## Minutes of the 6<sup>th</sup> meeting of TC 1.2 "Acoustics, ultrasound, vibration"

The sixth meeting of TC 1.2 was held at DP NDI "Systema" on 18 and 19 May 2010, Lvov, Ukraine.

There were 17 participants from 6 countries including TC 1.2 members, key experts in AUV from COOMET and EURAMET NMIs and guests.

# List of participants of the 6th meeting of TC 1.2 "Acoustics. Ultrasound. Vibration"

Mrs. Valentina Pozdeeva	Chair of TC 1.2, BelGIM, BELARUS
Mr. Anatoly Volodchenko	BelGIM, BELARUS
Dr. Erling Frederiksen	DPLA, Bruel&Kjaer, Denmark
Mrs. Joanna Kolasa	GUM, Poland
Dr. Anatoly Konkov	TC 1.2 member, coordinator in air acoustics, VNIIFTRI, Russia
Dr. Stanislav Kuznetsov	VNIIFTRI, Russia
Dr. Sergey Verozubov	D.I.Mendeleev VNIIM, Russia
Dr. Jan Sebok	TC 1.2 member, contact person in AUV from Slovakia, SMU, Slovakia
Dr. Vladimir Chalyy	TC 1.2 member, contact person in AUV from Ukraine, DP NDI "Systema", Ukraine
Dr. Parakuda V.V. Dr. Kuzi A.I. Dr. Kolpak B.D. Dr. Pasko E.V. Dr. Mizjuk G. L Ms. Ilnitskaja T.M. Mr. Kosterov A.A. Mr. Kizlivski I.G.	DP NDI "Systema", Ukraine

The meeting followed the agenda adopted by its participants.

The first deputy director of DP NDI "Systema" Mr. Parakuda greeted participants of the meeting.

#### Participants heard the following:

- Report on activities over the period in question made by chair of TC 1.2;
- Summary of the results of 20th meeting of COOMET Committee and 8th meeting of Joint Committee for Standards which both were held in Astana (Kazakhstan) from 20 to 22 April 2010. Report was made by the chair of TC;
- Information about upcoming meetings of CCAUV and CCAUV RMO CMC WG presnted by TC chair;
- Report on the results of key comparison COOMET.AUV.A-K2 (COOMET project No 431/UA/08) made by coordinator of comparison Dr. V. Chalyy;
- Report on the results of key comparison COOMET.AUV.V-K1 (COOMET project No 308/RU/04) made by coordinator of comparison Dr. S. Verozubov;
- Report on a current status of supplementary comparison COOMET.AUV.A-S1 (COOMET project No 434/BY/08) made by Mrs. V.Pozdeeva and addressed to comparison participants only;
- Information about the results of meeting of IEC TC 29 held in November 2009 in Tokyo (Japan) presented by Dr. Konkov;
- Presentation "Turnkey free-field reciprocity system for primary microphone calibration" made by Dr. E. Frederiksen;

#### Participants discussed the following:

- Draft B reports on key comparisons COOMET.AUV.A-K2 and COOMET.AUV.V-K1;
- Situation with CMCs and preparation of new CMCs in AUV;
- Proposals for increasing TC efficiency, including:
  - Introduction of TC vice-chair post following the decision of 8th meeting of the Joint Committee for Standards and appointment of Dr. A. Enjakov, TC contact person from VNIIFTRI (Russia) to this post following the proposal of Dr. A. Konkov;
  - Proposal of Mrs. V.Pozdeeva to introduce a TC secretary post and appoint Mr. A. Volodchenko from BelGIM (Belarus) to this post;
  - Proposal of Dr. V. Chalyy to add a new member Dr. A. Kuzi (DP "NDI" Sistema, Ukraine) to the TC to make ultrasound work more efficient;
- Proposal of Dr. V. Chalyy to carry out a comparison of 1-inch microphones over a frequency range from 2 Hz to 10 kHz;
- Russian version of the CCAUV Classification of services (version 2.0, October 2002, updated in October 2004);
- Assistance of COOMET members which claimed no calibration and measurement capabilities in AUV for the time being;
- Venue and date of the next 7th meeting.

### Participants decided:

- 1 to note:
- report of TC chair,
- information about meeting of IEC TC 29, 20th meeting of COOMET Committee and 8th meeting of Joint Committee for Standards;
- report on a current status of supplementary comparison COOMET.AUV.A-S1 (project No434/RU/08);
- presentation "Turnkey free-field reciprocity system for primary microphone calibration" made by Dr. E. Frederiksen.
- to approve a Draft B report on key comparison COOMET.AUV.A-K2 and make a recommendation to comparison coordinator Dr. V.Chaly that it should be submitted to CCAUV for approval.

- 3 to request Dr. V. Smirnov, based on discussion of Draft B report on vibration comparison COO-MET.AUV.V-K1, to:
- pay attention to the frequency range of the converted results from comparison;
- consider proposal of Dr. J. Kolasa to link measurements of this regional comparison to the CIPM KCRV using a method used in comparisons EUROMET.AUV.V-K1 and APMP.AUV.V-K1;
- finish preparation of the agreed final Draft Report by the end of 2010.
- 4 to make a recommendation to COOMET NMIs to prepare AUV CMCs from results in latest key and supplementary comparisons and submit them for intra-RMO review.
- to direct TC members to address further the proposal of Dr. V.Chalyy to carry out a comparison of 1-inch microphones over a frequency range from 2 Hz to 10 kHz. to request TC chair Mrs. V.Pozdeeva to consult the chairperson of the relevant EURAMET TC whether this comparison may be of interest to EURAMET NMIs.
- 6 to approve the Russian version of the Classification of services in AUV which takes into account any comments received;
- 7 to approve the following changes in TC structure:
  - introduction of TC vice-chair post and appointment of Dr. A. Enjakov;
  - introduction of TC secretary post and appointment of Mr. A. Volodchenko;
  - accession of a new member Dr. A.Kuzi.

to submit a proposal for the above changes of TC structure at the 21st meeting of COOMET Committee for its approval.

- 8 to request TC chair to draft a questionnaire to get information on the level of AUV metrology in those COOMET members which claimed no calibration and measurement capabilities in the relevant area in order to help them to resolve urgent problems in AUV metrology.
- 9 to request TC members to inform TC chair about participation in the work of international and regional metrological organizations, seminars, symposiums etc. This feedback will form part of the report on TC activities and may be useful for information sharing among TC members.
- 10 to request Dr. E. Frederiksen to discuss with his top management whether it would be possible for DPLA (Danish Primary Laboratory of Acoustics) to host the next meeting of TC 1.2. This proposal was initiated by Dr. A. Konkov.
- 11 to thank Dr. Frederiksen for his active long-term cooperation with COOMET TC 1.2 and note importance and up-to-date of his information on theoretical and practical aspects of air acoustics calibrations, calibration and measurement systems and other developments of the Danish Primary Laboratory of Acoustics (DPLA) and Bruel&Kjaer for improvement and development of calibration and measurement capabilities of COOMET NMIs.

Participants of the meeting are grateful to DP NDI "Systema" for well-organized meeting and warm reception.