

**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
9-11 November 2005**

COMMERCIAL REPORTING

Stock exchanges, public reporting

NON-COMMERCIAL REPORTING

State

Statutory Agencies

COMMERCIAL REPORTING

SAMREC

(South African Mineral Resource Committee)

-

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

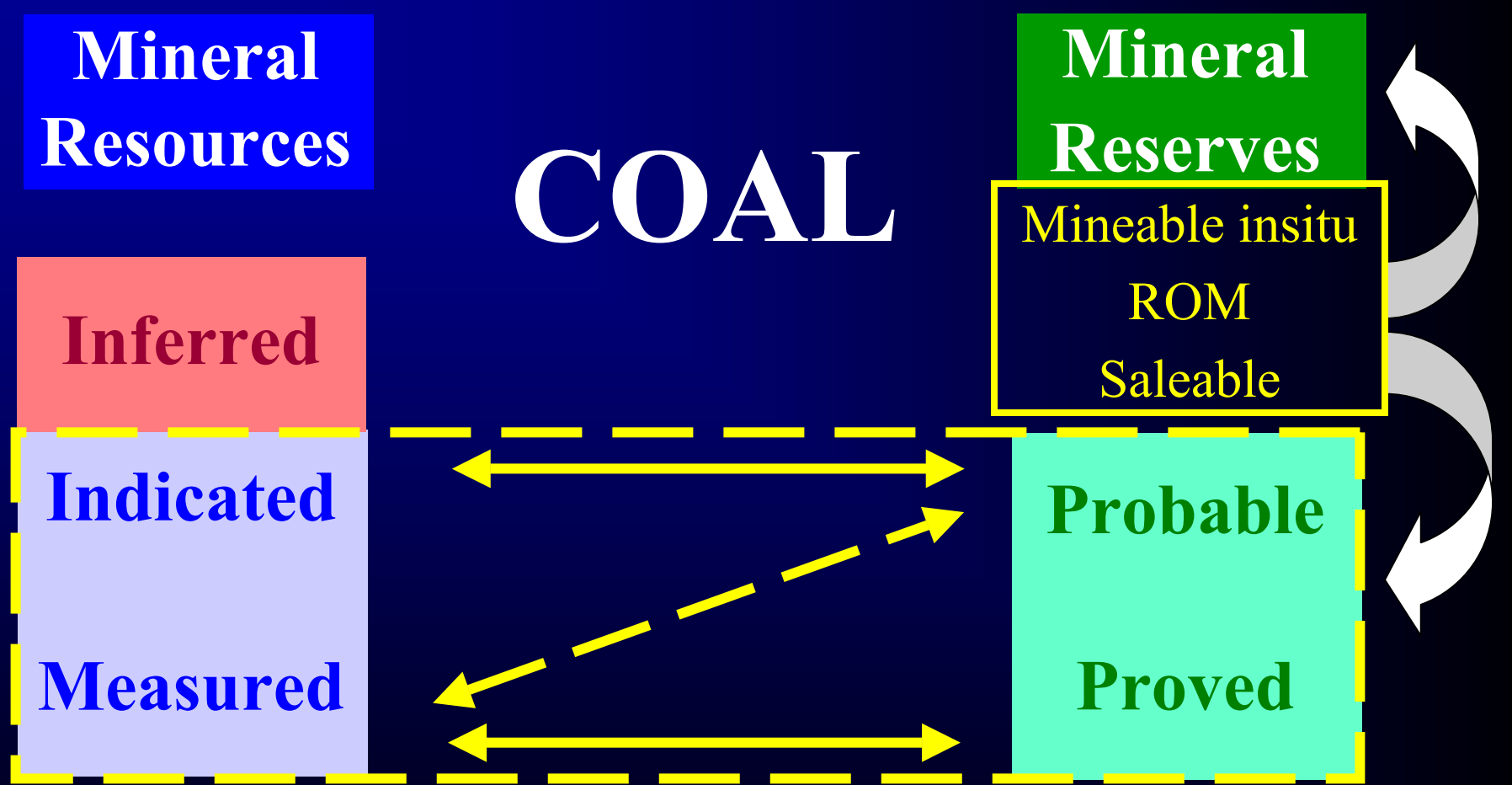
Probable

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

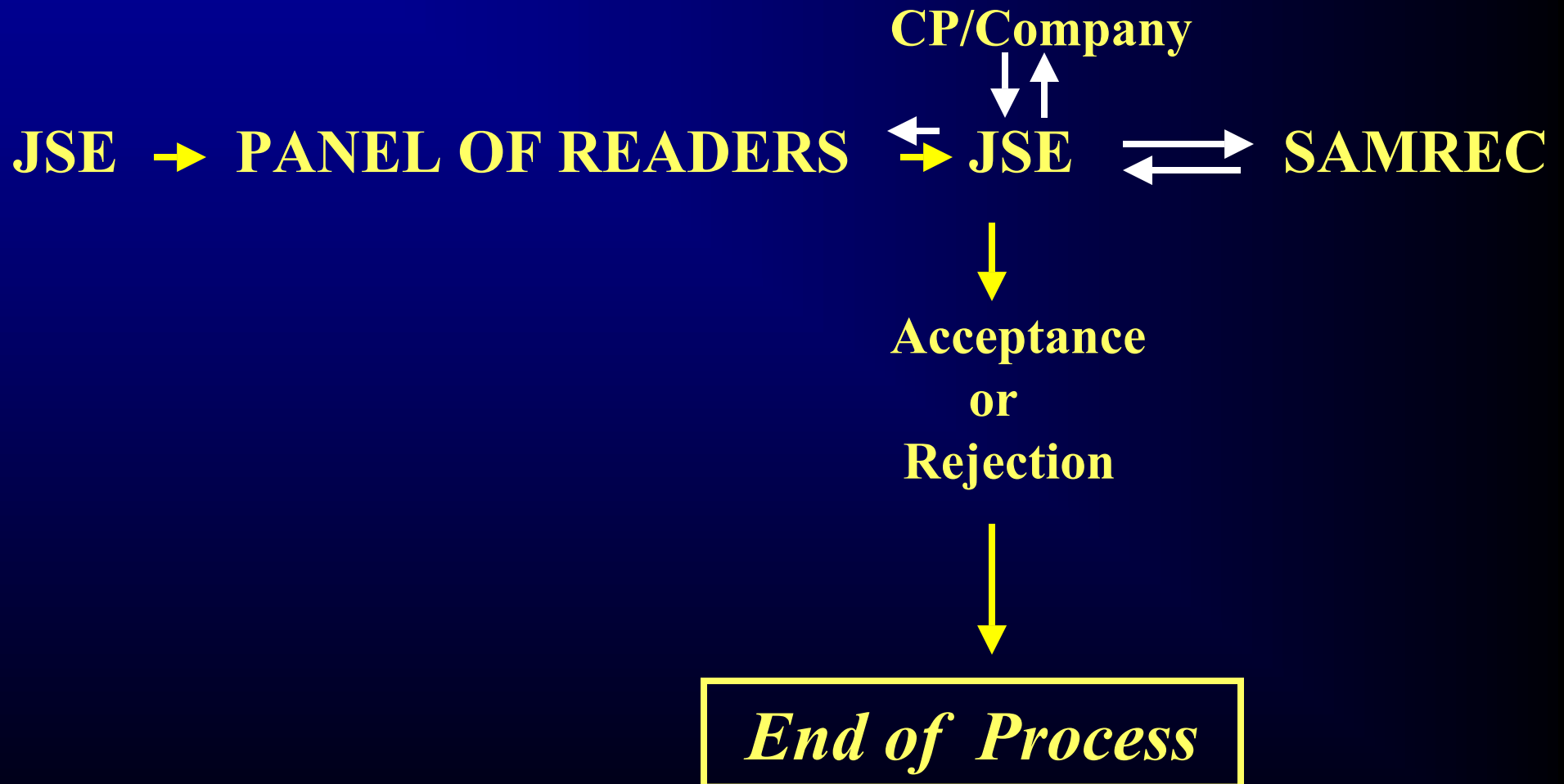
SASOL

ASSMANG, etc

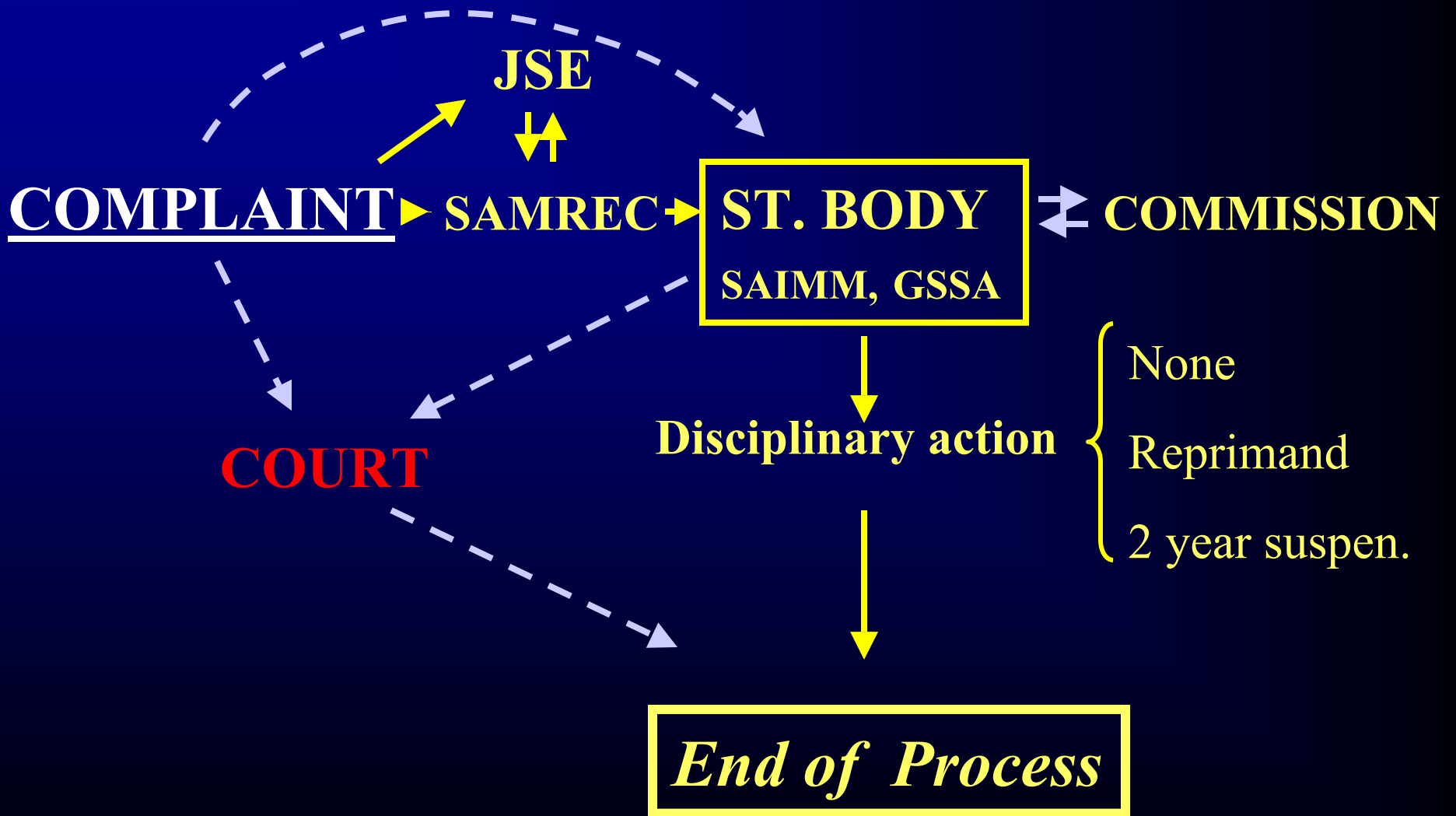
SECTION 12

- **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

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

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 U₃O₈/t)

Cut-off grade (kg U₃O₈/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