

# **Inception Report**

**TOOL AND DIE PROJECT**

**November 9<sup>th</sup> 2004**

# **This Presentation**

- **Approach & Methodology**
- **Industry Background**
- **Detailed Project Plan**
- **Sources - discussion**

# Approach & Methodology

# Objectives: Summary

- Develop a total picture of the South African Tooling Industry
- Address the specific strategic issues outlined in the ToR, for example, making investment in the South African Tooling industry attractive and the review of the relevant commercial issues.
- Develop a strategy for the development of a competitive Tooling industry in South Africa (what to do)
- Structure an implementable and pragmatic plan of action (how to do)

- **Economic Assessment**

- Identify national economic contribution of tooling, die manufacturing and design and how these support implementation of industrial and sector strategies;
- Track down the levels and nature of employment over time to give an indication of how this industry has contributed to employment or loss of employment;
- Provide a sectoral overview of the tooling industry in South Africa to indicate areas for potential growth or decline;
- Analyse local, regional and international markets necessary to justify investing resources in developing the tooling industry in South Africa. Indicate priority sectors for special attention;
- Consider ways in which to promote the participation of previously disadvantaged individuals and enterprises;

- **Technology/Technical Assessment**

- Identify South African Tooling industry's capability and capacity to manufacture components to appropriate and/or world-class standards;
- Identify ways to train tool designers and skilled toolmakers that will consistently supply the Tooling Industry with skilled toolmakers and avoid losing skilled toolmakers to foreign economies;

- **Commercial Assessment**

- Identify success factors for different sizes and types of the tooling in SA.
- Identify where the South African Tooling Industry could be competitive against the emerging global countries.
- Identify the specific interventions and levers necessary to make tooling an attractive and sustainable business venture in South Africa. Responsibilities should be identified and budget estimates for five years should be given;

- **Final Deliverable**

- Develop an overall strategic plan for a commercially viable and competitive Tooling Industry in South Africa. Estimated achievable growth forecasts in investment, sales and employment should be given.

# Industry Background

# Overview- Industry background

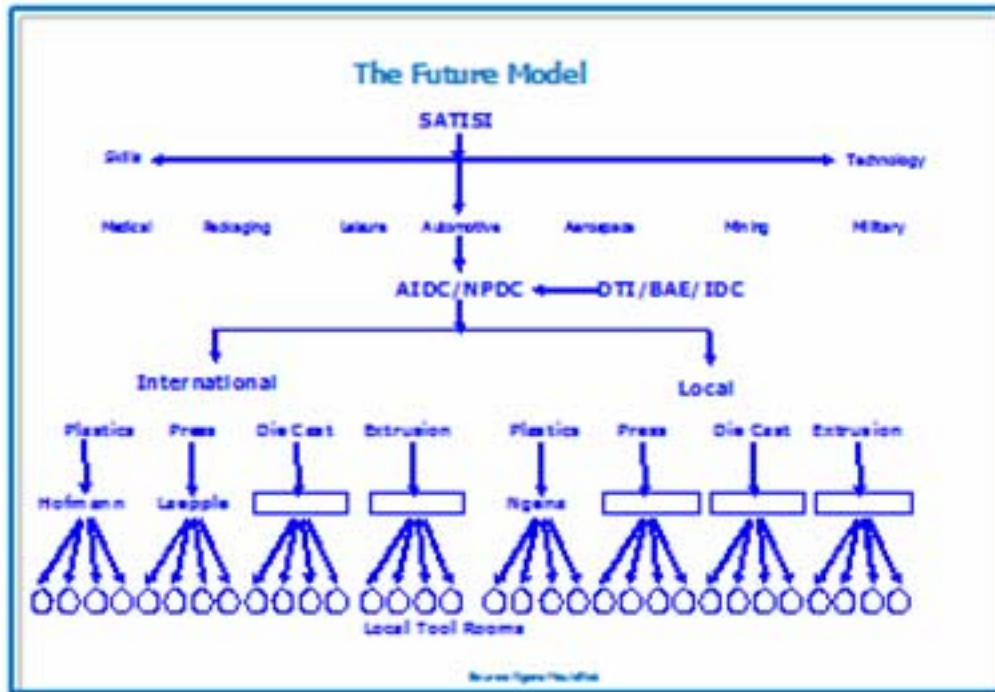
- Equipment is ageing.
- Limited exports (R100 million of an estimated R1.4 Billion)
- The automotive sector alone imported tooling to the value of R1,3 billion in 2001.
- The trade gap is growing – in 2001 the trade deficit was R848 million and in 2002, it was R1.2 billion in the automotive sector alone. All the signs point to an industry in decline.
- There is not an effective value chain in place for the South African Tooling industry that links designers, producers and core markets
- Tooling determines the downstream conversion processes of primary metals, processed metals and plastics into finished products

- The Tool & Die sector is important to South Africa:-
  - R & D Capability
  - SMME/BEE Development
  - Employment
  - Foreign Exchange earnings
  - Re-capitalisation of Aged Equipment

- Tool & Die sector consists of:
  - Design & Development
  - Deployment of Hi-tech Skills
  - SMME & BEE development
  - Sub-component Manufacture
  - Final Assembly - Quality, Timing, Cost
  - Distribution
  - Servicing & Maintenance

- Concentrated in Gauteng, KZN, Western and Eastern Cape
- Huge trade deficit
- Low level of re-capitalisation
- Aged skills level and low level of new entrants
- Dislocation from mainstream developments
- **Issues of IP and accreditation as outsource.**
- **Licensing Issues should be added in to the research investigation.**

# Ultimate Industry Goal



# Approach & Methodology

# Key Research Questions

- What is the status of the SA Tool and Die Industry at this time.
- How can the Industry be rendered competitive and in what areas?
- What strategy/ies should be adopted?
- How should these strategies be implemented?

# Approach

- Industry quantification and analysis Project
- Initiation
  - Desk research and information audit
  - Research- interviews
- Design & preparation
  - Qualitative research of industry growth potential, employment creation and retention
  - Strategy formulation and recommendations
  - Sector focus group discussions
- Initiation & Preliminary research
- Supporting Research
- Strategy Development

# Detailed Project Plan

# Plan of Study

- Principles:
  - Reliability
  - Verifiability
  - Triangulation (where possible)
  - Empirical data tested in qualitative interviews

Objectives	Outcomes	Deadline
<p>Phase Three Research continues, second interim report</p>	<p>Map industry structure and value chains, assess policy environment Review global and domestic markets, industry structure, conduct competitor analysis, review distribution channels, logistics, AND Potential growth opportunities by sector and sub sector Sectors and sub sectors expected to decline Drivers and inhibitors of growth in sectors and sub sectors, South and Southern Africa. International Influences. Assess SA potential to produce Tooling for which demand exists, identify key issues/barriers to success over all Review current production and production practices, assess producers and links to current value chains Prepare assessment of SA tooling sector, identify main gaps to be addressed in the strategy Review technology and quality control Begin preliminary analysis of supply/value chains and vertical and horizontal linkages</p>	<p>April 26th 2005 IDC 14h00 to 17h00</p>
	<p>Assess key technology constraints to meet market requirements. Develop a review of the funding received by certain other identified countries to support the T&amp;D sector. eg. Portugal and Israel. Assess competitive investment and review investment trends in the Industry</p>	
	<p>THIRD CGW WORKSHOP AND INTERIM REPORT</p>	

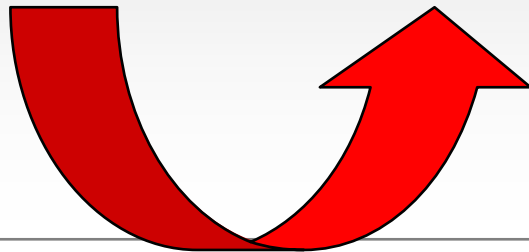
# Project Plan- Phase Three

Objectives	Outcomes	Deadline
<p>Phase Three Research continues, second interim report</p>	<p>Map industry structure and value chains, assess policy environment Review global and domestic markets, industry structure, conduct competitor analysis, review distribution channels, logistics, AND Potential growth opportunities by sector and sub sector Sectors and sub sectors expected to decline Drivers and inhibitors of growth in sectors and sub sectors, South and Southern Africa. International Influences. Assess SA potential to produce Tooling for which demand exists, identify key issues/barriers to success over all Review current production and production practices, assess producers and links to current value chains Prepare assessment of SA tooling sector, identify main gaps to be addressed in the strategy Review technology and quality control Begin preliminary analysis of supply/value chains and vertical and horizontal linkages</p>	<p>April 26th 2005 IDC 14h00 to 17h00</p>
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# Project Plan- Phase One

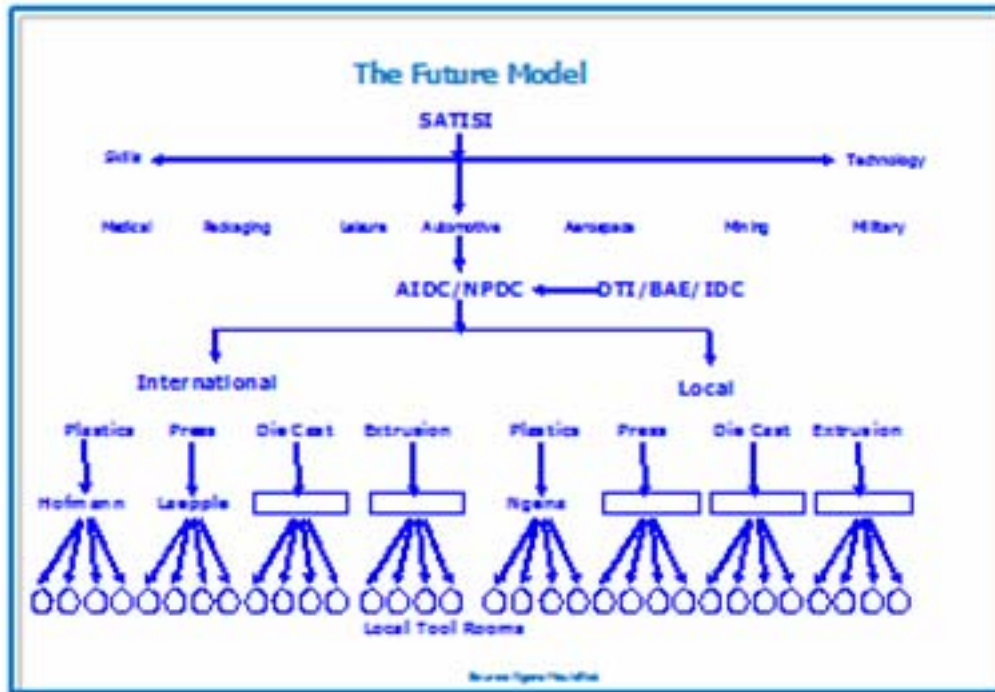
Objectives	Outcomes	Deadline
Phase One Project Start up. Finalisation of Project Plan. Final contracts concluded	Final refined Project design and detailed plan. Inception report , including approach, methodology and detailed outcomes for final agreement with Counterpart Group (CG) <b>Project Inception Workshop including:</b> Sources of information tabled by CG and Blueprint. Key respondents selected and agreed. Current sector actors and enterprises listed and tabled by CG and Blueprint Inception report to CG in PowerPoint	Inception Report Workshop November 9th 2004 NEDLAC 14h00 - 17h00
	FIRST CG WORKSHOP AND INCEPTION REPORT	



# Project Plan- Phase Five

Objectives	Outcomes	Deadline
Phase Five Final report and policy matrix	Develop final detailed strategy for SA tooling industry including objectives, targets, forward and backward linkages, implementation programmes, roles and responsibilities, milestones and funding requirements	June 14th 2005 Final report delivery Soft copy and Hard copies and CD's after meeting with Fridge Committee
	FINAL REPORT AND POLICY MATRIX DELIVERED	
FINALREPORT DELIVERED and SIGN OFF	FINAL DTP AND CDs BURNED & DELIVERED - AFTER MEETING WITH FRIDGE COMMITTEE  All Reports to CPG to be submitted 1 week prior to meeting dates	

# Ultimate Industry Goal



# Sources: Stakeholders

- Stakeholders to be interviewed are:-
  - SATISI
  - AIDC
  - TASA
  - NPDC
  - DTI
  - DST
  - NUMSA
  - Merseta
  - Local Customers
  - Suppliers
  - Capital goods/equ sector
  - Global benchmarks
  - Skills related institutions (E.g. FET)
  - SEIFSA

# Sources: Stakeholders

- **Stakeholders to be interviewed are:- (contd.)**
  - DoL
  - DHA
  - R & D Institutions
  - Cross cutting inputs, Plastics, Metals.
  - Various technology approaches.
  - Refurbished/second industry
  - Linked and related SETAs e.g. Mining (MQA), Transport (TETA)

# Sources:- Data

- ISIC data freely available to 4 digit level
- ISIC and SIC data made available by Stats SA and other statistical bodies, to the project
- NAAMSA, Naacam, TASA, SATISI, NPDC, AIDC, DTI Data bases
- Data from International studies such as UNIDO and US Tooling Industry Study
- HSRC year book on scarce skills.
- Sector Skills plan/Standards (unit) register.
- Sources provided by the CPG
- WORLD BANK 2004 investment trends/FDI
- Own research reports.

- DTI Integrated Manufacturing Strategy
- National Integration Plan for the Development of the SA Tool Industry
- UNIDO Study on International Tooling Industry
- AIDC reports (3) on the Tooling Industry submitted to the dti
  - Submission on Skills Limitation
  - International Study on Canada, Portugal and Taiwan
  - CSIR/AIDC combined report on the workshop of key concerns for the SA Tooling Industry

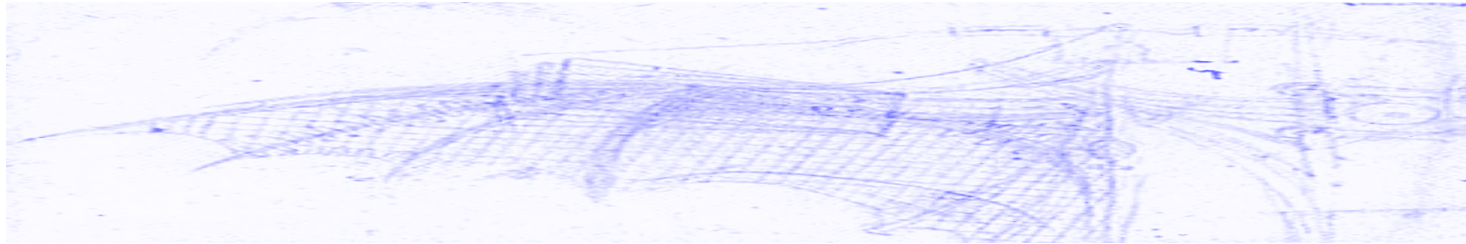
- Ngena Pilot Project- Injection Moulding Tooling Delivery Network
- USA's International Trade Commission Investigation into competitive conditions in the USA Tool industry
- Study on Portuguese Industry from CSIR. (NB)
- Research available from Spoor and Fisher, (Mr. Mowbray) and/or Chris Bull
- **NB issue of Standards and QA/QM/QC in the industry. NQF interview needed. SABS interview.**
- **NB regional Issues (regions/sectors)**

# ISSUE

- CHRISTMAS

# Project team

Name	Project position	Specialisation
Kevin Ponter	Project Leaders	Project Management Engineering Sector
Johan Cloete	Assist. Project Manager	Industry Specialist
Josie Rowe-Setz	Technical Project Manager	Research Project Methodology & Reporting
Richard Tinkler	International Tool & Die Specialist	Int. Tool & Die Industry
Dirk van Dyk	S.A Tool & Die Specialist	Local Tool & Die
Khathu Mashau	Project Intern	Investment Specialist
Mpumi Ramphomane	Skills Development	Skills Assessment and Strategy



**THANK YOU  
QUESTIONS?**