations and Programs for Border Posts

- Establish one-border posts on Beira and Nacala corridors to reduce clearing time by minimizing duplication of processes and elimination of costs
- Implement the SADC trade and transport facilitation instruments on documentation and processing for cargo, vehicles and persons crossing the borders.
- Government and revenue authority invest on information facilities at the borders





# Key Recommendations and Programs in Railways

- CFM undertake to improve the management and operation of the Beira railway system by buying more wagons, locomotives and upgrading of rail tracks.
- CFM and investment partner upgrade Nacala railway system by investing on wagons, rolling stock and rail tracks.
- CFM and railway operators establish KPIs on railway operations





### Key Recommendations on Special Export Terminals

- Mozambique Customs authorities provide export terminal market access and open registration for other market participants and eliminate NCL's monopoly position.
  - ☐ Creates competition that will ensure optimal service level and competitive prices.
- Establish key performance indicators and relevant statistical requirements with NCL to measure the operation efficiency of the NCL export terminal and other terminal that may be created.





#### THE END

#### Thank you



