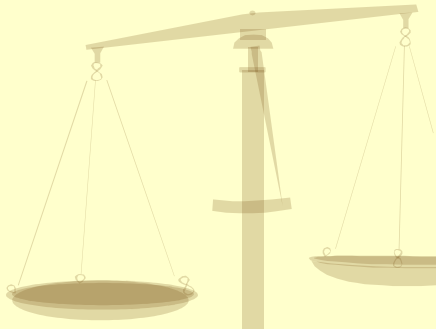
AFRIMETS
Intra-Africa Metrology System
Système Intra-Africain de Métrologie

Report from the first TCEM WG of Afrimets

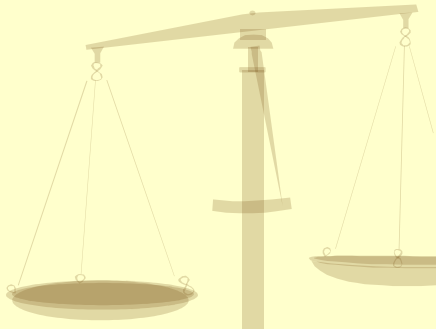
On behalf of

Alexander Matlejoane,
TCEM chair



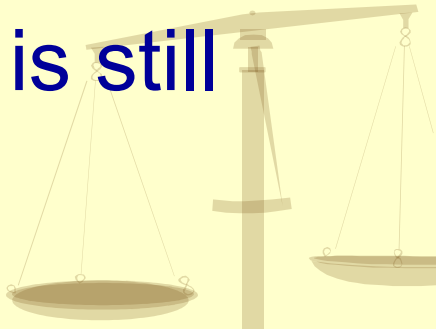
Who were the participants?

- Five participants
- Four countries
- IAEA, EAMET (KEBS), MAGMET (LNM/LPEE), SADCMET (NMISA and TBS)



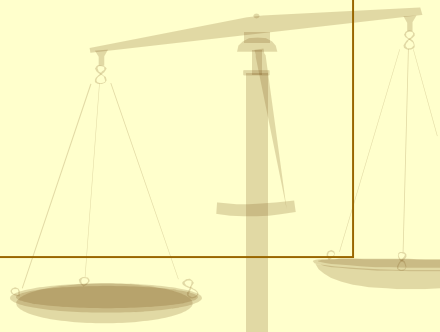
Chairman's Report

- Pilot comparison on dc voltage 10 V initiated in 2007 and kicked off in May 2008.
- Comparison is ongoing and three participants, Kenya, Uganda and Tanzania finished with their measurements. Kenya and Tanzania have already submitted their reports while a report from Uganda is still outstanding.



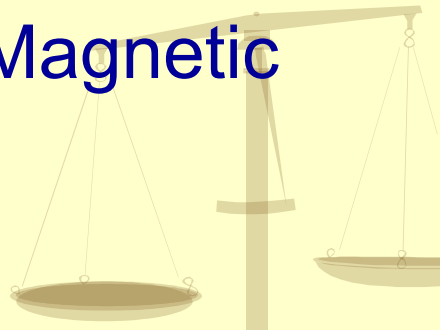
Chairman's Report cont.

- The comparison is scheduled to be completed by December 2009.It was noted by the chairman that most AFRIMETS members are not active in RMO activities.



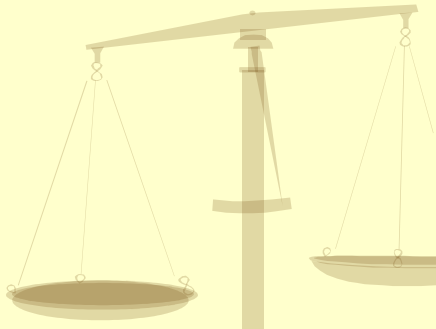
MRA Appendix C Matters

- No CMC submissions for intra-RMO review
- Busy with inter-RMO reviews for EURAMET and SIM
- Members encouraged to submit CMC's
- Report from CCEM meeting at BIPM
  - Planned CCEM key comparisons:
  - AC voltage using current sources with harmonic content; High value capacitance proposed by VNIIM; AC shunts and Magnetic flux density.



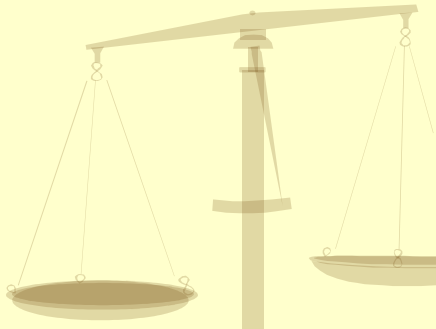
AFRIMETS EM GT-RF CMC Review Committee

- Alexander Matlejoane-NMISA
- Gibson Aguko-KEBS
- Abdellah Ziti-LNM/LPEE
- Erik Dressler-NMISA
- Alphonce Kagoma-TBS



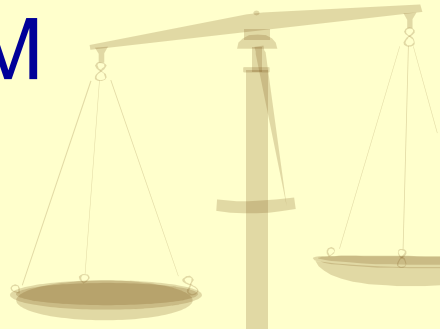
Proposed AFRIMETS Comparisons

- Key comparison on dc voltage reference at 10 V.
- Arrangements for this comparison will be finalised after completion of the ongoing 10 V pilot comparison.



Other issues

- Documentation of a draft document/guide related to the procedure for CMC submission is in progress and shall be circulated to the WG-EM members for comments and approval.
- The WG-EM proposed the following minimum requirements as inputs for the SADCMET planning workshop to be held on 15th July 2009 after the WG-EM meeting:



Other issues cont.

- Dc voltage: 1 mV-1000 V
- Dc resistance: 1 mΩ-10 kΩ
- AC/DC transfer difference in current: 10 mA-20 A at 10 Hz to 5 kHz
- AC/DC transfer difference in voltage: 10 mV-1 kV at 10 Hz-100 kHz
- Capacitance: 1 pF-1μF at 10 Hz to 20 kHz
- Inductance: 100 μH-10 H at 10 Hz to 20 kHz
- 3-phase power and energy: 240 V, 100 A at 50 Hz