Author: JCRB Executive Secretary

Report of the 23nd Meeting of the JCRB

Held on 23-24 September 2009-11-13

Kazan, Republic of Tatarstan, Russian Federation

Item Page

Participants

BIPM-CIPM

Prof. Andrew J. Wallard ..... (Chairman) BIPM
Mr Luis Mussio ..... (Executive Secretary) BIPM

Delegations

Dr Wynand Louw ..... (Representative) AFRIMETS
Dr Ahmed Ali Mohamed El Sayed ..... AFRIMETS
Mr Donald Masuku ..... AFRIMETS
Mrs Ajchara Charoensook ..... APMP
Dr WooGab Lee ..... (Representative) APMP
Dr Yoshio Hino ..... APMP
Dr Vladimir Krutikov ..... (Representative) COOMET
Dr Stanislav Musil ..... COOMET
Dr Pavlo Neyezhmakov ..... COOMET
Dr Sergey V. Komissarov ..... COOMET
Dr Sergey Korostin ..... COOMET
Dr. Aleksander Kogogin ..... COOMET
Dr Pavel Klenovsky ..... (Representative) EURAMET
Dr Wolfgang Schmid ..... EURAMET
Dr Alan Steele ..... (Representative) SIM
Dr William Anderson ..... SIM
Dr Claire Saundry ..... SIM

1. Welcome by the Chairman and changes to the Agenda

The Chairman welcomed the delegates to the BIPM and asked the participants to introduce themselves.

Afterwards he presented apologies from R. Kaarls and M. Kuehne for not been able to attend the meeting.

The Chairman then proposed the approval of the agenda, based on an open session for items 1 to 6 and a closed session for the other items. W. Anderson proposed to move the regional reports to the closed part of the meeting. The proposal was accepted and the agenda was approved with no further changes.

2. Approval of the minutes and discussion on matters arising from the report of the 22nd JCRB meeting.

The minutes (JCRB 23/02) were approved with no changes.

The Executive Secretary presented an update of the status of actions pending from the 22nd meeting.

ACTIONS

Action 22/1 The RMOs will send feedback to the KCDB office about the new FAQ facility. (Pending)

Action 22/2 The Executive Secretary will produce a new draft version of CIPM MRA-D-05 and circulate it to the RMOs. RMOs will send any comments to the Executive Secretary before the end of July. Responsible: Executive Secretary (Done)

Action 22/3 To modify CIPM MRA-D-04 (including the policies on traceability and re-review period) and circulate it among the RMOs (Executive Secretary). The RMOs will send comments before the end of July. Responsible: Executive Secretary. (Pending approval of the traceability policy)

Action 22/4 RMOs will send comments on the ILAC document for accreditation of NMIs. (Done)

Action 22/5 COOMET will inform the other RMOs and the BIPM about other related activities in the week of the JCRB meeting. (Done)

3. Report by the Chairman on progress since the 20th JCRB meeting

See document JCRB 23/03.

The report by the Chairman covered point 3 and 4 of the agenda, including the following points:

- New BIPM Members and Associates; activities to increase outreach; participation in the CIPM MRA; expected new Members and Associates for 2010.

- Outputs from the CIPM Bureau.

March 2009 - Topics

The “International Liaison” position was discussed

Preparation of the CIPM meeting

The publication of a “Short Annual Report to Governments” was approved

June 2009 - Topics

The “International Liaison” position was approved as permanent staff of the BIPM

Date of the 2011 CGPM – 17- 27 Oct 2011

Outline of 2013 – 2016 working program

CGPM Resolutions – Time table

Kaarls report

- Report of activities for governments.
- Liaison with other organizations.

  WMO

  OIML

  ILAC

- Secondees to the BIPM and changes in the BIPM personnel.
- BIPM participation in RMOs and other organizations meetings.
- World Metrology Day 2010.
- Calendar of events.

  2009 Director's Meeting

  Tenth anniversary of the CIPM MRA

  Conference on Measurement Challenges for Global Observation Systems and Climate Change Monitoring

  Workshop on Physiological Quantities and SI units

  Workshop on Metrology at the Nanoscale

P. Klenovsky asked if the BIPM or the CIPM bureau had discussed the implications of the present economic crises and the possibility of merging OIML and BIPM.

A. Wallard presented the problems that may occur in the case of a merging of OIML and BIPM, noting the implications for OIML of selling the buildings where the headquarters are located. On the point of the impact of economic crises, A. Wallard informed that it had not impacted the dotations beyond what was expected.

He also informed that it is planned that M. Kuhne and he will visit some NMIs in preparation for the budget proposal to the 2011 CGPM.

A. Wallard mentioned the situation of the JCDCMAS specifically with respect to its effectiveness noting that in the view of the CIPM, perhaps the expectations were too ambitions, and the opportunity for genuine collaboration and progress have not been realized. In JCDCMAS meeting held in March 2009 it was concluded that there is no support for a formal common developmental program. The terms of reference will be reviewed aiming to transform the JCDCMAS more as a communications and information sharing network than as a task-oriented or integrating/coordinating body.

4. Report from the CIPM and news from the BIPM

This item was covered in item 3 of the agenda.

5. RMO reports to the JCRB

5.1 SIM report (JCRB 23/05.1)

The SIM report was presented by A. Steele.

A discussion was held regarding the two SIM supplementary comparisons in mass in which there is no link to other comparisons by common participants and the reference value is provided by a private company.

The following points were touched on during the discussion:

- the need to have a link to previous comparisons through common participants;

- the participation of private companies that are not designated institutes;

- the reference value for non-linked comparisons.

As result of the discussion it was decided that the representatives will take these questions to their respective RMOs and bring a position for discussion at the next meeting.

It was also noted that this may lead to a change in the existing policies for comparisons in the framework of the CIPM MRA.

A. Steele made the point that the intention was to make optimal use of the effort spent on a proficiency testing exercise conducted by an accreditation body when considering CMC claims.

W. Louw expressed the view that a similar discussion is going on in AFRIMETS but there is no a definitive answer to the problem. At present, AFRIMETS is organizing comparisons and is requesting the cooperation of European NMIs so as to provide the reference values.

A. Wallard asked if there had been contacts aiming at the involvement of laboratories that have participated in key comparisons.

A. Steele answered that there were not, because it was not considered necessary and it would also increase the burden on the most experienced NMIs.

P. Klenovsky noted that from the point of view of EURAMET the participation of private companies in comparisons would be a major concern, and mentioned that in the past there have been political problems because this issue.

A. Steele remarked that this case is not a key comparison but an exercise organized by DKD for its accredited laboratories in South America, and the intention of registering it as a SIM comparison is to allow the participant NMIs to use this information to support CMCs. He also proposed that one solution may be to have a special report to be published in the KCDB without the private company data.

A. Wallard proposed that the regions have an internal discussion on the problem and bring a position for the next JCRB meeting. The proposal was accepted (see action 23/2)

Action 23/2: The RMOs will consider the issues related with the participation of private companies in comparisons carried out under the CIPM MRA, and bring a position for the next JCRB meeting.

5.2 EURAMET report (JCRB 23/05.2)

W. Schmid presented the EURAMET report.

C. Saundry asked about the possibility that NMIs from outside Europe could become Members or Associates in EURAMET.

W. Schmid answered that the categories of Members and Associates are limited to European institutions but there is a third category, liaison organizations, for which other non European organizations or NMIs can apply.

A. Kogogin asked if institutes from outside of Europe can participate in European Metrology Research Projects (EMRP). P. Klenovsky replied that the participation is open but only institutes from European countries may receive funds.

5.3 COOMET report (JCRB 23/05.3)

S. Korostin reported on behalf of COOMET.

A. Wallard made a remark on the large increase of the activities in COOMET related to the CIPM MRA.

5.4 APMP report (JCRB 23/05.4)

Y. Hino reported on behalf of APMP.

5.5 AFRIMETS report (JCRB 23/05.5)

W. Louw reported on behalf of AFRIMETS.

6. KCDB report (JCRB 23/06)

The KCDB report was presented by L. Mussio on behalf of C. Thomas.

The report included:

- Availability of historical statistics of the KCDB.

A. Steele SIM acknowledged this useful new feature, and noted that it is used for reporting SIM activities to the OAS.

- Present status of the KCDB, including number of published CMCs, greyed out CMCs, SC and KC, noting the increase in the number of registered comparisons mainly from COOMET and SIM.

- A summary of the contents of the KCDB newsletter.

- A draft for a new section of Frequently Asked Questions in the KCDB website.

- Number of hits to the KCDB website.

7. Status and problems arising with CMCs submission and review.

The Executive Secretary reported on the pending CMCs that may need attention from the RMOs.

COOMET.M.7.2008 – Viscosity, Belgim, Belarus (rejected in the final round)

COOMET.M.8.2008- Mass, INIMET, Cuba (rejected in the final round)

COOMET.M.9.2008 – Pressure, Belgim, Belarus (rejected in the final round)

SIM.RI.6.2004 – Activity, ININ, Mexico (lack of Quality System). The Executive Secretary will contact the Institute and if there is no response the CMCs will be tagged as abandoned.

7.1 5 years re-review period of CMCs.

A. Wallard made a brief introduction of the present status in the different RMOs and opened the floor for discussion on the subject of requirements for periodical on-site peer reviews.

W. Anderson explained the appeal process that will be proposed in SIM for the decisions of the QSTF and asked to the other RMOs have an established procedure for appealing decisions.

It was expressed by the delegates that no RMO has such procedure.

A. Wallard remarked the benefits of having harmonization on this process.

Action 23/1 After approval in SIM, SIM will present to the JCRB the procedure for appealing decisions of the QSTF.

P. Klenovsky then made a description of the present status in EURAMET regarding the need for on site peer reviews. The periodic review of QS (?) is based on the presentations in the TC-Q but there is no general mandatory requirement for on-site reviews. He also mentioned the relation with the accreditation bodies for the cases of NMIs that have chosen this route. This issue will be discussed in the EURAMET Board of Directors.

W. Anderson said that he said that visits from accreditors can be considered as on site peer reviews, but in other has cases, NMIs did not have on site reviews, arguing that they have a good knowledge of each other.

A. Steele noted that for the case of the visits from accreditors, what matters is the qualification of the assessors and not the fact that this are done under the accreditation process. He also noted that the mutual knowledge is very different in the cases of NMIs and DIs, considering that on site reviews would be more important in the latter case. He asked if there are any plans or considerations in the other RMOs to make on site reviews mandatory for the case of self declared DIs.

P. Klenovsky answered that this will be taken back to the EURAMET Board of Directors.

S. Musil said that for COOMET accreditation is not enough and that other elements are required for the approval.

W. Anderson expressed that external reviews are essential for establishing and maintaining confidence and it may be dangerous if any RMO decides to avoid the periodic on site review.

A. Wallard summarized the discussion stating that the general view is to have mandatory on site peer reviews.

A. Steele noted that the important point is to maintain the mutual confidence in the RMOs review of the QS, and not creating an inter-RMOs QS review.

A. Charoensook agreed with W. Anderson in favour of having external reviews are essential for establishing and maintaining confidence ~~A. Wallard's summary in favour of having mandatory on site review,~~ but noted that there are many problems to maintain this policy - mainly economic and language issues.

A. Wallard then proposed that the delegates take this problem to their respective RMOs and have an agenda item for the next JCRB meeting.

Action 23/3: The delegates will report to their respective RMOs the discussion on the JCRB about the need for maintaining periodic on site peer reviews and report back to the JCRB in the next meeting.

Resolution 23/1: The RMOs will present a report of the activities on the QS Working Groups to the JCRB every two year. (next presentation, March 2011)

8. Documents remitted to the JCRB by the CIPM and documents to be submitted to the CIPM.

8.1 Procedure for approval of new RMOs (CIPM MRA-P-01)

This document was discussed in the 22nd meeting of the JCRB and now submitted for final approval by the CIPM.

8.2 Policy for traceability in the CIPM MRA (to be included in CIPM MRA-D-04)

The text proposed by the CIPM was modified, and is to be resubmitted for approval and inclusion in CIPM MRA-D-04.

The proposed text follows.

National Metrology Institutes (NMIs) and Designated Institutes (DIs) publishing

Recommendation 22/2 The JCRB recommends that the CIPM adopts the following policy for traceability in context of the CIPM MRA.

Calibration and Measurement Capabilities (CMCs) in the BIPM Key Comparison Database (KCDB) have two choices for establishing their traceability routes to the SI:

1. via a primary realization of the unit of measurement concerned or by applying primary "higher-order" methods, in which case traceability must be declared to its own demonstrable realization of the SI;

2. via another NMI or DI having CMCs published in the KCDB or through calibration and measurement services offered by the BIPM, in which case the level of uncertainty in the relevant area must be appropriate.

Note 1: Paragraph 1 includes the case of NMIs or DIs using CRMs or high purity primary chemical references obtained from sources that are not recognized under the CIPM MRA only when the NMI or DI has the recognized capability to analyse the composition by itself.

Note 2: In Paragraph 2, where traceability to the SI is through a CMC published in the KCDB or a BIPM measurement service, the NMI or DI must still make a full assessment of the uncertainties involved in its measurement activity and must openly declare its chosen traceability route when submitting its CMCs for intra- and inter-regional reviews.

Note 3: For auxiliary influence quantities, not part of the main traceability path to the SI for a particular measurand and with uncertainties that can be shown to make only a minor contribution to the total combined uncertainty of the CMC, an NMI or DI is free to use measurement services provided by laboratories accredited by a signatory to the ILAC Arrangement for calibration of instrumentation, provision of reference standards or other elements of its measurement system.

(it should be noted that this text was modified and approved by correspondence after the meeting and submitted to CIPM who in turn approved it with modifications)

8.3 Interlaboratory Comparisons in the CIPM MRA (CIPM MRA-D-05) – Compilation of existing procedures and policy documents.

A discussion was held on the different use of the term Key Comparison in the different CCs, and it was agreed that harmonization is needed.

It was also discussed the use of pilot studies for supporting CMCs. The policy approved in the past, states that PS cannot be used to support CMCs. After some discussion it was agreed that PS cannot be used as exclusive support for CMCs, but they are a valuable piece of information. The document will be modified to show this position.

The document was approved as will be submitted to the CIPM for approval.

Action 23/4: The Executive Secretary will circulate the final draft of document CIPM MRA-D-05. RMOs will send final comments by October 3.

Recommendation 22/3 The JCRB recommends that the CIPM the approval of the document Interlaboratory Comparisons in the CIPM MRA (CIPM MRA-D-05), with the modifications proposed in the meeting and agreed by correspondence.

8.4 Review of the CIPM MRA – Version 2

A. Wallard explained the proposal for the review of the text of the CIPM MRA, the basic points, and the procedure to be followed to approve the modification, emphasizing that there are no policy changes, but only an update of the text to the new standards and references activities that have been already finished.

The proposed modification will be presented in the 2009 Director's meeting and that the discussion will be maintained by correspondence for approval in the 2010 meeting.

P. Klenovsky, asked if there are intentions to modify the text.

A.Wallard answered that there is no intention to make substantial modifications to the text, only editorial changes and updating of references.

9. Feedback from the CCs and CC Working Groups

CCRI

L. Mussio presented the proposal made by IAEA in the CCRI, to include the comparisons done between IAEA and Secondary Standards Dosimetry Laboratories (SSDLs) in the KCDB.

The document that will be submitted to IAEA (JCRB 23/09.1) was presented. The document describes the way in which those SSDLs that are either NMIs or DI from states signatories of the CIPM MRA should proceed to have these comparisons registered in the KCDB, making clear that SSDLs from non signatories or SSDL that are not NMIs or DI will not be allowed to register this comparisons.

CCM

The Flow Working Group of the CCM, reported cases of accredited laboratories that have uncertainties much lower than the NMIs to which they claim traceability. This issue will be taken to by BIPM to ILAC in the next AIC meeting.

10. ILAC documents related to the CIPM MRA.

L. Mussio presented the status of the work in the AIC in regards with the documents:

- Traceability policy

- Estimation of uncertainty

- Accreditation of NMIs.

The role of the BIPM in commenting on the draft ILAC document on accreditation of NMIs was discussed. The position to be taken to ILAC is that this document should not in any way endorse a position either in favor of, or against, accreditation, as this is a decision of the NMI or the authorities of its country.

A. Steele raised the question on whether this should be an ILAC document or, as it has a big impact in the NMIs community, it would be better to make it a joint BIPM-ILAC document. This option would allow the BIPM to have more control on the contents of the document.

After some discussion, the following resolution was taken.

Resolution 23/2: The BIPM will take the following position to the AIC meeting:

- **ILAC policy for estimation of Uncertainty – The document is not necessary.**
- **Accreditation of NMIs - A clear purpose of the document must be established before continuing the work and sending comments on the text.**
- **-ILAC policy for traceability - Continue the work strengthening the use of the KCDB to ensure that the CMCs of an accredited laboratory are consistent with the CMCs of the NMI to which it claims traceability**

11. Other business:

11.1 Director's meeting.

A. Wallard presented the proposed agenda for the Director's meeting, to be held at the BIPM, October 7, 2009.

11.2 10 year anniversary of the CIPM MRA (JCRB 23/11)

A. Wallard presented the program of activities related to the 10 year anniversary of the CIPM MRA. The activities will take place on October 8-9, in the OIE in Paris.

12. Next Meetings:

12.1 Next meetings of the JCRB:

A. El Sayed made a presentation for the hosting of the September 2010 meeting, in conjunction with AFRIMETS General Assembly.

Resolution 23/3: The next JCRB meeting will be hosted by BIPM, March 16 – 17 2010, preceded by the RMOs – RCAB meeting on March 15. The following meeting will be hosted by Egypt, AFRIMETS, September 21- 22 2010

13. Meeting closure

The Chairman thanked the delegations for their participation in the meeting. Having no further issues for discussion, the meeting was adjourned.

14. Summary of Actions, Resolutions and Recommendations.

ACTIONS

RESOLUTIONS

RECOMMENDATIONS