

Synopsis of the actions and decisions arising from the 10th meeting of the CCAUV

25-27 November 2015

The Consultative Committee of Acoustics, Ultrasound and Vibration (CCAUV) met from 25 to 27 November 2015 at the BIPM. The meeting started with oral presentations of specific topics concentrating on current trends in the AUV field. The work undertaken by the associated Working Groups was reported, activities carried out in the RMOs and the NMIs were communicated and particular questions concerning present and future planned key comparisons were discussed.

New guidelines for membership of CCAUV Working Groups were presented; the membership is addressed to NMIs that are members or observers of the CCAUV. A questionnaire will be sent to CCAUV members concerning the review of the CIPM MRA to seek input in particular on the awareness of the MRA and its instruments such as the CMC database with users of calibration services.

The essential actions and decisions arising from the 10th meeting of the CCAUV 2015 are summarized below.

Decisions of the 10th meeting of CCAUV

CCAUV10/D1. The final report on AFRIMETS.AUV.A-S1 was approved with editorial comments.

- CCAUV10/D2. A new pilot study on free-field calibration of microphones was agreed and will be developed by the NPL, UK. The DFM, Denmark, and NMIJ, Japan, will participate. The project is intended to inform a future KC (repeat of CCAUV.A-K4 with extension of scope).
- CCAUV10/D3. AFRIMETS.AUV.V-S2 will be upgraded to a KC with a new designation 'AFRIMETS.AUV.V-K3' to facilitate linking to the corresponding CCAUV KC.
- CCAUV10/D4. A new KC on the pressure calibration of LS2P microphones (repeat of CCAUV.A-K3) was considered, but will be postponed until new developments in low-frequency calibration are better established. It is likely that a new proposal for this KC will be developed for the next meeting of the CCAUV.
- CCAUV10/D5. A new KC on the acceleration sensitivity of accelerometers (a repeat of CCAUV.V-K2) was agreed. The following expressed interest in participation: NIM, VNIIM, PTB, INMETRO, CENAM, NMIJ, DPLA-BKSV, NMISA, LNE, METAS, GUM, CEM, IPQ, NIST and A-STAR. However, final participation will be decided by the pilot laboratory, considering the variety of facilities to be used and geographic distribution of participants. Other laboratories interested in participating should make this known to the PTB, Germany, the proposed pilot laboratory.
- CCAUV10/D6. A new KC for low intensity shock calibration was agreed. The following expressed interest in participation: NIM, VNIIM, PTB, INMETRO, CENAM, NMIJ, DPLA-BKSV, CMS/ITRI, NMISA, KRISS, NRC and INRIM. However, final participation will be decided by the pilot laboratory, considering the variety of facilities to be used and geographic distribution of participants.

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Other laboratories interested in participating should make this known to the NIM, China, the proposed pilot laboratory.

- CCAUV10/D7. APMP.AUV.V-K1.1 which is under the Draft B stage will be upgraded to a KC with a new designation 'APMP.AUV.V-K2' to facilitate linking to the corresponding CCAUV KC. The link will use only linking laboratory results in CCAUV and APMP comparisons.
- CCAUV10/D8. CCAUV President, Dr Usuda, approved the Chair of each WG; Dr Michael Gaitan of SPWG, Dr Gustavo Ripper of KCWG, and Dr Qiao Sun of RMOWG. The CCAUV Delegates welcomed these appointments.
- CCAUV10/D9. The CCAUV Delegates unanimously supported the applications for full member status of the CCAUV by METAS, Switzerland, and observer status of the CCAUV by CMS/ITRI, Chinese Taipei, and agreed to submit these recommendations for ratification by the CIPM.

CCAUV10/D10. The next meeting of the CCAUV is scheduled for September 2017.

Actions of the 10th meeting of CCAUV

- CCAUV10/A1. **The CCAUV President, Dr Usuda**, to seek input from CCAUV members via a freeform questionnaire, on raising awareness of the CIPM MRA and its instruments such as the CMC database with users of calibration services. The CCAUV members to complete the questionnaire circulated and return to Gianna Panfilo before the end of January 2016.
- CCAUV10/A2. **The BIPM Director** to re-iterate to NMI Directors that delegates nominated to attend the CCAUV meeting have ongoing executive responsibilities until the next meeting.
- CCAUV10/A3. PTB to prepare the outline and register a new CCAUV KC on acceleration sensitivity of accelerometers (see also CCAUV10/D6).
- CCAUV10/A4. **NIM** to prepare the outline and register a new CCAUV KC on low intensity shock calibration (see also CCAUV10/D7).
- CCAUV10/A5. **NPL** to prepare an outline for a new pilot study on free-field calibration of microphones, considering both reciprocity and optical calibration techniques, and in a separate study, extended high frequency calibration (see also CCAUV10/D3).
- CCAUV10/A6. **NPL** and **PTB** to review the definitions for AUV units given on the BIPM website, and suggest alternatives where necessary.