

REPORT ON THE THIRTEENTH MEETING OF THE JCRB*Held on 29 September, 2004, at the BIPM, Sèvres, France*

Note: Links to documents that have been approved for distribution to TC/WG Chairs are referred to the "Meeting document" section at

<http://www.bipm.org/cc/JCRB/MeetingDocuments/MeetingDocuments.jsp?cc=JCRB>

Links to other documents still under discussion are referred to the "Working document" section at

<http://www.bipm.org/cc/JCRB/Restricted/WorkingDocuments.jsp>

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0. Present

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Dr. William Anderson	SIM
Dr. Vladimir I Belotserkovskiy	COOMET
Dr. Seton Bennett	EUROMET
Prof. Matey Bily	COOMET
Dr. Stephen Carpenter	SIM
Dr. Ismael Castelazo	BIPM
Dr. Salvador Echeverría	SIM
Dr. Rohana Ediriweera	APMP
Mr. Luiz Carlos Gomes	SIM
Mr. Paul Hetherington	EUROMET
Dr. Hidetaka Imai	APMP
Dr. Keith Jones	APMP
Dr. Joao Jornada	SIM
Dr. Robert Kaarls	CIPM
Dr. Sergey Korostin	COOMET
Prof. Dr Michael Kühne	EUROMET
Mr. Lam Kong Hong	APMP
Dr. Jim McLaren	SIM
Dr. Mukayi Musarurwa	SADCMET
Ing. Quím. Luis Mussio	SIM
Dr. Héctor Nava Jaimes	SIM
Dr. Anatoly Pokhodun	COOMET
Dr. Attilio Sacconi	EUROMET
Dr. Takashi Usuda	APMP
Mr. Ngo Huy Van	APMP
Prof. Andrew Wallard	BIPM (Chairman)
Dr. Nikolai Zhagora	COOMET

A complete list of delegates, with their affiliations and contact data, as well as the names of observers, is given in [Document JCRB-13/01](#)

Note: Mr. Laurent Le Mée was present during point 6.4 of the agenda

1. Opening and welcome by the Chairman
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The Chairman welcomed the attendees and invited them to introduce themselves. He then asked for comments and approval of the meeting Agenda, which is included in the table of contents for this report, as well as in [Document JCRB-13/00](#).

2. Matters arising from the report of the 12 th meeting held at the BIPM

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The Chairman asked for comments on the 12th JCRB meeting Report and reviewed [Document JCRB-13/02](#), "Matters arising from the 12th Meeting". Action items that required further discussion had been already included in the agenda for this meeting. The 12th meeting Report was approved.

3. Report by the Chairman on progress since the 12 th meeting
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The Chairman reported that Indonesia, Jamaica and Viet Nam joined the CIPM MRA since the last JCRB meeting. At present, Costa Rica is the only Associate Member of the CGPM that has not yet signed the MRA.

The Chairman informed the JCRB that the BIPM quality system will be presented at the QS Workshop to be held the following day. Also, one of the issues to be raised at the Directors' meeting will be the use of the MRA statement and logo in calibration certificates, which is an important issue previously discussed at the JCRB in several occasions.

4. Report on the present status of the KCDB

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Dr. Ismael Castelazo presented the KCDB report ([Document JCRB-13/04](#)) submitted by Dr. Claudine Thomas, Head of the KCDB Office. He informed the JCRB that the number of CMCs was reduced by the introduction of uncertainty matrices. These matrices allow the presentation of services whose uncertainty varies with one or two parameters as a single CMC. Hence, the number of CMCs in Appendix C decreased since the last report even while several new CMC files were approved and published in the period.

At the request of APMP, approval dates were added to each new CMC, starting on 24 May 2004. This date will allow users to verify if a particular certificate was published in Appendix C at the time it was issued.

A new feature of the database is the availability of absolute URL addresses for Appendices B and C. These addresses may be copied and pasted in documents or e-mails, thus avoiding the need to repeat the search every time the same information is required. This feature also provides NMIs with a tool to communicate a full or a partial list of their CMCs to interested users who may not be familiar with the KCDB search engine.

Finally, it is now possible to download from the JCRB web page the final Excel files used to upload CMCs to Appendix C. These files include the final format modifications that the KCDB might have introduced and are the recommended starting point for any revision of published CMCs. The link is found in the Summary box of the JCRB CMC-review web page (www.bipm.org/JCRB) under "Get published CMCs".

The number of visits to the KCDB has remained relatively constant although several important private organizations have started visiting the page (see the report). The Chairman requested the JCRB members to inform the BIPM if they new who in particular within these companies might be visiting the KCDB.

4.1. Bilateral key comparison flowchart

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Dr. Castelazo tabled [Document JCRB-13/04\(1\)](#) and explained that this document is issued in response to frequent questions received at the BIPM on whether bilateral comparisons need to be approved and registered following a different process than that approved for key or supplementary comparisons.

The flowchart indicates that the participant in a previous comparison should be the pilot laboratory in a subsequent bilateral comparison. It was noted that this does not apply to key comparisons where there are only two participants. The document will be modified to include this case.

Mr Hetherington and Dr. Kühne pointed out that the artifact to be circulated in a subsequent comparison should be different from the one used in the previous comparison because the results were already known. Dr. Kaarls commented that, in that case, that would be a new comparison. Mr. Van asked if the standard used in the subsequent comparison was of the same level as that of the previous one, to which Prof. Wallard answered in the affirmative.

Dr Sacconi and Mr. Lam suggested that this document should be circulated to the TC/WG Chairs for comments before it is approved by the JCRB. The JCRB agreed.

Action 13/ 1 RMO Representatives to circulate Document JCRB-13/04(1) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

5. Reports by RMO representatives to the JCRB

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5.1. APMP

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Mr. Lam Kong Hong tabled [Document JCRB-13/05\(1\)](#). On the topic of quality system reviews, he mentioned that APMP accepts three pathways for NMIs to demonstrate compliance with the MRA requirements: a) Third party accreditation; b) ISO 9001 certification and attestation by technical peers and c) Attestation by a team consisting of quality system experts and technical peers, organised through APLAC or a recognised accreditation body.

Dr Kühne asked if accreditation information was accepted at face value. Mr. Lam responded that it is only used as supporting documentation but reviewed by the respective technical committee. The Chairman inquired if the technical committee needed to accept the technical assessors in the case of third party accreditation. Mr. Lam indicated that that was true for APMP. Dr. Kühne expressed his concern that accreditation and peer review for the CIPM MRA were being mixed in the same process. Mr. Lam responded that APMP uses accreditation as an efficient mechanism for NMIs to demonstrate compliance to ISO 17025 but with peers as technical assessors. He added that NMIs will be asked at the forthcoming APMP General Assembly to formally inform if all their CMCs are covered by a quality system. The Technical Committees will be responsible for reviewing this information.

Mr. Van reported on the work of the APMP Developing Economy Committee. They have a budget of 30 000 USD which is very limited for their needs but have been able to supplement it with the help of PTB and NMIJ. One additional difficulty in developing countries is the time it takes to go through the government channels to obtain approval to sign the MRA, which, in the case of Viet Nam, was one year.

Dr. Usuda commented on the reorganization of NMIJ and the relationship between the NMI and the new Research Institute of Instrumentation Frontier (RIIF). In response to questions from JCRB members, Dr. Usuda clarified that the RIIF will not be designated to maintain national standards or offer calibration or measurement services.

5.2. COOMET

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Dr. Vladimir Belotserkovskiy tabled document [JCRB-13/05\(2\)](#), which includes the COOMET report and four appendices. He reported that Dr. Jagora was re-elected as President of COOMET for a second three-year period.

The COOMET Representative informed that the Center of national measurement standards of the Uzbekistan Agency for standardization, metrology and certification is the newest member of COOMET.

Other COOMET members that are submitting their CMCs through this MRO include Ukraine, Belarus and Cuba. These NMIs, as well as Ukraine, have very few comparison results available to support their CMCs. For this reason, COOMET has started a Comparison Program, specifically aimed at supporting the CMCs from its members. Nine COOMET comparisons are currently registered in the KCDB, which is a significant improvement over the two that were registered last year.

The Chairman reminded the JCRB to please register their supplementary comparisons in Appendix B as soon as possible.

5.3. EUROMET

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Dr. Bennett tabled [Document JCRB-13/05\(3\)](#). EUROMET currently has 31 full members, 24 are signatories of the Metre Convention and 3 are Associates of the CGPM. Of these 31 members 28 are signatories of the CIPM MRA. New members of EUROMET Estonia, Lithuania, Malta and Rumania were accepted at the 18th General Assembly.

The EUROMET Representative summarised the progress in the QS Forum since the last meeting and informed the JCRB that the QS template has been updated and will be presented on agenda item 8.3.

5.4. SADC MET

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Dr. Musarurwa tabled [Document JCRB-13/05\(4\)](#). SADC MET currently has fifteen Full Members and four Associate Members. Only Egypt, Kenya and South Africa are signatories of the CIPM MRA. Only South Africa has CMCs published in Appendix C.

SADC MET has continued its activities in support of members with less developed capabilities. Among them, Dr. Musarurwa mentioned the implementation of a proficiency testing exercise for water testing with the help of PTB, the establishment of a Technical Committee aimed at improving measurement practices in small and medium enterprises and, finally, a project to establish a basic metrology infrastructure in Lesotho with the help of PTB.

5.5. SIM

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Ing. Luis Mussio tabled [Document JCRB-13/05\(5\)](#) and reviewed out the list of meetings and workshops that have been carried out at SIM in the past six months. He also mentioned the current list of SIM comparisons that is presented as an annex to the report.

The next SIM General Assembly will take place in Margarita Island, Venezuela, on 1-6 November 2004.

6. Status of CMC reviews

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6.1. Revised Rules of procedure for CMC entry into Appendix C

Dr. Castelazo tabled [Document JCRB-13/06\(1\)](#) "JCRB Rules of Procedure for CMC entry into Appendix C". He explained that this proposal incorporates the direct interaction of the TC/WG Chairs that is being proposed as a method to simplify the CMC review process. It also includes the possibility of posting CMC files directly for approval for the cases when they have been reviewed by a Consultative Committee Working Group on CMCs or when the TC/WG Chairs approve a small number of CMCs for a fast track process.

Mr. Hetherington suggested maintaining step f) in the previous document "NMI's revise their CMCs as necessary and re-submit to local RMO" which had been deleted in the draft proposal to keep the instructions at the RMO level. Dr. Kühne proposed distributing the document to the TC/WG Chairs for comments before approving it formally. The JCRB agreed to both proposals.

Action 13/ 2 The Executive Secretary to add step f) from Document JCRB-7/1 to Document 13/06(1) "JCRB Rules of Procedure for CMC entry into Appendix C" and to distribute it to JCRB Members.

Action 13/ 3 RMO Representatives to distribute the revised Document JCRB-13/06(1) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

6.2. Revised Criteria for acceptance of data for Appendix C

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Dr. Castelazo tabled Document [JCRB-13/06\(2\)](#) "Criteria for acceptance of data for Appendix C". He explained that this document is proposed as an update for the post-transition period that eliminates all references to that

period from the current criteria. He also presented some language modifications proposed by the CCRI WG on CMCs.

The JCRB was also of the opinion that this document should be distributed to the TC/WG Chairs for comments before being approved by the JCRB.

Action 13/ 4 RMO Representatives to distribute Document JCRB-13/06(2) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

6.3. RMO pending-actions page in the JCRB website

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This point was covered during agenda item 4, "Report on the present status of the KCDB".

As agreed by the JCRB during its 12th meeting, the status report that used to be sent by the Executive Secretary was replaced by a web page that gives this status on real time. JCRB attendees were shown the location of this page ("RMO pending actions" link in the "Summary" box of the CMC-review web page www.bipm.org/JCRB) and saw that it includes the dates (shown in red when overdue) when RMOs are required to perform the next action in the CMC review process.

6.4. New CMC review web page

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Dr. Castelazo and Mr. Laurent Le Mée demonstrated the new CMC-review web page that is being proposed to allow the TC/WG Chairs interact directly with this application. It was shown that all information posted in the web page would be sent automatically to all RMO Representatives, TC/WG Chairs in the same area and the Executive Secretary. Files posted will be sent by e-mail and maintained in the web page for future downloading. All actions on the web page will trigger automatic e-mails, including acknowledgements of receipt and votes on a final file. The web page will also manage automatically the deadlines.

An important feature of this proposal is that the Executive Secretary of the JCRB will always be able to modify any information posted in error or to reinstate the review status of an interested RMO in special circumstances.

Attendees suggested several improvements to the web page, including adding appropriate deadlines to the text of the messages, posting a file with a web page instruction manual. Dr. Seton proposed that the new web page be accepted on a trial basis for a period of 12 months, to which the JCRB expressed its consent. Dr. Castelazo informed the JCRB that after

incorporating the minor modifications proposed and verifying its performance the new web page will be put into operation on 1 November 2004.

Action 13/ 5 The Executive Secretary to develop a user's manual for the new web page and to release it for operation by 1 November 2004.

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| 7. Report from the Working Group to develop recommended criteria for the selection of peer-reviewers for NMIs |
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Mr. Lam reported that the working group had yet reached a consensus. The Chairman asked if there had been any particular problems, to which Dr. Kühne responded that EUROMET was concerned with defining the role of the reviewers. They had considered two possible situations which may be similar but not exactly the same. In the first case, the peer review would be requested by the NMI. In the second it would be requested by the Technical Committee when they had a concern during the CMC review. Dr. Kühne stated that he and Mr. Lam planned to present to the JCRB a proposal by the next meeting which will incorporate the various situations of peer reviews and will use ISO 17011 as a template.

Prof. Wallard asked if this proposal would include special calibrations with very small uncertainties. Dr. Kühne replied that that would be the case when the TC had concerns.

Action 13/ 6 Mr. Lam and Dr. Kühne to present to the JCRB a proposal on the recommended criteria for the selection of peer-reviewers by the next meeting

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| 8. RMO update on the status of Quality System implementations |
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8.1. APMP

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Dr. Usuda tabled Document JCRB-13/08(1), which provides details on the APMP requirements for fulfilling point 7.3 of the CIPM MRA.

Dr. Castelazo asked Dr. Usuda to clarify the APMP requirement that, when NMIs choose to be accredited, the uncertainties accepted in the accreditation scope (Best Measurement Capabilities or BMCs) should be equal or smaller than the uncertainties declared in the Calibration and Measurement Capabilities. Prof. Wallard and Dr. Kaarls expressed their concern that this requirement implies that accreditors may approve smaller uncertainties for the same CMCs than those approved by the

inter-regional review. Mr. Jones explained that this situation might be true only for a few months, while the CMCs undergo an inter-regional review. At APMP they use the accreditation evidence, if it exists, to support the CMCs during the intra-regional review.

Ing. Mussio expressed his opinion that this procedure will confuse accreditors. Mr. Lam pointed out that it was possible for an NMI to be accredited for smaller uncertainties than the CMCs, but reiterated Mr Jones' comment that this was only an interim situation. Dr. Kühne indicated that the Metre Convention organisations should establish the uncertainties required to assess traceability and that accreditors should not approve smaller uncertainties.

Prof. Wallard concluded the point by requesting APMP to reflect on this policy.

At a later point during the meeting, Dr. Usuda presented Document JCRB-10/8(1c) "JCRB Guidelines for the monitoring and reporting of the operation of Quality Systems by RMOs". Point 2.2 in this document states that "the claimed CMC uncertainty must not be smaller than the uncertainties claimed in the scope of the accreditation". Dr. Kaarls commented that this document should be revised.

8.2. COOMET

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Prof. Bily tabled Document JCRB-13/08(2). He indicated that in COOMET the QS Forum is in charge of reviewing QS implementations for CIPM MRA purposes. Prof. Bily commented that COOMET is in the process of adapting ISO/IEC 17025 for the use of NMIs. They use ISO 9001 certification as support but that this is not enough to have confidence in the technical competence of calibration laboratories.

Prof. Wallard asked if COOMET requires ISO 9001 certification. Prof. Bily replied that it is not required but only used for support.

8.3. EUROMET

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Dr. Sacconi tabled Document JCRB-13/08(3). He indicated that EUROMET has made some additions and corrections to the tables presented at the 12th meeting of the JCRB and this document is presented as an update of that report.

Among the recommendations issued by the EUROMET QS Forum, Dr. Sacconi mentioned the need to develop a procedure to monitor the CMC review process. Dr. Bennett indicated that there will be a recommendation for the next General Assembly to convert the QS Forum into a full Technical Committee.

8.4. SADC MET

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Dr. Musarurwa discussed the second half of [Document JCRB-13/05\(4\)](#). He indicated that in SADC MET only Kenya and South Africa have implemented ISO 17025 quality systems.

South Africa is the only country in SADC MET with CMCs published in Appendix C, has been accredited by SANAS, the South African national accreditation body, and has been peer-reviewed by SADC MET using assessors from NMIs in SADC MET, SIM, APMP and EUROMET.

8.5. SIM

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Dr. Anderson made an overview of activities of the SIM QS Task Force. This group had held several organizational meetings in the past but the first working meeting took place in Queretaro, Mexico, in May 2004. At this meeting three NMIs presented their quality systems; two were approved unconditionally and one was requested to clarify the role of their administration in the quality system. The Task Force will meet again in Venezuela in November and has plans for another meeting in February 2005. In these meetings, the QS Task Force expects to complete the review and approval of the QS of all six SIM NMIs with CMCs in Appendix C. It is foreseen that very few CMCs will have to be deleted at the end of this process for not having met the MRA QS requirements.

9. Additional CIPM MRA documents

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9.1. CIPM MRA: Resolving inconsistencies

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Prof. Wallard tabled [Document JCRB-13/09\(1\)](#). This paper presents the CIPM position on several sections of the text of the CIPM MRA which needed interpretation, including the identification of "signatory" NMIs, participation of Associate Members and Designated Institutes in CC and RMO comparisons, participation in the MRA of international and intergovernmental bodies, reports of activities from participating NMIs and the use of ISO/IEC 17025 and Guide 34.

Dr. Kühne suggested that any reference to normative standards should include the date in its designation. Prof. Wallard agreed.

Action 13/ 7 The Chairman to revise Document JCRB-13/09(1) according to the discussion in the meeting and send it for comments to the members of the JCRB

9.2. NMIs and other designated institutes

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Prof. Wallard tabled [Document JCRB-13/09\(2\)rev.](#)

Dr. Sacconi asked that an alternative to the term "leading institute" be used because in some countries the various designated institutes have equal standing. The JCRB Chairman indicated that the CIPM will look for a better term.

Dr. Kaarls pointed out that the word "completely" in the first bullet of point 2.6 should be eliminated and the two sentences in the last bullet should be in separate paragraphs. Commenting on the last bullet of the same point:

"Designating authorities should be aware that by designating laboratories in the private sector, this may have a direct influence on the market position of other commercial companies in their own or even in other countries. The designating authority is responsible for ensuring that the designation does not confer unfair market advantage to the designated institute in its normal commercial activities carried out in competition with other companies world-wide"

he recognized that it is very difficult to ensure that no unfair market advantage is given to a designated institute. He understands that the CIPM has no power to enforce this rule but he pointed out that it is stated as a strong warning. Dr. Bennett commented that the second sentence uses the word "responsible" and that is interpreted as more than a warning. Mr. Hetherington added that the second sentence may not be needed. Dr. Kaarls responded that the CIPM had requested it but that the opinion of the JCRB will be taken under advice.

On point 2.7, Dr. Imai commented that, given the large number of designated institutes, it was now more important that the designation be made by letter, indicating the dates and fields of said designation and that the BIPM keeps a current file with this documentation.

Action 13/ 8 The Chairman to revise Document JCRB-13/09(2) according to the discussion in the meeting and send it for comments to the members of the JCRB

9.3. Subcontracting of measurements under the CIPM MRA

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Dr. Kaarls tabled [Document JCRB-13/09\(3\).](#)

Dr. Sacconi indicated that these recommendations are appropriate when the subcontracted service forms part of a wider service being provided by

the NMI. However, when it is a separate service the "subcontracted" organization should be designated. Dr. Kaarls and Prof. Wallard agreed.

Dr. Imai noted that the document makes reference to four different kinds of participants: lead, designated, subcontracting and collaborating institute. Dr. Kaarls responded that the term used in ISO/IEC 17025 is "subcontractor" but the one employed in ISO Guide 34 is "collaborator". It was necessary to use both terms in the document but they refer to organisations that play a similar role. In Dr. Kaarls' opinion, the difference is not important as long as the subcontractor or collaborator is competent. Dr. Imai expressed his opinion that collaborators in general are less competent than subcontractors and are normally not inclined to co-sign a certificate. Dr. Kaarls responded that collaborators often are competent if their results are used to confirm the values obtained by the NMI and that they are only allowed to co-sign if they normally issue certificates themselves.

Dr. Imai asked if designated institutes are allowed to be subcontractors for other functions. Dr. Kaarls and Prof. Wallard responded that this was allowed.

Dr. Kühne commented that allowing some CMCs to be completely subcontracted would reduce the number of designated institutes and simplify the process. The NMI would still be completely responsible for these CMCs. As an example, he mentioned that PTB could expand its capabilities in the area of length by using a unique comparator that is available in another organisation. Dr. Jornada asked who would sign the certificate in such a case, to which Dr. Kühne responded that it would be PTB. Dr. McLaren asked which organisation would participate in the key comparisons. Dr. Kühne responded that it would be the NMI but that it would be very important to disclose that the instrument resides in a separate organisation to maintain transparency.

Prof. Wallard commented that it would not be convenient to subcontract services in an area in which the NMI does not have capabilities. Dr. Zhagora added that for the most part NMIs should restrict themselves to their own capabilities and only subcontract a small part of the work. Mr. Hetherington suggested that a definition of "subcontracting" could be added to the beginning of the document where it is specified that the subcontracting laboratory must have some capabilities in the area. Dr. Carpenter gave the example of a laboratory that uses a reactor in another facility to irradiate a sample and then performs its own measurements in house. In his opinion, this should not be considered "subcontracting". Dr. Kühne agreed and added that the term "subcontracting" only should be applied to actions where significant tasks are performed on behalf of the laboratory.

Referring to the field of chemistry, Dr. Kaarls noted that collaborating organisations do perform some measurements. Dr. McLaren agreed and added that in the case of reference materials with a complex matrix this is the rule more than the exception. He also commented that when a CRM is

produced for the first time a competent laboratory like a university is asked to confirm the results by performing measurements with an alternative method. NRC would not have any problem being responsible for the competence of such a lab but does not agree that they should be required to have a fully-compliant ISO/IEC 17025 quality system because they are not interested in being designated. Dr. Kaarls responded that they would only be required to have a quality system for the part of their activities involved in the collaboration.

Dr. Sacconi indicated that he was not convinced of the benefits of allowing cases like the one illustrated in the third example in the document (length comparator). Dr. Kühne commented that allowing this possibility would help avoid the need to designate commercial companies. Dr. Jornada agreed with the position expressed by Dr. Kühne. Some organisations, like universities, are not committed enough to act as a designated institute. Their capabilities could be accepted if the NMI is responsible but at some point it would be much simpler to cancel a CMC than a designation.

Action 13/ 9 Dr. Kaarls to revise Document JCRB-13/09(3) according to the discussion in the meeting and send it for comments to the members of the JCRB

9.4. Guidelines for the acceptance of CRMs in Appendix C of the CIPM MRA

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Dr. Kaarls tabled [Document JCRB-13/09\(4\)](#). He indicated that comments were received from SIM to improve the text and they will be taken into consideration. No other comments were expressed on this document.

10. Proposals for the CIPM MRA logo

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Prof. Wallard reminded the JCRB that a statement on the CIPM MRA to be included in calibration and measurement certificates had been approved in English and in French. However, some NMIs have adapted this text into other languages and expressed his concern about how users from other countries will be able to understand it.

The Chairman referred to action 12/4 from the 12th meeting of the JCRB, which requests RMO representatives to present proposals on the design and possible uses of the logo for the CIPM MRA. No responses were received by the BIPM but Prof. Wallard presented several proposals produced by BIPM staff for consideration by the JCRB. He reiterated his request that RMOs send their own proposals and to continue promoting the use of the MRA statement in the certificates issued by their member NMIs.

Action 13/ 10 RMO Representatives to send proposals for the design and use of the logo for the CIPM MRA

11. Progress on JCDCMAS

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The Chairman informed the JCRB that the JCDCMAS decided that the Secretariat will be provided by the organisation hosting each annual meeting. This year it is being held by the IEC. The next meeting will be held at the OIML who will then become the JCDCMAS Secretary for the following year.

The Joint Committee has seen a slow but steady progress. It will be present at the 12th International Legal Metrology Conference, to be held in Berlin on 25-29 October 2004. Also, after many detailed discussions by all members, a background document describing the integrated system of metrology, accreditation and standards was developed and is available on the web page (see

http://www.bipm.org/cc/JCDCMAS/Allowed/Background_documents/B_background_paper_final.pdf). JCRB members are invited to provide the BIPM with comments on this document.

Action 13/ 11 RMO Representatives to send comments to the JCRB Chairman on the JCDCMAS Background document

12. BIPM/ILAC Report on joint initiatives

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The Chairman made a presentation on the joint BIPM/ILAC activities. He remarked that the relations between these two organisations are becoming increasingly important because they share a common mission. The BIPM has clarified for ILAC the quality system review process in the CIPM MRA and they have expressed their confidence. Both organisations have taken very similar positions in the recent discussions with ISO/CASCO with respect to the latest drafts of the 17000 series of standards. The BIPM has expressed its commitment to its approach on traceability and uncertainty and ILAC has requested guidance in answering accreditors' questions on issues like the earlier discussion on BMCs and CMCs.

Prof. Wallard indicated that ILAC and the BIPM plan to issue a common statement on what they believe is the proper relationship between NABs and NMIs. This opinion has been expressed at various conferences and presented to ISO but a formal statement will probably be issued next year. The NMI Directors will have a chance to express their view on this issue at the upcoming meeting.

Dr. Imai asked to clarify the discussions between ILAC and BIPM on ISO 17011. Prof. Wallard and Dr. Kaarls explained that, after a long discussion, CASCO agreed that calibration is not part of conformity assessment but they would like the VIM to include a definition of this last term. The standard was published in the previous week

Dr. Sacconi pointed out that EUROMET is preparing a position paper on the relationship between NABs and NMIs stating that both operations can be under the same roof. Dr. Kaarls commented that in ISO 17011 this is allowed as long as there is no risk of conflict following a risk analysis approach. He indicated that ISO DIS 17021 for certification systems follows a similar approach which has been approved. Dr. Kühne requested that there should be a declaration on the relationship between NABs and NMIs stating that they can both be under the same roof. He recalled that such a system has worked in Germany for over one hundred year without any problem but that some private companies see this as a competition.

Prof. Wallard responded that he will present this issue to the Directors in order to obtain their feedback and take it to the community at large.

13. Progress on JCTLM

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Dr. Kaarls pointed out that there has been an enormous amount of interest in the development of a list of higher order CRMs. Several groups have been defined and they sorted the CRMs currently available in the market in three groups: alfa (traceable to the SI), beta (with pending questions on traceability) and gamma (not traceable to the SI). The list of alfa CRMs has been published in the web pages of the BIPM and the IFCC along with their methods. He also commented that there is a hierarchy of clinical laboratories that should be accredited according to the relevant standard. Prof. Wallard added that the EC has asked to use this database and that they are looking at the appropriate mechanisms for doing so.

Dr. Kaarls indicated that the BIPM is taking legal advice on its possible liability concerning the publication of this list of higher-order CRMs.

In relation to the food area, Dr. Kaarls informed the JCRB that there had been meetings with CODEX Alimentarius and other food-related bodies last year and a few weeks ago. There is a very high focus on traceability and uncertainty in these groups. The CCQM WGs have done a lot of work in this area but much more is still required. He does not believe a joint committee, parallel to the JCTLM, will be created in the food area but the CIPM organisations will monitor closely the work in this field.

Dr. Sacconi asked if it would be possible to organise a meeting where the NMIs that have experience in new areas like food or biotechnology could share their experiences with other NMIs in order to increase their awareness on the subject. Prof. Wallard commented that this would be a

good topic for a future meeting of Directors. Dr. Kaarls commented that organisations in the wine industry also have some activities that could be interesting for a presentation of in this forum.

14. Progress on JCGM

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The Chairman informed the group that a revised draft of the third edition of the VIM and a supplement to the GUM (Numerical methods for the propagation of distributions) have been sent out for consultation with the NMI community as well as to the communities of the joint committee members. He asked the JCRB members to remind their members to send their comments.

Dr. Sacconi suggested that it would be useful to have two rounds of comments so that NMIs could improve their contributions after looking at the first-round responses. Prof. Wallard expressed his opinion that such a system would take a very long time.

15. Report on the MRA presentation at the WTO/TBT

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The Chairman informed the JCRB that he was invited to make a presentation on the CIPM MRA at a meeting of the Technical Barriers to Trade Committee of the World Trade Organisation. According to the draft minutes he received, the organisation recognises the potential contributions of the Metre Convention. Apparently, the attitude has changed with the appointment of a new Committee Chairman.

16. Other JCRB business

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Prof. Wallard commented that a meeting was held at the NPL to discuss the possibility of forming a working group on materials metrology. A proposal on this topic will be presented to the CIPM the following week.

Dr. Castelazo commented on the reports presented by the CCAUV and CCRI RMO Working Groups to the JCRB. Both groups report good progress in their CMC reviews and have noted the deadlines for implementation of quality systems established by the JCRB. They have requested the JCRB to post their guidance documents regarding completion of the CMC Excel files in the open section of the JCRB web page. The TC Chairs expressed their appreciation for the new mechanism for posting CMCs, for their review and for their approval.

Dr. Sacconi asked how the JCRB can assure that the CMCs are indeed supported by a quality system. Dr. Castelazo replied that the JCRB has given this responsibility to the RMOs.

16.1. Topics for the next JCRB

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Mr. Lam suggested that an issue for the JCRB is a possible statement on subcontractors. Prof. Wallard added that the convenience of holding two meetings a year will continue to be discussed.

17. Date and place of next meeting

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The 14th meeting of the JCRB will take place in Minsk, Belarus, on 11-12 May 2005.

Prof. Zhagora extended an invitation to attend this meeting at his home organization in Minsk. He informed the JCRB that a Workshop on the "Role of the CIPM MRA in international cooperation in the field of metrology and in supporting trade and economical interrelations" will be held on 11 May. The actual JCRB meeting will take place on the 12th.

18. Close of meeting

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The Chairman closed the meeting and thanked all RMO delegations for their usual cooperation.

19. Summary of action items

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Action 13/ 1 RMO Representatives to circulate Document JCRB-13/04(1) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

Action 13/ 2 The Executive Secretary to add step f) from Document JCRB-7/1 to Document 13/06(1) "JCRB Rules of Procedure for CMC entry into Appendix C" and to distribute it to JCRB Members.

Action 13/ 3 RMO Representatives to distribute the revised Document JCRB-13/06(1) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

Action 13/ 4 RMO Representatives to distribute Document JCRB-13/06(2) to their TC/WG Chairs for comments and forward them to the JCRB Executive Secretary by 3 December 2004.

Action 13/ 5 The Executive Secretary to develop a user's manual for the new web page and to release it for operation by 1 November 2004.

- Action 13/ 6 Mr. Lam and Dr. Kühne to present to the JCRB a proposal on the recommended criteria for the selection of peer-reviewers by the next meeting
- Action 13/ 7 The Chairman to revise Document JCRB-13/09(1) according to the discussion in the meeting and send it for comments to the members of the JCRB
- Action 13/ 8 The Chairman to revise Document JCRB-13/09(2) according to the discussion in the meeting and send it for comments to the members of the JCRB
- Action 13/ 9 Dr. Kaarls to revise Document JCRB-13/09(3) according to the discussion in the meeting and send it for comments to the members of the JCRB
- Action 13/ 10 RMO Representatives to send proposals for the design and use of the logo for the CIPM MRA
- Action 13/ 11 RMO Representatives to send comments to the JCRB Chairman on the JCDCMAS Background document