

**REPORTING OF MINERAL RESERVES AND  
RESOURCES IN SOUTH AFRICA  
CURRENT SITUATION**

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**Ad Hoc Group of Experts on Harmonization of Energy Reserves  
and Resources Terminology  
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# **COMMERCIAL REPORTING**

**Stock exchanges, public reporting**

# **NON-COMMERCIAL REPORTING**

**State**

**Statutory Agencies**

# COMMERCIAL REPORTING

# **SAMREC**

**(South African Mineral Resource Committee)**

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**Started January 1998**

**With representatives from**

**Institute of Mining and Metallurgy (SAIMM)**

**Umbrella organisation and sponsor**

**- MINING -**

**Chamber of Mines (CoM)**

**Geological Society (GSSA)**

**Geostatistical Association (GASA)**

**- SECURITIES -**

**Johannesburg Exchange Commission (JSE)**

**- LAW & FINANCIAL -**

**Association of Law Societies**

**General Council of the BAR**

**Council of Banks**

**- ACADEMIA & RESEARCH -**

**Witwatersrand University**

**- STATUTORY BODIES -**

**Council of Geoscientists (SACNASP)**

**Engineering Council (ECSA)**

**Council of Professional Surveyors (PLATO)**

**- GOVERNMENT ORGANISATIONS -**

**Department of Minerals and Energy  
(Minerals Bureau)**

**Council of Geosciences**

**Final Obligation from the SAMREC process:**

**Mining industry**

**Mining and mining-financial companies listed on JSE**

**JSE**

**Financial institutions**

**Mining research institutions and universities**

**Government mining institutions and organisations**

**Bound to adhere to the SAMREC Code for  
non-government reporting**

**Effective SAMREC membership**

**+ 20 000**

# **First Edition of SAMREC Code**

**Effective May 2000**

**COMMODITY SPECIFIC  
REPORTING**

**FOR**

**COAL**

*South African Guide to the  
Systematic Evaluation  
of Coal Resources and Reserves*

**Guideline to cater for both Stock  
Exchange and Government Resource  
reporting requirements.**

# In-situ

# To Plant

Mineral Resources

Mineral Reserves

# COAL

Inferred

Mineable insitu  
ROM  
Saleable

Indicated

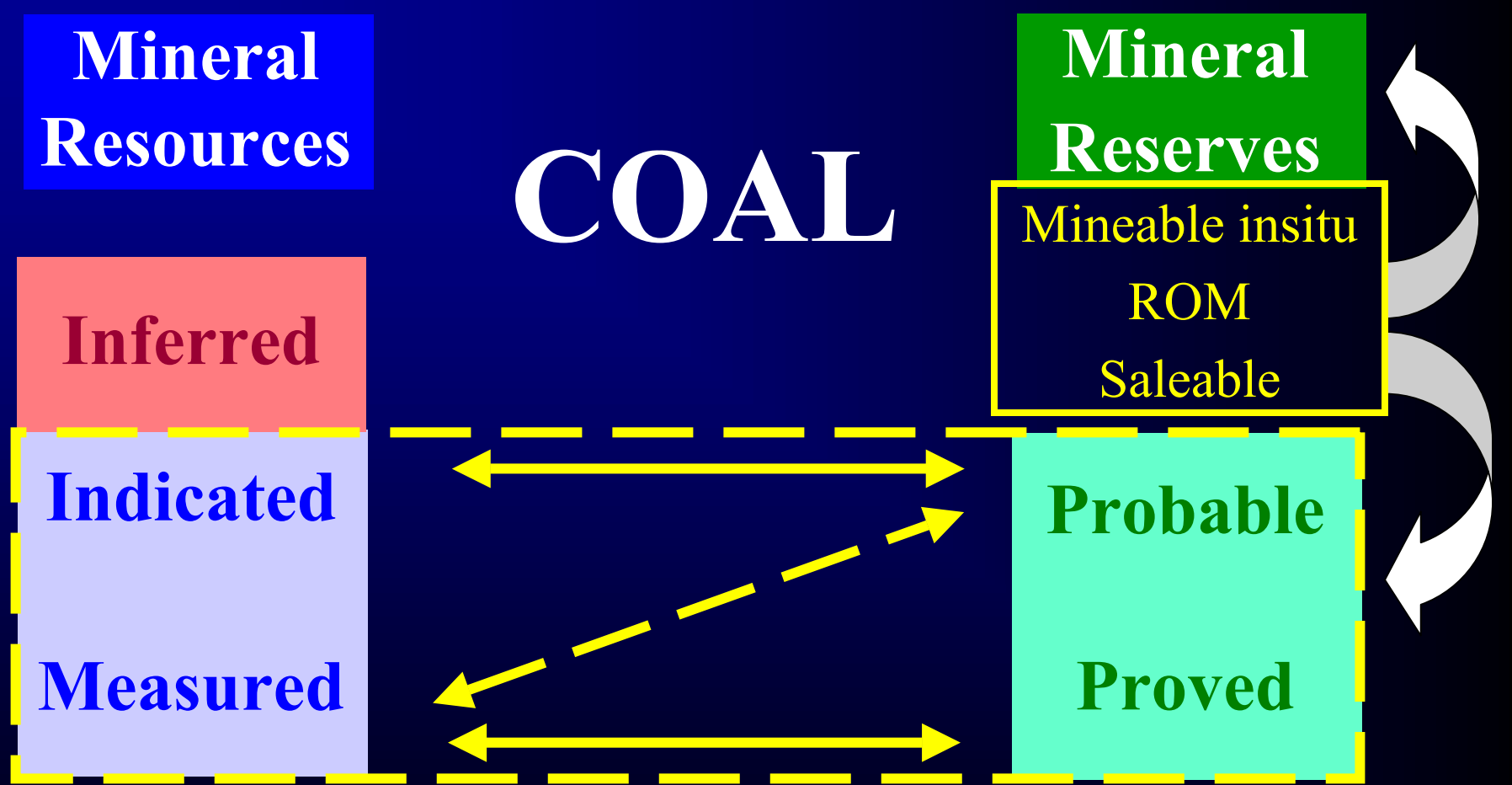
Probable

Measured

Proved



The 'Modifying Factors'



# **Second Edition of SAMREC Code**

## **Main General Section**

**As all-embracing as possible**

## **Out-of-norm Commodities**

**where deemed necessary  
and to the extent they are needed:**

**Coal**

**Diamonds**

**Oil & Gas**

**Others**

**Expected implementation March 2006**

# **COMPETENT PERSON**

**Minimum 5 Years Relevant Experience**

**Registered with a Body Approved by  
SAMREC**

**Full Responsibility**

# APPROVED BODIES

**SACNASP**

**PLATO**

**ECSA**

**Plus:**

**SAIMM, GSSA**

**and ROPOs**

**(AusIMM, CIM, SME, EFG, IMMIM etc)**

**JOHANNESBURG  
EXCHANGE COMMISSION  
(JSE)**

# JSE

**Lists + 50 major mining companies/groups**

**Including**

**Anglo American**

**BHP Billiton**

**Goldfields**

**Harmony**

**Impala Platinum**

**Anglo Platinum**

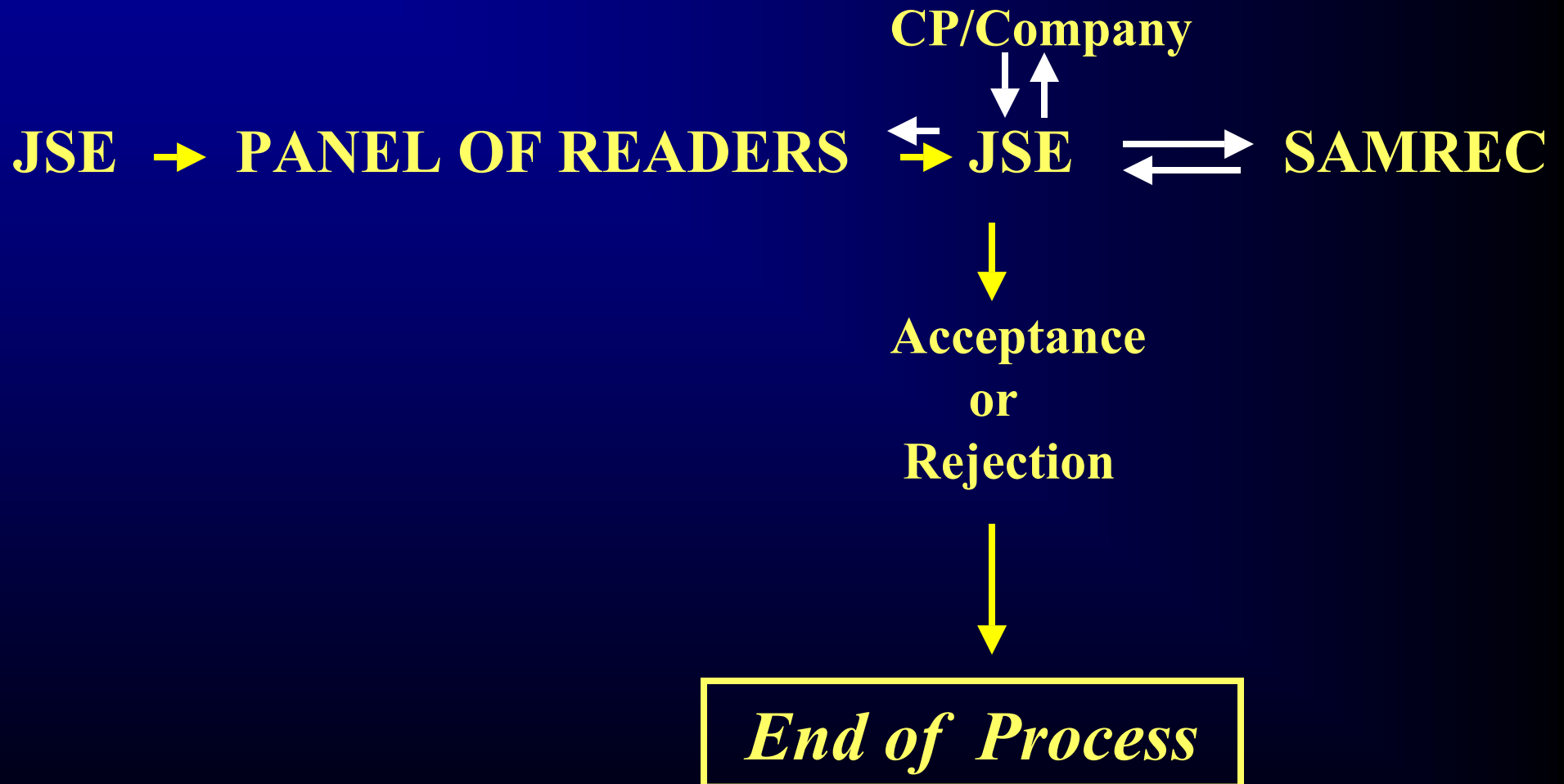
**SASOL**

**ASSMANG, etc**

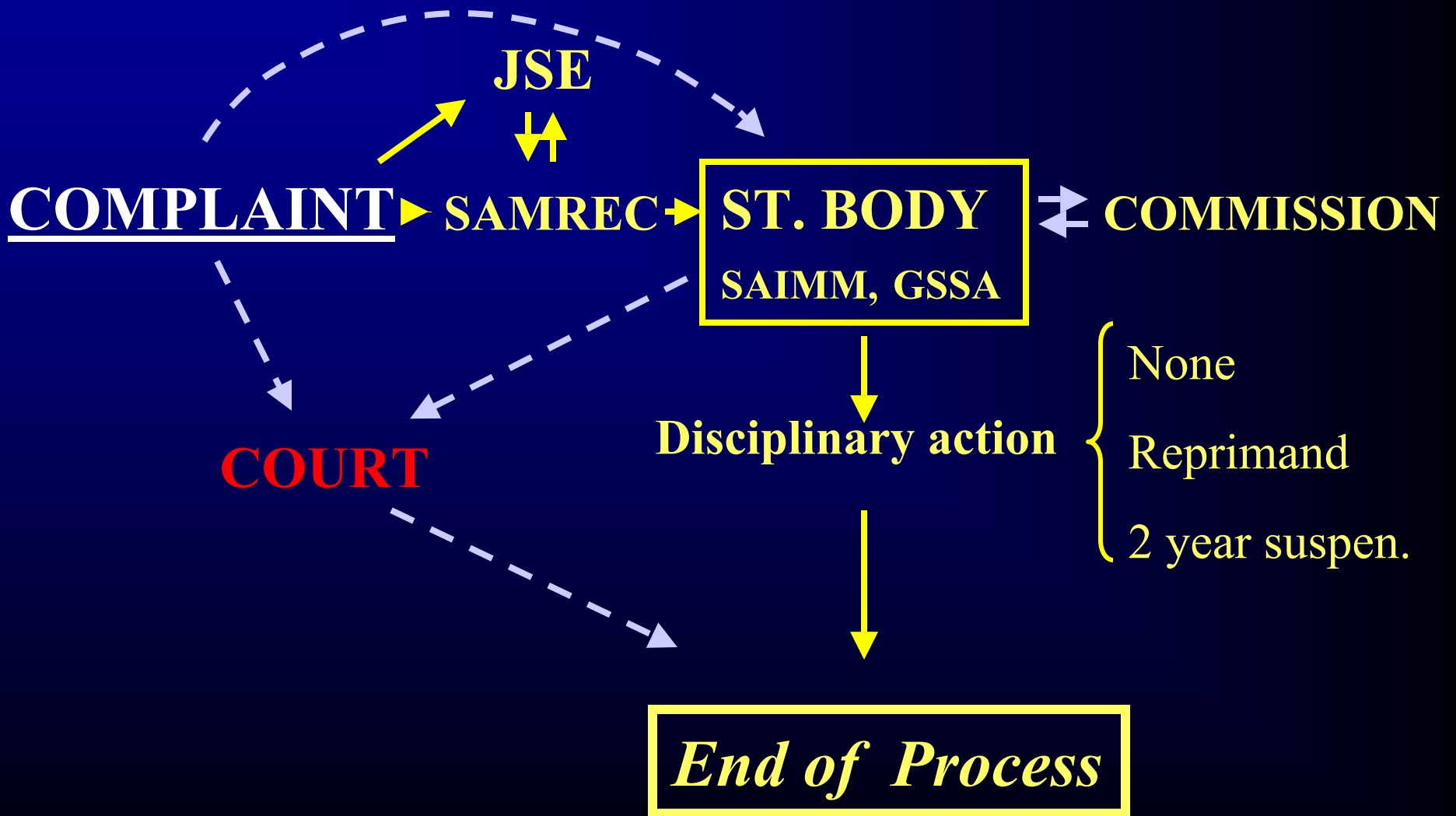
# SECTION 12

- **SAMREC Code fully adopted**
- **JSE: CPR - Readers Panel instituted**
- **CPs: Strict rules and accountability**
- **Oil and Gas: No specific requirements**  
(Equivalence to SAMREC classification compulsory for listing)

# PANEL REVIEW PROCEDURE FOR CPRs



# SAMREC DISCIPLINARY PROCEDURE



# **NON-COMMERCIAL REPORTING**

**REPORTING TO STATE**

**GOVERNMENT MINING  
ENGINEERS**

**(GME)**

# GOVERNMENT MINING ENGINEERS (GME)

“*South African Mine Valuation*” by C. D. Storrar

Guideline text for precious metals ~base metals reporting

Into law

**Responsibility:**

**Qualified Mine Surveyor**

**Requirement:**

**In-situ estimates**

**Fundamental rule:**

**Mining at the deposit's average  
grade**

# PRECIOUS METALS

## Reporting to GME

- **Proved reserve** (=“measured ore” USA; ore reserve = the payable portion of the proved reserve)
  - Fully developed (*...immediately available...*)
  - Partly developed (*...not immediately available...*)
  - Undeveloped (*...unavailable..*)
- **Probable reserve** (=“indicated ore” USA)
- **Possible reserve** (=“inferred ore” USA)
- **Life-of-mine reserve** (Proved + Probable + Possible)

**REPORTING TO  
STATUTORY AGENCIES**

**ATOMIC ENERGY CORPORATION  
OF SOUTH AFRICA**

**(AEC)**

**Ultimately, reporting to**

**IAEA**

<b>Exploitable at costs</b>	\$ 130 - \$ 260 / kg U	<b>Reasonably Assured Resources</b>	<b>Estimated Additional Resources I</b>	<b>Estimated Additional Resources II</b>	<b>Speculative Resources</b>
	\$ 80 - \$ 130 / kg U	<b>Reasonably Assured Resources</b>	<b>Estimated Additional Resources I</b>	<b>Estimated Additional Resources II</b>	<b>Speculative Resources</b>
	Up to \$ 80 / kg U	<b>Reasonably Assured Resources (Reserves)</b>	<b>Estimated Additional Resources I</b>	<b>Estimated Additional Resources II</b>	<b>Speculative Resources</b>
<b>Decreasing confidence in the estimates</b>					

# AEC

## Reporting requirements:

**Cumulative reporting per company/group**

**Reporting above 60 ppm  $U_3O_8$  mandatory (being revised)**

**In-situ estimates**

**No strict requirement for CPs**

# AEC

## Reporting requirements form (detail, example):

### REASONABLY ASSURED RESERVES AND RESOURCES

Average grade (kg U<sub>3</sub>O<sub>8</sub>/t) .....

Cut-off grade (kg U<sub>3</sub>O<sub>8</sub>/t) .....

Average thickness (m) .....

Depth range (m below surface) .....

Tonnes U (recoverable) .....

(Factors used for conversion) (.....)



**The South African Institute of Mining and Metallurgy**  
*Founded in 1894*



THE END