

### Information about 28<sup>th</sup> JCRB Meeting

On 3-4 April 2012 there was held the 28<sup>th</sup> JCRB meeting in BIPM, Paris, France.

At the meeting the delegation of COOMET was represented by: N. Zhagora (COOMET Vice-president, Belarus), P. Neyezhmakov (Head of COOMET Secretariat, Ukraine), S. Komissarov (National COOMET Secretariat in Russia), M. Halaj (TC of Quality Forum, Slovakia).

The meeting was opened by the BIPM Director M. Kühne. There was approved the Agenda and the Minutes of the 27<sup>th</sup> JCRB meeting. The BIPM Director M. Kühne reported about the activities of the Bureau since the 27<sup>th</sup> JCRB meeting.

During the reporting period:

- a. February 1, 2012, Tunisia was previously an Associate of the CGPM
- b. Montenegro in October 19, 2011 signed the CIPM MRA
- c. The BIPM is working with a number of States interested in participation (Member State or Associate status). Among them are:  
Middle East – Bahrain, Kuwait, Oman, Qatar, UAE, Yemen, Syria;  
South America – Colombia;  
Africa – Botswana, Ethiopia, Cote d'Ivoire, Morocco, Nigeria;  
Europe – Luxembourg;  
Eastern Europe & Central Asia – Azerbaijan, Kyrgyzstan, Mongolia, Uzbekistan.
- d. The BIPM currently conducts more than 80 on-going BIPM key comparisons. The graphs of equivalence are regularly updated with some 35 news results added over the last year.

M. Kühne informed that during the implementation of the **Resolution 2** 24th CGPM: *On the importance of international collaboration so as to place measurements to monitor climate change on an SI traceable basis*, the BIPM-WMO Joint Liaison Group met in Geneva on February 14, 2012. The primary outcome of the meeting was the outline of a strategic approach based on the 50 “Essential Climate Variables” (ECVs).

It was mentioned the importance of the Quadripartite BIPM, OIML, ILAC and ISO Declaration on Metrological Traceability concluded in November 2011. These organizations endorse the following recommendations:

1. In order to be able to rely on their international acceptability, calibrations should be performed:
  - in National Metrology Institutes who should normally be signatories to the CIPM MRA and have CMCs published in the relevant areas of the KCDB
  - or
  - in laboratories accredited by accreditation bodies which are signatories to the ILAC Arrangement;
2. Measurement uncertainty should follow the principles established in the GUM; the results of the measurements made in accredited laboratories should be traceable to the SI
3. NMIs providing traceability for accredited laboratories should normally be signatories to the CIPM MRA and have CMCs published in the relevant areas of the KCDB;
4. Within the OIML's MAA, accreditation should be provided by bodies which are signatories to the ILAC Arrangement and the above policies on traceability to the SI should be followed;

The participants of the meeting were also informed about the signing of Joint ILAC – CIPM Communication on 7 March 2012 regarding the Accreditation of Calibration and Measurement Services of NMIs.

Implementing the **Resolution 4 24th CGPM**: *On the status of Associate State of the General Conference*, letters were sent by BIPM in December 2011 to all Associates States of

the General Conference informing them of the resolution and its implications for subscription fees and transition to Member status. Each letter was tailored to the particular circumstances of the Associate.

Assistant Director on International Liaison and Communications A. Hanson reported about the status of Quality Management System (QMS) BIPM. The first Quality Manual was issued in February 2003, and has been revised a number of times since. BIPM operates a self-declared QMS. Currently there are 247 policy, management and technical procedures, which are available on the BIPM Intranet.

Within the discussion of the situation with CIPM MRA Addendum the participants of the meeting were informed that after two rounds of letters being sent to NMIs by BIPM, approximately 50% of NMIs have already signed the Addendum. Several questions (connected with traceability policy, providing calibration services for the inland needs and cooperation with ILAC) raised that require further discussion so the issue will be further discussed during the NMIs directors meeting in October. The text of CIPM MRA should be approved by CIPM and agreed by all the countries who signed the agreement.

The CIPM Secretary R. Kaarls in the report about the CIPM activities informed the participants about the results of the 24<sup>th</sup> CGPM and about further CIPM actions on the implementation of Resolutions adopted at the conference. Ad-hoc working group that was formed at CGPM met in March 2012. One of the recommendations is to be held by CGPM each two years but to approve budget for a four years period. It means that every second CGPM the participants will deal with budget only. Results of the working group will be distributed among the directors of NMIs of the Member states.

The representatives of the RMOs (SIM – C. Santo; EURAMET – J. Drovsek; COOMET – P. Neyezhnikov; APMP – I. Budovsky + I. Yeoh; AFRIMETS – B. Hassine) made presentations of RMO summarized reports about the activities conducted since the 27<sup>th</sup> JCRB meeting (full reports were to be tabled before the meeting).

KCDB Administrator K. Toma informed the participants about KCDB activities during the 6 months periods (entries, reviews, etc.). It is openly available from the KCDB webpage. Issuing of the KCDB Newsletter finishes, the issue 16 is the last one. At the end of March 2012, CMC includes app. 24 600 entries, adding about 1000 entries each year. Nowadays 1078 comparisons are published online, out of them 782 are key comparisons, 296 are supplementary comparisons.

JCRB Executive Secretary O. Altan informed the participants about the Project “Policy on published CMCs not supported by the latest CIPM or RMO key comparison” proposed by CCPR Calibration and Measurement Capabilities Working Group, which states that:

“All CMCs linked to a key comparison ought to be supported by the most recent CIPM or RMO comparison. Should an NMI not be able to meet this requirement, it has to arrange a bilateral comparison with a NMI who participated in the CIPM or RMO key comparison, if it intends to maintain the related CMCs in the BIPM Appendix C database.

Once the final report for a RMO key comparison is published, the CMCs of NMIs who did not participate this or the CIPM comparison will be greyed-out. NMI is given five (5) years to arrange a bilateral comparison for this parameter before the CMCs will be permanently deleted from the database. If the affected CMCs are consistent with the comparison result, they can be re-instated without a review.”

The participants of the meeting discussed the CCPR propositions and also continued the discussion which was started at the 27<sup>th</sup> JCRB meeting about expression form of CMC uncertainty proposed by CCL. According to results of the discussion there were agreed the following Actions:

*28/1: The JCRB view on the change to expression of uncertainty being considered by CCL will be presented at the next CCL meeting. The outcome concerning the change will be presented at the next JCRB meeting.*

*28/2: CCPR's new policy requiring NMIs to participate in repeats of comparisons that were used to support CMCs will be reviewed for compliance with the terms of the CIPM MRA. The CCPR policy will be discussed at the next JCRB meeting.*

O. Altan reported about the results of Actions 27/3 and 27/4: *Obtaining information on DI designation scopes and advising new CIPM MRA signatories of expectations for participation*, undertaken after the 27<sup>th</sup> meeting. There was presented the information that the letters were sent to the corresponding bodies of the number of countries with the request in compliance with CIPM 2005-07 to split the authorities and the areas of responsibility by types of measurements between the DIs in their countries. These letters were sent in particular to Ukraine and Russia. The extensive discussion was started then about designation of the institutes. On the basis of EURAMET propositions there were adopted the following Resolutions:

*28/1: The JCRB resolves:*

*"Laboratories should only be designated under the CIPM MRA when they have responsibility for national measurement standards and the dissemination of the units (i.e. providing traceability), as demonstrated by provision of appropriate and relevant services to customers."*

*28/2: The JCRB resolves:*

*"The QMS that must be in place prior to the acceptance of CMCs must be according to ISO/IEC 17025 (and ISO 34 for CRMs) in line with requirements for calibration laboratories."*

And there was agreed the following Action:

*28/3: Resolutions 28/1 and 28/2 adopted by the JCRB will be incorporated into the BIPM procedure on the registration of new designated institutes and the letters that are sent to newly designated institutes as part of that procedure.*

Within the item 9 of the Agenda of the meeting there was considered the application of GULFMET to join the JCRB. A. Henson presented the received documents including the road map for further activities of GULFMET and outlined the situation in the Gulf region. The discussion was opened about the competence of the proposed RMO. Several different opinions were expressed and there was agreed the following Action:

*28/4: A letter will be sent to GULFMET summarizing JCRB's position on their application to join the JCRB as an RMO. A GULFMET delegation will be invited to join the 29<sup>th</sup> meeting of the JCRB as guests to discuss the next steps forward.*

EURAMET proposed to discuss the Position Paper on CMC Processes at the 28<sup>th</sup> JCRB meeting. As the average for total time needed to post CMCs to publication reaches 159 days/22.8 weeks, EURAMET proposed several changes in inter RMOs review of entries:

- Restrict review to new and improved services (reduced uncertainty, wider scope)
- Restrict review to a sub-sample of entries (e.g. 30% of submitted entries) or to a pre-defined set of "key quantities" only.
- Coordinate review work among the RMOs, so that a submitted entry is reviewed by one to two RMOs only.
- Take reports of peer reviews into account, if available.

To avoid slow process on Inter-RMO reviews of CMC claims, strict deadlines should be fixed, accepted and respected by all RMOs. JCRB proposed to include the following improvements to the document CIPM MRA-D-04:

There were agreed the following Actions:

*28/5: the KCDB manager will prepare a short document on the proposal to develop a web platform for the input and sharing of CMC declarations for review, outlining requirements and issues to consider*

*28/6: the KCDB manager will split files in the JCRB CMC review website by category at least in the areas of Mass and Ionizing Radiation.*

*28/7: Ilya Budovsky will propose that the issue of splitting EM CMC declaration files by category will be taken up by CCEM WG-RMO at their next meeting.*

Ö. Altan presented to the participants of the meeting the draft Agenda of CMC Review Best Practices Workshop. Proposed location is BIPM in 19-20 March 2013, participants will be heads of CCs plus invited persons. The intention is to set more comprehensive practices among RMO that deal with processing CMCs proposals. According to the results of the discussion there was agreed the following Action:

*28/8: RMOs will propose topics at the 29<sup>th</sup> meeting of the JCRB for discussion for the brainstorming session proposed to be a part of the agenda of the Best Practices in CMC Reviews Workshop.*

A. Henson presented the Status report on the ILAC-CIPM Joint Communication on the accreditation of NMI Services and the ILAC P10 Document. *The draft version of ILAC P10 document was prepared, enabling three ways how to provide traceability to accredited laboratories. The discussion was aimed at the point 3.*

“For equipment and reference standards that shall be calibrated the ILAC policy is that they shall be calibrated by:

- 3) An NMI or calibration laboratory whose service is neither covered by the CIPM MRA nor the ILAC Arrangement. In these cases the accreditation body shall ensure that the laboratory being assessed and has used such service, shall provide evidence that the laboratory providing the calibration meets the relevant criteria of ISO/IEC 17025:2005 and that the calibration certificate includes statements concerning measurement uncertainty and traceability. The evidence shall be documented and the documentation shall be assessed by the accreditation body. This applies also to internal calibrations.”

The participants of the meeting discussed the proposed changes to CIPM MRA-D-05. BIPM proposed to include the following additions and improvements to the sections 7. Supplementary comparisons, 7.2. Reports of supplementary comparisons:

There was approved the following Recommendation of the meeting:

*28/1: The JCRB recommends that the CIPM approve proposed changes to the text of the document CIPM MRA-D-05 pertaining to the approval procedure for RMO supplementary comparison reports.*

Within the item 14 of the meeting “Any other business”, the participants of the meeting were informed about the letter of the Chair of COOMET TC QF R. Spurny about the support of SIM Resolution voiced at the 26<sup>th</sup> JCRB meeting regarding the possibility of CIPM MRA logo inclusion on the QMS recognition certificates issued by RMOs. The BIPM Director informed that he would inform CIPM about the letter.

There were agreed the dates of the next JCRB meetings:

- a. JCRB-29, 25-26 September 2012, SIM / NIST, Washington, DC, USA.
- b. JCRB-30, 18-19 March, 2013, BIPM, Paris, France (19-20 March, 2013, CMC Best Practices Workshop).

At the end of the meeting the Actions were agreed, the Resolutions and Recommendations were accepted.

Dr. Pavel Neyezhnikov  
Head of COOMET Secretariat