

AFRIMETS TCAUV/00-02

Meeting Minutes
July 18th-19th, 2011

1. Welcome to the AFRIMETS TCL meetings.

The AFRIMETS TC meetings held at the Red Court Hotel and Conference facilities in Nairobi Kenya were officially opened on the 18th of July 2011 at 10:00 A.M. and members welcomed by dignified persons from the host country and institutions, namely the Ministry of Industrialisation, the Department of Weights and Measures and the Kenya Bureau of Standards.

2. Attend Uncertainty using Monte Carlo Techniques training presented by AFRIMETS TCL

The members of AFRIMETS TCAUV were privileged to attend by invitation presentation on the propagation of distributions using a Monte Carlo method for the estimation of uncertainty in measurement. The presentation was organised by the AFRIMETS TCL.

3. Welcome to the 1st AFRIMETS TCAUV meeting

The 1st meeting of the AFRIMETS TCAUV was called to order at 11:00 A.M on the 18th of July 2011 at the Red Court Hotel and Conference facility, in Nairobi Kenya by the Chairman, Mr. Ian Veldman (NMISA).

4. Present:

NMISA	Mr. Ian Veldman
KEBS	Mr. Samuel Gacheru
KEBS	Mr. Anderson Maina

5. Appointment of Rapporteur

Mr. Anderson Maina was appointed to take minutes.

6. Approval of Agenda

The Chairman went through the agenda. It was agreed to add the following points to the agenda:

- getting TC AUV members' capabilities recognised
- formulating AFRIMETS TC AUV procedures and policies for the review of CMCS.

7. Short presentation on NMI's present capabilities (participants)

The participating NMIs gave short presentations on their current measurement capabilities.

8. Feedback from CCAUV and CCAUV RMO WG meeting (Chair)

The chair brought the members up to speed on the current progress of AUV on regional and International level.

Progress on current key comparisons in Acoustics and Vibration were reported. CCAUV.V-K2 (a key comparison in vibration) was at an advanced stage. Once completed the KCRVs of this comparison needs to be disseminated into AFRIMETS. The NMISA will pilot a regional comparison using secondary measurement techniques.

The chair also reported to members that NMISA is co-piloting a low frequency (LF) vibration comparison, APMP.AUV.V-S1.

A CIPM key comparison in acoustics, CCAUV.A-K5, is in progress. The circulation of the LS1 microphones for measurement has started and NMISA is due to receive the microphones in September 2011.

During the last CCAUV RMO WG meeting, it was re-affirmed that when CMCs were reviewed, only the changes in existing CMCs or totally new CMCs is to be reviewed. CMCs and parts that have been accepted is not to be commented on. RMOs were reminded to follow the colour coding used to highlight the areas that had changed or that needed review (these to appear in red).

Apart from this, the chair informed the members about current measurement activities, scientific research, publications and new developments in measurement techniques. There were also discussions on services categories for sound sources and these were accessible in the CCAUV part of the BIPM website.

The chair also informed members of other technical forums specifically the IMEKO conference, aimed at all metrology related publications.

A list of technically competent persons in Acoustics, Ultrasound and Vibration was available on the BIPM Webb site. This could aid in selecting persons to perform peer reviews and act as technical assessors.

9. CMC's Submissions and Reviews

It was agreed by members that a method to review regional CMC's by AFRIMETS TCAUV needed to be put in place. It was agreed that members adopt a working procedure from one of the other RMO's for example EUROMET in this regard.

The Chairman informed members of existing CMC's submitted for inter RMO review. Since members from KEBS were less experienced in the matter, it was agreed that NMISA provide mentorship in the area until KEBS members were confident enough to undertake the exercise on their own.

The members also took the opportunity to discuss their own CMC's and capabilities. It was part of the aim of the TCAUV to ensure that members CMC's were recognised internationally. Currently, only NMISA had their CMC's published in the BIPM CMC database. It was agreed that TCAUV would work to have KEBS CMC's published.

10. Inter-comparison Proposals

The Chairman took the opportunity to shed more light on the role of inter-comparisons and how they were undertaken. It was agreed that Inter-comparisons be undertaken especially to validate members CMC's.

Proposals for inter-comparisons were discussed for both the fields of vibration and acoustics.

In vibration, it was proposed that a comparison be done for the back to back calibration of single ended accelerometers. The proposed frequency range was between 10 Hz and 10 kHz. This would mirror the recent key comparison in the area i.e. CCAUV.V-K2. It was further proposed that NMISA be the pilot laboratory in the exercise. After some discussion, it was proposed that the NMISA and KEBS would use secondary methods during the comparison and the NMISA would provide the KCRV using its primary system.

In acoustics, it was proposed that a comparison be done using LSP2 microphone calibration. The proposed range was 31.5 Hz to 16 kHz. It was further proposed that KEBS be the pilot lab in the exercise.

It was further agreed that protocols for the inter-comparisons be drawn up in order to be ready by April 2012. Again it was suggested that NMISA offer mentorship in the area due to their experience and the lack of the same by members from KEBS.

11. Review of Service Categories

It was recommended that KEBS uses the BIPM CCAUV service category numbering system to structure a service numbering system required for CMC submissions.

The meeting identified a requirement for an additional service category in the Acoustics field needed to list conformance testing of sound level meters using the electrical methods as this is a measurement performed routinely by laboratories. This would enable the validation of IEC conformance tests on sound level meters. The chair was tasked to table this at the next CCAUV RMO WG meeting.

12. AFRIMETS TCAUV Roadmap

The following areas were identified as the goals TCAUV needed to fulfil in the near future.

- i) Grow the TCAUV by getting more labs or institutions involved.
- ii) Ensure the optimal calibration services amongst the TCAUV labs.
- iii) Participate in regular inter-comparison exercises.
- iv) Ensure that member labs are accredited.
- v) Ensure that member labs are internationally recognised by having their CMC's accepted in the BIPM CMC database.
- vi) Strive for the three known laboratories in AUV in Africa i.e. NIS, NMISA and KEBS to satisfy the AUV calibration requirements of the African continent.
- vii) Actively plan to sensitise government and local industry on the importance of acoustics and vibrations measurements.
- viii) KEBS to become active in the CCAUV.

13. Recommendations for Actions

The following were recommended actions based on the agenda.

- i) Include KEBS in the CMC's review process for labs at a regional level.
- ii) Have KEBS submit its CMC's and have them published in 24 months.
- iii) Initialise the process of inter-comparison for the two areas identified.
- iv) Request CCAUV to have an additional service category to cater for sound level meter electrical calibration.
- v) Remind the BIPM to extend invitation letters to KEBS to the next CCAUV meeting in June 2012, in Paris.

14. Report to the GA

The chairman stated that the TCAUV was well participated considering percentage attendance.

A short report was compiled to provide feedback to the GA on the TC activities.

15. Appointment of Chairman for the next meeting

It was agreed that the current chair Mr. Ian Veldman retain the chairmanship.

16. Date of the next meeting

This will be determined at the GA.

Minutes submitted by:

Mr. Anderson Maina

Approved by:

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