New Developments in the Manganese Industry

International Manganese Institute

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Introduction

Mineral and Petroleum Resources Development Act

Enacted October 2002

Mining Charter

Finalised October 2002

Scorecard

Released February 2003

Introduction

- The DME held an internal strategic planning session in November 2002 to unpack its priorities, assess its resources and capacity to implement the industry transformation objectives as per MPRDA
- Following this session decision was taken to :
  - Communicate government vision for the industry to key stakeholders
  - Convene commodity sessions to address unique and specific issues
  - Develop a common understanding of the industry with key stakeholders
  - Clarify the structural and transformation goals of the DME
  - Involve current industry players and aspirant actors
  - Identify key issues requiring further attention
  - Convene subsequent sessions to consider conclusion and define path for implementation

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The commodity workshops

- A number of focussed commodity workshops were held using an independent facilitator agreed to between government and industry players
- The manganese workshop was held on 22 May 2003 at Mintek in Randburg with the following participants
  - Government: Department of Minerals and Energy and Department of Trade and Industry
  - State Institutions:
    - Mintek, Council for Geoscience and Miningtek
    - Industrial Development Corporation, and Spoornet
  - Industry Players:
    - Samancor and Assore
    - Xstrata and Burke Mining
    - Manganese Metals Company and Delta EMD
    - Chamber of Mines
- The workshop identified areas of aligment of goals and objectives between government and stakeholders but also gaps
- To address gaps both in terms of information availability and goals, Mintek was mandated to commissions two studies
  - Alloy Metals and Steel Market Research : Heinz H Pariser (Germany)
  - A Strategic and Macroeconomic Analysis (University of Pretoria)

- A follow up workshop would then be convened to discuss the outcomes of these study and the chart a concrete way forward

Manganese workshop: the key issues

- Develop a common understanding of the industry characteristics
- Define industry and DME goals for a transformed industry
- Develop collaborative strategies to achieve these
- Evaluate these strategies against both DME and Industry Goals
- Define a clear path forward for SA manganese industry

Industry Characteristics

- Global demand for manganese is flat (particularly for the steel industry)
- South Africa, with about 80% of world reserves accounts for 19% of global production and 23% of exports
- Just under 50% of SA ore exports are in the form of alloys
- Growth in alloy exports is constraint by need to blend SA manganese ores for smelting
- Competitive advantages

Cost component	**RSA Production costs**
Ore: ●Open pit ●underground	 ●Below average ●Above average
Electric Power	Below average
Reductants	Mixed
Labour	Below average
Transportation	Above average

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Goals for Mn Industry Transformation

DME Goals

- Compliance with Act and Charter
- Maintaining global share
- Enhanced SHE standards and compliance
- Deepening through beneficiation
- Expanding BEE participation in mining inputs/ procurement
- Job creation through expansion of output and BEE partnerships/ JVs
- Sustainability beyond mine life
- Maintenance of Industry Value add:
  - Balance of Payments sustained/ expanded
  - Fiscal receipts maintained/ expanded
- Rationalise rail infrastructure in/out of Kalahari

Industry Goals

- Effective compliance with act and charter
- Ensuring industry sustainability in slow growing market
  - Extract synergies in Kalahari
  - Reducing real cost of capital
  - Securing stability of reductant supply
  - Electricity supply
    - Quality and peak capacity
    - Price sustainability
  - Better rail and port efficiencies and tariffs
  - HRD/ R& D for continuous cost reduction
- Greater global industry responsibility (WTO)
- Enhance/ diversify demand profile
- Maintenance of industry profile
- New Entrants such as Xstrata envisaged
  - Unlocking access to Kalahari
  - Proactive investment in new alloy plants
  - Change to industry structure

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Outcomes and recommendations

- Given the BEE and beneficiation objectives defined by Government, the core question confronting the Minister, advised by DME, is whether maintenance and growth of manganese industry value for the Balance of Payments and the fiscus will be better served by maintenance of the present industry structure or by unlocking access to the Kalahari deposits

- This decision cannot be taken lightly as the risk of value-destruction through miscalculation is considerable, while the possibility of additional value creation cannot be ignored

- To ensure that the most responsible decision possible is made, DME will commission the development of an independent industry model and invite both those in the present SA industry and those seeking entry to submit their best data, information and representations to the entity developing the model, to enable consideration of all relevant material and argument

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What has happened to date?

Positives

- Mintek commissioned the independent manganese study using the University of Pretoria and Heinz H Pariser
- The DME has restructured itself to increase capacity for service delivery
- New BEE entrants have been introduced into the Kalahari
- Existing have concluded or, in advance stages of concluding their BEE deals
- The commodities sector is doing well globally with Manganese experiencing a growth of some 8 to 9 % over the past 5 years

Challenges

- A follow-up workshop to discuss the outcomes of the independent study has not happened
- The process towards defining a clear way forward for the manganese industry is incomplete
- The industry structure has not changed
- South Africa share of global market has decreased from around 20% in 2000 to 17% in 2005 (ito Mn content)

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The Independent Mn Study

- The independent study was conducted under Mintek supervision and the following issues tested:
  - What is the likely outcome of the entry of a third producer?
  - Could a new entrant grow market share without any price war taking place- only a downward adjustment in price?
  - What would be the outcome for SA if the oligopoly-marketing model were disrupted by each of the above scenarios?
  - What would be the outcome in global terms between the new tonnage and resultant market price?
  - What would be the effect of each scenario on fiscus, jobs and other socio-economic factors?
  - What would be the benefits HDSA in terms of the Mining Charter requirements with regard to unlocking access or maintaining the current status quo?

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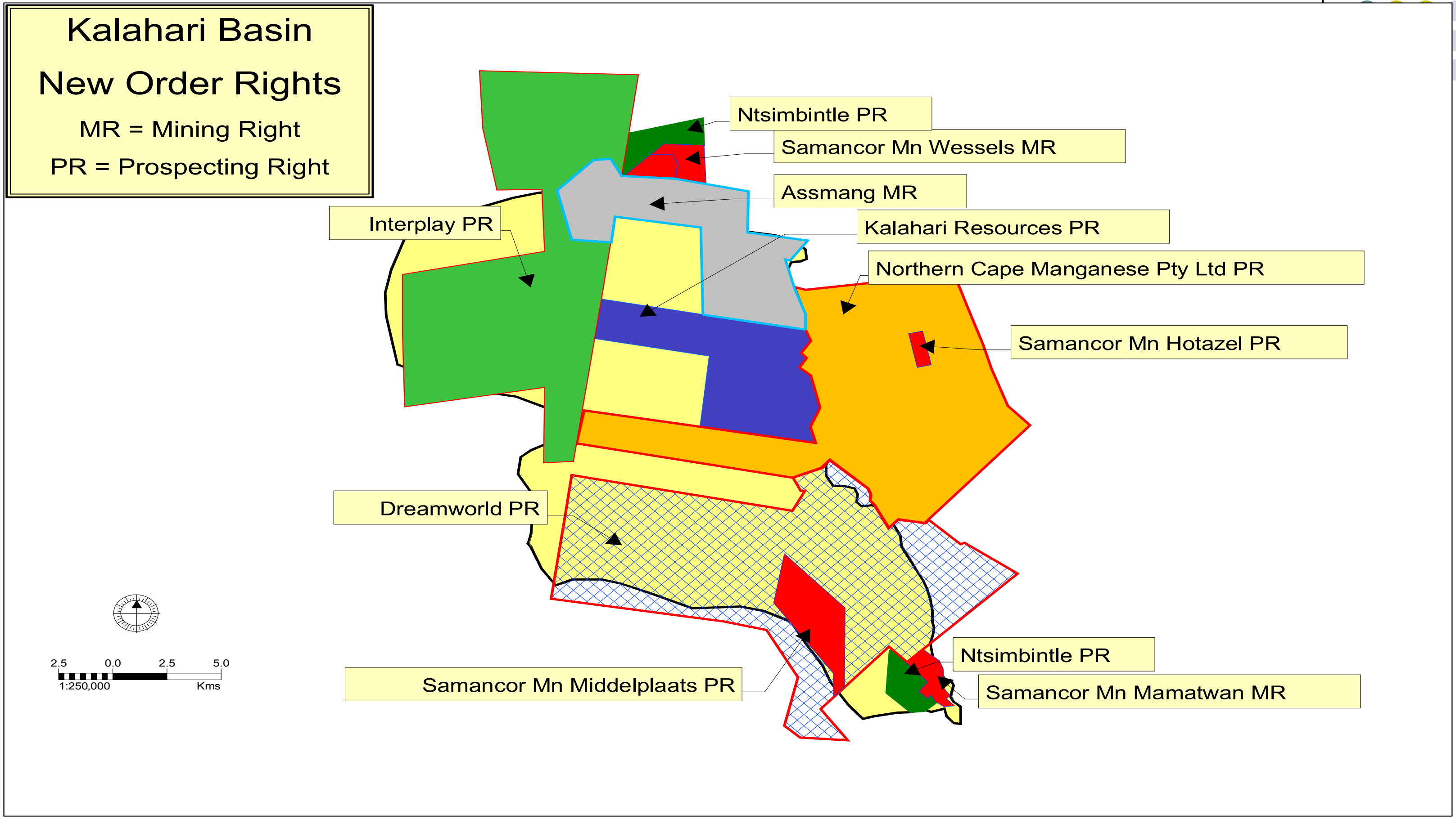
Independent Mn Study

- The outcomes
  - The study was undecided on recommending new entrants, stating that price impact is unclear and that the price will be the determining factor for success of the new entrants
  - There is an opportunity to introduce new entrants into manganese particularly to benefit HDSA
  - Recommended that the value-added aspect of alloy production, rather than ore export, be encouraged at all levels
  - Current producers to be encouraged to convert a bigger proportion of the local ore to alloy before export
  - Allowing large additional exports of unbeneficiated ore would delay the relocation of alloy producing capacity to South Africa, and in fact benefit the external alloy producers.

The new entrants



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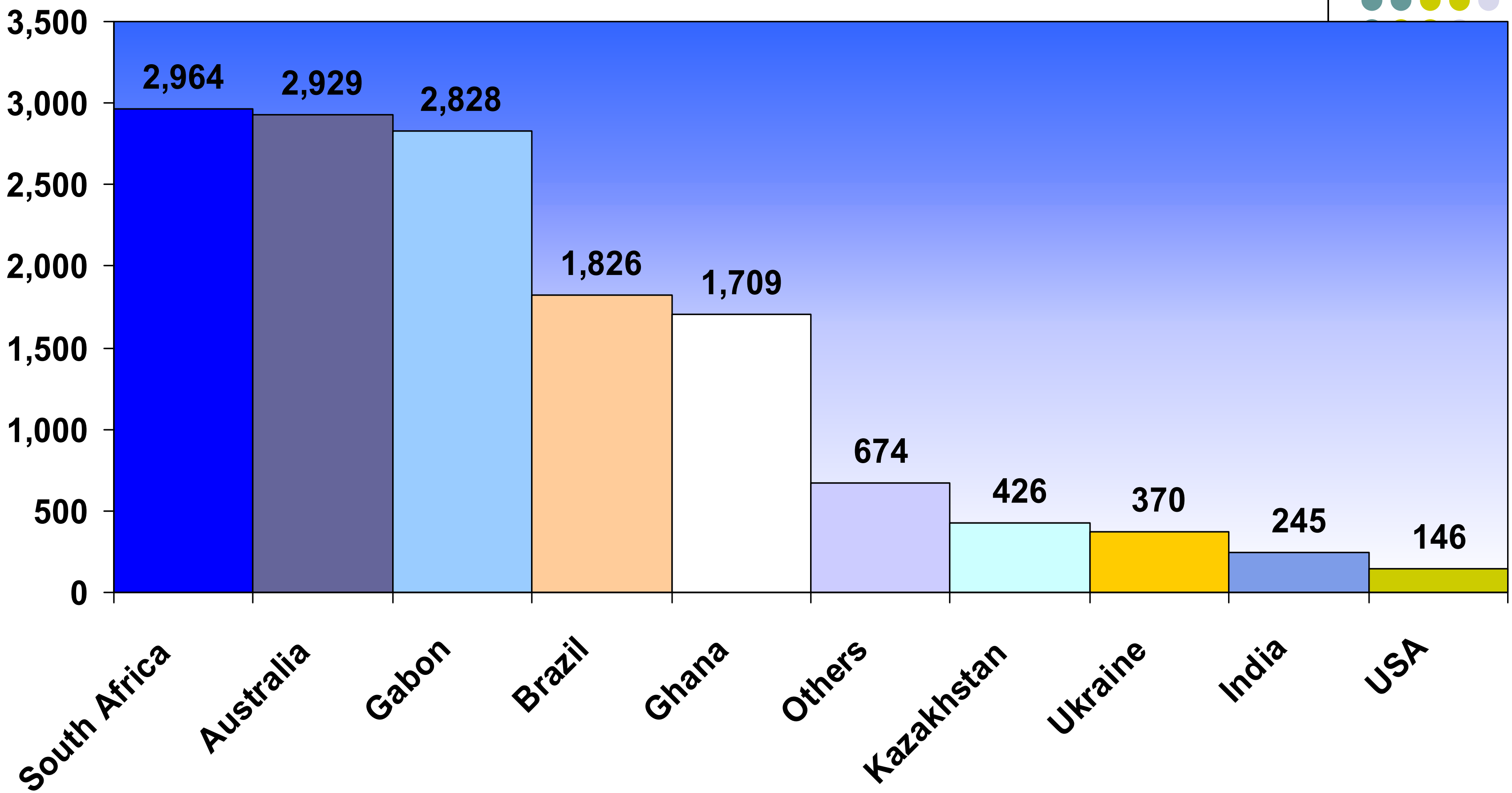
New entrants

- The introduction of new entrants has brought in new challenges:
  - Exploit the Kalahari resource in the most optimal manner
  - Exploit options to ensure sustainability of the current and new operations
  - Build a partnership with service providers and Government to ensure lower cost of services provided
  - Increased beneficiation of ore into alloy

- Practical solution is cooperation of all parties involved

Ranking Of Manganese Ore Exporters - 2005



South Africa is:

the **largest supplier** of manganese ore to the global "open" market,

the **undisputed leader** when it comes to **supplying external converters**

but **ranks only fourth** in **internal conversion**

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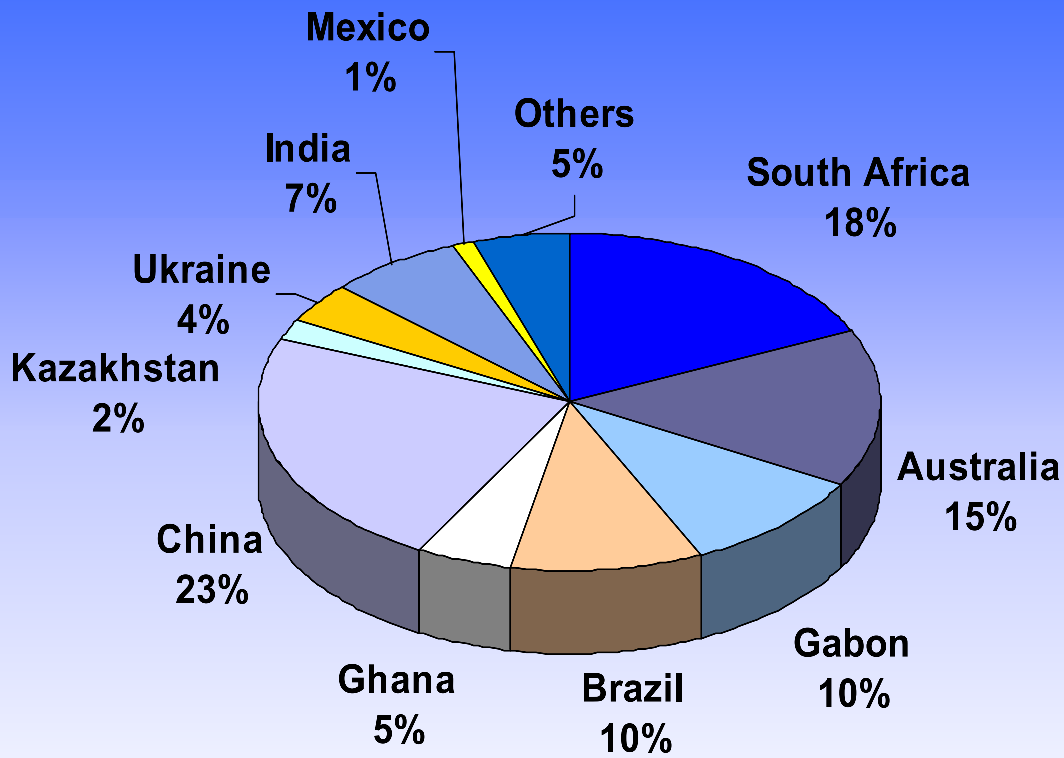
Share of global production - 2005



Conclusions

- The DME has done a sterling job in bringing together key stakeholders to seriously engage in fundamental issues affecting the Mn industry
- However, this process was somewhat derailed during the implementation of the Act with main focus on processing applications
- Time is ripe now for DME to take the leading role again in shaping policy and influencing a positive outcome in the principle of Batho Pele

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