

TC-M
Mass and Related Quantities
2011
Benjamin van der Merwe



Monday 18 July 2011

- Opening of TC-M working group meeting
- Approval of minutes of previous meeting
- Approval of the agenda
- Introduction of members and short country reports
- Confirmation of chairs and vice chairs
- Presentation on the Monte Carlo method
- Visit to KEBS metrology laboratories

Tuesday 19 July 2011

- Comparisons
 - Feedback on comparisons in process
 - Planning of new comparisons
- CMC review panels
- Visit to Kenya Weights and Measures



Chairs

- **TC-M**
Mr Benjamin van der Merwe
- **Pressure and Vacuum working group**
Ms Cherie Korasie

Vice chairs

- **Mass standards**
Ms Mouna Makhlouf
- **Volume (incl, Density and Flow)**
Mr Dominic Ondoro
- **Pressure and Vacuum**
Dr A Eltawil
- **Force (incl. Torque and Hardness)**
Mr Josephat Bangi



SRMOs contacts

- CEMACMET **Mr Henri Mitip**
- EAMET Mr Dominic Ondoro/Mr Patrick Kizito
- MAGNET Ms Mouna Makhoulf/Mr M Barrada
- NEWMET Prof Ali Abu Elezz/Dr Alaa Eltawil
- SADCMET Ms C Korasie/Mr BF vd Merwe
- SOAMET Mr Coffi Bohoun/Mr Deza Zabo

Working group members

Update working group member list



- **AFRIMETS.M.FF-S4 (Volume comparison)**
Artifacts 100 mℓ and 5 ℓ
10 Participants (Pilot: KEBS & NMISA)
- **AFRIMETS.M.P.K-2**
100 MPa Hydraulic
10 Participants (Pilot: LCAE-Tunisia)
- **EAMET pressure comparison**
600 bar hydraulic
5 Participants (Pilot: KEBS)
- **NEWMET pressure comparison**
100 MPa (hydraulic)
3 Participants (Pilot: NIS)



Mass Standards

- **AFRIMETS.M.M-K2.1**
OIML E₁ and E₂
5 Participants (Pilot :NIS)
- **AFRIMETS.M.M-S2 or S6**
OIML F₁ and F₂
8 Participants (Pilot: NMISA)

Volume (incl. Density and Flow)

- **AFRIMETS.M.M-S4.2**
Artifacts 100 µl and 1 000 µl micro-pipette
9 Participants (Pilot :NMISA)
- **The working group recognise the need for future comparisons in the following ranges:**
 - 1 ml to 5 l
 - Above 5 l



Density of Reference Standards

- The working group recognise the need for a comparison in the future (linked to CCM.M.D-K3).

Density of Liquid

- **AFRIMETS.M.D-K4**
Artifacts hydrometers
8 Participants (Pilot :NIS)

Fluid Flow

- Only 3 NMI's active in this metrology parameter, NIS to investigate the need for a comparison and suitable artifact.

Force

- 6 NMI's active in this metrology parameter, will re-evaluated the need for a comparison in the future.



Torque

- **High accuracy** (Smooth bore)
Bilateral between NIS and LCAE-Tunisia
Pilot: NIS
- **Lower accuracy** (Square drives)
Supplementary comparison
5 Participants (Pilot: NMISA)



- **Mass Standards**
TBS: Mr Ingram Kisamo
LCAE-Tunisia: Ms Mouna Makhlouf
NMISA: Mr Benjamin van der Merwe
NIS: Dr A Eltawil
- **Volume (incl. Density and Flow)**
LCAE-Tunisia: Ms Mouna Makhlouf
NMISA: Mr Benjamin van der Merwe
KEBS: Mr Dominic Ondoro
- **Pressure and Vacuum**
UNBS: Mr Patrick Kizito
NMISA: Ms Cherie Korasie
NIS: Dr A Eltawil
- **Force (incl. Torque and Hardness)**
NIS: Prof Ali Abu Elezz
KEBS: Mr Dominic Ondoro
NMISA: Mr Ben Burke



The end

Thank you for your time

