Transnet Manganese 16Mtpa Expansion Programme
Progress Update

International Manganese Institute
June 2013
Recap: Cancun 2012

Where are we?

Final Expansion Scope

Bridging Projects

Conclusions
What did we commit to last year?

**Transnet committed to:**

- Relocate and decommission the current Mn terminal from Port Elizabeth
- Create **rail capacity** from the Northern Cape to a **new, expanded and modern manganese terminal** in the Port of Ngqura
- Facilitate the expansion of Mn Ore exports from SA initially to **16Mtpa**, scalable to **19Mtpa**
- Facilitate **broad-based participation**
- Offer **innovative and cost effective logistics solutions** to emerging miners and existing majors
- Contribute to the **positioning** of the SA Manganese industry as a leading global producer
Integrated Capacity Ramp-up Programme

**Rail Phase 1**
- Capacity expansion of existing rail route + Ngqura Manganese terminal Phase I

**Rail heavy haul corridor + full Ngqura port expansion**

**20 t per axle heavy haul operations to Ngqura Terminal**

**Heavy haul conversion to 26 tons/axle to Ngqura Terminal**

**Ngqura terminal commissioning**

**Bridging Capacity**

**Available capacity**
- Rail Capacity
- Port Capacity (Scalable to 22Mtpa)

**Financial Years**
- 11/12
- 18/19
- 19/20
- 2025+

**Capacity Mtpa**
- 5.5
- 8
- 16
- 22
An initial R2.3-billion project to upgrade the railways network from the manganese-rich Northern Cape province to the Port of Ngqura, in the Eastern Cape, has been approved, Transnet Freight Rail CEO Siyabonga Gama revealed on Tuesday, 14 May 2013.
Project Achievements:
• Successful Testing of the first general freight Distribute Power train
• 2X104 wagon consists with 4_3_1 loco configuration

September 2012
Project Progress to date

- Various **bridging capacity projects** have been initiated to support manganese exports and maintain market share during construction of the major expansion programme to 16Mtpa

- **Rail Phase 1 Investment** approved in Feb. 2013
  - Construction has commenced

- **Integrated Rail and Port Business Case for the remaining investments** is in approval process

- **Rail and Port Environmental Approvals** expected Nov 2013

- Transnet National Ports Authority (TNPA) to proceed **with Design-and-build** of the port terminal and port infrastructure
Finalised Rail Scope

**Section: Mamathwane to Kimberley**
- 4 x loops lengthened
- 1 x new loops
- 3kV DC upgrade

**Section: Kimberley to De Aar**
- Partial doubling of 97km

**Satellite Operations Planning Centre**

**Mamathwane Compilation Yard**

**Mamathwane Common User Terminal**

**Beaconsfield “On the Fly” change-over facility**

**Rolling stock**
- Upgrade 1158 existing CR wagons
- Build 1660 new CR wagons
- 109 new Dual Voltage Locomotives
- 12 Diesel Locomotives

**Rosmead loop extension**

**Section: De Aar to Coega**
- 25kV AC upgrade
- Section doubling
  - Cookhouse – Golden Valley
- 7 x loops lengthened

**Coega Compilation Yard**

**Phase 1**

**Phase 2**
Mamathwane Common User Terminal: Operations

- 100 wagon rail shuttles
- 200 wagon Distributed Power Train

Mines with rail facilities
- Mamathwane Compilation Yard
- Ngqura Compilation Yard

Mines with no rail facilities

Bulk materials handling: off-loading, stockpiling and loading to rail

Mainline Rail Operations

Road haul
• 25 Grades in total to be exported
• Parcel sizes for each grade between 25,000 ton to 60,000 ton (average of 48,000 ton)
Port Solution Overview

- Utilise existing berths C101 and C100
- Two ship-loaders capable of loading up to two 80 000 DWT Panamax size vessels simultaneously
- Three stackers and related stockyard conveyors to stack ore on the stockpiles, with provision to add a fourth stacker in future
- Two reclaimers and related stockyard conveyors to reclaim ore from the stockpiles, with provision to add a third reclaimer in future
- Four stockyard rows, with provision to add two additional rows in future
- Dual surge bins at the stockyards to optimize ship loading efficiency
Interim Bridging Projects attests to Innovation

- Increased Bulk exports through **Durban**
- Containerisation of manganese at **various inland terminals** (incl. Lohatla and Bloemfontein) and export through PE/ Ngqura container terminals
- Containerised rail of manganese to **Aloes station** and road hauled and stockpiled adjacent to PE MPT. Skips used to load via the MPT (~0.9Mtpa)
- Establishment of additional **loading and off-loading terminals** for handling bulk wagons: Lohatla Bulk CUT (late June) and Swartkops Terminal (Nov)

Courtesy : Baobab (Aloes)
Conclusions

- Transnet is **committed** to delivering on its promises to the Manganese industry in South Africa
- The expansion programme is recognised and support by the **South African Government** through its ‘Strategic Integrated Projects’ Programme – SIP 3
- The expansion is **on track** and complimented by interim bridging capacity projects
- We believe that this is a BRICS **success story** in the making.
Thank You