

Report of the 36th Meeting of the JCRB

Held on September 14 and 15, 2016

Nairobi, Kenya

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Participants

BIPM-CIPM

Dr. Martin Milton..... (Chairman) BIPM

Mr. Andy Henson.....(Director, BIPM ILC Department) BIPM

Dr. Douglas Olson (Executive Secretary) BIPM

Dr. James McLaren CIPM

Kenya State Department for Investment and Industry, Ministry of Industry, Trade and Cooperatives

Mr. Joseph Mbeva official representative

Kenya Bureau of Standards

Dr. Henry Rotichrepresentative (KEBS)

Delegations

Dr. Wynand Louw AFRIMETS representative to the JCRB

Prof. Noha Khaled.....AFRIMETS

Mr. Dennis MoturiAFRIMETS

Ms. Zakithi Msimang AFRIMETS

Dr. Peter Fisk..... APMP representative to the JCRB

Dr. Toshiyuki Takatsuji APMP

Dr. Peter Manson APMP

Dr. Isao Kishimoto..... APMP

Dr. Pavel Neyezhnikov COOMET representative to the JCRB

Dr. Aleksei Ippolitov..... COOMET

Mr. Sergey Komissarov COOMET

Dr. Beat JeckelmannEURAMET representative to the JCRB

Dr. Wolfgang SchmidEURAMET

Dr. Robert EdelmaierEURAMET

Mr. Saleh Al-Remaihi GULFMET representative to the JCRB

Eng. Omar S Kanakrieh GULFMET

Dr. Majed Alharthi GULFMET

Mr. Nasser Alqahtani..... GULFMET

Dr. Claudia SantoSIM representative to the JCRB

Dr. Alan SteeleSIM

Dr. Claire SaundrySIM

Dr. James OlthoffSIM

Regrets

Dr. Vladimir Krutikov COOMET

Dr. Enver Sadikoglu.....EURAMET

1. Welcome by the Chairman and approval of the agenda

Dr. Martin Milton, Director of the BIPM and Chairman of the JCRB, welcomed the delegates to the 36th meeting of the JCRB. A special thanks was extended to KEBS for their hospitality in hosting the meeting and the efforts of their staff to make it successful. Mr Joseph Mbeva and Dr. Henry Rotich (respectively representatives from the Kenya State Department for Investment and Industry, and the Kenya Bureau of Standards), welcomed the delegates to Nairobi, Kenya and wished them a successful meeting. The members of the JCRB delegations introduced themselves.

The agenda of the 36th JCRB meeting was presented and approved without amendment.

2. Approval of the minutes of the 35th meeting of the JCRB and review of pending actions

The minutes of the 35th meeting of the JCRB were approved without amendments.

M. Milton reported on the status of actions agreed to at the 35th JCRB meeting:

- Action 35/1: GULFMET will report the status of the registration of their comparisons in agenda item 9.5.
- Action 35/2: RMO activities related to strategic planning of comparisons at the RMO TC level are listed in the RMO reports found in the restricted-access JCRB working documents webpage.
- Action 35/3: The BIPM draft scope of KCDB 2.0 will be presented in agenda item 7.
- Action 35/4: Possible metrics that might measure the quality of intra-regional reviews will be presented in agenda item 11.
- Action 35/5: The availability of RMO materials to support the involvement of NMIs (from countries and economies with emerging metrology systems) in the work of the CIPM MRA is listed in the RMO reports found in the restricted-access JCRB working documents webpage.
- Action 35/6: The report of the subgroup charged to prepare a draft position paper on the JCRB response to the MRA review will be covered in agenda item 5.
- Action 35/7: The report of the subgroup charged to prepare a draft position paper on the feasibility of “broader scope” CMCs will be covered in agenda item 6.
- Action 35/8: The KCDB has retired the pop-up survey on the usage of the KCDB website.
- Action 35/9: (regarding the RMOs reminding TC and WG chairs to submit confirmation, at the beginning of the inter-RMO review, that CMCs are supported by QMS evidence) data on performance of this requirement will be reported in agenda item 11.

- Action 35/10: The BIPM has deleted the listings of non-signatories and non-designated participants of comparisons, in the web-visible drop-down menus of the KCDB.

3. Report on progress since the 35th JCRB meeting

A. Henson reported on developments at the BIPM since the 35th meeting of the JCRB. The Important points of the report included:

- Slovenia became a Member State on 23 March 2016 (previously they were an Associate);
- Sri Lanka was reinstated as an Associate on 17 August 2016 (previously they were an Associate from 3 August 2007 to 31 December 2014);
- Having met the CIPM criteria for encouragement to become Member States, nine Associates will reach step five on the escalator in 2017 of graduated increasing subscriptions; in 2017 their subscription will be 90 % of what they would pay as a dotation as a Member State;
- The BIPM has responded to ARAMET, detailing criteria for acceptance of a new RMO, and requesting additional information from ARAMET addressing the criteria. There has been no response from ARAMET. GULFMET have stated in their report that SASO has confirmed its membership in ARAMET and confirmed its participation in the activities related to the CIPM MRA through GULFMET. AFRIMETS confirmed the participation of NIS Egypt in the activities related to the CIPM MRA through AFRIMETS. GULFMET has inquired of YSMO (Yemen) as regards to its RMO involvement in the CIPM MRA, with no response yet; AFRIMETS has been asked to provide the intension of Tunisia. It was decided to return to the issue of the JCRB position with regard to ARAMET as an RMO within the context of the CIPM MRA, under agenda item 12;
- The theme for the 2017 World Metrology Day will be “Measurements for transport”, and the contributing NMI is INM from Colombia;
- The BIPM Capacity Building and Knowledge Transfer (CBKT) programme continues to expand. There has been a growth in training opportunities and laboratory based projects. The metrology for safe food and feed, and metrology for clean air programs were described in some detail. COOMET was asked to supply a contact name for linking on the CBKT page of the BIPM website. It was announced that the training course “A Sound Beginning” (the second of the two NIST-sponsored training courses) will be held November 13 to 24, 2017. All RMOs confirmed there would be no conflicts with RMO events limiting candidate participation during that time period. Both GULFMET and EURAMET will hold CBKT training based on elements of the “Leaders of Tomorrow” course in the coming months, with BIPM instructors.
- GULFMET was asked to provide a web link for their guidance documents on quality systems and CMC review, to be linked from the BIPM website.

- The BIPM has selected the 8th JCRB Executive secretary, Mr Nikita Zviagin of VNIIM, to begin in January 2017. It was noted that there were fewer applicants this year than in previous cycles.

[The BIPM report is available on the restricted-access JCRB working documents webpage, listed as [JCRB-36/03.0](#)]

4. Report from the CIPM

J. McLaren delivered a verbal report from the CIPM. He recalled that in recent years there have been a number changes in the way the CIPM operates. These include the method of election of CIPM members, and the use of subcommittees and working groups for specific issues. The CIPM currently has three vacancies and are in the process of filling them as provisional appointments, to be made at the October 2016 meeting of the CIPM. A major piece of work in recent months has been assuring the sustainability of the BIPM Pension and Provident Fund.

5. JCRB – strategic approach to the CIPM MRA review: Action item 35/06

A. Steele led a discussion of the document “JCRB – Strategic Approach to MRA Review” ([JCRB-36/05.1](#)), the draft position paper on the JCRB response to the recommendations from the Working Group on the Implementation and Operation of the CIPM MRA. The JCRB draft position paper was prepared by a subgroup of the JCRB in response to Action 35/06 of the 35th JCRB meeting.

A. Steele presented the concept for the strategic approach, and presented next steps for the JCRB. The approach taken in the document was to revisit the recommendations of the Working Group, and to consider a smaller set of broad thematic areas that would be strategic imperatives for the JCRB in the coming years. The four strategic themes proposed in the position paper were 1) governance and organizational effectiveness; 2) efficiency and effectiveness; 3) support for countries and economies with emerging metrology systems (CEEMS); and 4) BIPM operations and logistics for the KCDB. For each theme area, the document lists a number of key considerations to be addressed, and then lists the recommendations from the Working Group that have relevance to the thematic areas.

The discussion of the meeting followed through the 4 thematic areas described above, although not in the order presented in the document. In the discussion of theme area (3), C. Santo stated that some SIM TC chairs have reported not been invited to the meetings of the CC WG-RMO, even though the membership requirement is for representation from all RMOs. The JCRB took the following action:

Action 36/01: *The JCRB Executive Secretary will review current membership of the WG-RMO (or the equivalent designation) within each CC, and provide the list of members to the JCRB.*

Some of the views expressed in the lively discussion were: CMC review should shift from a rules-based approach to a principles-based approach; the system needs to support both the emerging NMIs and the established NMIs; the RMOs are usually better connected to the countries with emerging metrology systems than are the CCs; it should

be a goal to build enough evidence to support trust in the system; it is important to clarify the roles and responsibilities of each stakeholder within the strategic approach; there can be differences in effectiveness and efficiency between short term and long term strategies; the JCRB has limits in its responsibilities, but with its broad perspective it can suggest actions that improve efficiency; NMI directors are important actors in the system even though there is not a separate committee of NMI directors that deals with the MRA; RMOs can channel the views of NMI directors to the JCRB to represent their views.

The discussion of thematic area (4) was held in the context of agenda item 7, the draft scope of KCDB 2.0 presented by the BIPM.

Following the discussion of the thematic areas, the possible “action plan” of the document was presented and discussed. This plan looks at a way of implementing solutions to the Working Group recommendations. The particular tool presented in the position paper and the discussion was the “RACI” analyses, where the acronym “RACI” stands for “responsible”, “accountable”, “consulted”, and “informed”. For each recommendation, the RACI method assigns one or more actors (stakeholders) to the four RACI categories, which is a way of clearly understanding roles of stakeholders and managing complex relationships. A possible set of stakeholders would be NMI directors, the CIPM, CC Presidents, RMOs, JCRB, BIPM, CCs and their WGs, and RMO TC chairs. A. Steele explained how this would work for a few of the Working Group recommendations. As an example, recommendation 4C (consistency of intra-RMO review processes) within the Governance and Organizational Communication theme could assign these actors to the RACI categories:

- Responsible: JCRB, RMOs
- Accountable: JCRB
- Consulted: RMOs, BIPM, RMO TC chairs
- Informed: CIPM

The JCRB performed the analysis collectively for some of the other recommendations. This discussion helped to clarify the meanings of the RACI terms and the roles of the actors in implementing the plan.

The JCRB decided that the position paper would form the basis for a presentation for the NMI Directors meeting. It also decided that it would prepare a RACI analysis of the Working Group recommendations within the structure of the position paper, both as input for the presentation and a basis for future discussions of JCRB strategy at the 37th JCRB meeting. The JCRB agreed to the following two actions:

Action 36/02: *The JCRB charged a task group (comprising Alan Steele (convener), Peter Fisk, Andy Henson, Beat Jeckelmann, Wynand Louw, Mohammed Al Mulla, and Pavel Neyezhnikov) to develop a presentation for the 2016 NMI Directors Meeting, of the JCRB response to the CIPM MRA review. The presentation to be based on the JCRB Strategic Approach to the MRA Review (JCRB working document JCRB-36/05.1).*

Action 36/03: *The JCRB charged a task group (comprising Alan Steele (convener), Peter Fisk, Andy Henson, Beat Jeckelmann, Wynand Louw, Mohammed Al Mulla, and Pavel Neyezhnikov) to prepare a draft RACI analysis of the MRA Review Working Group recommendations, based on the JCRB Strategic Approach to the MRA Review (JCRB working document JCRB-36/05.1). The draft RACI analysis to be distributed to the JCRB prior to the 37th JCRB meeting in March, 2017.*

[The draft report entitled “JCRB – Strategic Approach to the MRA Review” can be found on the restricted-access JCRB working documents webpage as [JCRB-36/05.1](#).]

6. JCRB position on feasibility of “broader scope” CMCs: Action item 35/07

C. Santo led a discussion of the feasibility of “broader scope” CMCs, based on the preparatory documents which are referenced below. These documents were prepared by a subgroup of the JCRB in response to Action 35/07 of the 35th JCRB. A variety of points of view on the meaning of “broader scope” CMCs were presented and discussed. One view expressed was to restrict the CMC to a quantity with its measurand, rather than a calibration method and/or the instrument to be measured; multiple calibration and measurement services offered by the NMI/DI could be linked to the same CMC, as long as they were within the range of the CMC and had an uncertainty equal to or greater than the CMC. The different services per CMC entry could differ by measurement method, calibration procedure, or type of instrument to be calibrated. Another concept discussed was how broad could be the range or measurement method of CMCs which are supported by a comparison of a certain range, the so called “how far the light shines”. In this concept, a comparison conducted to support a high level CMC could be used to support a CMC using a less demanding method. It was pointed out that many users of the KCDB benefit from more descriptive CMCs that match the services they require, which is often in conflict with the desire to limit the number of CMCs.

The discussion led to trying to better articulate the goal of the Working Group recommendation (relating to improving the efficiency and effectiveness of the CIPM MRA). It was expressed that the JCRB could better frame the discussion by providing guidance on best practices on formulating CMCs (rather than trying to agree to reach consensus on broader scope CMCs), including kinds of evidence that is required for CMC claims (and possibly reducing the number of comparisons necessary to support CMCs). Such a document would describe the general principles of best practices and provide examples, but leave it to the consultative committees as to how they would best implement the guidance. The JCRB took the following action:

Action 36/05: *The JCRB charged a task group (comprising Claudia Santo (convener), Beat Jeckelmann, Peter Manson, Zakithi Msimang, and Toshiyuki Takatsuji) to prepare a draft document reviewing “best practices” in formulation and submission of CMCs, to be distributed prior to the 37th JCRB meeting in March, 2017.*

[The background documents related to agenda item 6 can be found on the restricted-access JCRB working documents webpage as [JCRB-36/06.1](#).]

7. Draft scope for the update to the KCDB/JCRB IT suite: Action item 35/03

A. Henson made a presentation on the draft scope of KCDB, which was based on the more detailed document distributed prior to the meeting (links to both documents are found below). The revision to the KCDB/JCRB IT suite is henceforth referred to as KCDB 2.0. The presentation first provided the context for the draft scope, including recommendations from the working group on the CIPM MRA review, and feedback of users concerning practical issues that limit efficiency or effectiveness of the KCDB and/or JCRB review. Status of the BIPM process of software development was presented, along with what the BIPM perceived as key issues to be clarified in going forward. A. Henson then presented the concept of KCDB 2.0.

KCDB 2.0 is proposed to include three modules: *CMC writer*, *CMC reviewer*, and *CMC Finder*. *CMC Writer* would provide entry of CMC data by the originating NMI into a web platform, either directly on a web interface or through uploading an excel file. Correct formatting is ensured by the web platform. Once entered, the CMCs can be viewed and referred to on the web throughout the review process. Each CMC will have a unique URL identifier. TC chairs within the RMO of the originating NMI will receive notification once the CMCs have been entered (or modified). *CMC Reviewer* will encompass the review process, both for the intra- and inter-RMO review. For the intra-RMO review, the web platform will display the draft CMCs for the reviewers, however the RMOs will use their own process for the intra-RMO review. For the inter-RMO review, *CMC Reviewer* will manage and enforce the process requirements for approval as currently established by the JCRB. The review will be done *by* CMC, eliminating the current difficulty of batches whereby problematic CMCs can delay publication of approved CMCs. Reviewing of CMCs will be done on the web platform, rather than by downloading and uploading of excel files. Once approved, the CMCs will become available for unrestricted viewing and searching (with no repeat data-entry required). *CMC Finder* will provide an improved search capability.

The JCRB delegates expressed the desire to make some of the intra-RMO review available in the KCDB, without burdening the system. A. Henson stated that the BIPM has been considering the capability of allowing posting of comments associated with the intra-RMO review; but not the incorporation of intra-RMO review process requirements, since they differed between the RMOs and technical areas. Delegates viewed the draft scope favourably and agreed to the following action:

Action 36/04: *The JCRB welcomes the proposal made by the BIPM and charges the BIPM to progress to the next stage of developing KCDB 2.0.*

[The presentation to the JCRB meeting is available on the restricted-access JCRB working documents webpage listed as [JCRB-36/07.0](#). The draft scope is available on the restricted-access JCRB working documents webpage listed as [JCRB-36/07.1](#).]

8. Other actions arising from the CIPM MRA Review not covered by items 5, 6, and 7

There were no uncovered actions items requiring discussion in agenda item 8.

9. Highlights to the RMO reports to the JCRB

As time was limited for this agenda item, RMOs presented verbal reports only.

9.1. AFRIMETS

W. Louw presented the highlights of the AFRIMETS report.

9.2. APMP

P. Fisk presented the highlights of the APMP report.

9.3. COOMET

P. Neyezhnikov presented the highlights of the COOMET report.

9.4. EURAMET

B. Jeckelmann presented the highlights of the EURAMET report.

9.5. GULFMET

O Kanakrieh presented highlights of the GULFMET report.

9.6. SIM

C. Santo presented highlights of the SIM report.

[The individual RMO reports and presentations are available on the restricted-access JCRB working documents webpage, listed as [JCRB-36/09.1](#); [JCRB-36/09.2](#); [JCRB-36/09.2.1](#); [JCRB-36/09.3](#); [JCRB-36/09.3.1](#); [JCRB-36/09.4](#); [JCRB-36/09.4.1](#); [JCRB-36/09.5](#) ; and [JCRB-36/09.6](#) respectively.]

10. KCDB report

D. Olson presented a summary of the semi-annual KCDB report to the JCRB for S. Picard. The report included the following points:

- As of 31 August 2016, the KCDB has a total of 24 655 CMCs, with 18 492 in physics (including ionizing radiation) and 6 163 in chemistry. In the last 12 months, the overall increase in the number of CMCs has been 2.6 %; the number of physics CMCs has increased by 1.9 % and the number of chemistry CMCs has increased by 4.7 %. This continues a recent pattern where the overall increase in CMCs is similar to historical patterns but the rate of increase in chemistry is larger than that in physics.
- Bolivia and the World Meteorology Organization published their first CMCs (both in chemistry). Chile (UDEEC) published their first CMCs in EM; Kenya published their first CMCs in AUV.
- 173 CMCs are in grey-out status (temporarily removed from the KCDB), compared with 142 CMCs in this status as of 1 March 2016. CMCs from Belgium (M/3), Slovakia (L/3), and the United States (RI/3) were permanently deleted from the KCDB. There were no reinstatements. Italy greyed out all 29 CMCs in viscosity, and Slovakia greyed out 2 CMCs in length. There presently are no greyed-out CMCs in the 1-year reinstatement period. CMC that will reach the 5-year greyed-out limit in

the next 12 months are Korea (5 CMCs in pH) on 20 December 2016, Mexico (3 CMCs in PR) on 15 March 2017, and Finland (6 CMCs in M) on 28 August 2017.

- 22 of the 41 Associates have CMCs currently published in the KCDB. The total number of CMCs of Associates decreased by 256 since the 35th JCRB, due to Slovenia becoming a Member State and Costa Rica applying matrices for EM.
- As of 31 August 2016, there were 1434 total comparisons in the KCDB (950 KCs, 480 SCs). Since the 35th JCRB, there have been 57 comparisons registered as new: 30 KCs and 27 SCs. Reports were published for 54 comparisons since the 35th JCRB.
- As of 31 August 2016, 83 KCs and 49 SCs are in the category of unfinished and started 5 years or more ago. In the last six months, 10 KCs and 8 SCs were removed from the category due to being approved or abandoned. The complete list of comparisons remaining in this category is available on the restricted-access JCRB working documents webpage (see below).

[The KCDB report is available on the restricted-access JCRB working documents webpage listed as [JCRB-36/10.0](#) and on the unrestricted BIPM website at <http://www.bipm.org/jsp/en/ViewKCDBReport.jsp>]. The list of unfinished comparisons started 5 years or more ago is available on the restricted-access JCRB working documents webpage at [JCRB-36/10.1](#)].

11. Status of CMC submissions and review / issues from Consultative Committees

D. Olson made a presentation on the status of CMC submissions and review, and issues arising from the CCs and operation of the JCRB CMC review. Since the 35th JCRB, 17 CMC sets have been published, 32 CMC sets have been submitted, six sets were not approved, and no sets were abandoned. As of 7 September 2016, 22 sets were in the status of “review in progress”. One CMC set had its last update in 2013, and two sets had their last update in 2015. RMOs whose CMCs sets were last updated in 2015 or earlier were asked to take appropriate action to bring the review process to conclusion. Three of the published CMC sets took longer than 200 days for the inter-RMO review; in two cases the longest portion of the review was the posting of the revised file by the submitting NMI/RMO; in the other case the longest portion of the review was the first round of the RMO review (this was a multi-NMI submission in EM with matrices).

In the period since the March of 2016, Inter-RMO review performance (the number of reviews performed according to meeting process deadlines) was 100 % for AFRIMETS, EURAMET, and SIM; it was 88 % for APMP. Inter-RMO review performance dropped to 16 % for COOMET, much lower than in previous time periods. Specific information on reasons and TC areas, for loss of rights to review for COOMET was provided. This period was the first for which GULFMET participated in the inter-RMO review; their performance was 53 %.

CMC sets submitted without the required confirmation of the QMS evidence continues to occur. Information was provided to the RMOs by each metrology area on the adherence to this requirement. In the six months since the 35th JCRB meeting, 50 % of CMC sets

were submitted with the confirmation of the QMS evidence, with significant variations across metrology areas. Confirmation of QMS evidence is always verified before a CMC set is published. CMC sets currently in review and awaiting the QMS confirmation were listed.

A method was proposed for addressing Action 35/4, “The BIPM will identify possible metrics that might measure the quality of the intra-regional reviews carried out by each RMO”. For KCDB 2.0, the concept is to measure the number of CMC lines requiring comment and/or modification at the inter-RMO review, this being an indication of the quality of the intra-RMO review. This the statistic could be monitored for NMIs, RMOs, and metrology areas over time, which should be a simple feature to build into the KCDB 2.0. For the present JCRB review software, it is envisioned that a scoring field be added that the inter-RMO reviewer could complete upon submitting their review. This asks the inter-RMO reviewer to assess the quality of the CMC submission, but without attempting to count instances of comments or modifications to the CMC set. It was decided that the effort to re-program the current software to incorporate such a feature was not cost-effective; however the BIPM would consult with one of the CCs to see if they would be willing to see if such a scoring would be helpful.

[The CMC status report is available on the restricted-access JCRB working documents webpage listed as [JCRB-36/11.0](#)].

12. Any other business

JCRB discussed its position on ARAMET as an RMO within the meaning of the CIPM MRA. Based on the intensions of NMIs from Member States (who are members of ARAMET and the existing RMOs recognized by the CIPM MRA) to participate in the CIPM MRA through existing RMOs rather than through ARAMET, the JCRB recommends to the CIPM that there is no grounds for granting RMO status to ARAMET within the meaning of the CIPM MRA.

13. Next meetings and meeting closure

The JCRB agreed to the following resolutions regarding the next two JCRB meetings:

Resolution 36/1: *The 37th meeting of the JCRB will take on March 15 and 16, 2017 at the BIPM. The meeting will start on the afternoon of March 15 and will last a full day on March 16.*

Resolution 36/2: *The 38th meeting of the JCRB will take place during week 37 (the week beginning September 11, 2017) and will be hosted by EURAMET. The need to hold the meeting will be decided at the 37th meeting of the JCRB.*

M. Milton read the resolutions, recommendations, and actions. The JCRB expressed its thanks to D. Olson for his service as the JCRB Executive Secretary, as he will be returning to NIST in January of 2017. M. Milton thanked D. Moturi and KEBS for hosting the meeting and welcoming the delegates to Nairobi. He called the 36th meeting of the JCRB to a closure.

14. Resolutions, Recommendations, and Actions

Action 36/01: The JCRB Executive Secretary will review current membership of the WG-RMO (or the equivalent designation) within each CC, and provide the list of members to the JCRB.

Action 36/02: The JCRB charged a task group (comprising Alan Steele (convener), Peter Fisk, Andy Henson, Beat Jeckelmann, Wynand Louw, Mohammed Al Mulla, and Pavel Neyezhnikov) to develop a presentation for the 2016 NMI Directors Meeting, of the JCRB response to the CIPM MRA review. The presentation to be based on the JCRB Strategic Approach to the MRA Review (JCRB working document JCRB-36/05.1).

Action 36/03: The JCRB charged a task group (comprising Alan Steele (convener), Peter Fisk, Andy Henson, Beat Jeckelmann, Wynand Louw, Mohammed Al Mulla, and Pavel Neyezhnikov) to prepare a draft RACI analysis of the MRA Review Working Group recommendations, based on the JCRB Strategic Approach to the MRA Review (JCRB working document JCRB-36/05.1). The draft RACI analysis to be distributed to the JCRB prior to the 37th JCRB meeting in March, 2017.

Action 36/04: The JCRB welcomes the proposal made by the BIPM and charges the BIPM to progress to the next stage of developing KCDB 2.0.

Action 36/05: The JCRB charged a task group (comprising Claudia Santo (convener), Beat Jeckelmann, Peter Manson, Zakithi Msimang, and Toshiyuki Takatsuji) to prepare a draft document reviewing “best practices” in formulation and submission of CMCs, to be distributed prior to the 37th JCRB meeting in March, 2017.

Resolution 36/1: The 37th meeting of the JCRB will take on March 15 and 16, 2017 at the BIPM. The meeting will start on the afternoon of March 15 and will last a full day on March 16.

Resolution 36/2: The 38th meeting of the JCRB will take place during week 37 (the week beginning September 11, 2017) and will be hosted by EURAMET. The need to hold the meeting will be decided at the 37th meeting of the JCRB.