25th Annual Southern African Transport Conference

Freight and Rail Logistics Session

Supply Chain Competitiveness of the SA Automotive Industry with an emphasis on Supplier Parks

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Contents

Key industry measures

- Compete on equal terms, no concessions
- Compete against international parent and sister companies
- Key measures:
  - Cost
  - Quality
  - Delivery

The Automotive Industry

- SA represents **83% of Africa’s vehicle output**, but only **0.9% of the world market (US = 30%)**
- Whilst global production increased by 3.8% in 2000, SA’s production expanded by 9.6%
- SA is the **18th largest manufacturer of vehicles in the world**
- The automotive industry contributes to 6.4% of GDP and is the third largest sector in the SA economy, accounting for 29% of 300 700 people directly and many more indirectly
- Total vehicle “parc” of 6.8 million vehicles with an estimated replacement cost in excess of ZAR 700 Billion
- Total revenue from the industry is expected to reach R 153 billion in 2002, with component and vehicle exports amounting to R 40 billion. **Equals 13% of the countries exports.**
- Direct labour costs per vehicle have reduced by 30% over the past five years
- **Productivity (vehicle per head) has increased by 68%** in the last 5 years, **but is still lagging behind international standards**

The SA Automotive Supply chain

8 OEMs - BMW, DaimlerChrysler, General Motors, Ford (including Land Rover, Mazda and Volvo), Fiat, Nissan, Toyota, Volkswagen

↑

Approx 275 1st tier suppliers

↑

Approx 100 2nd tier suppliers

↑

>200 3rd and 4th tier suppliers

Critical challenges faced by South African part suppliers

Profiles of component suppliers in the SA automotive industry, the extremes

	Small	**Large/Multinational**
Turnover	R500K	>R200million
Staff	5	>600
Technology	Manual	Highly automated
Market	Exclusively domestic	Export orientated
Local supply	Exclusive supplier to 1 OEM	Supplier to all 8 OEMs

NOTE: Data and reference in this presentation refers respectively to both

Key challenges facing the SA components industry

- **Cost control**
  - Inventory use (raw materials, work in progress, finished goods) – total logistics costs exceed international benchmarks, more specifically India and China
  - Logistics infrastructure inefficiencies (Ports, rail,...)

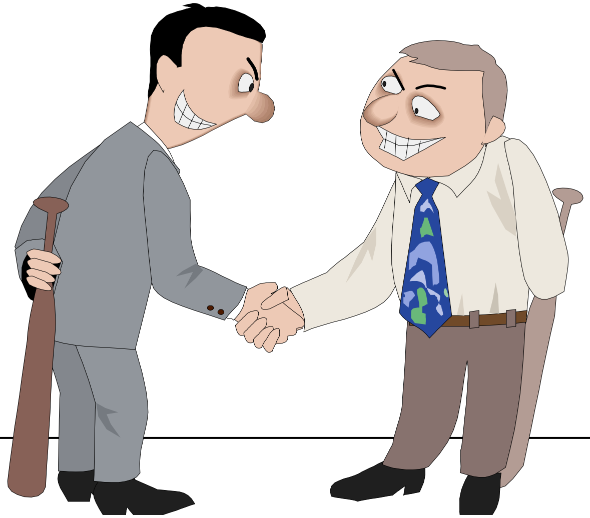
- **Exports**
  - Exchange rate fluctuations of recent
  - Strengthening of the rand

Key challenges facing the SA components industry

- **Quality – weaker rand and lower remuneration levels historically made poor quality tolerable, there is no longer a cushion.**
  - Customer return rates
  - internal reject rate
  - rework and scrap rates
  - return rates to suppliers

Key challenges facing the SA components industry

- **Relationships – Supplier & OEM**
  - Historically extremely adversarial – although improving it is still evident
  - Collaborative projects to sustain the industry no longer a preference but a necessity
  - Partnering relationships still a relatively new concept that needs to be embraced.
  - Internationally, the industry is guided by OEM strategies, reciprocal relationships are imperative



Location –distance to markets and source of components

Asia

Europe

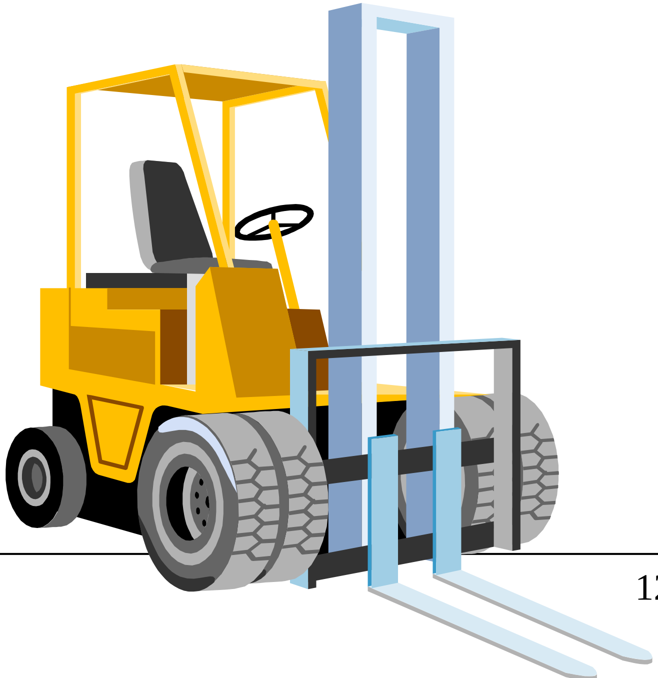
Australia

USA

South America

Key challenges facing the SA components industry

- **Lead times**
  - Value chain flexibility
  - Time from order to delivery - 4 to 6 weeks international delivery lead time
  - delivery frequency of suppliers and supplier delivery reliability,
  - delivery frequency to customers and delivery reliability
  - Average stock turns below that of China and India



Key challenges facing the SA components industry

- **Capacity to change**
  - Human resource development (unsatisfactory)
  - Literacy & numeracy levels (the “unemployables”)
  - Employee development/training
  - Labour & management turnover
  - Absenteeism rates, employee output

The path to global competitiveness

- Skills Development and Training
  - China has 10 million engineers !!!!

  - South African illiteracy level   >10 Million

Key challenges facing the SA Automotive Industry

- **Innovation capacity**
  - Limited in no R&D expenditure (process and product)
  - Contribution of new products to total sales

Key challenges facing the SA components industry

- **Funding and capital investment**
  - A great deal of investment has taken place at multinational level
  - Growth of locally owned businesses – unsatisfactory
  - Lack of capital investment ultimately leads to antiquated production processes and equipment which erodes global competitiveness (eg TRANSNET)
  - Lack of “low cost” reliable technology

Key challenges facing the SA components industry

- **BEE compliance**
  - BEE compliance very often necessitates development , this is a serious challenge at the lower end of the value chain
- **Market access**
  - Despite Governments trade missions, etc, emerging suppliers have little success in accessing international markets
- **Globalisation**
  - **Globalisation = access to global capacity** of which excess, with higher skills levels, are available

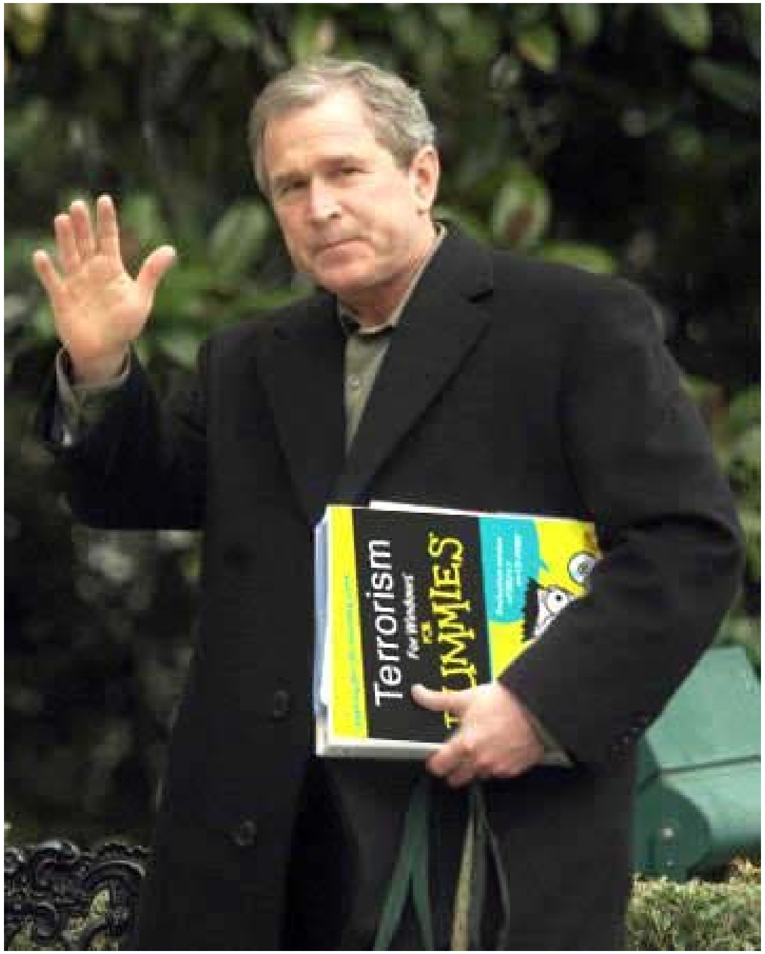
“The Chinese threat”

Deputy Minister of Commerce, Mr Wei Jianguo made a statement that China will make more efforts to promote exports - bringing auto parts and sedans into international markets.

China has set a target of exporting automobiles and components worth 70 to US$100 billion a year by 2010.

(SA currently @ R40b)

Imports

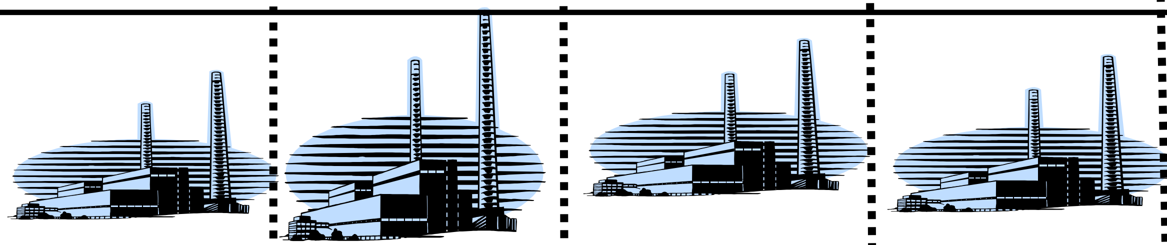


"...more and more of our imports are coming from overseas."

On NPR's Morning Edition (Sept 25, 2000)

Dynamics of South Africa's Automotive Supply Chain

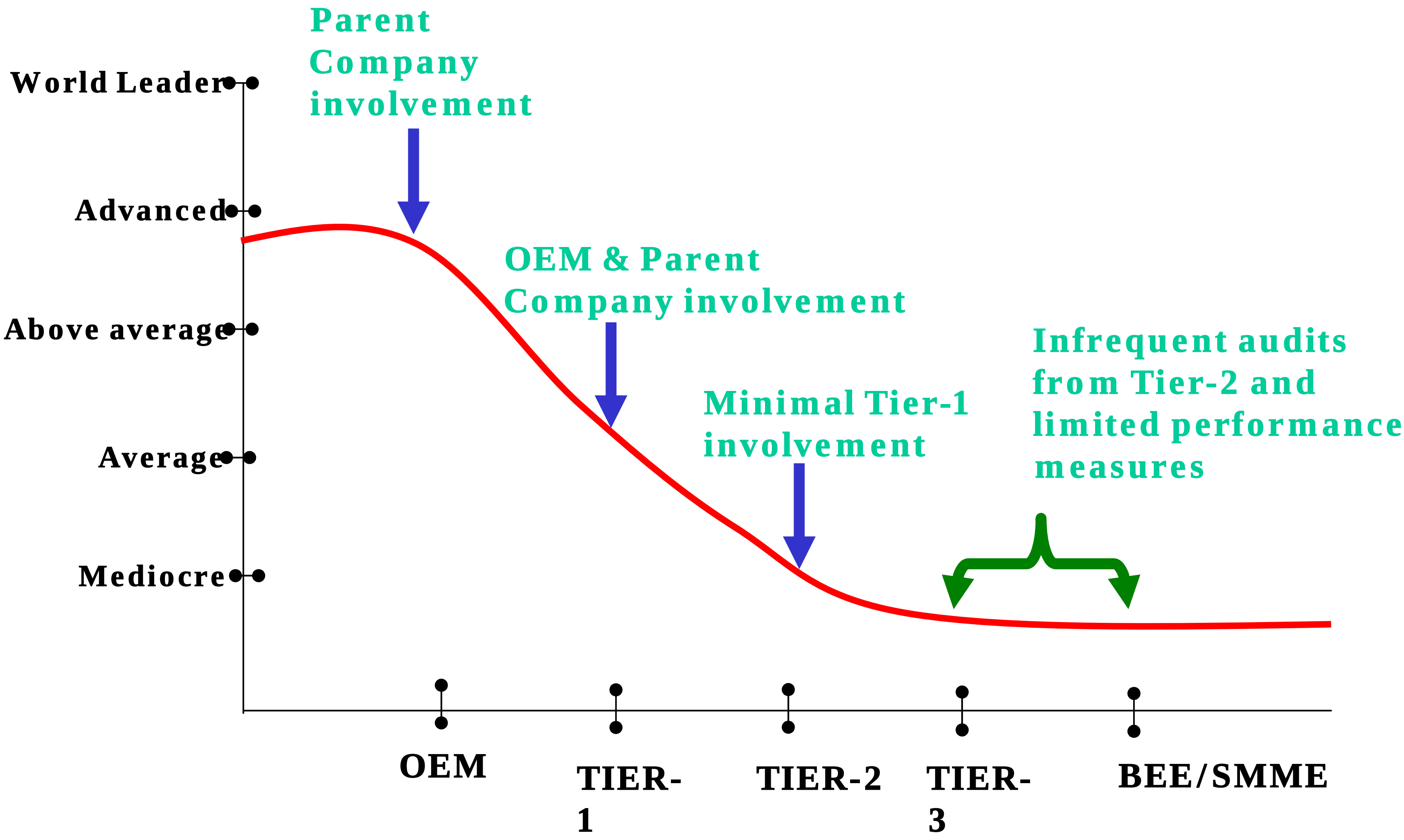
- Good
- Average
- Below average



	OEM - Original Equipment Manufacture	TIER -1	TIER - 2	TIER - 3	Black Economic Empowerment / SMME
Lean manufacturing	Good	Average	Below average	Below average	Below average
Continuous Imp.	Good	Average	Below average	Below average	Below average
Mech. Technology	Good	Good	Average	Average	Below average
Training Prog.	Good	Average	Below average	Below average	Below average
Six Sigma/BSC	Average	Below average	Below average	Below average	Below average
CRM	Average	Below average	Below average	Below average	Below average
IT Infrastructure	Good	Average	Below average	Below average	Below average

This is based on the industry average, exceptions do exist.

Global Competitiveness of the SA automotive supply chain



This is based on the industry average, exceptions do exist

Key challenges facing the SA Automotive Industry..cont

- How "***lekker is local***" when the markets and the competition are international ?

Automotive Supplier Park - Rosslyn

The Supplier Park Concept

- Supplier Parks (Logistics Infrastructure)

  Clustering of manufacturers in close proximity to point of consumption to exploit benefits of synergies and collaboration. ie capitalizing on shared services and facilities

- Examples of other South African Supplier Parks
  - Rosslyn (Pretoria) – R340m
  - Uitenhage (Port Elizabeth) – R394m
  - ELIDZ (East London Industrial Dev Zone) - >R250m
  - Other under discussion

Socio Economic Indicators of NMBLP (Phase 1)

- Employment:
  - During construction (temp) 1100
  - Full time (post construction) 1764
    - Park management
    - Security
    - 5% industry growth
    - Tenants staff
    - …
- GDP Growth for the region R529m
- Increase in rates & taxes base
- Increase in water and electricity consumption
- Property price increase of 200%
- FDI R40m
- Regional “regeneration”
- World-class working environment, eventually with:
  - Training centers
  - Creche’ facilities
  - …

What attracts investors (tenants) to supplier parks

- Overall reduction in logistics costs
- Close proximity between point of manufacture and consumption (optimally 5kms)
- World-class infrastructure and facilities :
  - Corporate image
  - Staff morale
- Environmentally friendly buildings
- Ability to out-source non-core business activities:
  - Canteen facilities
  - Security
  - IT Network
  - Conference & meeting facilities
  - Medical centres
  - Training centres
  - …
- Concessions/preferential rates on lease options
- **Must be a "business case"**

Institutional Arrangements…

Projected tenants and main beneficiaries?
Restriction to customers, groups, industries?
Preparation for funding, government schemes, etc.?
Competition with market or other projects?
…

Development

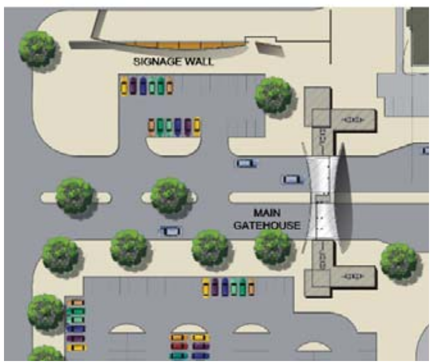
Private — Public Private Partnership — Public

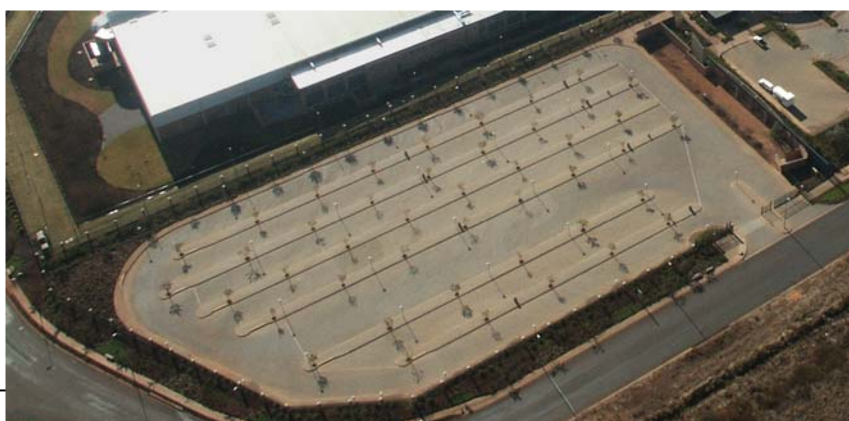
Private	Public Private Partnership	Public
OEM	Contribution of land	National
Bank	Contribution of infrastructure	Province
Property Industry	Contribution of bulk services	Local
Service Providers	Project development costs	Others
Others	Subsidies	…
…	Other	

Operations

Private — Public Private Partnership — Public

Infrastructure:
Main Gatehouse, Taxi Rank (Drop-off Zone)
and
Central Parking –





Automotive Supplier Park - Rosslyn

Automotive Supplier Park - Rosslyn

Logistics Centre (ASP-Rosslyn)

Walvis Bay – Trans Kalahari Corridor Automotive Trial Shipment

Problem Statement:

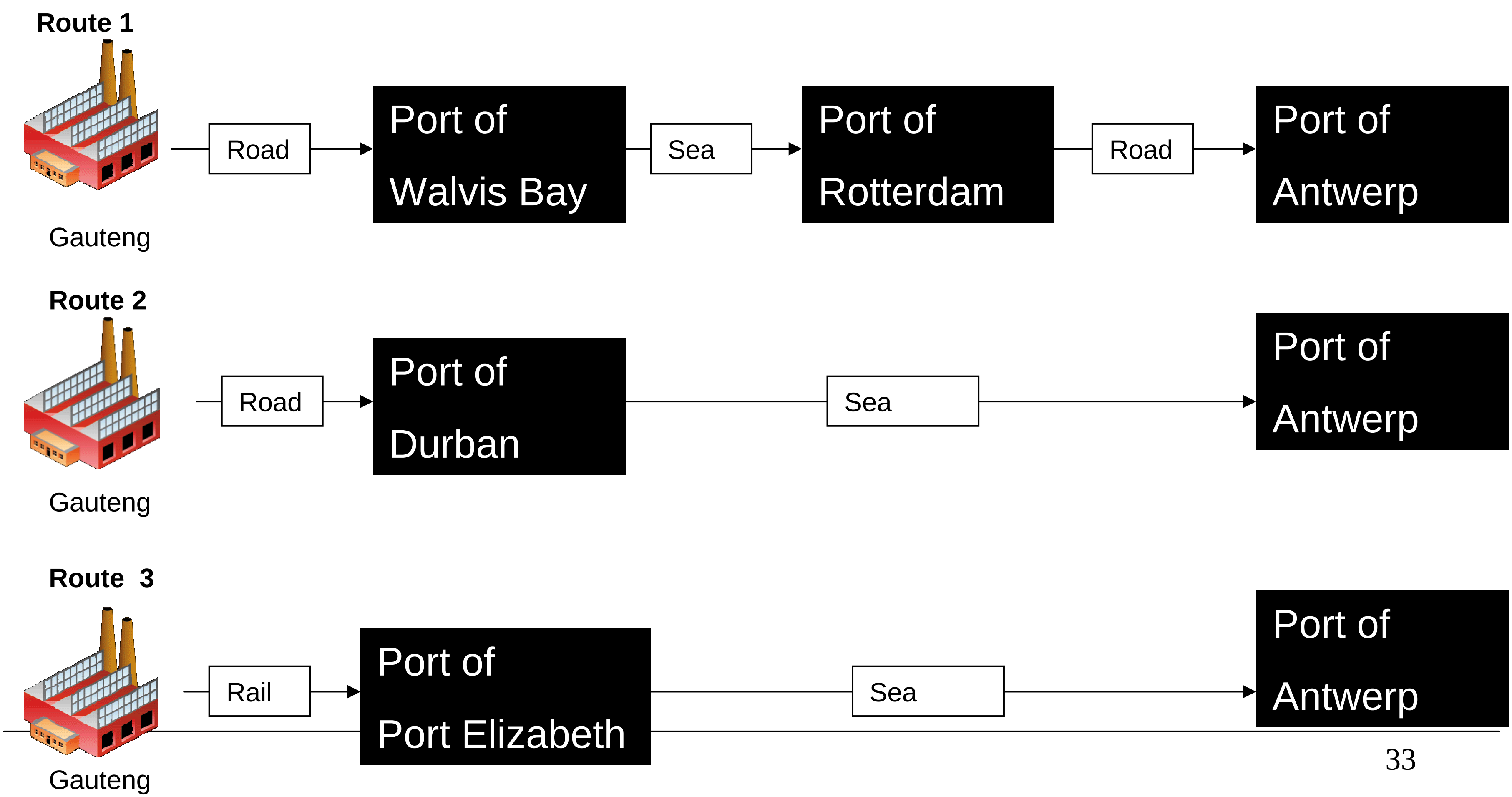
- Congested ports
- Weather conditions
- Resulting in time delays

Objective:

- Investigate WB-TKC as an alternate Supply Route
- Verifying the performance of the corridor through the actual transshipment of auto components via the WB corridor

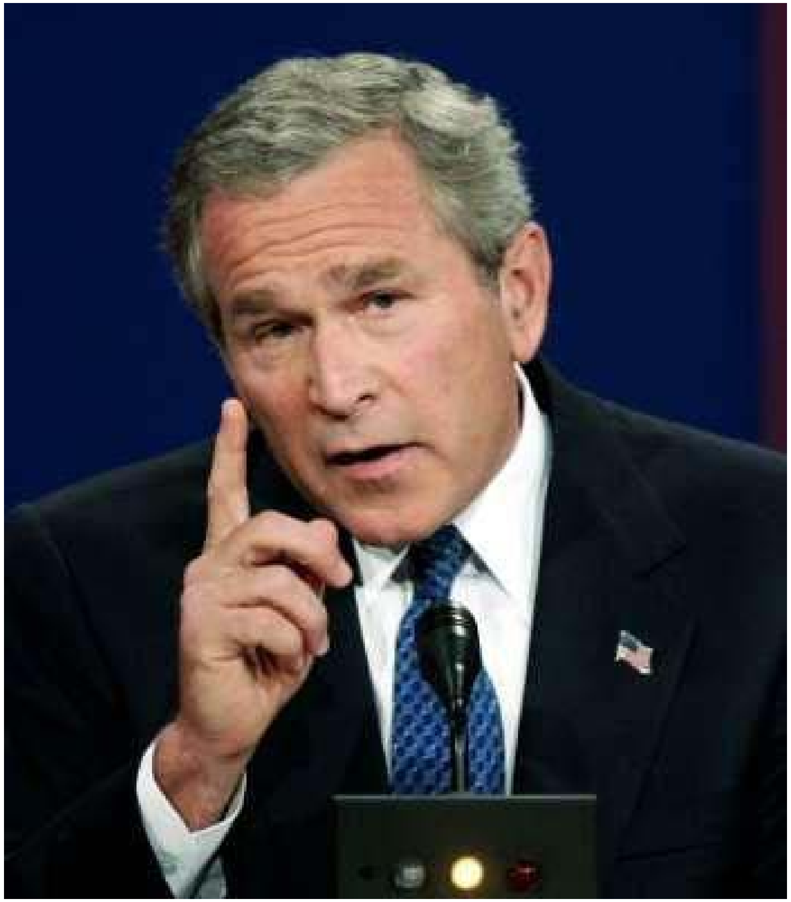
Walvis Bay – Trans Kalahari Automotive Trial Shipment

Project Methodology:



International standards…

- VW Plant – Manufacturing the new Pheaton
- New Pheaton Factory in Germany.pps



“If we don't succeed, we run the risk of failure."
- George W. Bush

Thank you ☺

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