

SIM Report

G. Ripper

Submitted 29/09/2008

3 pages inclusive



Report to the Consultative Committee for Acoustics, Ultrasound and Vibration

6th CCAUV meeting, 9-10 October 2008, Paris, France

Dr. Gustavo P. Ripper, Chair of SIM MWG-9

1 SIM INTER-LABORATORY COMPARISONS

1.1 SIM.AUV.A-K1 (LS1P microphones)

The comparison was concluded and the results were published in the KCDB on August 30, 2007. SIM.AUV.A-K1 results were linked to those of CCAUV.A-K1.

1.2 SIM.AUV.V-K1 (accelerometers)

The Draft B report dated September 2008 has been distributed by NIST to SIM MWG-9 members and to the BIPM for discussion at the 6th CCAUV meeting.

SIM.AUV.V-K1 results were linked to those of CCAUV.V-K1.

1.3 SIM.AUV.A-S1 (pistonphones)

The pilot laboratory, CENAM, is responsible for the release of the draft B report.

1.4 SIM.AUV.V-S1 (LF calibration of accelerometers)

The comparison technical protocol has been revised during the SIM MWG-9 meeting on December 2007. The pilot laboratory, CENAM, is analyzing the stability of different accelerometers and the circulation of the standards may start in 2008.

1.5 SIM.AUV.V-K1.1 (accelerometers: complex sensitivity)

The draft B report is under development by the pilot laboratory, INMETRO. Partial results have been published in a paper presented in November 2007 at the IMEKO TC22 meeting held in Merida, Mexico.

2 OTHER INTER-LABORATORY COMPARISONS

2.1 CCAUV.AUV.V-K1.1 (accelerometers: complex sensitivity)

This comparison was coordinated by the PTB and included the participation of NIM/China, NPLI/India and INMETRO/Brazil. The draft B report was submitted as a working document for discussion at the 6th CCAUV meeting.

CCAUV.V-K1.1 results were linked to those of CCAUV.V-K1.

3 FUTURE CCAUV INTER-LABORATORY KEY COMPARISON

3.1 CCAUV.V-K2

SIM MWG-9 members agreed upon the extension of the scope of the next CIPM key-comparison in vibration. Therefore, SIM agree with the proposal from PTB to cover the measurement of magnitude sensitivity and phase shift of accelerometers of both standard accelerometer types (i.e. single-ended and double-ended) in the frequency range 10 Hz to 10 kHz.

4 CALIBRATION AND MEASUREMENT CAPABILITIES

4.1 Intra-regional CMC reviews

No requests for revision were received from SIM members in 2007. Inclusions of new services and improvement of the uncertainties of current CMCs may be submitted for intra-regional and then for inter-regional review in 2008/2009.

4.2 Inter-regional CMC reviews

SIM MWG-9 has reviewed the CMC entries COOMET.AUV.4.2007 and EUROMET.AUV.7.2007 in 2007 and recently reviewed the CMC entries APMP.AUV.4.2008 and EUROMET.AUV.8.2008.

5 MEETINGS

The last SIM MWG-9 meeting was held in Merida, Mexico on December 01-02, 2007. Representatives from all countries member of MWG-9 have participated in this meeting (i.e. Canada, U.S.A., Mexico, Brazil and Argentina).

NIST will host the next meeting of MWG 9 in April 2009 at NIST Gaithersburg.

The chairman of MWG-9 has participated in the SIM TC Meeting in August 2008 and will represent the group at the CCAUV RMO WG meeting and at the 6th CCAUV meeting.

6 CHAIRMAN ELECTION

Dr. Gustavo P. Ripper, from INMETRO was reelected in December 2007 for another two-year period of Chairmanship.

Gustavo P. Ripper
26 / September / 2008