



## The Centre of Excellence

CoE  
Striving for Zero Harm





# South African Mining Research

- Appetite for research has been on the decline.
- Post 1990, a major restructuring of the mining industry.
  - Mining companies moved focus to their core business as result economic challenges
  - COMRO was transferred into the CSIR during this period of restructuring
  - Creation of Miningtek then Centre for Mining Innovation (CMI)
  - Creation of small consultancies
  - Loss of expertise through emigration and retirement





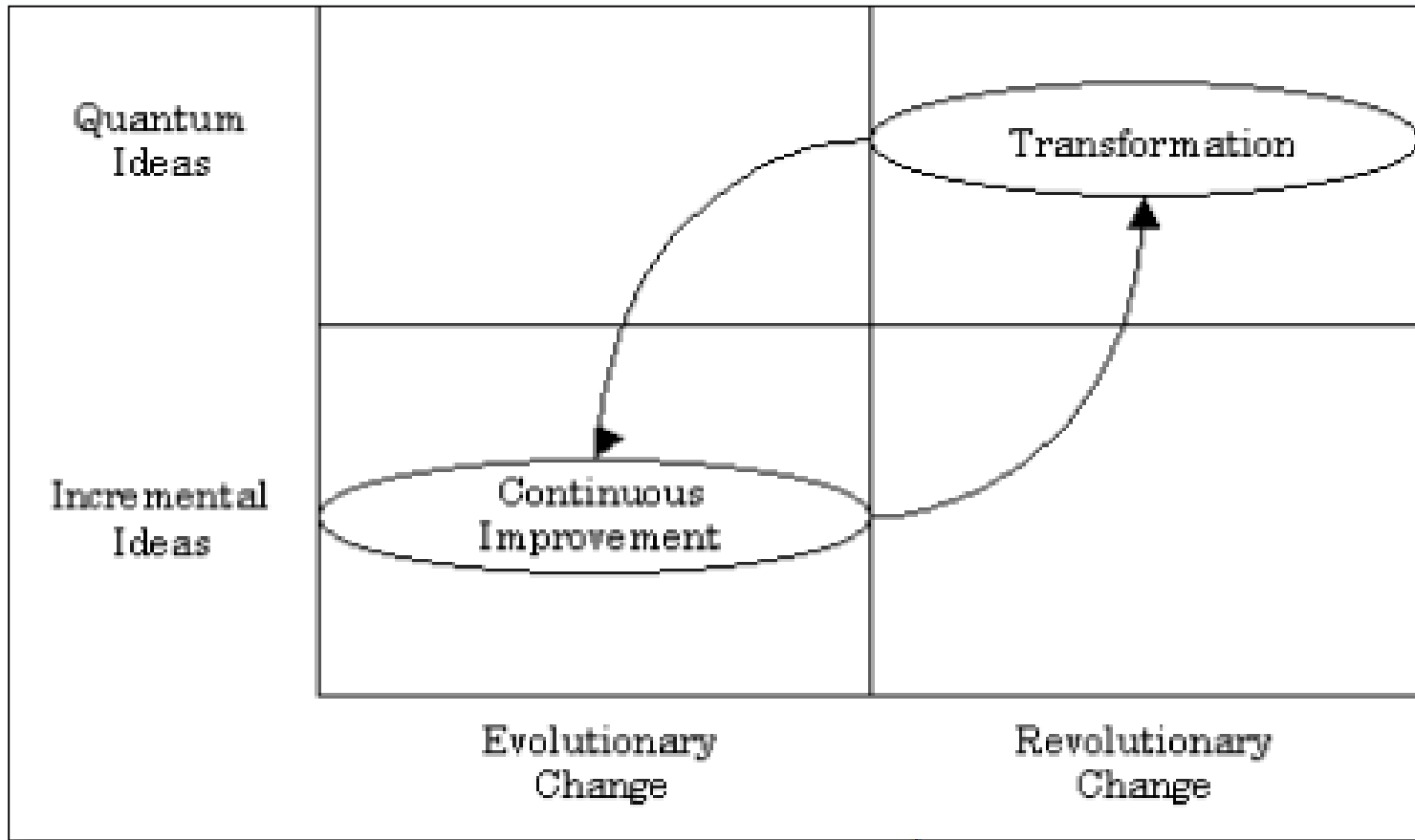
# Impact of Post 1990 Developments on Research

- Reduction in research capacity
  - Larger organisations reduced skills and capacity to undertake the research in the mining industry
- Increase in smaller consultancies
  - Smaller consultancies lacked the infrastructure or organisational backing to undertake the research, even though the capacity may exist
- Diminishing dominance in research and development
- Fragmented Resources (Human, Financial & Infrastructure)





# 2008 Summit: Paradigm Shift Required







## 2008 Summit: MHSC's Centre of Excellence

At the 2008 summit - Action plan developed to further drive significant improvements in OHS performance.

Within the theme of promoting a Learning Industry and Building Capacity, it was proposed that a Centre of Excellence be developed to focus on:

- *Key thematic research areas;*
- *Enhancing research capacity by drawing on existing research strength, infrastructure, and other funding sources;*
- *Providing high quality training in innovative and internationally competitive research;*





# Rationale of COE

- Identified CoE focus areas:

- Enhancing capacity and strengthening domestic research **collaboration** by drawing on local existing research strength, infrastructure, and other funding sources;
- Developing **beneficial relationships with major international** research centres and programmes.
- Attracting and retaining **top research talent** in mining research with particular emphasis on occupational health and safety research;
- **Providing high quality training** in innovative and internationally competitive **occupational health and safety research**;
- **Facilitating** educating and training of Mineworkers on health and safety related in conjunction or in partnership with **Mining Qualification Authority (MQA)**





## COE Alignment with Chapter 9 of NDP

- Research and innovation by institutions playing a key role in improving SA's **global competitiveness and developing a base for the knowledge economy**
- Ensuring that research and development is expanded through **collaboration** across South African and with internationally accredited institutions
- Utilisation of **multiple research sites** through collaboration of industrial laboratories, government departments, corporate research parastatals, statutory research council and NGO's.





# MHSC's Centre of Excellence Task Team

Multi-stakeholder CoE task team established: Local Research Providers and Other organisations

- National Institute of Occupational Health (NIOH)
- Technology Innovation Agency (TIA)
- CSIR
- Wits University
- University of Pretoria
- Consultancies
- Coaltech Research Association



International Research Organisations in Canada, Australia and USA also visited.







# MHSC's Centre of Excellence

The MHSC considered three options towards establishing a CoE:

Option 1: New Physical Centre

Option 2: Virtual Centre

**Option 3: Existing Centres with Links**

The comparisons for each is articulated below:

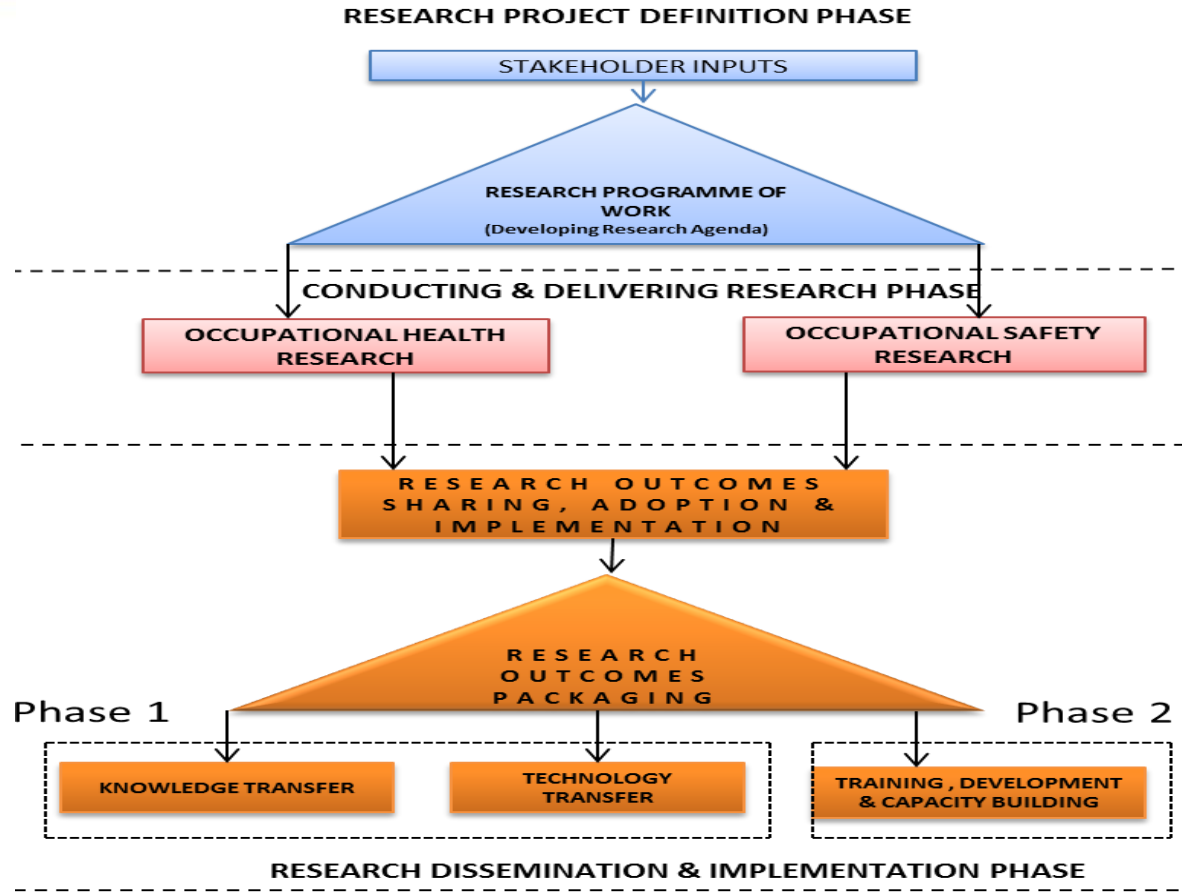
	Governance	Skill Retention	R&D Capacity	Operational Flexibility	Infrastructure	Value for Money
Option 1	High	Medium	Low	High	Low	Low
Option 2	Low	Low	Medium	Medium	Low	High
Option 3	High	High	High	High	High	High

**CoE Partners: University of Pretoria, Wits University, CSIR, National Institute of Occupational Health, Other Partners**





# MHSC's Centre of Excellence Model





# CoE Quick Win Projects

- **Understanding the Impact of Technology on People in the South African Mining Sector**
- **Underground and Surface Communication System Integration**
- **Rockmass Condition Assessment Tools**
- **Independent Support Equipment Testing Capability**
- **Continuous Dust Monitoring and Suppression**
- **Diesel Particulate Matter (DPM) Measurement and Controls**
- **Missing Person Locator System**
- **Collision Avoidance Management Systems**
- **Statutory Equipment**





# Implementation of CoE

Activity	Action Required	Timeline	Status
<b>Finalization of CoE document including business plan</b>	Task team to meet to approve final document to MHSC	Before end of February 2014	Completed
<b>Approval by MHSC</b>	Submission of document to MHSC meeting in March	Mid-March 2014	Completed
<b>Presentation to principals on CoE</b>	Meeting dates with principals of each stakeholder individually	9 September 2014	Completed
<b>Approval by MHSC Principals</b>	Principals to agree on model for engagement with identified Primary Research Providers	Oct 2014	Completed
<b>Preparation of draft MoA</b>	Development of MoA with identified Primary Research Providers	Sept 2014	Completed
<b>Engagement with identified Primary Research Providers</b>	Engagement with Primary Research Providers	October 2014	Completed
<b>Preparation of promotional and publicity material for launch at MHSC summit</b>	Documents that will be signed by all principals and the identified Primary Research Providers	Oct 2014	Completed
<b>MHSC COE Launch</b>	Launch of CoE at the MHSC summit in November 2014	November 2014	Underway
<b>MHSC CoE to be operational</b>	Implementation of Quick Wins Projects	April 2015	



**MINE HEALTH AND SAFETY COUNCIL**

**CENTRE OF EXCELLENCE**



**EVERY MINE WORKER RETURNING FROM WORK  
UNHARMED EVERYDAY**