# Report of the 28th Meeting of the JCRB

**Held on April 3-4, 2012**

**BIPM, Sévres**

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Participants

BIPM-CIPM
Prof. Michael Kühne ................................................................. (Chairman) BIPM
Dr Robert Kaarls........................................................................... CIPM
Mr Ahmet Ömer Altan............................................................... (Executive Secretary) BIPM
Dr Claudine Thomas ..................................................................... BIPM
Mr Andy Henson ........................................................................... BIPM

Delegations
Dr Mourad Ben Hassine.............................................................. (Representative) AFRIMETS
Mr Dennis Moturi .......................................................................... AFRIMETS
Dr Yadong Yu ................................................................................... (Representative) APMP
Mr Irfan Yeoh ................................................................................ APMP
Dr Ilya Budovsky ............................................................................. APMP
Dr Nikolaj Zhagora ....................................................................... (Representative) COOMET
Dr Pavel Neyezhmakov ............................................................... COOMET
Dr Martin Halaj .............................................................................. COOMET
Dr Anna Chukovnina ..................................................................... COOMET
Dr Janko Drnovsek ........................................................................ (Representative) EURAMET
Dr Wolfgang Schmid ....................................................................... EURAMET
Dr Pavel Klenovsky ..................................................................... EURAMET
Ms Maguelonne Chambon .......................................................... EURAMET
Dr Claudia Santo ........................................................................... (Representative) SIM
Dr Alan Steele ................................................................................ SIM
Dr Claire Saundry .......................................................................... SIM
Dr James Olthoff ............................................................................. SIM

Guests

Dr Sergey Alekseevitch Komissarov ............................................. COOMET
1. **Welcome by the Chairman and approval of the agenda**

The chairman, M. Kühne, welcomed the delegates.

Participants were then asked to introduce themselves.

The agenda of the 28th JCRB meeting was approved without amendments.

2. **Approval of the minutes of the 27th meeting of the JCRB and a review of pending actions.**

The minutes of the 27th meeting of the JCRB were approved without amendments.

M. Kühne reviewed the actions agreed upon at the 27th meeting, noting that all had been completed except Action 27/5 (on adopting PTB Guide 6 as a BIPM document,) for which work was still in progress and would be completed by the next meeting of the JCRB.

3. **Report by the Chairman on progress since the 27th JCRB meeting**

M. Kühne presented the report on developments at the BIPM since the 27th meeting of the JCRB. Important points in the report concerned progress made on implementing the requirements of the resolutions of the 24th CGPM. Concerning Resolution 2, the BIPM-WMO Joint Liaison Group met in Geneva on February 14, 2012 and agreed on an outline of a strategic approach based on “Essential Climate Variables”, which will be piloted by the BIPM. In response to Resolution 4 of the 24th CGPM, concerning the status of Associates of the CGPM, the BIPM has written to Associate states individually informing them of the specific changes to be applied to the subscription fees they pay in light of the provisions of the resolution.

Concerning Resolution 4, A. Steele asked whether the status of CARICOM as an Associate to the CGPM had changed. A. Henson replied that the resolution in question did not change the status of those Associates to the CGPM who were accepted as “economies” (rather than “states”), though it is possible that the issue may be an item of discussion at the next CGPM.

3.1. **Update on the status of the BIPM QMS**

A. Henson presented developments concerning the status of the BIPM QMS. Since the 27th JCRB, the BIPM has undergone an external review conducted by Ajchara Charoensook of NIMT, in which no non-conformities and one observation was reported. It was stated that the BIPM QMS is to be presented at the meeting of EURAMET’s TC-Quality in 2014, which is in accordance with the CIPM’s decision at its 100th Meeting that the BIPM present its QMS to RMO Quality TCs/WGs on a rotating basis.
3.2. Update on the CIPM MRA Addendum

M. Kühne gave an update on the progress of the CIPM MRA Addendum. The text of the addendum that had been agreed at the meeting of NMI Directors in May 2011 was circulated to NMI directors for their approval after the meeting. Despite BIPM follow-up, there is currently a response rate of approximately 50%, the vast majority of which consist of approvals. There was a rejection received from one NMI based on an objection to a note appended to the definition of CMCs that addresses the issue of “special calibrations” conducted by NMIs. M. Kühne stated that the exchange of opinions was continuing on this point and that it would be discussed at the next meeting of NMI Directors in October 2012 with a modification of the text in question being a possibility. In the case that a modification is made, the agreement with ILAC on the definition of CMCs would also have to be renegotiated. M. Kühne explained that he was not optimistic that replies on the CIPM MRA Addendum would be received from all signatories, which is required by the CIPM MRA for the updates proposed in the addendum to take effect.

4. Report from the CIPM

R. Kaarls gave a presentation that included the following points:

- New Member States of the BIPM and Associates to the CGPM
- Developments resulting from the resolutions of the 24th CGPM.
- Outcomes of the meeting of the Ad hoc Working Group held in March 2012.

5. Highlights of the RMO reports to the JCRB:

5.1. SIM

C. Santo presented the highlights of the SIM report.

5.2. EURAMET

J. Drnovsek presented the highlights of the EURAMET report.

5.3. COOMET

P. Neyezhmakov presented the highlights of the COOMET report.

5.4. APMP

I. Budovsky presented the highlights of the APMP report.

5.5. AFRIMETS

M. Ben Hassine presented the AFRIMETS report.

6. KCDB report
C. Thomas presented a summary of the semi-annual KCDB report to the JCRB. It was emphasized the close observance of the rules for drafting CMCs and formatting of the Excel worksheets used in the review process would enable faster publication of CMCs in the KCDB.

C. Thomas also initiated a discussion on issues arising from the proposal being debated within the CCL to request changes in the expression of uncertainty used in CMC declarations. It is estimated that the proposed change would affect approximately 8000 CMCs published in the KCDB, resulting in a heavy work load that could not be meet by current staff as well as presenting a high risk for errors in the process of modifying the CMC entries. After a discussion on whether the proposed change could be justified in terms of its costs and risks, it was agreed that the action proposed by the CCL was not a desirable step to take. The JCRB thus agreed to the following action:

**Action 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 reported at the next JCRB meeting.

### 7. Status of CMCs submission and review / Issues from Consultative Committees

O. Altan reported that there were no current issues to be brought before the meeting concerning CMC submissions and reviews.

O. Altan reported on a new policy adopted by the CCPR WG-CMC at their meeting in February 2012. According to this policy, NMIs that have published CMCs in the KCDB that are underpinned by Key Comparisons must participate in the repeat of those Key Comparisons. Failure to do so would result in the greying-out of the CMCs in question for a maximum period of five years, during which the NMI would be expected to arrange a bilateral comparison with an NMI that did participate in the latest Key Comparison in order to reinstate the CMCs. As this policy represents a departure from the policies of all other CCs in relation to maintaining the validity of published CMCs and places a new obligation on NMIs, it was debated whether CCPR has acted within its domain in endorsing this policy. Concerning this policy, the JCRB agreed to the following action:

**Action 28/2:** CCPR’s new policy requiring NMIs to participate in repeats of comparisons that were used to support CMCs will be reviewed by the BIPM for compliance with the terms of the CIPM MRA. The CCPR policy will be discussed at the 29th JCRB meeting.
8. **Report on Actions 27/3 and 27/4: Obtaining information on DI designation scopes and advising new CIPM MRA signatories of expectations for participation.**

O. Altan reported on the actions taken to carry out Action 27/3 (on obtaining information on the designation scopes of DIs listed in Appendix A) agreed at the 27th meeting of the JCRB. In order to obtain missing information on the designations scopes of the DIs listed in Appendix A of the KCDB, 18 letters were sent to CIPM MRA signatory bodies to clarify the more complicated cases involving multiple DIs. As of the time of the meeting, 13 responses had been received and Appendix A was updated to reflect the information obtained. Some responses received still require follow up as the information given does not sufficiently clarify the distinction in the scopes of designation between different DIs or between the NMI and the DI. For less complicated cases, information was obtained on the designation scopes of DIs by e-mail or by checking the CMCs published by the DI in the KCDB. The BIPM will continue to work on this matter.

In order to meet the requirements of Action 27/4 (on drafting a document detailing expectations for DIs), O. Altan reported that he had written a new procedure to be followed by the BIPM when notification of the designation of a new institute is received. The purpose of the procedure is to ensure that sufficient information is received on the designation scope of new DIs, that the information is communicated to the RMO, and that the new DI is adequately informed of its obligations under the terms of the CIPM MRA. The new procedure states that information on the newly designated institute will not be published in the KCDB unless information on the specific scope of its designation is received from the designating authority. Further details of the procedure were presented to the JCRB.

EURAMET proposed two resolutions pertaining to DIs that seeks to eliminate the possibility that institutes that do not provide traceability through the provision of calibration services are improperly designated by national authorities. After a discussion on the proposed text, the JCRB adopted the following resolutions:

**Resolution 28/1:** The JCRB resolves that 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.

**Resolution 28/1:** The JCRB resolves that 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.
Further to Resolutions 28/1 and 28/2, the JCRB agreed to the following action:

**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.

9. Discussion of the application of GULFMET to join the JCRB

A. Henson opened the discussion of the formal application by GULFMET to join the JCRB as an RMO by summarizing the contents of the documents that were submitted by GULFMET and distributed to the JCRB delegations prior to the meeting. He stated that, as of the date of the meeting, the organization had only one member state, Saudi Arabia, and one state, Oman, whose application to become an Associate of the CGPM was in process. Letters have been received from all other GULFMET countries indicating their intent to apply to become Associates of the CGPM. GULFMET’s membership is currently restricted due to its link with the Gulf Cooperation Council (GCC). However, GULFMET officials have expressed their intent to become independent of GCC, which may open up the possibility for membership of countries that do not belong to the GCC.

In the discussion, reservations were expressed about the limited membership of the organization, consisting of Saudi Arabia, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman and Yemen. The fact that there was only one BIPM member and CIPM MRA signatory among the constituent countries and that there was a lack of significant experience necessary to carry out the functions of an RMO were also areas of concern. The JCRB agreed that the criteria required of RMOs in order to join the JCRB, as written in document CIPM MRA-P-01, were not fully met by GULFMET, but that encouragement should be given to continue progress towards JCRB membership in the future.

At the end of the discussion, the JCRB agreed to the following action:

**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 29th meeting of the JCRB as guests to discuss the next steps forward.

10. Discussion of EURAMET Position Paper on CMC Processes

M. Chambon presented the EURAMET Position Paper on CMC Processes, in which a number of proposals are made to increase the efficiency of the inter-RMO CMC review process.
Among the proposals made, the suggestion to use a web-based platform for the entry and sharing of CMC declarations for review was discussed. C. Thomas stated that while this would be a desirable improvement over the current practice of using Excel files for CMC reviews, it would take a significant amount of work and financial resources to build such a platform. Before work could begin, a number of issues would have to be considered and detailed specifications would need to be determined.

On the subject of a web-based platform for CMC declaration entry and review, the JCRB agreed to the following action:

**Action 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, for presentation at the 29th meeting of the JCRB.

As an immediate solution to the problem of large CMC declaration files that frequently hinder the efficiency of the inter-RMO review process and present a greater potential for errors, C. Thomas proposed that CMC review files be split into categories within areas and by country. Currently, the Chemistry area splits their CMC review files by category (for example: Water, Food, Organic Solutions, etc.) and it is recommended that other areas follow the practice. After a discussion of the benefits of following this suggestion, the JCRB agreed to the following actions:

**Action 28/6:** The KCDB manager will split the CMC files made available on the JCRB CMC review website for use in the CMC declaration and review process by category within the areas of Mass and Ionizing Radiation and will explore the possibility of doing the same for other areas in consultation with the relevant Consultative Committee working groups.

**Action 28/7:** APMP TCEM Chair I. Budovsky will propose that the CCEM WGRMO consider the issue of splitting EM CMC declaration files by category at their next meeting.

On the proposals contained within the position paper concerning coordination among RMOs of the inter-RMO CMC review, C. Thomas spoke of the practice where EM TC/WG Chairs coordinate the review of EM CMC declaration files so that a pair of RMOs agree to review a portion of the CMC file, which reduces unnecessary repetition of work and time spent on the reviews. It was agreed that this practice could be taken up by other areas, but that RMOs should retain the right to review the entirety of a CMC declaration file.

In conclusion to the discussion, EURAMET was thanked for its contribution to carrying the discussion on improving CMC processes forward and it was agreed that
EURAMET's Position Paper on the subject would be considered an input for the
planned Workshop on Best Practices in CMC Reviews and discussed further.

11. Discussion on the proposed CMC Review Best Practices Workshop

O. Altan presented a proposed agenda for the planned Workshop on Best Practices in
CMC Reviews. According to the proposed agenda, the workshop will have participation
from RMOs and CCs, who will present practices they have adopted to increase the
efficiency and effectiveness of CMC reviews. The second part of the workshop will be
devoted to a brainstorming session on possible improvements to the CMC review
process. The one and a half day workshop is planned to be held in conjunction with the
30th meeting of the JCRB in March 2013.

The proposed agenda was endorsed by the JCRB and the following action was agreed
upon:

Action 28/8: At the 29th Meeting of the JCRB, RMOs will propose topics to be discussed
within the brainstorming session that is to be on the agenda of the planned Workshop
on Best Practices in CMC reviews.

12. Status report on the ILAC-CIPM Joint Communication on the
Accreditation of NMI Services and the ILAC P10 document

A. Henson reported on the developments concerning the ILAC P10 document and the
ILAC-CIPM Joint Communication on the Accreditation of NMI Services.

The ILAC P10 document failed to receive the required number of endorsements from
ILAC members and had not been adopted. The revised text is to be prepared and
discussed at the ILAC AIC meeting in April 2012.

Discussion focused on the text in the P10 document that gives guidelines on the
acceptable traceability routes for the equipment and reference standards of the
laboratory undergoing accreditation in terms of supplying the required traceability to
the SI. There is disagreement within the JCRB on how the text treats NMI calibration
services that are covered by the CIPM MRA versus those that are not. A. Henson
agreed to bring the concerns of all sides to the ILAC-AIC meeting and not take a
specific position. He will also circulate the revised text to the NMIs once it has been
agreed upon within ILAC.

The ILAC-CIPM Joint Communication on the Accreditation of NMI Services has been
approved at the 100th CIPM meeting and has been placed on the BIPM web site.
13. Documents to be submitted to the CIPM for approval

13.1. Changes to the CIPM MRA-D-05

O. Altan presented proposed changes to the CIPM MRA-D-05 which consist of a change in the text in Section 7.2 of the document concerning the approval procedure for RMO supplementary comparisons that bring it in accordance with CIPM MRA requirements for CC approval while avoiding, as far as possible, an unnecessary additional burden on CC working groups.

The changes were approved by the JCRB and the following recommendation was made:

Recommendation 27/3: The JCRB recommends to the CIPM to approve changes to the text of Section 7.2 of document CIPM MRA-D-05.

14. Any Other Business

There were no other issues discussed under this agenda item.

15. Next Meetings

The JCRB agreed to the following:

Resolution 28/3: The 29th meeting of the JCRB will take place at at NIST on September 25 and 26, 2012.

Resolution 28/4: The 30th meeting of the JCRB followed by the Workshop on Best Practices in CMC Reviews will take place at the BIPM between March 18 and 20, 2013.

16. Meeting closure

With no further issues to discuss, the meeting was adjourned.
17. 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 reported 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 by the BIPM for compliance with the terms of the CIPM MRA. The CCPR policy will be discussed at the 29th JCRB meeting.

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.

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 29th meeting of the JCRB as guests to discuss the next steps forward.

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, for presentation at the 29th meeting of the JCRB.

28/6: The KCDB manager will split the CMC files made available on the JCRB CMC review website for use in the CMC declaration and review process by category within the areas of Mass and Ionizing Radiation and will explore the possibility of doing the same for other areas in consultation with the relevant Consultative Committee working groups.

28/7: APMP TCEM Chair I. Budovsky will propose that the CCEM WGRMO consider the issue of splitting EM CMC declaration files by category at their next meeting.

28/8: At the 29th Meeting of the JCRB, RMOs will propose topics to be discussed within the brainstorming session that is to be on the agenda of the planned Workshop on Best Practices in CMC reviews.

18. Resolutions

28/1: The JCRB resolves that 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 that the QMS that must be in place prior to the acceptance of CMCs must be according to ISO/IEC 17025 (and ISO Guide 34 for CRMs) in line with requirements for calibration laboratories.

28/3: The 29th meeting of the JCRB will take place at at NIST on September 25 and 26, 2012.

28/4: The 30th meeting of the JCRB followed by the Workshop on Best Practices in CMC Reviews will take place at the BIPM between March 18 and 20, 2013.

19. Recommendations

28/1: The JCRB recommends to the CIPM to approve changes to the text of Section 7.2 of document CIPM MRA-D-05.