

Grain on the Move – a Transnet perspective to increase freight on rail

14 August 2019



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- Transnet Freight Rail reach in South Africa
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- The case of Rumo Logistics – collaboration model
- How can we make this experience work for South Africa
- The possible model to increase rail market share in South Africa
- The way forward

BACKGROUND

Transnet through the years



1910



1970



1981

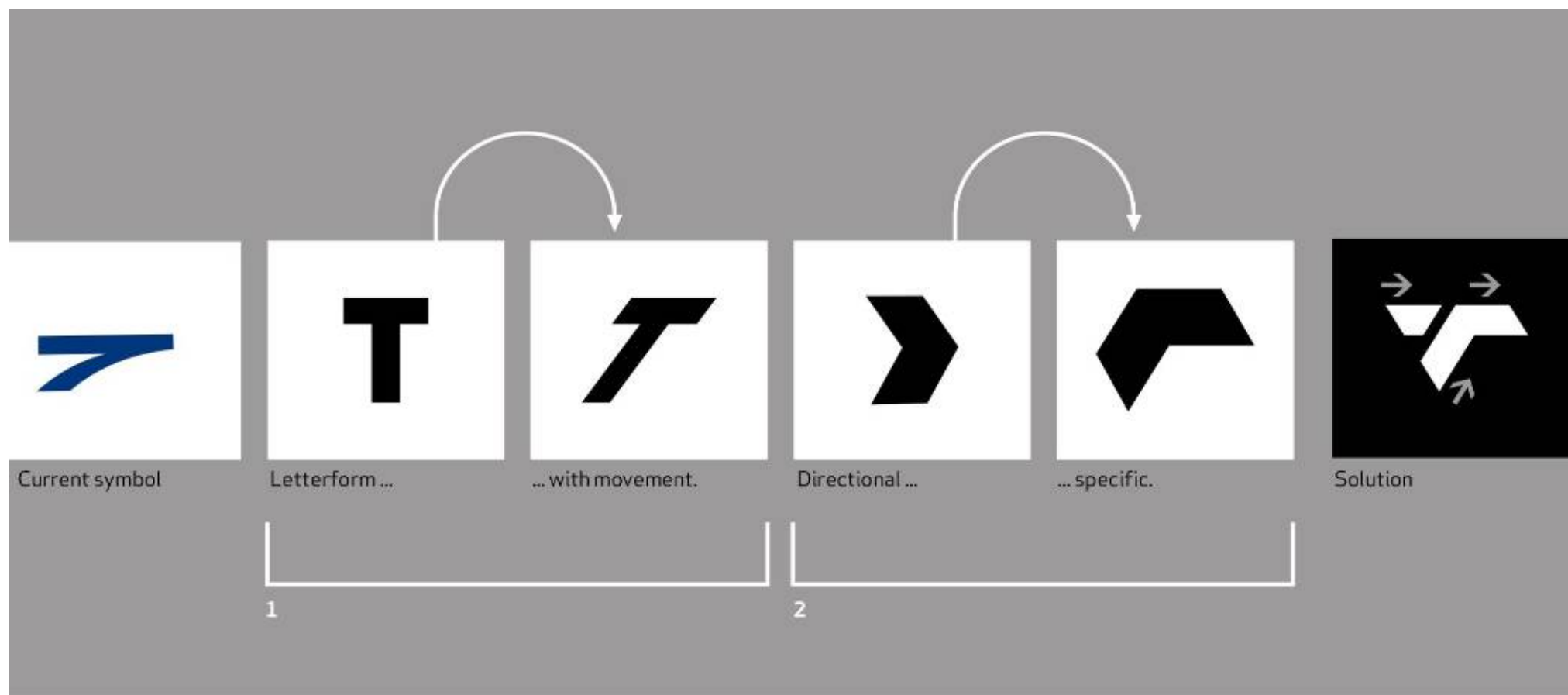


1990

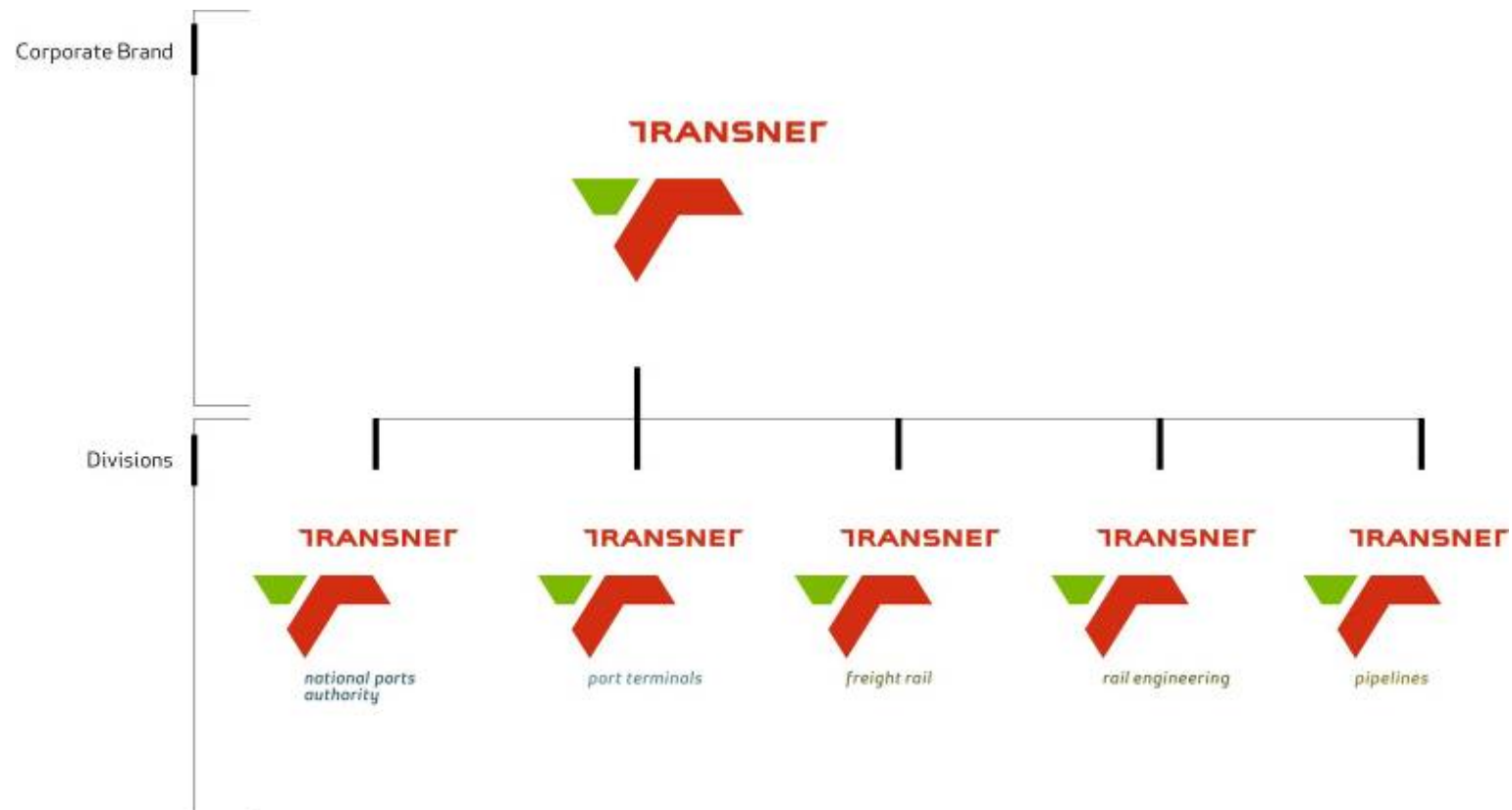


1994

EVOLVING THE CURRENT BRAND MARK



TRANSNET STRUCTURE



"One Company, One Vision" aims to integrate all the operations to provide seamless transport solutions to customers.

TFR is the largest division of Transnet

1

TFR transports freight on rail

2

TFR moves 17% of South Africa's freight

3

Has a network of 31 000 km of railway track

4

Employs 27 600 people

TFR has 6 business units:

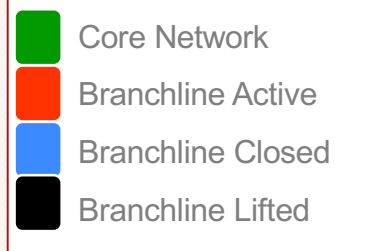
- Agricultural and Bulk Liquids
- Containers and Automotive
- Coal
- Iron Ore and Manganese
- Mineral Mining and Chrome
- Steel and Cement



Rail Network

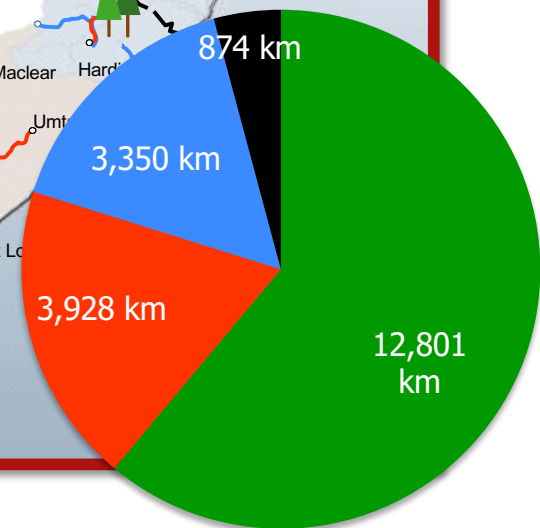
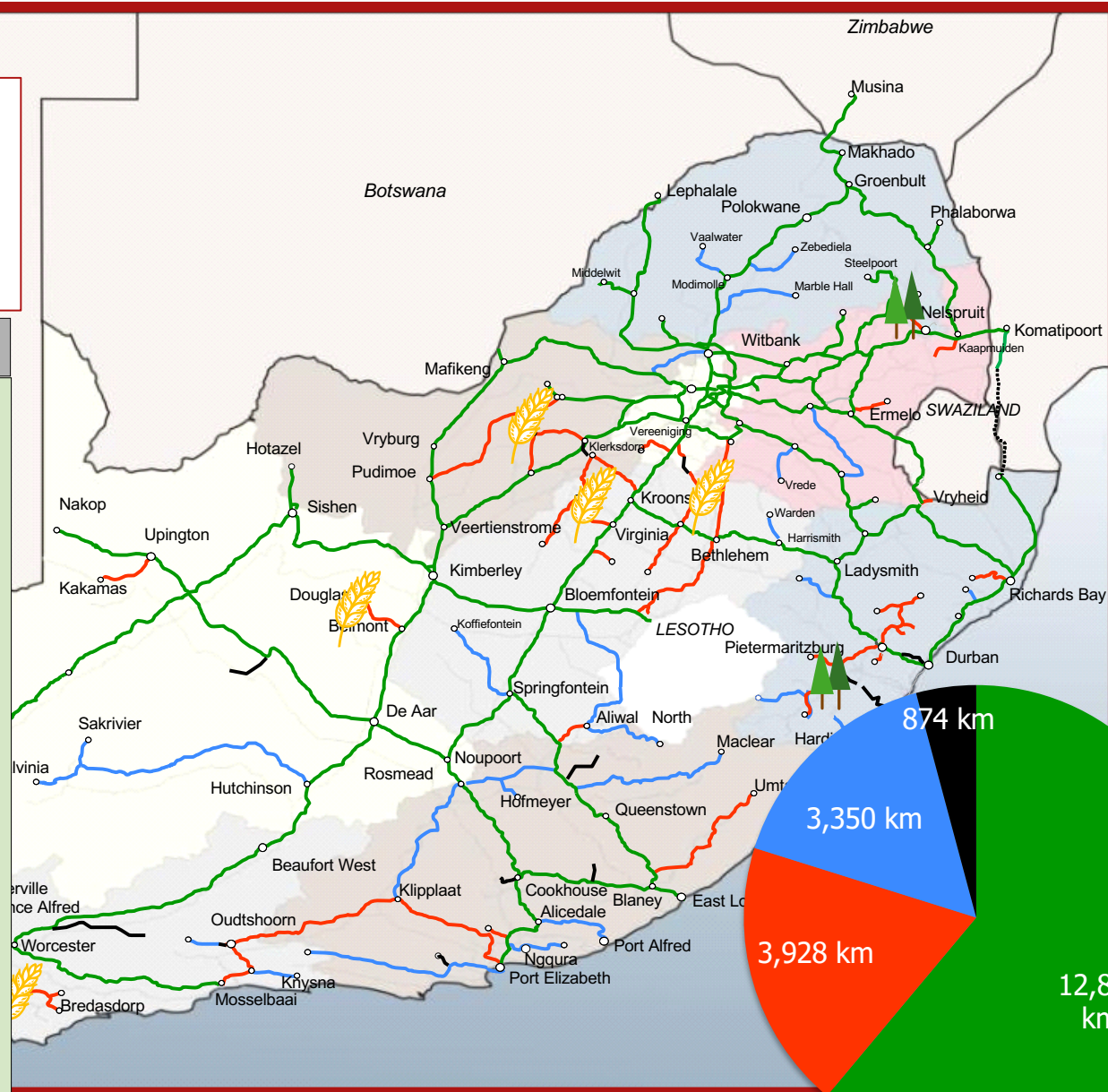


NER



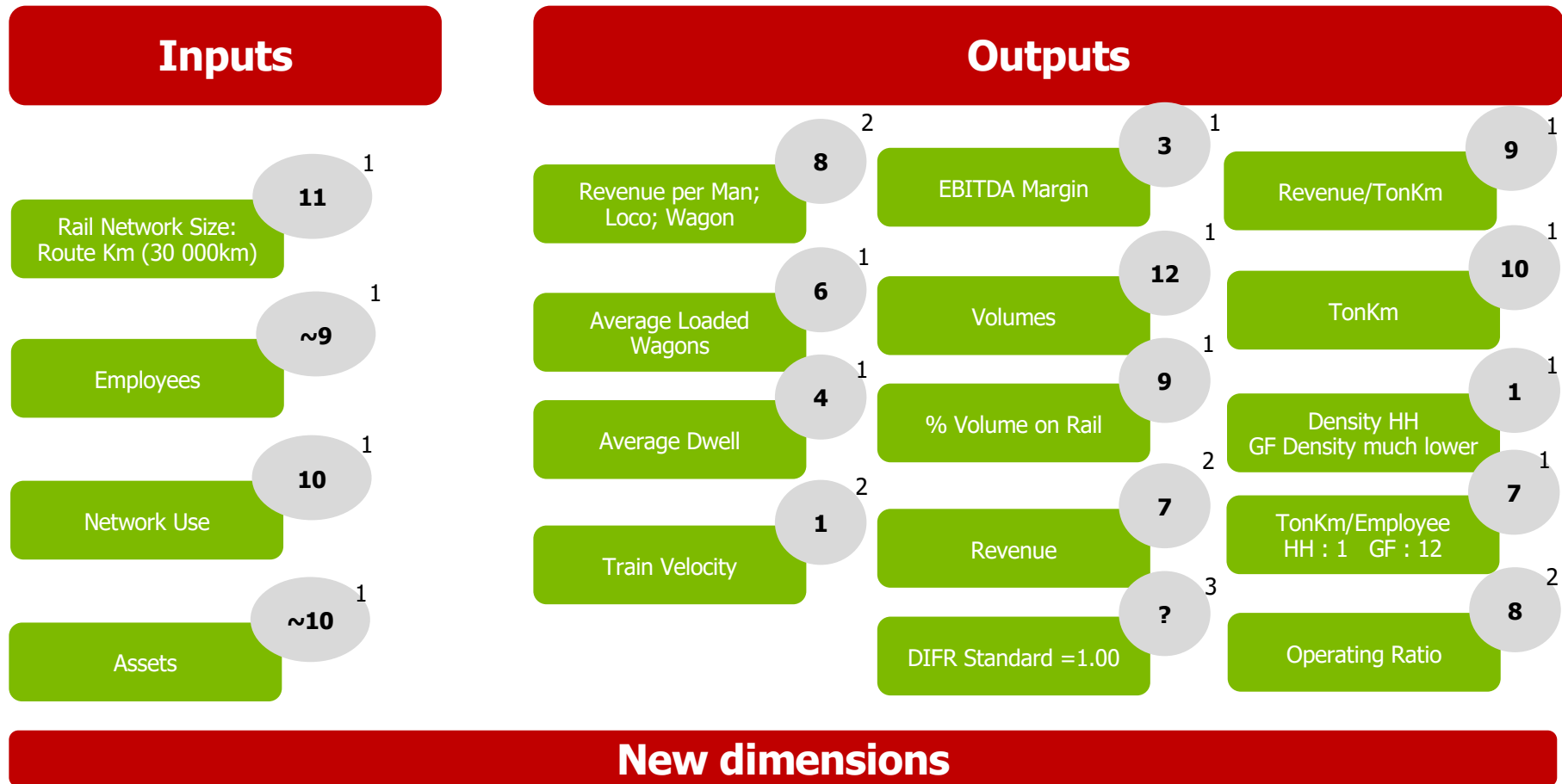
Rail Infrastructure

- 30 400 km of track
- 20 953 route km
- Core network: 12 801 route km
- Network Traction
 - 50kV AC (861km)
 - 25 kV AC (2309km)
 - 3kV DC (4935km)
 - Diesel (11974km)
- Axle loading
 - Main lines at 20t/axle
 - Ore line at 30t/axle
 - Coal line at 26t/axle



Is Transnet Freight Rail in the World's top 5 railway companies?

- perhaps top 10!



Customer Satisfaction Surveys

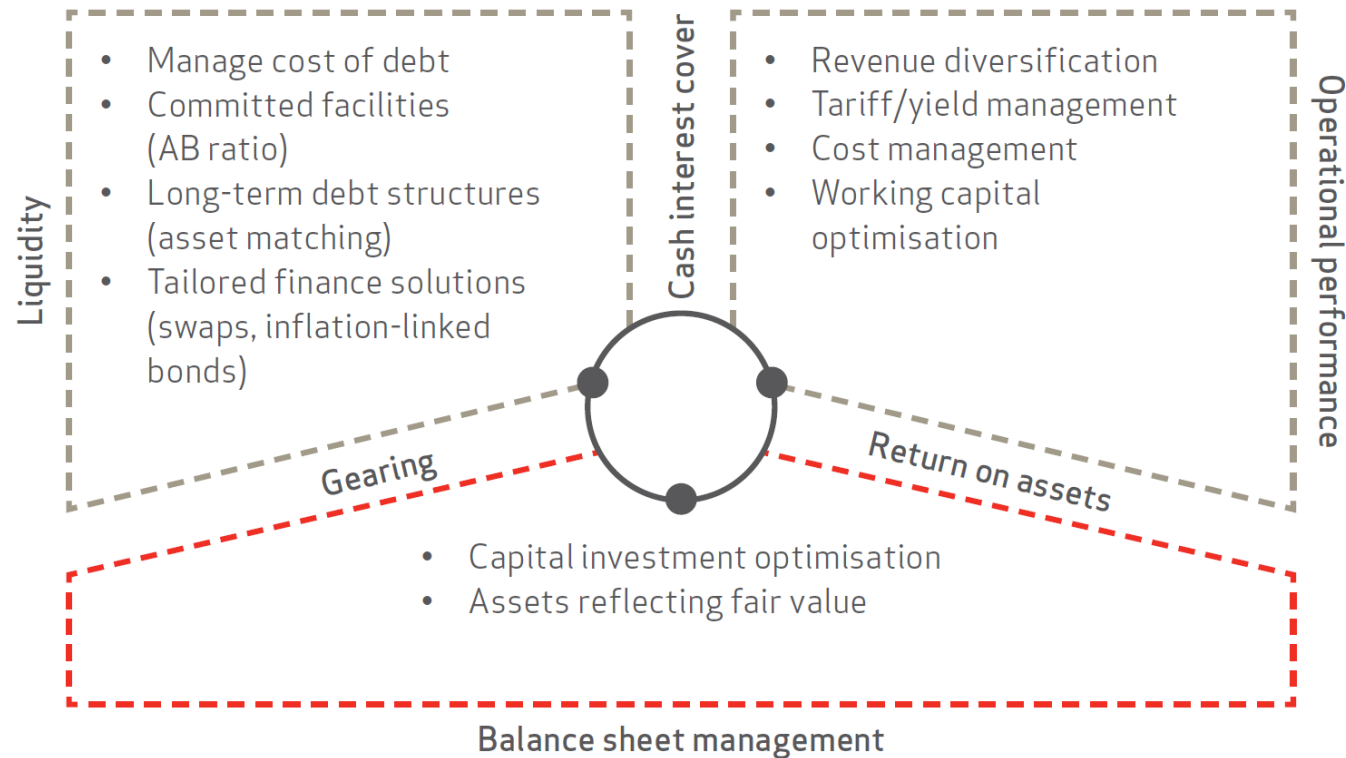
GC POWERLIST
AFRICA TEAMS | 2016



The key challenge: balancing key strategic objectives versus financial constraints



Financial goals:



- Transnet must balance certain **developmental objectives** with the achievement of **commercial objectives** to ensure it is able to source cost-effective funding in the debt capital markets.
- The strategy must consider the risk profile of the business and ensure risks are proactively managed to ensure **long-term sustainability**.
- The **recent downgrade** of the sovereign credit rating of South Africa resulted in the **automatic downgrade of Transnet**, given its strong links to the South African Government. The **impact of the downgrade** has resulted in an **increase in debt finance costs**.

Historical performance satisfactory, but well below aspirations with negligible “real” growth in rail volumes despite significant investments



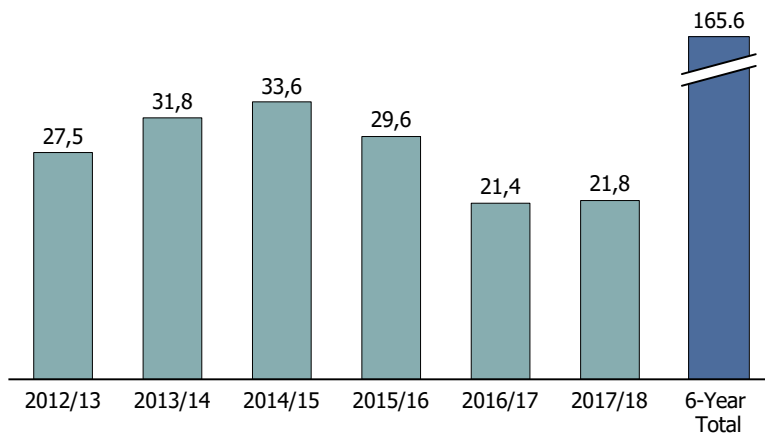
	2013/14	2014/15	2015/16	2016/17	2017/18 Prelim	YoY variance
VOLUMES						
General freight (GFB) (mt)	88,0	90.6	84.0	88.1	90.8	3.1%
Export coal (mt)	68,1	76.3	72.1	73.8	77.0	4.3%
Export iron ore (mt)	54,3	59.7	58.1	57.2	58.5	2.3%
Total rail volumes (mt)	210,4	226.6	214.2	219.1	226.3	3.3%
Containers (TPT) ('000 TEUs)	4 503	4 571	4 366	4 396	4 664	6.1%
Petroleum (Mℓ)	16 583	17 186	17 426	16 978	16 345	(3.7%)
FINANCIALS (R million)						
Revenue	56 606	61 152	62 167	65 478	72 938	11.4%
EBITDA	23 639	25 588	26 250	27 557	32 515	18.0%
Capital investment	31 766	33 565	29 561	21 438	21 781	1.6%
Total assets	240 073	328 439	356 393	351 635	369 823	5.2%
Total borrowings	90 444	110 377	134 517	124 780	122 550	(1.8%)
RATIOS						
EBITDA margin (%)	41.8	41.8	42.2	42.1	44.6	
Gearing (%)	45.9	40.0	43.1	44.4	43.4	
Cash interest cover (times)*	3.7	3.2	3.0	2.8	3.0	
Return on total average assets (%)	6.5	6.4	3.7	4.6	5.9	
Net debt/EBITDA (times)	3.5	3.7	4.1	4.2	3.7	

* Excluding working capital changes.
Strictly private and confidential

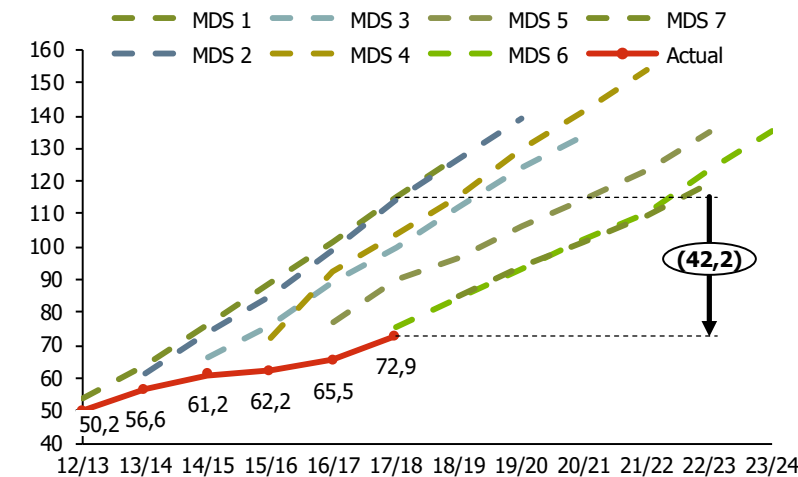
We have invested heavily in assets, but associated volumes and returns are well below initial Market Demand Strategy targets



Capital investments (R billion)



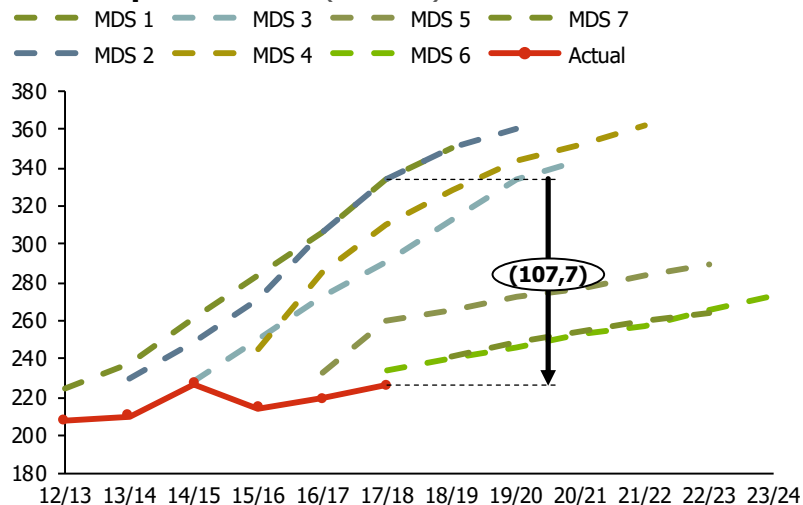
Revenue trends (R billion)



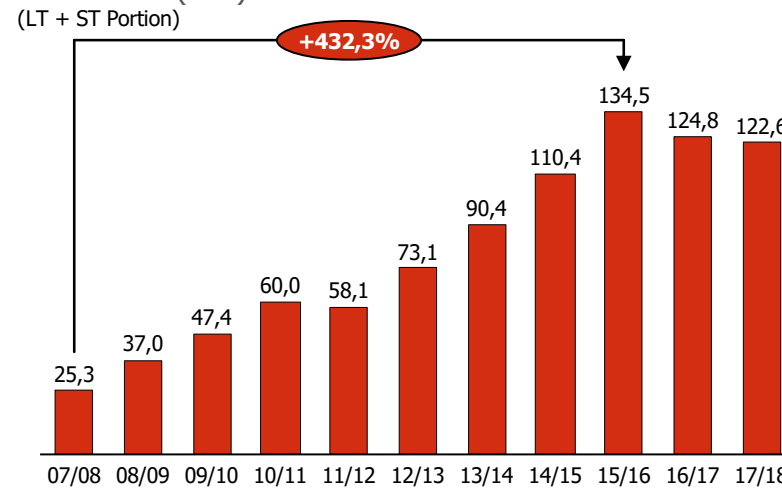
Historical trends to avoid going forward:

- Invested R165.6bn since 2012/13, but rail volumes only increased by 1.7% CAGR⁽¹⁾.
- Total rail volumes are 107.7mt below the 334mt target set in MDS 1.
- Actual 2017/18 revenue is R42.2bn billion below the R115.1bn target set in MDS 1.
- All subsequent MDS targets have been missed significantly
- Result
- Assets not delivering on revenue, but interest and redemptions for the associated loans are still due and payable

Volume performance (Rail: mt)



Loan Book (Rbn)

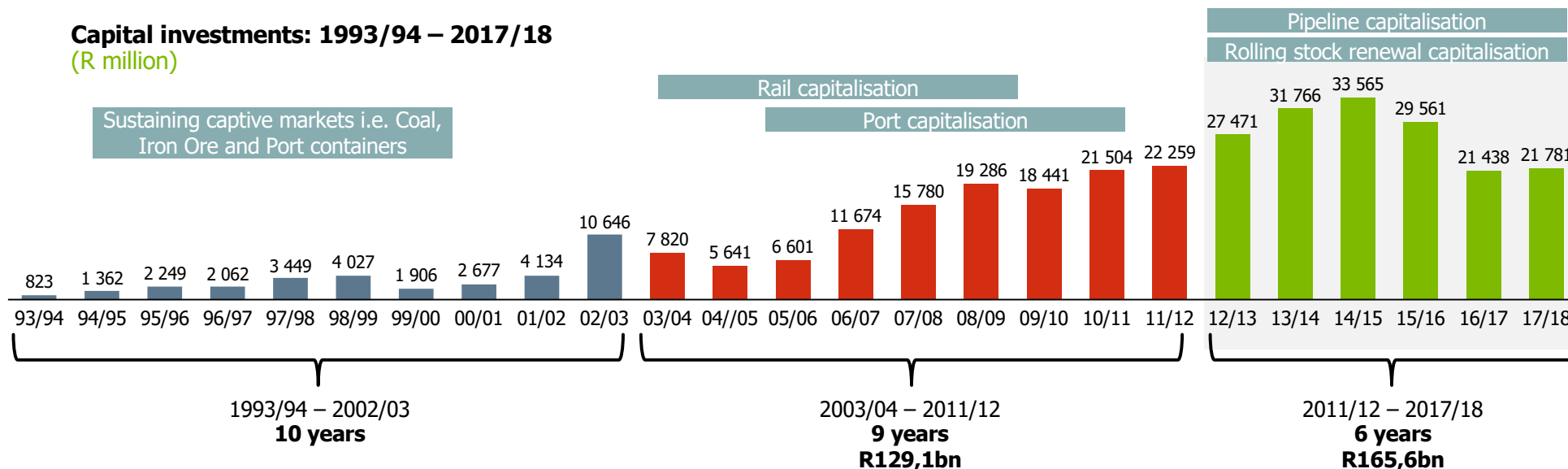


(1) 5-year compounded average growth rate

Transnet's historical capital investment programme

Capital investments: 1993/94 – 2017/18

(R million)



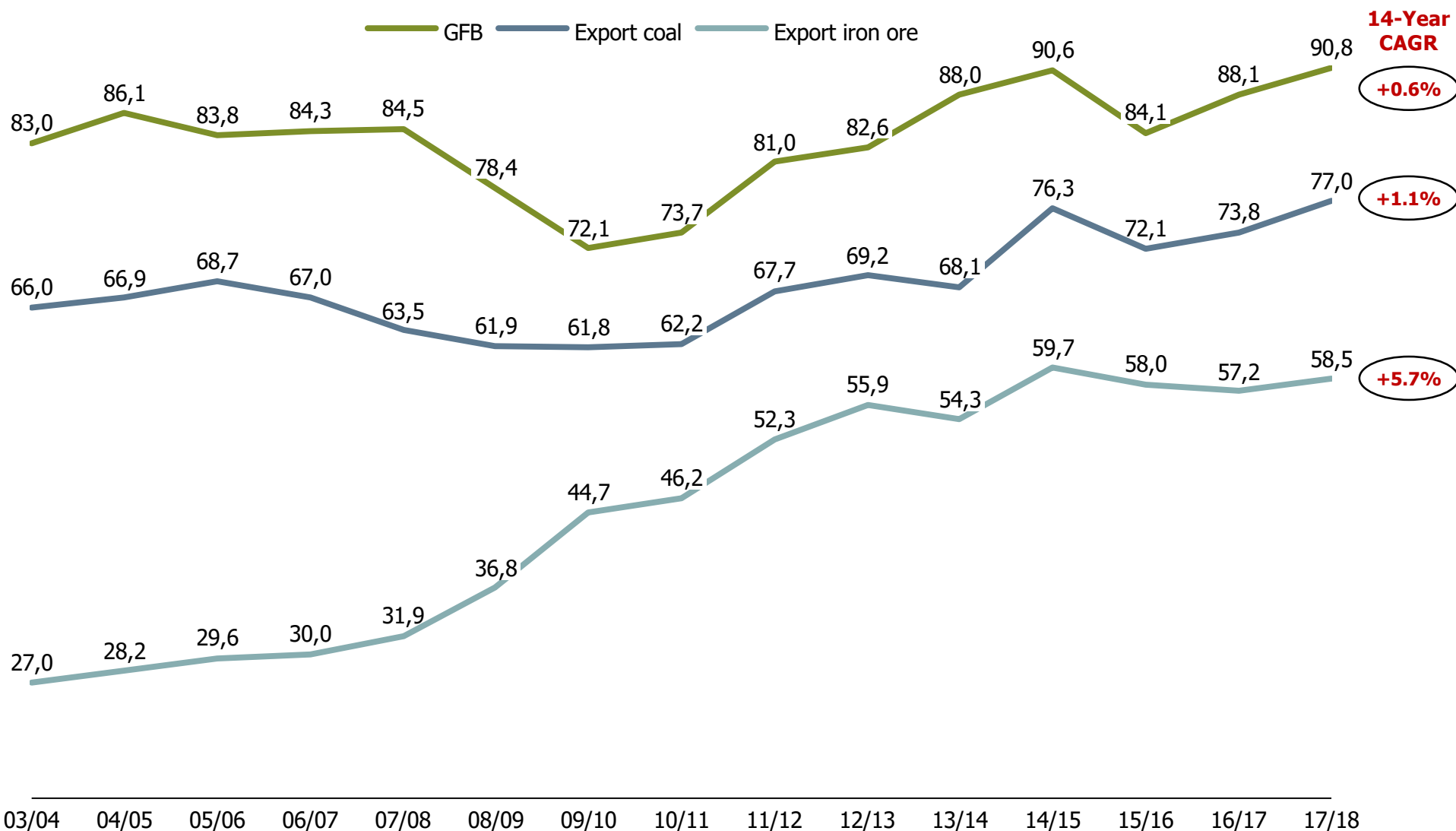
Benefits and outputs derived/Investments initiated

- Iron Ore line reaches 41mtpa capacity
- Port of Ngqura basic port infrastructure embedded

- 11D dual voltage locomotives introduced on the coal line
- Cape Town Containers Terminal expansion
- Commencement of NMPP programme
- Durban entrance widening completed
- Iron Ore line increased to 60mtpa capacity
- Durban port refurbishments
- 50 EMD locos for GFB

- Manganese 16mtpa expansion phase 1 completed
- Maintenance initiatives for infrastructure and rolling stock
- NMPP pipeline completed (TM2 – inland terminal)
- Port equipment refurbishments
- Coal 81 near completion
- 95 GFB, 210 Coal & 60 GFB locomotives programme completed
- ~402 from the 1064 programme are accepted into service
- ~11 500 new wagons for GFB, Coal & Iron Ore

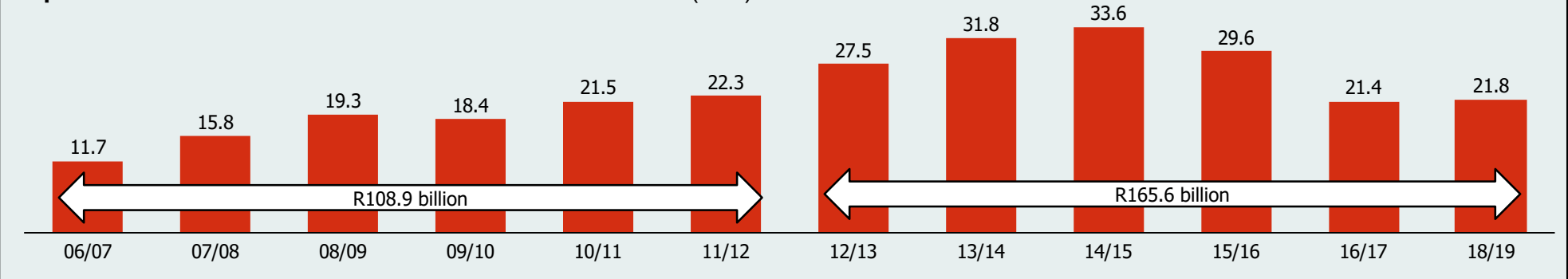
However, the rail volumes history paints a different picture



We have not made any significant progress to capture market share, despite significant capex



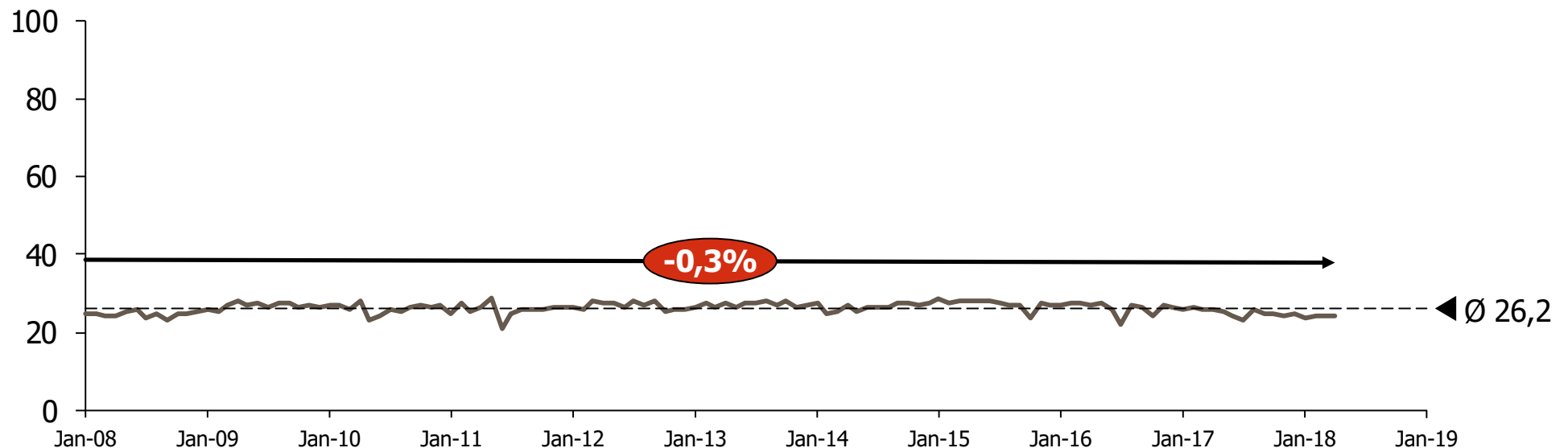
Capital investments since the “4-Point Turnaround Plan” (Rbn)



Land Transport Market Share ⁽¹⁾

% of Total Payload [Rail / (Rail + Road)]

— Rail market share

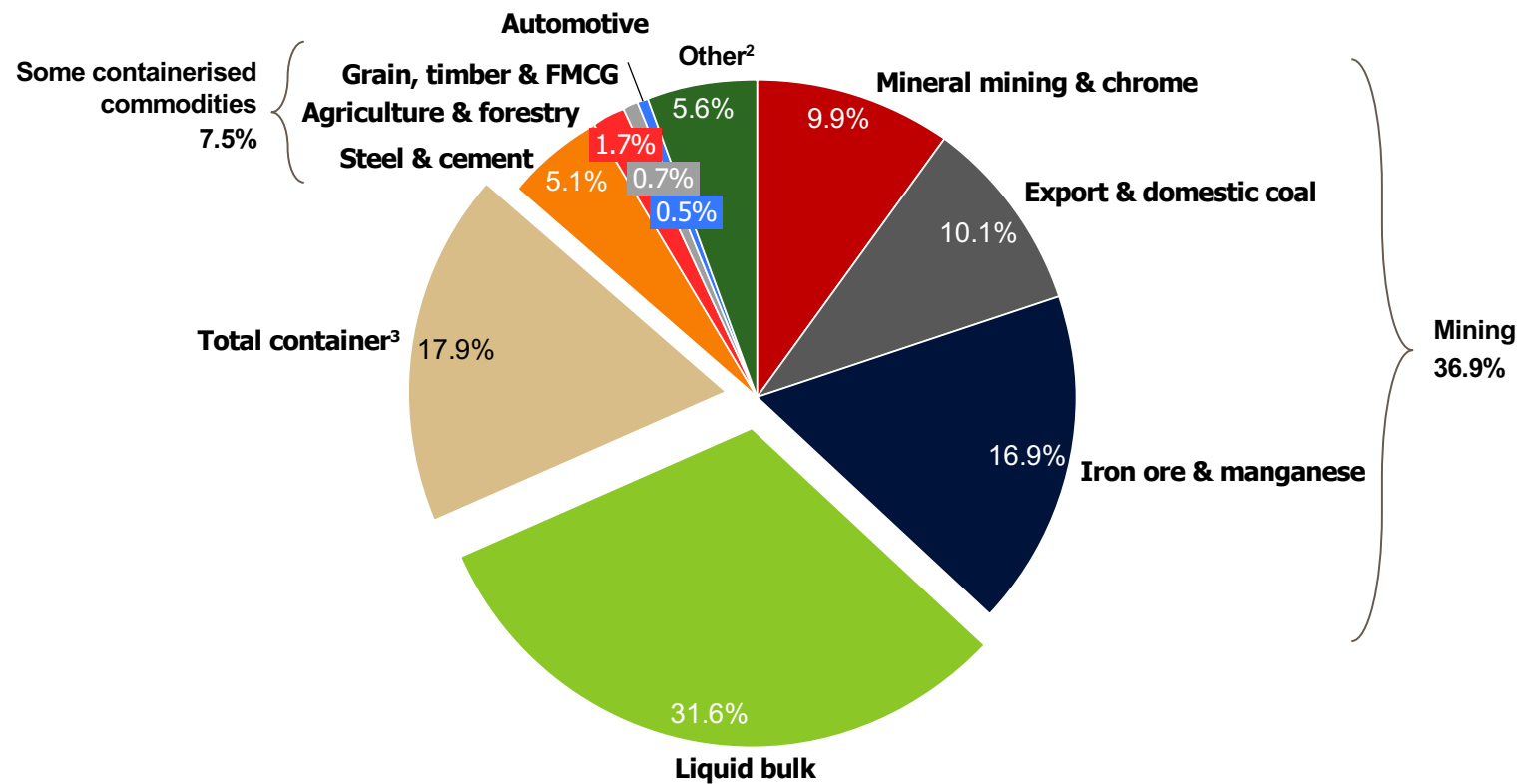


(1) Source: Stats SA (P7162)

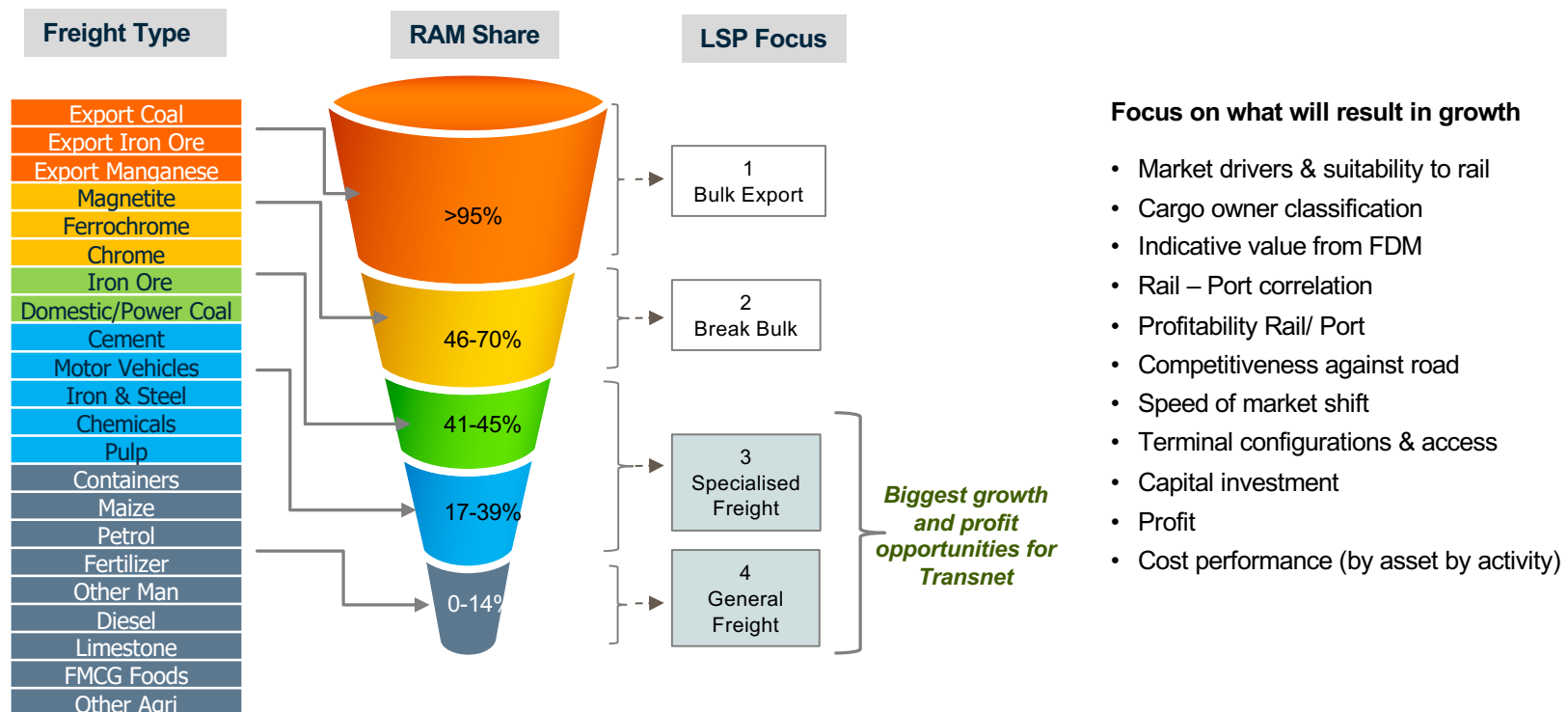
Revenue Contributions of Key Sectors



The mining, liquid bulk and container business units make the largest contributions to revenues



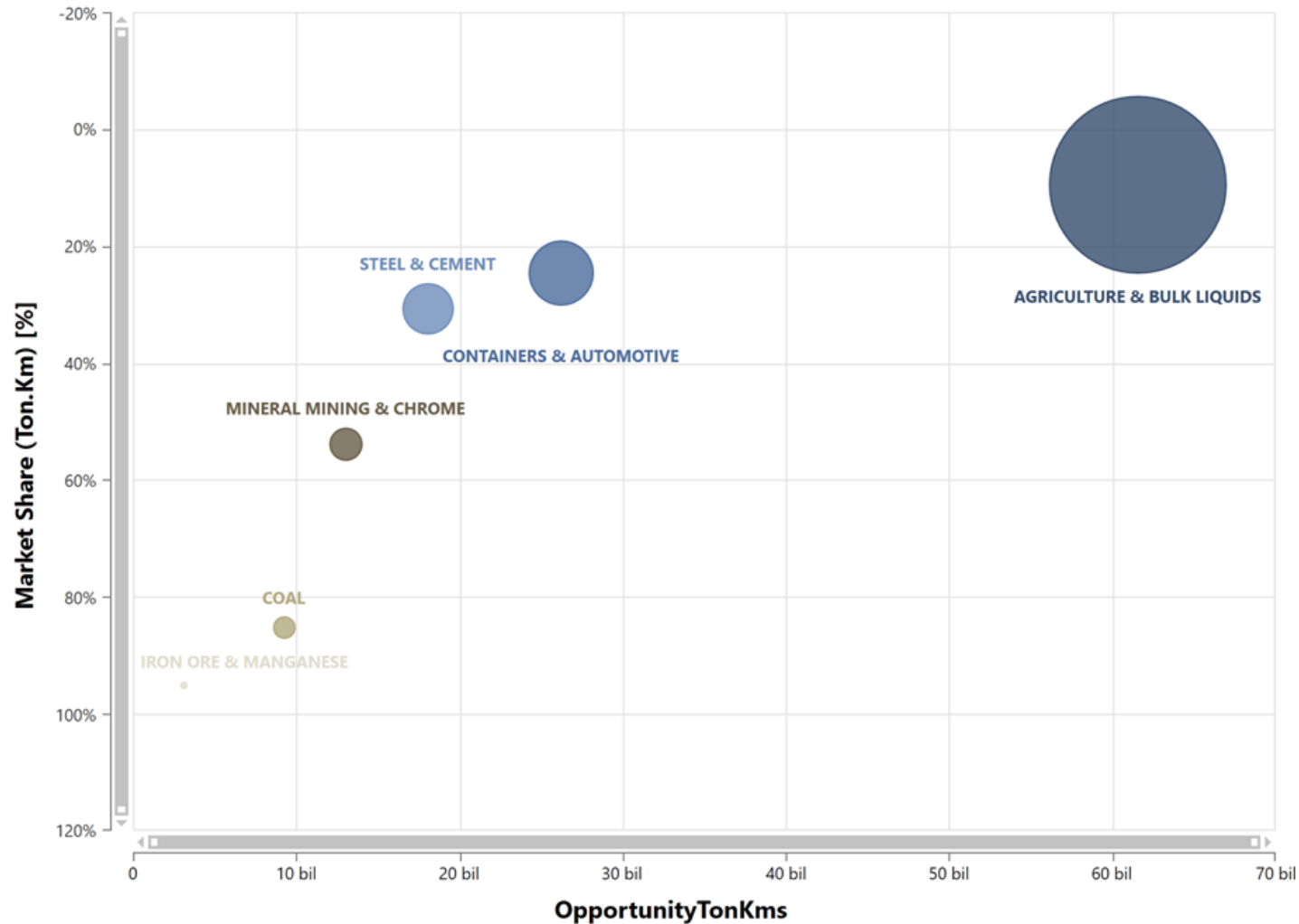
Inside Out: Unlocking value in non-RAM industry sectors as a basis for growth



Agriculture holds the biggest growth opportunity for Transnet



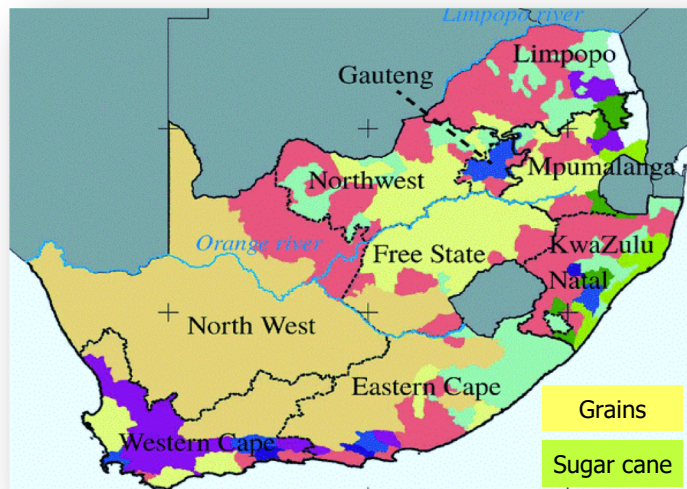
RAM Opportunity Matrix - TFR Business Units: FY2017/18



The South African Agricultural Sector generates in excess of R45bn towards GDP. Maize and wheat in isolation contribute 80%+



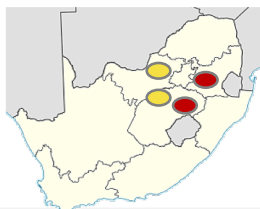
Production areas



Fast facts

MAIZE

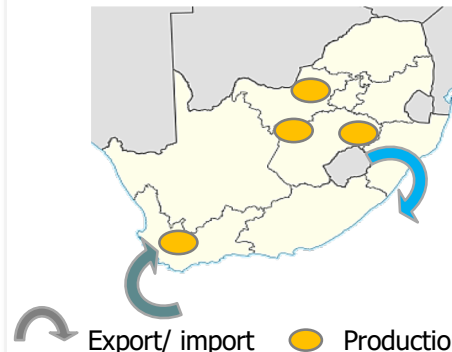
- Rail serviced farmers attract higher price for maize
- Rise of Mega Farmers with on-farm silos enabling direct loading from farms to mills



- White maize mainly for human consumption
- Yellow maize – animal feed & exports



WHEAT



Export/ import

Production



SUGAR CANE

- Many Sugar Mills can only receive sugar cane by rail
- Road requires off-loading into railway wagons at mill
- Sugar cane production will grow into the Makatini Flats
- No mill in the vicinity

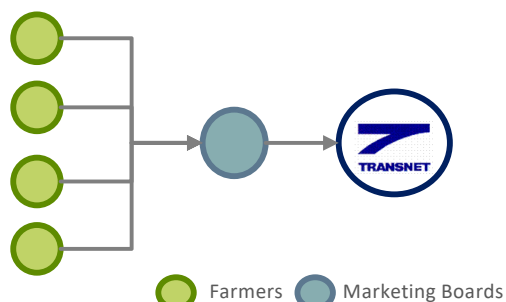


Structural changes in the Agriculture sector influencing logistics

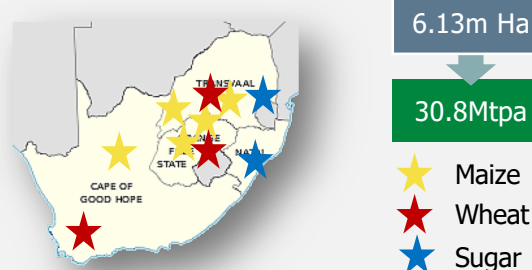


Pre 1995

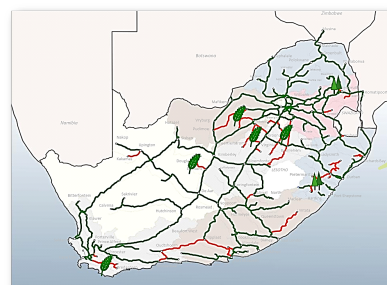
Agriculture sectoral structure: **Regulated**



Productive farming



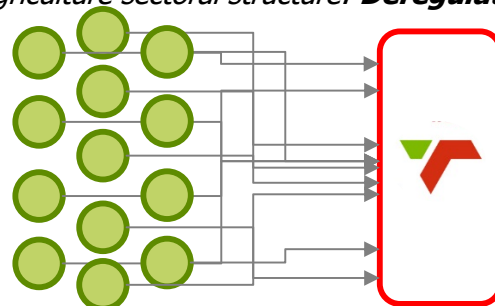
Branch lines



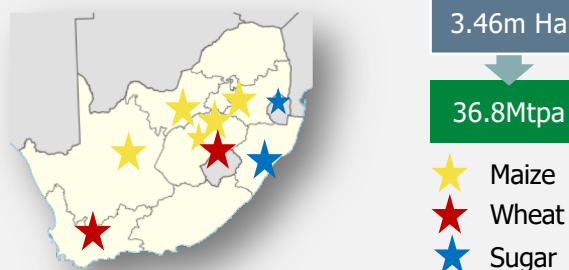
Branch line network active and lines open

1995 to current

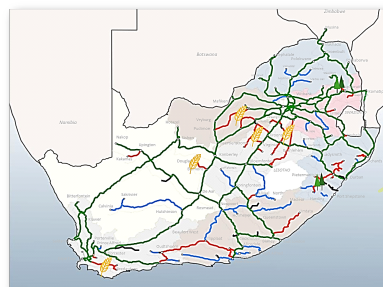
Agriculture sectoral structure: **Deregulated**



Productive farming

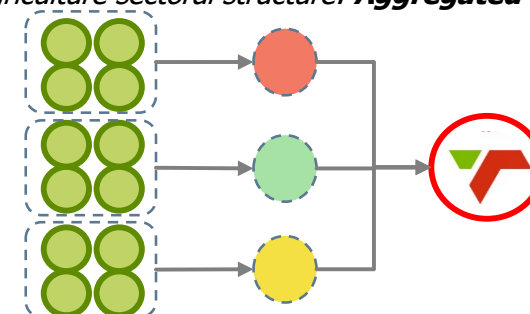


Branch line network reduced: ~50% of lines active



Illustrative changes

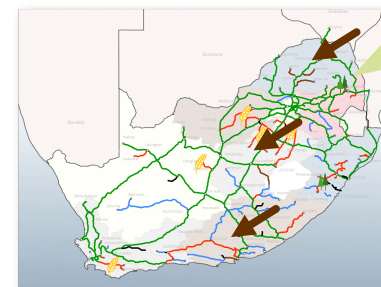
Agriculture sectoral structure: **Aggregated**



Productive farming



Branch line network revitalisation to initially support agri production areas



Biggest changes in last 30 years and what remained the same



Changes

- Higher yielding crops
- Higher output on smaller land size
- Development of storage on farms – about 40% of crops no longer use legacy silo's
- 90% of movements on road

What remained the same

- Transnet retains efficiencies from before deregulation of transport – uncompetitive
- No upgrade in silo logistics capacity in 40 years

Current The Transnet Freight Rail grain service offering



- Reducing market share
- Branch Lines not operational – reduced reach
- No investment in last 40 years in freight wagons
- Reduced volumes – lead to increasing cost structure
- Became insignificant player in most areas

What happened in Road Freight

- Significant investment by Government in Road building and maintenance
- Increased Gross Vehicle mass
- No policing on standards in roads

The Silo Owners and their Impact of current logistics system



- No Investments by silo owners to increase capacity and efficiency
- Increasing costs for producers using the silos – in many cases the Silo owners charge more for the use of the silo than TFR for the movement to the mills
- More and more silos without valid rail safety permits – equal requirement for roads not in place
- Reducing market share for Silo owners

What is happening?

- Big farmers are building grain storage on their farms
- Direct shipment from farms to mills, bypassing the Silos
- Road vehicles being subsidized by having access on roads being built and maintained by Government taxes

Old Rail from Silo system may become the transport option of last resort!

The case of Unigrain



- Formed in 1987 – started as trader of sorghum between producers and industry
- Now wide range of grain trading and logistics
- Formed Grain Carriers in 1991 – now the biggest transporter of grain in South Africa >4million tons pa
- Unigrain Commodities in 2001 – focused on winter grain production
- Grain Logistics was formed – part of strategy to penetrate the grain logistics and supply chain
 - Grain Logistics supply services to grain processors to facilitate the receiving, handling and management of grain on their own premises.
 - No manages more than 1 million ton of off-loading on behalf of big millers
- Grain Carriers was the first transporter of grain directly from the producer to the processors.
- Unigrain Storage formed to sell farm silos to big producers



Operational turnaround

Growing safely and efficiently

Volume

(Bln RTK)



CAPACITY

Diesel

(Liters/1000 GTK)



EFFICIENCY

LTIF

(# Accidents x mln /man hour worked)



Note: LTIF = Lost Time Injury Frequency

SAFETY

Grain production in Mato Grosso state – competing with SA

North operation

Mato Grosso state is the largest grain producer in Brazil

Mato Grosso Grain Production

(mln ton)



Mato Grosso Exports

(mln ton)

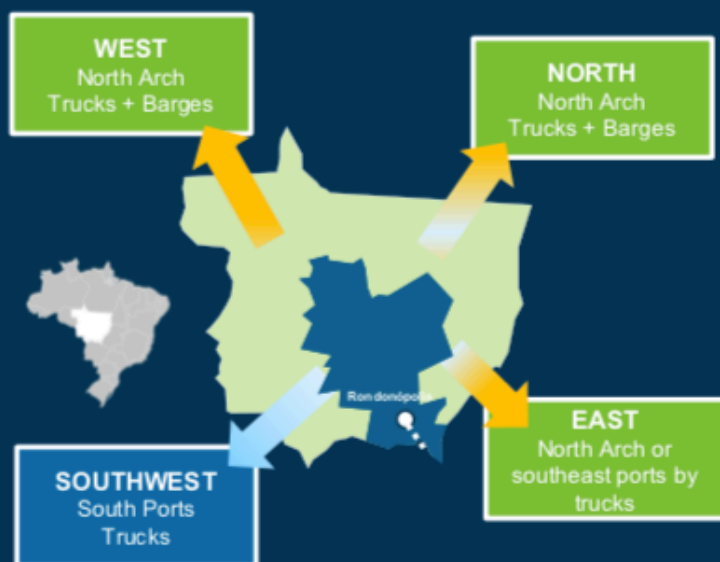


Rumo Market share growth in Mato Grosso

North operation

Best logistic alternative

Rumo influence area in Mato Grosso



Contribution of Mato Grosso to North Arch

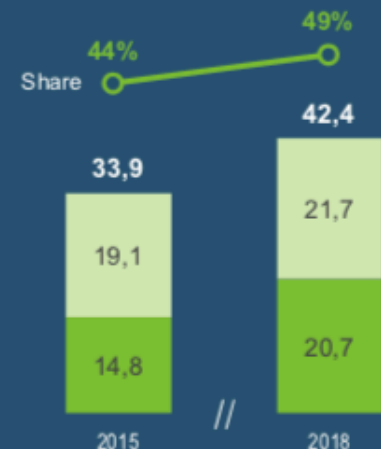
(mln ton)

■ Mato Grosso ■ Others states



Market-Share in Mato Grosso

■ Rumo ■ Others



rumo

Source: Comex Stat

Rumo – How to win more market share – becoming cheaper

North operation: capacity expansion

120 train project roll-out in 2021

Railcars
Train



120
+50%

Railway Capacity
(RTK bln)



75
+50%

Trips per month/
railcar



3,8x
+21%

Fuel Consumption
(Liter/GTK)



3,4
-10%

rumo

How to win back grain to rail?

- **Integrated Solutions**

- We need to focus on the full logistics chain and optimize

- **Upgrade efficiency of the branch line network**

- The network must become equivalent to the main lines

- **Increase the size of load per wagon**

- Higher payloads with lower empty weight will reduce cost
 - New investment will be required

- **Revalue the freight rates offered by Transnet and the handling charges by Silo owners**

- Perhaps lowering the rail rates in anticipation of higher volumes – increase density of freight activity on the branch lines required

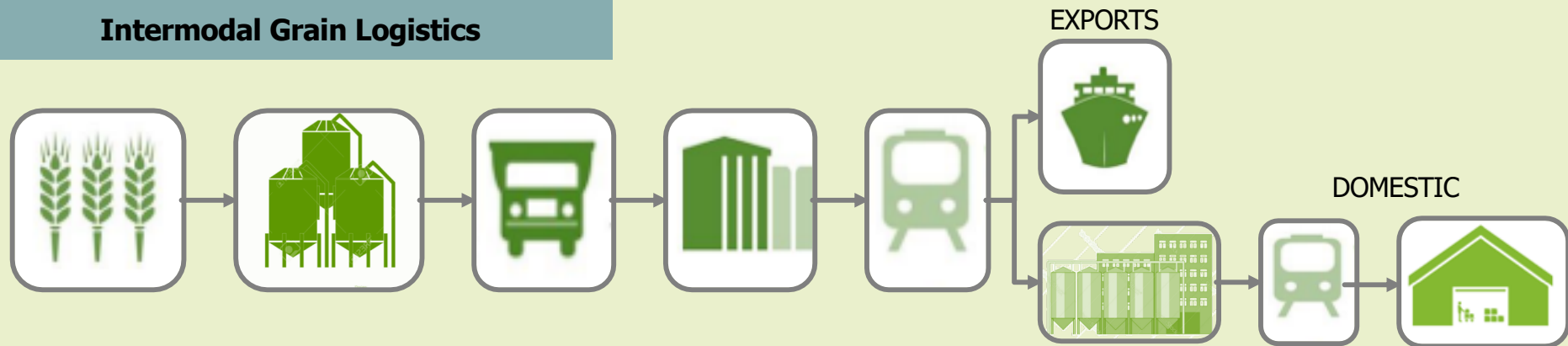
- **Collaborative investment**

- Expansion of service offering

Creating a responsive and cost-efficient logistics solution



Intermodal Grain Logistics



Change in logistics philosophy from farm to consumer

Illustrative intermodal concepts

Private Sector
Participation
Investments

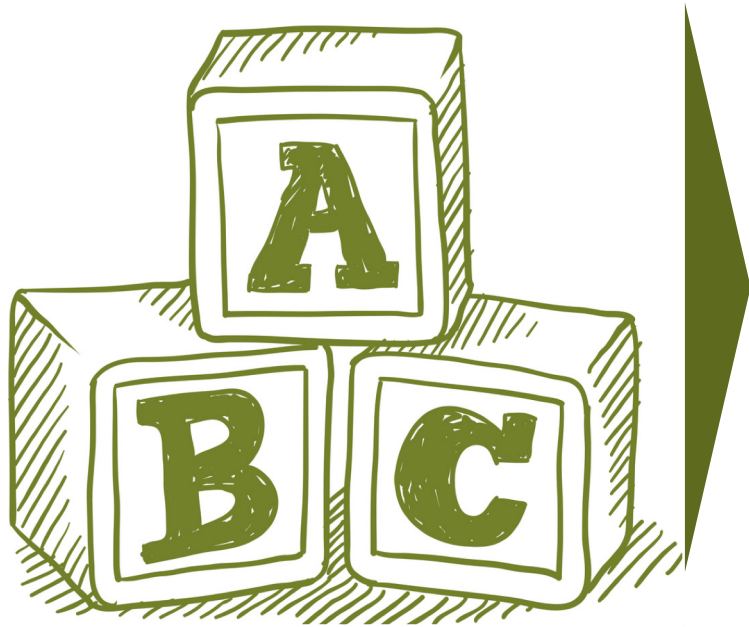
⊕ Bridging 'the missing rail links'



What can the Silo Owner and other Private Sector investors do?

- Invest in refocusing current silo sites into multimodal handling terminals
 - Container loading equipment
 - Container staging areas
- Invest in Containers for the movement of:
 - Grain
 - Fuels - tankertainers
 - Supplies into the farming area including seeds, fertilizer, tires, fuel etc.
- Local movement to include loading from farmers own silos on farms
- Upgrade load-out rates of current silos

Building blocks to blueprint the logistics solutions for the Agriculture sector



- Massive opportunities available for the taking
- Change our approach. Business-as-usual will not cut it
- Adapt to be trusted and willing enabler of the supply chains of Sunrise Industries
- Creation of a 'Coalition of the willing'
- Invest in Technology and systems
- Business systems responsive to needs of customers



Thank You

