

Maputo Corridor

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Streaming ||||| 100%

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Pointer 25°58'10.89" S 32°33'36.21" E elev 16 ft

Eye.alt 3320 ft

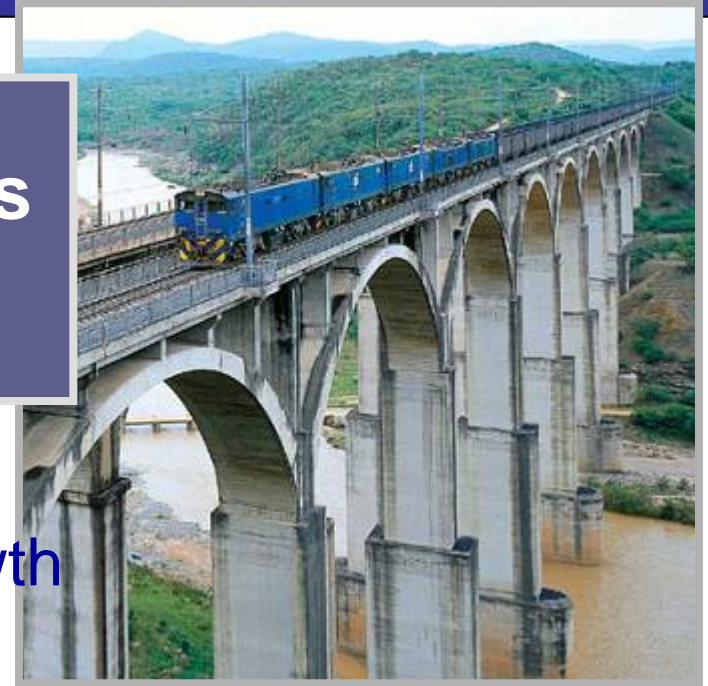
Preamble

- The Governments of the Republic of Mozambique and of the Republic of South Africa have expressed their intent to develop the “Maputo Corridor”
- Ressano Garcia Railway Concession resolved
- CFM and Transnet Freight Rail (TFR) are committed to this development
- Both Railway Administrations have appointed task teams to implement the commitment
- Support for future development of Port of Maputo
- Corridor freight growth predicated on shorter transport distance from Gauteng Hub to Maputo

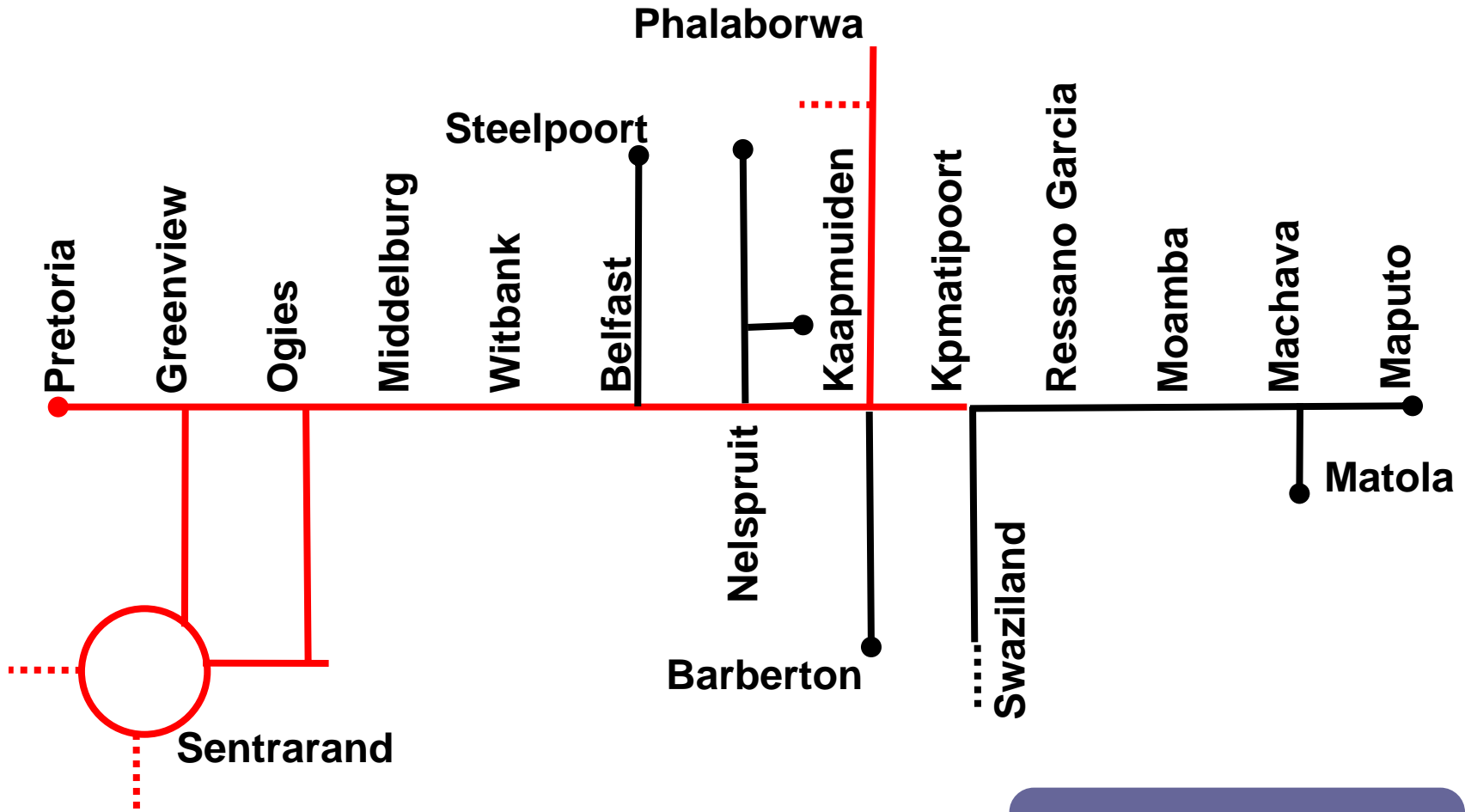
CFM/TFR Strategic Intent

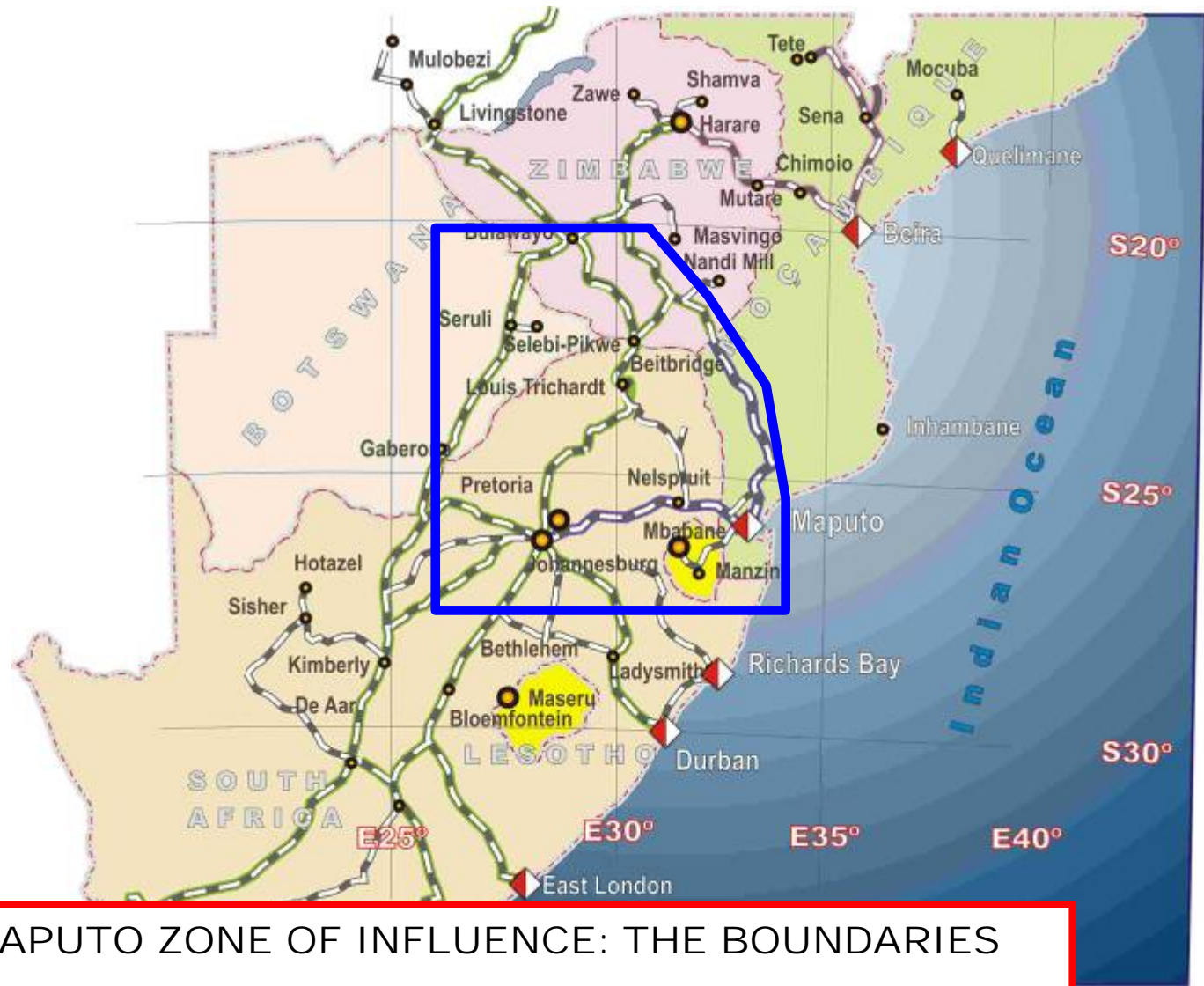
A Freight Railway that satisfies the needs of our Customers

- Enables Regional Economic Growth
- Facilitates Trade Growth by:
 - Increasing South Africa's and Mozambique competitiveness
 - Reducing logistics costs by transferring traffic from road to rail
 - Developing Skills



Corridor Detail





MAPUTO ZONE OF INFLUENCE: THE BOUNDARIES

MAPUTO ZONE OF INFLUENCE

SECTOR	PRODUCT	WEST	CENTER & MAPH	CENTER & MAPH	CENTER & MAPH	NORTH
ENERGY	COAL		WITBANK	ERMELO		
STEEL	MAGNETITE					Palaborwa
STEEL	CHROME	RUSTENBURG	WITBANK	MIDDELBURG	LYNDENBURG	Palaborwa
STEEL	MANGANESE				NELSPRUIT	
INDUSTRY	COPPER					Palaborwa
CIVIL WORKS	GRANITE	RUSTENBURG		BELFAST	LYNDENBURG	Potgietersrus
CIVIL WORKS	CEMENT	GABERONE	GAUTENG	MIDDELBURG	NELSPRUIT	POLOKWANE
FERTILISER	PHOSPHATE					Palaborwa
CHEMICALS			SECUNDA			
CONTAINER			GAUTENG	WITBANK	NELSPRUIT	

MAPUTO ZONE OF INFLUENCE COMPETITIVENESS

Absolute Rail Distances (KM)		Maputo MZ	Durban SA	Richards Bay SA	Cape SA	AVG
WITBANK	SA	469	801	627	1,662	890
PRETORIA	SA	575	763	683	1,586	902
RUSTENBURG	SA	661	874	794		776
TZANEEN	SA	452	1,160	972	2,038	1,156
LYDENBURG	SA	443	856	668	1,868	959
NELSPRUIT	SA	219	830	642	1,902	898
PHALABORWA	SA	374	1,083	895		784
PIETERSBURG	SA	550	935	802		762
GWERU	ZB	967	1,764	1,684		1,472
BULAWAYO	ZB	1,083	1,880	1,800		1,588
MATSAPA	SW	228	544	371		381

Market Demand (1)

Export	Comment	Rail tons p.a..
Coal - TCM	Current service (15 t/pw) Immediate demand for (22 t/pw) Medium term demand for (35 t/pw) Longer Term Market Demand	1.1 Mt 1.6 Mt 2.4 Mt 3.4 Mt
Magnetite - TCM	Phalaborwa - Current service (12 t/pw) Short Term increase to (14 t/pw) Short Term demand Long Term Demand (Optimistic Scenario driven by China and requires Joint Investigation)	650 – 800 Tt 0.95 Mt 2.0 Mt 3 - 4.6 Mt
Ferrochrome	Xstrata – Ex Lydenburg Current Market (Maputo) – 320 Tt 5 Year Market Projection ~ 1 Mt - Rail share 75% Further Potential – Ex Steelpoort (Lion Project)	120 Tt 750 Tt Joint Investigation
Steel	Highveld and Columbus (Main Players) Current Market (0.1Mt) & Rail Share – 54% 5 Year Market Projection – 0.38 Mt & Rail Share (80% - 90%) Potential – Ex Middelburg area	48 – 58 Tt 350 Tt

Market Demand (2)

Export	Comment	Rail tons p.a..
Chrome	Growth of low base (ex Steelport) Excellent growth potential - 700 Tt market	12 Tt
Granite	Granite – Ex Rustenburg Growth from zero base Medium Term Market Projection Switch from RBY needs to be investigated	27 Tt – 45 Tt 300 Tt
Sugar	Current bulk and bagged Rail market expected to stabilize Joint Investigation of Rail Market Potential with possible Terminal capability of 1 Mt	120 Tt 140 Tt 200 Tt
Citrus	Lost market, Seasonal traffic Customers indicate want rail Specialized wagons required	Further joint investigation
Containers	Lost market over past year Immediate demand 2 tpw (Maputo – Gauteng) Recapture 4000 boxes p.a. road Gauteng –Durban	5,800 – 8,000 Boxes
Automotive	Industry has put out feelers Further work required	Further joint investigation

Market Demand (3)

Imports	Comment	Rail tons p.a..
Containers	Same as for export	
Fuel	Rail Demand from Maputo to Watloo 80,000 cube Ex Maputo to Watloo Joint Investigation in other petroleum opportunities, i.e. BP (other Markets), Total, etc.	80,000 cubes
Sulphur	Potential return load to Phalaborwa from magnetite flows	Further joint Investigation
Fertilizer	Possibly Ex Mozambique to Potchefstroom and Hectorspruit	Further joint investigation
Domestic	Comment	Rail tons p.a.
Cement	Current Rail Market Market Opportunity	120 Tt 150 Tt Further joint Investigation
Maize	Current Rail Market. Requires main line block load consolidation Other opportunities needs to be investigated	53 – 90 Tt Further joint investigation

Corridor Objective and Time Frames

- Develop the corridor to mutual benefit:
- Coal and Magnetite
 - Stabilize current service against current design for coal and magnetite largely using current resources.
 - Optimize current design
 - Increase capacity thorough resource substitution
- General Freight
 - Growth through new services based on
 - Available resources
 - Reclaimed (repaired) resources
 - Growth through new investment

Time Frame

0 – 3 mths

3 – 6 mths

12 mths

0 – 3 mths

3 – 12 mths

18 mths

REHABILITATION OF RESSANO GARCIA LINE

- **INVESTMENT: USD 20 million (5 as support from World Bank)**
- **COMPLETION DATE: December 2007**
 - Purchase and application of new 54 kg/m rail
 - Modernization of concrete sleeper Factory
 - Re-sleeper and re-ballast of track
 - Inspection and repair of Bridges
 - Purchase of new turnouts at yards and stations
 - Rehabilitation of stations
 - Upgrade of communication system
 - Heavy track maintenance (geometric alignment)

REHABILITATION OF RESSANO GARCIA LINE

- **REPAIR OF EQUIPMENT**
 - **INVESTMENT: USD 50 million**
 - **COMPLETION DATE: 2008/9**
 - **Locomotives (6 GE's under repair-outsourcing);**
 - **Locomotives (6 GE's repaired-xitimela);**
 - **Wagons(Bid for repair of 670 wagons to be awarded)**
 - **Track Maintenance machinery**

REHABILITATION OF RESSANO GARCIA LINE



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REHABILITATION OF RESSANO GARCIA LINE



Resources - Locomotives

- **Stabilization phase**
- **CFM**
 - Currently insufficient - Using TFR
 - CFM locos being overhauled – Starting March 2007
- **TFR**
 - Design (9) Current (7) x 35 class for TCM based on 10 hr TAT
 - Komatipoort to design strength – 2 extra diesels - October
 - Reinforce 18E at Waterval Boven to design (101) 7 short – October
- **Immediate Growth**
- **CFM well positioned**
- **TFR**
 - TCM OK by reducing TAT to 8 hours
 - Magnetite – dependant on 18E's Phalaborwa
 - Containers and Fuel – 18E's Waterval Boven to Pretoria
 - Review service design

Resources - Wagons

- **Stabilization Phase**
- Coal
 - Wagons determined by TAT
 - 850 DZ ring fenced. 600 Operational
 - 250 not operational, awaiting wheels
 - Repair at Komatipoort – end Nov
- Magnetite
 - Sufficient for 6 block trains per week
 - Change to CFR when axle loading permits
- **Immediate Growth**
- Coal
 - Further 150 DZ at Komatipoort require body repairs.
 - Determine repair date to match growth requirements
- Magnetite
 - Additional growth depends on wagons

Crews

▪ TRAINING

- 31 new drivers certified from CFM rail school
- 2 trainer drivers certified on air brake system by TRF
- 25 yard shunters trained and certified by TRF

Stabilization: Summary

- Market potential alignment
- Performance shortcomings
- Stabilize current designs
- Channel management and reporting
- Focus on Immediate growth opportunities
- Principle based Investment for long term growth
- Relationship Governance

Current Design – Stabilization Phase

Current Traffic Design	Trains per week Into Komati	Trains per week Komati - Maputo	Comment
Magnetite – TCM	6	12	▪ TFR locos to TCM
Coal – TCM	22	22	▪ Initial design 35 tpw ▪ Current average 15 tpw ▪ TFR locos to TCM
Coal - Matola	1	1	
General Traffic	7	7	▪ Ferro-chrome, Steel, Cement, Sugar, etc
Passengers	6	-	▪ Komati – Maputo shuttle
Total	42	42	

Train resourcing is fine balancing act

Short Term Growth Response

Deployment of existing assets

- **Containers**
- Serves import and export
- Maputo terminal well positioned with 160 000 box capacity p.a.
- Target Gauteng – Durban road competition
- 2 container trains per week –Maputo to Pretcon / City Deep
 - Wagons available
 - TFR – Service design and locomotives and crew

- **Fuel Imports**
- Create capacity Maputo – Waltloo
- CFM – relocate tankers
- TFR – repair tankers
- Introduce ring fenced sets as tankers become available

Medium & Long Term Growth Response

■ Medium Term

- Reallocation of Assets
- Sugar, Citrus, Cement, Maize, Chrome, Granite
- Joint investigation and planning in
 - Service Design
 - Locomotive allocation
 - Crewing
 - Wagon availability, sourcing
 - Return on assets / investment

■ Long Term

- New Assets
- Ferrochrome, Steel, Sulphur, Fertilizer
 - Full investment planning
 - Long term contracts

Investment Principles

- Appropriate risk sharing by all parties including customers
- Forwarding administration responsible for wagons
- Investments structured for win-win and lose-lose
- Public Private Partnerships for investments
- Relationship Governance & Business Agreement in place

PERFORMANCE

■ Traffic

Up to the 41th week of this year 1.219 trains

Being;

- 488 Coal trains,
- 390 Magnetite,
- 340 General freight (include container).

At a weekly average of 30 trains weekly being: 12 Coal, 10 Magnetite and 8 General Freight (Container, Steel, Ferrochrome, Citrus, Sugar, Cement.

PERFORMANCE

These figures represent 71% of the Planned 1.722 trains to this date.

Reasons: Drop on Coal due to market reasons

Target on magnetite not achieved (average of 10 trains weakly)