



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES



**SAMVAL**  
THE SOUTH AFRICAN CODE FOR THE REPORTING OF  
MINERAL ASSET VALUATION



**SAMREC**  
THE SOUTH AFRICAN CODE FOR THE REPORTING OF  
EXPLORATION RESULTS, MINERAL RESOURCES AND  
MINERAL RESERVES



**SAMOG**  
THE SOUTH AFRICAN CODE FOR THE REPORTING OF  
OIL AND GAS RESOURCES

GUIDELINES: **SAMESG** | **INDUSTRIAL** | **DIAMOND** | **COAL**

12 May 2026

1

1



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

**CRIRSCO (SAMREC)**

In the context of UNFC/AMREC

In the context of PARC

Oil & Gas Standards

CRIRSCO / IMVAL

UNFC

Independent Country Codes

Dr Tania R Marshall

Slide 2

2



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

CRIRSCO

- Poseidon Nickel Bubble (1969-76)
  - Joint Ore Reserves Committee (JORC) code published in 1989
  - Enforced by the ASX for listed companies

- Bre-Ex scam (1993-1997)
  - CIM and NI43-101 published in 2001
  - Legislated by CSA for all Canadian Securities Exchanges.

Figure 9: Poseidon Share Price



Source: Australian Financial Review



Slide 3

3



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

CRIRSCO

### Committee for Mineral Reserves International Reporting Standards

- Developing a **mine** involves
  - Technical expertise
  - Substantial capital investment
  - Long term investment
  - Carries numerous risks
- Requires clear communication of risks
  - Depends on the trust and confidence of investors and other stakeholders for its financial and operational well-being.

- CRIRSCO is a (NGO) grouping of representatives of organisations that are responsible for developing mineral reporting codes and guidelines for **Public Reports**
- Governance system
  - Based on integrated and self-regulated governance hierarchical system
  - Global Committee (comprised of representatives of all of the member nations; rotating chair)
  - National (or Regional) Reporting Organizations (NRO) – representing a country or a group of countries
  - Recognised Professional Organizations (RPO)
  - Experienced mineral industry professionals – companies, regulatory agencies or governmental bodies, stock exchanges; Competent Person/ Qualified Person

Slide 4

4

4

Dr Tania R Marshall (marshall.tania@gmail.com)

2



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

CRIRSCO

**Committee for Mineral Reserves  
International Reporting Standards**

- CRIRSCO currently has 16 member nations each with their own national reporting code based on a common template
  - In 2026, there are 5 additional countries as candidates to join

- Since 2000, SAMREC was the only CRIRSCO Code on the African continent
- Recently the West African contingent and Saudi Arabia have become candidates (to be accepted in 2026)
- Various other southern African countries have expressed levels of interest in creating their own codes or joining existing frameworks
- Many African countries host international mining companies that are listed according to CRIRSCO in their home countries.

Slide 55

5



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

CRIRSCO

- Objective is to standardize terminology and definitions internationally for PUBLIC REPORTS, providing a reporting “template” with 16 standard definitions
  - Public Reports
  - Competent Person
  - Modifying Factors
  - Exploration Target, Exploration Results
  - Mineral Resource
    - Inferred Resource
    - Indicated Resource
    - Measured Resource
  - Mineral Reserve
    - Probable Reserve
    - Proved Reserve
  - Technical Study (Scoping Study, Pre-Feasibility Study, Feasibility study)

| Exploration Results | MINERAL RESOURCES | MINERAL RESERVES |
|---------------------|-------------------|------------------|
|                     | Inferred          |                  |
|                     | Indicated         | Probable         |
|                     | Measured          | Proved           |

Slide 65

6



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

CRIRSCO

- Template is used by all National Reporting Organisations (NROs) as a basis and modified for issues specific to their jurisdiction
  - NROs may include specific local requirements, based on governmental or stock exchange issues
    - Colombia added issues around emeralds
    - Many countries added issues around diamonds, coal, industrial minerals, use of metal equivalents, ASM
    - Others have added requirements specific to their jurisdictional/listing constraints (e.g. Canada, Philippines, China)
  - African countries could add specific references to the African Mining Vision
- Understood by both technical and non-technical professionals
  - Accountants, investors, investment advisors, legal practitioners, regulators, etc



Slide 7

7



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMCODES

SAMCODE

SAMESG Guidelines



SAMREC

SAMVAL

SAMOG



- SAMCODE
  - SAMREC is one of the founder members of CRIRSCO
  - NRO – SAMREC Committee through the SAMCODES Standards Committee (SSC)
  - RPO – SACNASP, ECSA, SAGC, GSSA, SAIMM, IMSSA
  - Written into the Listing Requirements of the JSE
- BENEFITS
  - Minimum Standards of Public Reporting; Not “Best Practice”
  - Common language and definitions (between SAMREC, SAMVAL, SAMOG and SAMESG)
  - Easily applicable to non-Public (Private) Reports for private and/or institutional funding
  - Can be intertwined with other industry guidelines, best practice standards, sustainability guidelines or other mandatory/voluntary Codes of Practice
    - Co-exists with UNFC/UNFCMRS, through the bridging document

Slide 8

8

Dr Tania R Marshall (marshall.tania@gmail.com)

4



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMREC Code

- Glossary of Terms
- Foreword, Introduction and Scope
- Competence and Responsibility
- Reporting Terminology
- Reporting General
- Reporting of Exploration Results
- Reporting of Mineral Resources
- Reporting of Mineral Reserves
- Technical Studies
- Reporting of Coal Exploration Results, Coal Resources and Coal Reserves
- Reporting of Diamond Exploration Results, Diamond Resources and Diamond Reserves
- Reporting of Exploration Results, Mineral Resources and Mineral Reserves for Industrial Minerals
- Reporting of Metal Equivalents

- Table 1: Checklist and guideline of reporting and assessment criteria
- Table 2: Guidance on Technical Studies
- Appendix 1: Suggested Table of Contents
- Appendix 2: Suggested Authors Certificates
- Appendix 3: Guidance in respect of Compliance statements

Slide 9

9



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMREC Code

Guiding Principles

Materiality

Transparency

Competence

- Relevant information
- Enable reasoned & balanced judgement
- Disclosure of all material information

- Sufficient information
- Unambiguous
- Not misleading
- Clear & balanced
- Not silent on material issues

- Registration
- Statutory/ Professional / RPO
- Experience

Slide 1010

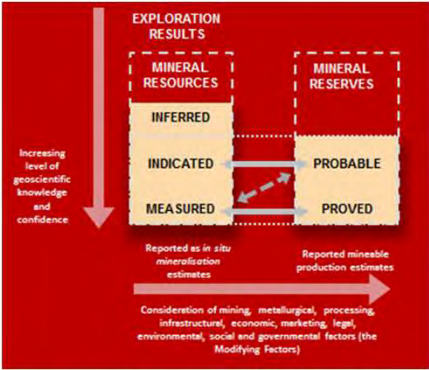
10



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMREC Code

Classification



- Exploration Results
  - Data and information generated by exploration programmes that may be of use to investors (what are we looking for and how)
- Mineral Resources
  - What is in the ground (*in-situ*) and could it potentially be commercial.
- Mineral Reserves
  - Can it be mined profitably?
  - Includes detailed Technical Studies (including ESG) and risk assessments
- Focus is on volume/tonnage, grade and value (adjusted for all the relevant Modifying Factors)

Identifying potential ESG relevant investments

Slide 11

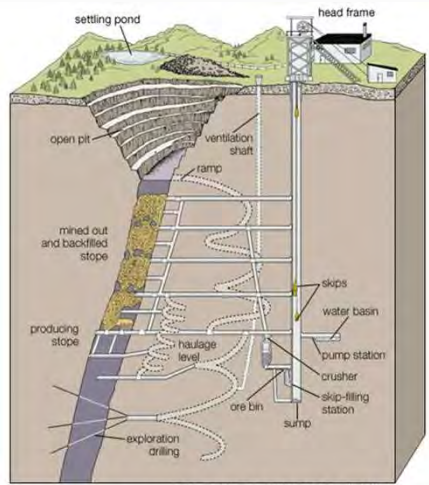
11

11



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

SAMREC Code



Modifying Factors

|                 |                                              |
|-----------------|----------------------------------------------|
| Mining          | Methods, costs, losses                       |
| Processing      | Methods, costs, recoveries                   |
| Metallurgical   | Methods, costs, recoveries and yields        |
| Infrastructural | Costs, technical constraints                 |
| Economic        | Project economics                            |
| Marketing       | Price and Cost of Sales<br>Supply and Demand |
| Legal           | Rights and limits                            |
| Regulatory      | Constraints                                  |
| ESG             | Impacts and costs of impacts                 |

© 2007 Encyclopedia Britannica, Inc. Source: H. Hamrin, Guide to Underground Mining Methods and Applications (Stockholm: Atlas Copco, 1997)

Slide 12

12

12



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

### CRIRSCO/UNFC (AMREC)

Exploration Results

MINERAL RESOURCES

Inferred

Indicated

Measured

Increasing level of geological knowledge and confidence

MINERAL RESERVES

Probable

Proved

Application of mining, processing, metallurgical, economic, marketing, legal, environmental, infrastructure, social, and governmental factors (the "Modifying Factors")

Build or extend production

$E_1$

$E_2$

$E_3$

$E_4$

$E_5$

$E_6$

$E_7$

$E_8$

$E_9$

$E_{10}$

$E_{11}$

$E_{12}$

$E_{13}$

$E_{14}$

$E_{15}$

$E_{16}$

$E_{17}$

$E_{18}$

$E_{19}$

$E_{20}$

$E_{21}$

$E_{22}$

$E_{23}$

$E_{24}$

$E_{25}$

$E_{26}$

$E_{27}$

$E_{28}$

$E_{29}$

$E_{30}$

$E_{31}$

$E_{32}$

$E_{33}$

$E_{34}$

$E_{35}$

$E_{36}$

$E_{37}$

$E_{38}$

$E_{39}$

$E_{40}$

$E_{41}$

$E_{42}$

$E_{43}$

$E_{44}$

$E_{45}$

$E_{46}$

$E_{47}$

$E_{48}$

$E_{49}$

$E_{50}$

$E_{51}$

$E_{52}$

$E_{53}$

$E_{54}$

$E_{55}$

$E_{56}$

$E_{57}$

$E_{58}$

$E_{59}$

$E_{60}$

$E_{61}$

$E_{62}$

$E_{63}$

$E_{64}$

$E_{65}$

$E_{66}$

$E_{67}$

$E_{68}$

$E_{69}$

$E_{70}$

$E_{71}$

$E_{72}$

$E_{73}$

$E_{74}$

$E_{75}$

$E_{76}$

$E_{77}$

$E_{78}$

$E_{79}$

$E_{80}$

$E_{81}$

$E_{82}$

$E_{83}$

$E_{84}$

$E_{85}$

$E_{86}$

$E_{87}$

$E_{88}$

$E_{89}$

$E_{90}$

$E_{91}$

$E_{92}$

$E_{93}$

$E_{94}$

$E_{95}$

$E_{96}$

$E_{97}$

$E_{98}$

$E_{99}$

$E_{100}$

$E_{101}$

$E_{102}$

$E_{103}$

$E_{104}$

$E_{105}$

$E_{106}$

$E_{107}$

$E_{108}$

$E_{109}$

$E_{110}$

$E_{111}$

$E_{112}$

$E_{113}$

$E_{114}$

$E_{115}$

$E_{116}$

$E_{117}$

$E_{118}$

$E_{119}$

$E_{120}$

$E_{121}$

$E_{122}$

$E_{123}$

$E_{124}$

$E_{125}$

$E_{126}$

$E_{127}$

$E_{128}$

$E_{129}$

$E_{130}$

$E_{131}$

$E_{132}$

$E_{133}$

$E_{134}$

$E_{135}$

$E_{136}$

$E_{137}$

$E_{138}$

$E_{139}$

$E_{140}$

$E_{141}$

$E_{142}$

$E_{143}$

$E_{144}$

$E_{145}$

$E_{146}$

$E_{147}$

$E_{148}$

$E_{149}$

$E_{150}$

$E_{151}$

$E_{152}$

$E_{153}$

$E_{154}$

$E_{155}$

$E_{156}$

$E_{157}$

$E_{158}$

$E_{159}$

$E_{160}$

$E_{161}$

$E_{162}$

$E_{163}$

$E_{164}$

$E_{165}$

$E_{166}$

$E_{167}$

$E_{168}$

$E_{169}$

$E_{170}$

$E_{171}$

$E_{172}$

$E_{173}$

$E_{174}$

$E_{175}$

$E_{176}$

$E_{177}$

$E_{178}$

$E_{179}$

$E_{180}$

$E_{181}$

$E_{182}$

$E_{183}$

$E_{184}$

$E_{185}$

$E_{186}$

$E_{187}$

$E_{188}$

$E_{189}$

$E_{190}$

$E_{191}$

$E_{192}$

$E_{193}$

$E_{194}$

$E_{195}$

$E_{196}$

$E_{197}$

$E_{198}$

$E_{199}$

$E_{200}$

$E_{201}$

$E_{202}$

$E_{203}$

$E_{204}$

$E_{205}$

$E_{206}$

$E_{207}$

$E_{208}$

$E_{209}$

$E_{210}$

$E_{211}$

$E_{212}$

$E_{213}$

$E_{214}$

$E_{215}$

$E_{216}$

$E_{217}$

$E_{218}$

$E_{219}$

$E_{220}$

$E_{221}$

$E_{222}$

$E_{223}$

$E_{224}$

$E_{225}$

$E_{226}$

$E_{227}$

$E_{228}$

$E_{229}$

$E_{230}$

$E_{231}$

$E_{232}$

$E_{233}$

$E_{234}$

$E_{235}$

$E_{236}$

$E_{237}$

$E_{238}$

$E_{239}$

$E_{240}$

$E_{241}$

$E_{242}$

$E_{243}$

$E_{244}$

$E_{245}$

$E_{246}$

$E_{247}$

$E_{248}$

$E_{249}$

$E_{250}$

$E_{251}$

$E_{252}$

$E_{253}$

$E_{254}$

$E_{255}$

$E_{256}$

$E_{257}$

$E_{258}$

$E_{259}$

$E_{260}$

$E_{261}$

$E_{262}$

$E_{263}$

$E_{264}$

$E_{265}$

$E_{266}$

$E_{267}$

$E_{268}$

$E_{269}$

$E_{270}$

$E_{271}$

$E_{272}$

$E_{273}$

$E_{274}$

$E_{275}$

$E_{276}$

$E_{277}$

$E_{278}$

$E_{279}$

$E_{280}$

$E_{281}$

$E_{282}$

$E_{283}$

$E_{284}$

$E_{285}$

$E_{286}$

$E_{287}$

$E_{288}$

$E_{289}$

$E_{290}$

$E_{291}$

$E_{292}$

$E_{293}$

$E_{294}$

$E_{295}$

$E_{296}$

$E_{297}$

$E_{298}$

$E_{299}$

$E_{300}$

$E_{301}$

$E_{302}$

$E_{303}$

$E_{304}$

$E_{305}$

$E_{306}$

$E_{307}$

$E_{308}$

$E_{309}$

$E_{310}$

$E_{311}$

$E_{312}$

$E_{313}$

$E_{314}$

$E_{315}$

$E_{316}$

$E_{317}$

$E_{318}$

$E_{319}$

$E_{320}$

$E_{321}$

$E_{322}$

$E_{323}$

$E_{324}$

$E_{325}$

$E_{326}$

$E_{327}$

$E_{328}$

$E_{329}$

$E_{330}$

$E_{331}$

$E_{332}$

$E_{333}$

$E_{334}$

$E_{335}$

$E_{336}$

$E_{337}$

$E_{338}$

$E_{339}$

$E_{340}$

$E_{341}$

$E_{342}$

$E_{343}$

$E_{344}$

$E_{345}$

$E_{346}$

$E_{347}$

$E_{348}$

$E_{349}$

$E_{350}$

$E_{351}$

$E_{352}$

$E_{353}$

$E_{354}$

$E_{355}$

$E_{356}$

$E_{357}$

$E_{358}$

$E_{359}$

$E_{360}$

$E_{361}$

$E_{362}$

$E_{363}$

$E_{364}$

$E_{365}$

$E_{366}$

$E_{367}$

$E_{368}$

$E_{369}$

$E_{370}$

$E_{371}$

$E_{372}$

$E_{373}$

$E_{374}$

$E_{375}$

$E_{376}$

$E_{377}$

$E_{378}$

$E_{379}$

$E_{380}$

$E_{381}$

$E_{382}$

$E_{383}$

$E_{384}$

$E_{385}$

$E_{386}$

$E_{387}$

$E_{388}$

$E_{389}$

$E_{390}$

$E_{391}$

$E_{392}$

$E_{393}$

$E_{394}$

$E_{395}$

$E_{396}$

$E_{397}$

$E_{398}$

$E_{399}$

$E_{400}$

$E_{401}$

$E_{402}$

$E_{403}$

$E_{404}$

$E_{405}$

$E_{406}$

$E_{407}$

$E_{408}$

$E_{409}$

$E_{410}$

$E_{411}$

$E_{412}$

$E_{413}$

$E_{414}$

$E_{415}$

$E_{416}$

$E_{417}$

$E_{418}$

$E_{419}$

$E_{420}$

$E_{421}$

$E_{422}$

$E_{423}$

$E_{424}$

$E_{425}$

$E_{426}$

$E_{427}$

$E_{428}$

$E_{429}$

$E_{430}$

$E_{431}$

$E_{432}$

$E_{433}$

$E_{434}$

$E_{435}$

$E_{436}$

$E_{437}$

$E_{438}$

$E_{439}$

$E_{440}$

$E_{441}$

$E_{442}$

$E_{443}$

$E_{444}$

$E_{445}$

$E_{446}$

$E_{447}$

$E_{448}$

$E_{449}$

$E_{450}$

$E_{451}$

$E_{452}$

$E_{453}$

$E_{454}$

$E_{455}$

$E_{456}$

$E_{457}$

$E_{458}$

$E_{459}$

$E_{460}$

$E_{461}$

$E_{462}$

$E_{463}$

$E_{464}$

$E_{465}$

$E_{466}$

$E_{467}$

$E_{468}$

$E_{469}$

$E_{470}$

$E_{471}$

$E_{472}$

$E_{473}$

$E_{474}$

$E_{475}$

$E_{476}$

$E_{477}$

$E_{478}$

$E_{479}$

$E_{480}$

$E_{481}$

$E_{482}$

$E_{483}$

$E_{484}$

$E_{485}$

$E_{486}$

$E_{487}$

$E_{488}$

$E_{489}$

$E_{490}$

$E_{491}$

$E_{492}$

$E_{493}$

$E_{494}$

$E_{495}$

$E_{496}$

$E_{497}$

$E_{498}$

$E_{499}$

$E_{500}$

$E_{501}$

$E_{502}$

$E_{503}$

$E_{504}$

$E_{505}$

$E_{506}$

$E_{507}$

$E_{508}$

$E_{509}$

$E_{510}$

$E_{511}$

$E_{512}$

$E_{513}$

$E_{514}$

$E_{515}$

$E_{516}$

$E_{517}$

$E_{518}$

$E_{519}$

$E_{520}$

$E_{521}$

$E_{522}$

$E_{523}$

$E_{524}$

$E_{525}$

$E_{526}$

$E_{527}$

$E_{528}$

$E_{529}$

$E_{530}$

$E_{531}$

$E_{532}$

$E_{533}$

$E_{534}$

$E_{535}$

$E_{536}$

$E_{537}$

$E_{538}$

$E_{539}$

$E_{540}$

$E_{541}$

$E_{542}$

$E_{543}$

$E_{544}$

$E_{545}$

$E_{546}$

$E_{547}$

$E_{548}$

$E_{549}$

$E_{550}$

$E_{551}$

$E_{552}$

$E_{553}$

$E_{554}$

$E_{555}$

$E_{556}$

$E_{557}$

$E_{558}$

$E_{559}$

$E_{560}$

$E_{561}$

$E_{562}$

$E_{563}$

$E_{564}$

$E_{565}$

$E_{566}$

$E_{567}$

$E_{568}$

$E_{569}$

$E_{570}$

$E_{571}$

$E_{572}$

$E_{573}$

$E_{574}$

$E_{575}$

$E_{576}$

$E_{577}$

$E_{578}$

$E_{579}$

$E_{580}$

$E_{581}$

$E_{582}$

$E_{583}$

$E_{584}$

$E_{585}$

$E_{586}$

$E_{587}$

$E_{588}$

$E_{589}$

$E_{590}$

$E_{591}$

$E_{592}$

$E_{593}$

$E_{594}$

$E_{595}$

$E_{596}$

$E_{597}$

$E_{598}$

$E_{599}$

$E_{600}$

$E_{601}$

$E_{602}$

$E_{603}$

$E_{604}$

$E_{605}$

$E_{606}$

$E_{607}$

$E_{608}$

$E_{609}$

$E_{610}$

$E_{611}$

$E_{612}$

$E_{613}$

$E_{614}$

$E_{615}$

$E_{616}$

$E_{617}$

$E_{618}$

$E_{619}$

$E_{620}$

$E_{621}$

$E_{622}$

$E_{623}$

$E_{624}$

$E_{625}$

$E_{626}$

$E_{627}$

$E_{628}$

$E_{629}$

$E_{630}$

$E_{631}$

$E_{632}$

$E_{633}$

$E_{634}$

$E_{635}$

$E_{636}$

$E_{637}$

$E_{638}$

$E_{639}$

$E_{640}$

$E_{641}$

$E_{642}$

$E_{643}$

$E_{644}$

$E_{645}$

$E_{646}$

$E_{647}$

$E_{648}$

$E_{649}$

$E_{650}$

$E_{651}$

$E_{652}$

$E_{653}$

$E_{654}$

$E_{655}$

$E_{656}$

$E_{657}$

$E_{658}$

$E_{659}$

$E_{660}$

$E_{661}$

$E_{662}$

$E_{663}$

$E_{664}$

$E_{665}$

$E_{666}$

$E_{667}$

$E_{668}$

$E_{669}$

$E_{670}$

$E_{671}$

$E_{672}$

$E_{673}$

$E_{674}$

$E_{675}$

$E_{676}$

$E_{677}$

$E_{678}$

$E_{679}$

$E_{680}$

$E_{681}$

$E_{682}$

$E_{683}$

$E_{684}$

$E_{685}$

$E_{686}$

$E_{687}$

$E_{688}$

$E_{689}$

$E_{690}$

$E_{691}$

$E_{692}$

$E_{693}$

$E_{694}$

$E_{695}$

$E_{696}$

$E_{697}$

$E_{698}$

$E_{699}$

$E_{700}$

$E_{701}$

$E_{702}$

$E_{703}$

$E_{704}$

$E_{705}$

$E_{706}$

$E_{707}$

$E_{708}$

$E_{709}$

$E_{710}$

$E_{711}$

$E_{712}$

$E_{713}$

$E_{714}$

$E_{715}$

$E_{716}$

$E_{717}$

$E_{718}$

$E_{719}$

$E_{720}$

$E_{721}$

$E_{722}$

$E_{723}$

$E_{724}$

$E_{725}$

$E_{726}$

$E_{727}$

$E_{728}$

$E_{729}$

$E_{730}$

$E_{731}$

$E_{732}$

$E_{733}$

$E_{734}$

$E_{735}$

$E_{736}$

$E_{737}$

$E_{738}$

$E_{739}$

$E_{740}$

$E_{741}$

$E_{742}$

$E_{743}$

$E_{744}$

$E_{745}$

$E_{746}$

$E_{747}$

$E_{748}$

$E_{749}$

$E_{750}$

$E_{751}$

$E_{752}$

$E_{753}$

$E_{754}$

$E_{755}$

$E_{756}$

$E_{757}$

$E_{758}$

$E_{759}$

$E_{760}$

$E_{761}$

$E_{762}$

$E_{763}$

$E_{764}$

$E_{765}$

$E_{766}$

$E_{767}$

$E_{768}$

$E_{769}$

$E_{770}$

$E_{771}$

$E_{772}$

$E_{773}$

$E_{774}$

$E_{775}$

$E_{776}$

$E_{777}$

$E_{778}$

$E_{779}$

$E_{780}$

$E_{781}$

$E_{782}$

$E_{783}$

$E_{784}$

$E_{785}$

$E_{786}$

$E_{787}$

$E_{788}$

$E_{789}$

$E_{790}$

$E_{791}$

$E_{792}$

$E_{793}$

$E_{794}$

$E_{795}$

$E_{796}$

$E_{797}$

$E_{798}$

$E_{799}$

$E_{800}$

$E_{801}$

$E_{802}$

$E_{803}$

$E_{804}$

$E_{805}$

$E_{806}$

$E_{807}$

$E_{808}$

$E_{809}$

$E_{810}$

$E_{811}$

$E_{812}$

$E_{813}$

$E_{814}$

$E_{815}$

$E_{816}$

$E_{817}$

$E_{818}$

$E_{819}$

$E_{820}$

$E_{821}$

$E_{822}$

$E_{823}$

$E_{824}$

$E_{825}$

$E_{826}$

$E_{827}$

$E_{828}$

$E_{829}$

$E_{830}$

$E_{831}$

$E_{832}$

$E_{833}$

$E_{834}$

$E_{835}$

$E_{836}$

$E_{837}$

$E_{838}$

$E_{839}$

$E_{840}$

$E_{841}$

$E_{842}$

$E_{843}$

$E_{844}$

$E_{845}$

$E_{846}$

$E_{847}$

$E_{848}$

$E_{849}$

$E_{850}$

$E_{851}$

$E_{852}$

$E_{853}$

$E_{854}$

$E_{855}$

$E_{856}$

$E_{857}$

$E_{858}$

$E_{859}$

$E_{860}$

$E_{861}$

$E_{862}$

$E_{863}$

$E_{864}$

$E_{865}$

$E_{866}$

$E_{867}$

$E_{868}$

$E_{869}$

$E_{870}$

$E_{871}$

$E_{872}$

$E_{873}$

$E_{874}$

$E_{875}$

$E_{876}$

$E_{877}$

$E_{878}$

$E_{879}$

$E_{880}$

$E_{881}$

$E_{882}$

$E_{883}$

$E_{884}$

$E_{885}$

$E_{886}$

$E_{887}$

$E_{888}$

$E_{889}$

$E_{890}$

$E_{891}$

$E_{892}$

$E_{893}$

$E_{894}$

$E_{895}$

$E_{896}$

$E_{897}$

$E_{898}$

$E_{899}$

$E_{900}$

$E_{901}$

$E_{902}$

$E_{903}$

$E_{904}$

$E_{905}$

$E_{906}$

$E_{907}$

$E_{908}$

$E_{909}$

$E_{910}$

$E_{911}$

$E_{912}$

$E_{913}$

$E_{914}$

$E_{915}$

$E_{916}$

$E_{917}$

$E_{918}$

$E_{919}$

$E_{920}$

$E_{921}$

$E_{922}$

$E_{923}$

$E_{924}$

$E_{925}$

$E_{926}$

$E_{927}$

$E_{928}$

$E_{929}$

$E_{930}$

$E_{931}$

$E_{932}$

$E_{933}$

$E_{934}$

$E_{935}$

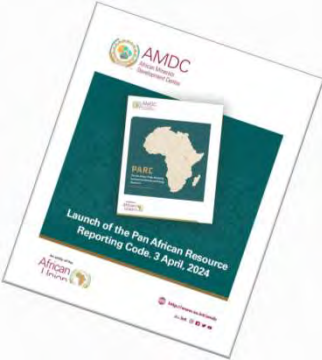
<



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

# CRIRSCO (SAMREC)

In the context of PARC



Slide 15

15



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

## PARC (Pan African Resource Code)

- “Competition” with CRIRSCO Codes as its purpose is to provide a framework of Public Reporting (to obtain finance from public institutions).
  - Aim to gain acceptance in parallel with CRIRSCO reports at Stock Exchanges and other financial institutions
- Scope, purpose and fundamental principles are the same as CRIRSCO codes
  - Objectives are compatible with CRIRSCO
  - Outline of the report is almost identical to that of SAMREC, except for the resource classification
- PARC Objectives:
  - To increase access to global finance (through private/public investment) through an internationally compatible public reporting code.
  - To finance ASM operations
  - To increase the visibility of African issues and concurrence with the UN\_SDGs and AMV
  - To allow more African geoscientists/engineers to qualify as Competent Persons.



Slide 16

16



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

PARC (Pan African Resource Code)

- Fundamental differences (Potential barriers to easy acceptance on international Stock Exchanges)
  - Reporting classification – UNFC vs CRIRSCO
    - Difficult for non-technical professionals to understand
  - Includes undiscovered, unrecoverable classes
    - Problem for international financial institutions due to significant risk
  - International Stock Exchanges never finance ASM operations.
  - International Stock Exchanges never finance inventories (non-commercial projects)
  - Definition of PARC CP and NRO
    - Similar but not the same



Slide 17

17



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

PARC (Pan African Resource Code)

| PARC CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SAMCODE (CRIRSCO) CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>At a minimum, a Competent Person shall have a relevant tertiary degree.</li><li>A Competent Person shall have a minimum of five (5) years’ experience working with the style of mineralisation or type of deposit under consideration and relevant to the activity which that person is undertaking.</li><li>Competent Person should have relevant experience in resource management functions for the specific technical discipline in the sector for which the resource estimation and reporting is being carried out.<ul style="list-style-type: none"><li>UNFC resource classification criteria</li></ul></li></ul> | <ul style="list-style-type: none"><li>At a minimum, a Competent Person shall have a relevant (four-year) tertiary degree.</li><li>A Competent Person shall have a minimum of five (5) years’ experience working with the style of mineralisation or type of deposit under consideration and relevant to the activity which that person is undertaking.</li><li>Competent Person should have relevant experience in resource reporting functions for the specific technical discipline in the sector for which the resource estimation and reporting is being carried out.<ul style="list-style-type: none"><li>CRIRSCO MRMR classification criteria</li></ul></li></ul> |

Slide 18

18



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

PARC (Pan African Resource Code)

PARC CP

- A Competent Person shall as a minimum be a member of a regionally recognised reporting organisation and/or national reporting organisations.
- These Recognised Professional Organisations (RPO) will be as verified by the PARC Assessment committee and the list published with a provision to review this from time to time.
- The RPO shall be a juristic professional body or association with an enforceable code of ethics and performance expectations.
  - Statutory/professional bodies only

SAMCODE (CRIRSCO) CP

- A Competent Person shall as a minimum be a member of a **regionally recognised reporting organisation and/or** national reporting organisations.
- These Recognised Professional Organisations (RPO) will be as verified by the **SAMCODES Standards Committee** and the list published with a provision to review this from time to time.
- The RPO shall be a juristic professional body or association with an enforceable code of ethics and performance expectations.
  - Statutory/professional bodies only

Slide 19



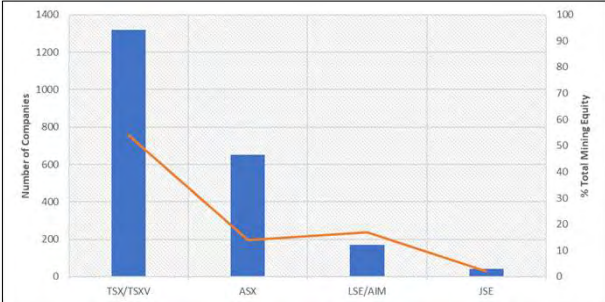
**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

PARC (Pan African Resource Code)

**The Largest Stock Exchanges in Africa by Market Capitalization**

| Rank | Stock Exchange               | Country | Market Cap (US\$ Bn) |
|------|------------------------------|---------|----------------------|
| 1    | Johannesburg Stock Exchange  |         | 1,077.14             |
| 2    | Casablanca Stock Exchange    |         | 69.84                |
| 3    | Botswana Stock Exchange      |         | 52.46                |
| 4    | Nigerian Exchange            |         | 41.03                |
| 5    | Egyptian Exchange            |         | 40.28                |
| 6    | BRVM Stock Exchange          | WAEMU   | 13.82                |
| 7    | Nairobi Securities Exchange  |         | 13.64                |
| 8    | Stock Exchange of Mauritius  |         | 7.43                 |
| 9    | Dar es Salaam Stock Exchange |         | 6.66                 |
| 10   | Ghana Stock Exchange         |         | 5.71                 |

\*Based on publicly available information as of May 31, 2024. Rates were converted using Oanda.com  
Source: Official figures, African Markets, Daba Research | Chart: Daba Finance



| Exchange | Number of Companies | % Total Mining Equity |
|----------|---------------------|-----------------------|
| TSX/TSXV | ~1300               | ~85%                  |
| ASX      | ~650                | ~20%                  |
| LSE/AIM  | ~150                | ~15%                  |
| JSE      | ~50                 | ~5%                   |



Slide 20



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

## PARC (Pan African Resource Code)

Canada  
TSXV: 673 Companies  
TSX: 140 Companies

USA  
TSXV: 176 Companies  
TSX: 78 Companies

Mexico  
TSXV: 80 Companies  
TSX: 40 Companies

Central America & Caribbean  
TSXV: 23 Companies  
TSX: 14 Companies

South America  
TSXV: 123 Companies  
TSX: 68 Companies

Africa  
TSXV: 76 Companies  
TSX: 57 Companies

Middle East  
TSXV: 3 Companies  
TSX: 2 Companies

Asia  
TSXV: 26 Companies  
TSX: 18 Companies

Australia  
TSXV: 26 Companies  
TSX: 28 Companies

Russia & CIS  
TSXV: 7 Companies  
TSX: 11 Companies

UK/Europe  
TSXV: 40 Companies  
TSX: 24 Companies

- LSE
  - ±180 companies
  - +15% of total global mining equity (ex O&G)

5712 billion sector - The London Stock Exchange hosts more big mining companies than any other major exchange.



- TSX/TSXV
  - +1,300 companies
  - +60% of total global mining equity (ex O&G)
  - Very strict regulatory framework, backed by legislated requirements

21

Slide 21

21



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES

## PARC (Pan African Resource Code)

- PARC is not currently accepted by any international Stock Exchange
  - Stock Exchanges are independent companies and cannot be forced to accept specific listing rules
  - Need to convince the TSX/TSXV (regulators and legislators) and LSE
- CP/NRO issues
  - PARC NRO will not necessarily be acceptable as a CRIRSCO NRO or by all Stock Exchanges (and vice-versa).
  - PARC CP is not necessarily acceptable as a CRIRSCO CP (and vice-versa)
  - Using CRIRSCO terms CP, NRO will only cause confusion going forward

- Stock Exchange acceptance of the CRIRSCO codes born out of a need to prevent fraud and scams.
  - It has taken +30 years for Exchanges and financial institutions to come to understand and trust CRIRSCO Resource estimations and definitions
  - 85-90% of global mining equity currently reports according to CRIRSCO
  - UNFC/AMREC/PARC classification is very different from CRIRSCO MRMR classification and not easily understandable by non-technical practitioners and investors (lawyers/accountants)
- Any new classification will have to prove itself resistant to fraud and gain mainstream acceptance by investors – **take time.**

22

Slide 22

22

Dr Tania R Marshall (marshall.tania@gmail.com)

11



**SAMCODES**  
SAMCODES STANDARDS COMMITTEE  
THE SOUTH AFRICAN MINERAL REPORTING CODES



**SAMVAL**  
THE SOUTH AFRICAN CODE FOR THE  
REPORTING OF MINERAL ASSET VALUATION



**SAMREC**  
THE SOUTH AFRICAN CODE FOR THE  
REPORTING OF EXPLORATION RESULTS, MINERAL  
RESOURCES AND MINERAL RESERVES



**SAMOG**  
THE SOUTH AFRICAN CODE FOR THE  
REPORTING OF OIL AND  
GAS RESOURCES

Thank You



[www.SAMCODES.co.za](http://www.SAMCODES.co.za)

