Report of the 16th meeting of the JCTLM Executive Committee 4 June 2016, Shangri-La-Hotel, Chengdu, China

List of participants:

Dr G. Myers (JCTLM Chairman, IFCC) Dr G. Beastall (IFCC, JCTLM WG-TEP Chair) Prof L. Siekmann (IFCC, JCTLM DB WG vice-chair) Dr R. I. Wielgosz (JCTLM Executive Secretary, BIPM) Dr H. Schimmel (JCTLM DB WG vice-chair) Dr S. Maniguet (JCTLM Secretariat, BIPM) Dr K. Phinney (JCTLM DB WG vice-chair)

Apologies received: Dr. M. Milton (BIPM) Dr. W.E. May (CIPM) Dr J. McLaren (CIPM) Ms R. Robertson (ILAC) Dr G. Jones (ILAC)

1. Approval of the agenda [JCTLM-EXEC/16-01]

Prof Siekmann asked for an agenda point to be added to allow for discussion on the JCTLM requirements of EQAS providers for calibration (reference) laboratories. Dr Myers agreed that this could be dealt under agenda point 15.

2. Report of 15th JCTLM Executive Committee Meeting

There were no comments on the report of the 15th Executive Committee meeting, which had been finalized in February 2016, and published on the <u>BIPM JCTLM website</u>.

2.1 Review of action points arising from the 15th meeting [JCTLM-EXEC/16-02]

Dr Wielgosz summarized the action items that were still outstanding:

Action (A/15-27): Dr Beastall to draft a proposal for a JCTLM Educational Workshop at the IFCC meeting in Athens in June 2017

Dr Beastall informed the Committee that the proposal for a JCTLM Educational Workshop at the IFCC meeting in Athens in June 2017 had failed due to financial constraints, and pointed out to the members of the Committee that the IFCC WorldLab in Durban in 2017 which would be focusing on training, could be the appropriate venue for organizing a JCTLM Educational Workshop. He agreed to approach the IFCC Organizing Committee for proposing an informative symposium on traceability at the Athens EuroMedLab Conference, and JCTLM symposium for the IFCC WorldLab Durban congress in October 2017. Dr Beastall confirmed on 20/06 that a two hours symposium for JCTLM was programmed at the EuroMedLab meeting in Athens on Wednesday 14 June 2017.

Action (A/15-30): Dr Beastall and Dr Jones to draft a working document for discussion at the ICSH General Assembly in October 2016.

Dr Beastall reported that there was no working document yet drafted, and that he will follow up on this action by first contacting the ICSH to confirm his participation at their General Assembly in October 2016. The Committee supported the initiative for holding a meeting between the representatives of the JCTLM and ICSH Executive Board to present the activity of JCTLM and to understand traceability in the area of haematology and their needs for reference standards. It was agreed that the development of a working document would follow on from these discussions.

Dr Beastall confirmed on 20/06 a JCTLM presentation at the ICSH GA on Wednesday 26/10/2016.

Action (A/15-35): Secretariat to contact the participants in the 2015 Members' and Stakeholders' meeting to invite them to send their suggestions for the next meeting in 2017

Dr Wielgosz reported that a request for suggestions of topics for discussion at the 2017 Members' and Stakeholders' meeting was sent to all participants, and that no response was received yet. The Executive requested that a second circular should be sent to the participants, and that a draft of the meeting programme be sent to the members of the Committee for comment and approval at the next Executive meeting.

Action (A/15-44): Prof Siekmann to contact the CCQM OAWG Chair / PTB to see if they would be interested in coordinating a CCQM studies with a RELA samples.

Prof Siekmann reported that the chair of the CCQM Organic Analysis working group became a member of the IFCC-CTLM WG in January. He believed that this new membership would ensure appropriate working relationship between the JCTLM and the NMIs concerning the IFCC RELA activity.

These remaining actions listed below were not completed yet, and would be followed up at the next Executive meeting.

Action (A/15-32) : Secretariat to draft a template (pro forma) for the written activity reports to be submitted on a biennial basis by the JCTLM member organizations Action (A/15-33) : Dr Myers to draft responses to the questions that CNAS (China) submitted in its activity report for comment by the EC

Action (A/15-36): Secretariat to contact the leaders of the review teams to request them to present an "environment scan" in regard to the standardization activity covering their team's scope of activity, at the next Database WG meeting.

Action (A/15-40): Dr Wielgosz in consultation with Leader of the Coagulation factor review team to identify the appropriate contact person within the ISTH organization who could provide guidance on the ISTH involvement in the Coagulation factor review team activity

Action (A/15-45): Dr Jones to draft a paper which would address gap and the needed development of reference system components to establish traceability for patients' measurement results.

Action (A/15-46): WG-TEP to develop a presentation for introducing JCTLM which would be available for speakers attending meetings organized under JCTLM auspices, and a template for JCTLM presentations which would include the JCTLM Logo and tag line

New Actions

Action (A/16-01): Secretariat to send a second circular to the participants of the 2015 Members' and Stakeholders' Meeting in order to request their suggestions for the 2017 Meeting for inclusion in the draft programme for comment and approval at the next Executive Meeting.

3. Signature of JCTLM Declaration of Cooperation Document [JCTLM-EXEC/16-02]

Dr Wielgosz reported that the revised text of the Declaration of Cooperation (DoC) between the BIPM, IFCC and ILAC [JCTLM-EXEC/16-02] had been signed in April 2016 by the three Sponsoring Organizations, and had been published on the <u>JCTLM website</u>.

4. Progress with identifying potential JCTLM Executive Committee Organizations

The members of the Committee noted the participation of representatives of the World Health Organization (WHO) at the NIM-BIPM Conference on Protein and Peptide Therapeutics and Diagnostics (Chengdu, China) which was held under the auspices of the JCTLM during the week. In addition, Dr Wielgosz reported that the NIBSC was a Designated Institute under the CIPM Mutual Recognition Arrangement, and a meeting between the new Director of the NIBSC and the BIPM was being arranged before the end of the year. The Committee recognized the need for further discussion with WHO/NIBSC to identify available reference standards in the field of Genetics and Infectious diseases, and to understand key standardization issues in the area of blood and clinical virology already addressed by the SoGAT group being led by the NIBSC. In the discussion that followed, it was agreed that invite representatives of the WHO to and additional meeting in December to strengthen the working relationship between both organizations. The Committee recognized the need to collaborate with the WHO in producing a common message on high level references.

The liaison with the International Council for Standardization in Haematology (ICSH) was discussed under agenda point 2.1, and will be followed on by Dr Beastall.

5. Progress with updating JCTLM quality manual [JCTLM-EXEC/16-06, -07]

Dr Maniguet presented the documents JCTLM-EXEC16-06, and -07, that included the draft versions of the revised procedure documents of the JCTLM Executive Committee and the newly formed Database working group, respectively. These two sets of documents were revised to include the modifications approved at the previous Executive meeting concerning the nomination and review process, and the management of JCTLM entities involved in this process. The Executive set of procedures describe the new organizational structure described in the Declaration of Cooperation published in April, the process for the appointment of the JCTLM entities involved in the nomination and review process, as well as the process for management of actions and approval of working groups' recommendations by the Executive Committee. The Database WG set of procedures describe the WG policies for soliciting and reviewing the nominations for materials, methods, and services with the participation of RELA Advisor.

The current versions of the JCTLM procedures describe processes for comparing certified values of the same measurand in multiple reference materials, and for demonstrating the extent-of-equivalence of multiple reference measurement methods for the same nominal measurand. The question was raised on whether or not these processes should remain as part of the JCTLM activity. Dr Schimmel agreed to review these two procedures and to advise the Committee if these should remain as part the JCTLM Database WG Quality Manual.

The drafting of the JCTLM Quality documents would be completed with the revision of the procedures describing the Database WG management process, and those describing the processes by which the JCTLM Secretariat manages the operations of the JCTLM.

It was agreed during the meeting that the Quality System Implementation team would finalize the revision of JCTLM Database WG procedures and that the members of the Executive would sent their comments of the two sets of procedures by end of September 2016.

Action (A/16-02): Executive Members to send their comments on the draft of the revised documents for the Executive and Database WG procedures by the end of September 2016.

6. JCTLM Governance

6.1 Representation on the Executive

Dr Wielgosz reminded the Committee that the term of the JCTLM President and the JCTLM Secretariat host organization would come to an end at the next Executive meeting in December 2016, and that the procedure to select the President and Secretariat host organization of the Committee would be followed.

Dr Myers informed the Committee that he would be willing to renew his mandate for an additional two years.

Action (A/16-03): JCTLM Secretariat to contact IFCC, BIPM and ILAC for nominations for JCTLM President, and Secretariat host organization

6.2 JCTLM WG Chairs

Dr Wielgosz reminded the Committee that the term of the JCTLM WG Chairs would come to an end at the next Executive meeting in December 2016.

Dr Beastall informed the Committee that his mandate as the IFCC past-president would come to an end at the same time and questioned whether the TEP-WG Chairmanship position would require an affiliation with a JCTLM Executive Committee Organization. The Committee confirmed that the WG Chair positions were opened to the representatives of the organizations outside of the JCTLM Founding Organizations, and requested that this should be clarified in the JCTLM Executive Procedure.

Dr Phinney, Dr Schimmel and Prof Siekmann confirmed their willingness to continue to chair the WG Analyte Group 3, 2 and 1, respectively.

6.3 JCTLM membership

Dr Myers gave an update on his recent meeting with the U.S. Food and Drug Administration (FDA) concerning the JCTLM and its database. He said that he met on April 20 with Dr. Courtney Lias, Director, Division of Chemistry and Toxicology Devices (DCTD) and members of her staff who welcomed his presentation on the database. He asked Dr. Lias about the FDA joining the JCTLM as a Stakeholder Member which she indicated she would check to see if that would be possible. He proposed to develop a leaflet for introducing JCTLM to potential JCTLM member organizations. The Committee agreed with this proposal.

Dr Myers agreed that he would also make contact with the representative of Adavamedx (formerly Advamed) being listed as a member organization of the JCTLM, with the view of re-establishing their link to the JCTLM, as well as with representative of the Chinese JCTLM and the AACC Industry Division.

In addition, Dr Beastall mentioned that the members of the consortia Infect-met and BioSITrace could be interesting in JCTLM activity and in becoming stakeholder members of the JCTLM.

Action (A/16-04): Secretariat to develop a leaflet for introducing JCTLM and distribution to potential JCTLM Member Organizations

6.4 Funding of the JCTLM Secretariat

As reported at the previous meeting the running cost for 2016 was estimated as the same as for 2015, corrected for inflation. It was agreed that BIPM and IFCC would again share the JCTLM Secretariat costs on a 50:50 basis for 2016.

The Committee recognized the need to investigate the possibility to find additional sources of incomes and possible donations from JCTLM Member Organizations or even educational grants from JCTLM stakeholders. This latter route was already used to fund the TEP-WG project for developing the traceability website.

6.5 JCTLM Database

Dr Maniguet presented the status of the database as of June 2016 as well as the updates of the data content and of the web system that have been carried out from December 2015 to June 2016.

In February 2016, 13 entries for certified reference materials, 4 reference measurement methods, and 18 reference measurement services were published in the JCTLM Database following the approval by the Executive of nominations reviewed during WG1 cycle 12 and WG2 cycle 10. In addition, there were nine certified reference materials that have been delisted from the JCTLM Database and placed in the PDF file for no longer available materials. The delisting of these materials raised the issue of the long term sustainability and the replacement of the materials used in established reference measurement systems, and whether or not additional information such as the deadline for the release of a new lot of the material should be made available to the database user. The Committee recalled that because usage rates for listed materials could not be predicted accurately, producers must be contacted by anyone intending to use the listed material to determine availability of the current materials and projected times for production of new lots. It was the responsibility of the producer to notify the JCTLM Secretariat if a material ceased to be available.

However, the Committee agreed that the nomination and review process should be adapted in the case of the replacement of the batch of a material, being listed or having been listed. This will be dealt with under agenda point 9.2.

In addition, there were five reference measurement services delisted in March 2016 following the notification from the Belgium laboratory which ceased the delivery of its reference measurement services in the Metabolites & Substrates area.

The current status of the database as of June 2016 was as follows:

- 298 certified reference materials (CRMs) amongst which 33 are in List II (i.e. Reference Materials value assigned using an internationally agreed protocol), and 3 are in List III (i.e. Reference Materials for nominal properties),

- 180 reference measurement methods covering 80 analytes, and

- 146 reference measurement services covering 39 analytes. These services were delivered by 15 reference laboratories accredited for compliance against ISO 15195 and IEC/ISO 17025 as Calibration laboratories, and by two National Metrology Institutes (NMIs).

The database software was upgraded to platform Windows 2012/ SQL Server 2012 to ensure compatibility with BIPM environment hosting the application. Other technical developments

were being investigated following the users' request to provide more guidance, and to facilitate the download of information from the database. Quotations for technical and graphic developments of the Analyte keyword Search Form would be requested.

Dr Schimmel pointed out that there were certified reference materials listed in the JCTLM Database for which the certificate of analysis and the certification report were not always available to the users in a full English version. He added that as part of the JCTLM review process some producers were providing only partial English translation of these documents. He proposed that the JCTLM should require a full English version of the certificate and certification report be available when a producer submits materials for inclusion in the JCTLM Database. He argued that to be considered as an internationally recognized reference material, the documentation would need to be available in English. Dr Wielgosz expressed his concern about this additional requirement which would affect the issuing of certificates at a national level, noting that the CIPM MRA worked on mutual recognition, and there were no requirements within this arrangement or the ISO harmonized standards to produce the documentation in English. Before commenting further on the proposal, he wished to consult the CCQM and in particular the NMIs providing these Reference Materials to canvas opinion on the proposed change to the JCTLM acceptance criteria for CRMs.

Action (A/16-05): Dr Wielgosz to consult the CCQM and in particular the NMIs providing these Reference Materials to canvas opinion on the requirement for the CRM certificate and certification report to be available in English as a acceptance criteria for a higher order CRM.

7. Report from the JCTLM WG on Traceability Education and Promotion [JCTLM-EXEC/16-04]

Dr Beastall presented the document JCTLM EXEC/16-04 which included the outcomes of the second meeting of the TEP-WG held on 5^{th} April 2016 by Webex teleconference.

He gave an update on the activity of the sub-group on Education and the sub-group on Meetings as of 04 June 2016.

The sub-group on Education identified six work streams to describe traceability and its role in laboratory medicine, as follows:

Work Stream 1: Definitions,

Work Stream 2: Mini-presentations to explain scientific concepts,

Work Stream 3: Why traceability matters to manufacturers?

Work Stream 4: Why traceability matters to patients and the public?

Work Stream 5: Global significance of traceability,

Work Stream 6: Tools to promote traceability.

Dr Beastall added that with respect to work stream 1, JCTLM TEP-WG and the newly formed ACB group on Traceability would collaborate as both groups aim to produce "reasonable" definitions in regard to traceability.

The sub-group on Meetings completed the following action items:

-A written report on 2015 Members and Stakeholders meeting was included in 2016 Newsletter.

-An evaluation of 2015 Members and Stakeholders meeting was completed by the Secretariat. It showed that the participants' feedback was positive in regard to the scientific programme, meeting arrangement and venue, and that there was room for improvement on publicizing the

meeting. A short document was produced to provide feedback on the results of the 2015 Members and Stakeholders meeting questionnaire to all participants.

-The JCTLM Auspices document was approved for use by JCTLM Executive, and posted on the BIPM JCTLM website, and the next step will be to promote it.

The next immediate working item for the sub-group on Meetings would be to draft a proposal of the programme for the Members' and Stakeholders' meeting in 2017.

G. Beastall updated the Committee on the progress with making publicity and promotion items, and reported on the following points:

-D. Armbruster and G. Jones produced a generic abstract for a JCTLM Poster which was available for TEP-WG. This was initially drafted for the 2016 AACC conference.

-The Secretariat edited the third issue of the JCTLM Database Newsletter which was distributed by email in February 2016 and available from the JCTLM website. G. Beastall said that he will identify an editor of the future newsletter next year.

-There were two quotations obtained from the BIPM and the IFCC for developing the traceability website. From these it was decided that the IFCC Office will be hosting, developing and maintaining the website. G. Beastall pointed out to the Committee that there was currently no finance to fund the development at the IFCC, and that he already applied for two educational grants from external companies. He succeeded in getting 25% of the cost of the quotation and will follow up this in contacting JCTLM Stakeholders.

8. Review of the JCTLM Website

Dr Myers reviewed the JCTLM website and suggested to implement the new Database WG structure in merging information from both previous WG1 (materials and methods) and WG2 (services) webpages, to publish the JCTLM Members in appropriate categories: National and Regional Organization, and Stakeholders Members, and finally to provide a link to the JCTLM structure diagram. The Committee agreed with the proposed updates.

Action (A/16-06): Secretariat to update the BIPM JCTLM website to include the JCTLM structure diagram, and Database WG structure and JCTLM member categories.

9. JCTLM Database Working Group

9.1 Nominations for Cycle 13 RM and RMP and Cycle 11 RMS

There were 57 nominations submitted by 30 May 2016 for JCTLM review for cycle 13 for materials and methods, and cycle 11 for services.

These were submitted in the following analyte groups:

Drugs: there was one nomination for a reference measurement method, and two nominations for reference measurement services;

Electrolytes: there was one nomination for a reference measurement method, and two nominations for reference measurement services;

Enzymes: there were 23 nominations for reference measurement services;

Metabolites and Substrates: there was one nomination for a certified reference material, two nominations for reference measurement methods, and seven nominations for reference measurement services;

Non-Peptide hormones: there were eight nominations for certified reference materials, two nominations for reference measurement method, and five nominations for reference measurement services;

Proteins: there were two nominations for certified reference materials; Vitamins: there was one nomination for a reference measurement method.

Action (A/16-07): Secretariat to distribute complete nominations to Database WG Chairs by 15 June, and to JCTLM review teams by 15 July 2015.

9.2 Nomination process for replacement materials

The Committee discussed the issue of the nomination/lack of nomination for the new batches of the certified reference materials when the previous batch has ceased to be available/expired and delisted from the JCTLM Database. The Executive were of the opinion that the process for nomination and review of new batches of material should be streamlined as much as possible, as a number of the requirements would have already been met and verified for the the previous material and this would be applicable to the new materials if the producer had maintained their production procedures. The Database WG vice-chairs were asked to draft a proposal for a process for nominating and reviewing the new batches of replacement materials. This would describe the information and the supporting documents that a producer would submit for nominating a new batch of a material, and the review criteria against which the review team would assess the renewed material. Some members of the Committee commented that a key criteria would the commutability of the new material, and the extent to which new commutability studies would need to be performed. Approaches were currently being discussed at the IFCC Working Group on Commutability (WG-C), and a publication being prepared. It was agreed that the IFCC WG-C approaches should be taken into account by JCTLM in this new review process, with a reference to their publication if appropriate.

Some members of the Committee pointed out that during the PPTD Workshop the NIM (China) raised the issue of the duplication of review processes for listing CMCs in the KCDB and materials/services in the JCTLM Database. Dr Wielgosz replied that the review criteria for the two databases were different considering that the KCDB was listing the NMIs' measurement capabilities whereas the JCTLM was listing CRMs that were reviewed in compliance against ISO 15194 requirements.

The Committee requested that JCTLM should provide a response to the national metrology institute to invite them to document the materials they wish to have listed by JCTLM in accordance with JCTLM procedures.

Action (A/16-08): Database WG vice-chairs to draft a proposal for the nomination and review process that will apply for the replacement materials.

Action (A/16-09): BIPM to draft a response to NIM's request for a fast track review process of their materials already listed in the BIPM KCDB and invite them to provide the relevant document for consideration of their materials by JCTLM review teams.

10. Suggestion to consider merging the International Consortium for Harmonization of Clinical Laboratory Results with the JCTLM

Dr Myers gave a brief update on the progress with the activity concerning the International Consortium for Harmonization of Clinical Laboratory (ICHCL). He pointed out that the first step in defining the criteria for prioritizing the measurands as potential targets for harmonization according to the laboratory medical needs and feasibility was complete, and ready for posting on the website. He added that second step concerning the implementation was on-going, and recalled that JCTLM would possibly be involved for the publication of accepted new harmonization materials and/or procedures for a measurand.

In additional, a collaborative paper with the FDA has been drafted and a meeting with IVD and regulators in Japan was scheduled prior the ISO TC 212 WG2 meeting in November 2016.

11. Update on Gap Analysis Studies

11.1 Blood gas and pH reference measurement systems

Dr Wielgosz reported that he presented a gap analysis on reference measurement systems on pH and blood gas analysis [JCTLM-EXEC/16-03] at the last meeting of the CCQM Working Group on Electrochemical Analysis (EAWG) in April. He pointed out that 22 NMIs had Calibration and Measurement Capabilities (CMCs) in the BIPM KCDB but there were no corresponding certified reference materials and methods presently listed in the JCTLM Database as references for the laboratory medicine community. He also showed examples of traceability statements with references to materials that were no longer available or with inappropriate references (i.e. pH scale).

Further to this presentation, there had been no nominations submitted for materials and/or methods in blood gases or pH for this year review cycle 11.

The IFCC representatives noted the presence of three IFCC references to peer review publications for pH, Blood Gases, and Electrolytes reference measurement procedures, and requested that relevant references be sent for review to the IFCC Scientific Division with the view of nominating these at a next JCTLM review cycle.

Action (A/16-10): Dr Wielgosz to send a request to the IFCC Scientific Division to review the IFCC reference measurement procedures for pH, Blood Gases, and Electrolytes and consider nominating these for listing in the JCTLM database.

12. Liaison with ISO TC 212

Dr Wielgosz reported that the next meeting of the ISO TC 212 WG2 would be held in London (GB) on 20-21 June 2016, and updated on the status of the drafting of the documents developed or revised by ISO-TC212/WG2: the draft of the revised text of the ISO 17511 was being circulated for comments until the end of the year, the paper on the guidance document on the estimation of uncertainty would be finalized by the end of the year, and there was no actions foreseen during the year for the revision of the text of the ISO 15195 which was pending the finalization of the ISO/IEC 17025 document.

13. Liaison with the EC

13.1 Update on revision to the IVD Directive

Dr Schimmel informed the Committee that a consolidated version of the revised text of the EC Directive on IVD medical devices was still being considered by the European parliament. He commented that it was likely that the publication of the revised IVD directive as a regulation would be postponed to the end of 2016, and would be followed by a transition period of three years before the full implementation of this regulation. He added that according to the new regulation the Notified Bodies (NBs) would be

responsible for the verification of the Quality Systems of the IVD on compliance with standards developed by ISO TC 210. The Committee noted that ISO TC 210 was dealing with quality management and corresponding general aspects for medical devices, and questioned

if/how lack of calibration of IVD would be considered as a requirement in the verification by NBs. Some members of the committee commented that the aspect would probably be addressed by the standard which was currently being drafted by the ISO TC 212 WG3.

14. Liaison with the WHO

This agenda point was dealt with under the agenda point 6.3.

15. Requirements for RELA EQAS

Prof. Siekmann asked the Committee if the IFCC RELA EQAS could be stated in the JCTLM Procedure Manual as a proficiency testing service provider for reference laboratories in support of the requirement for being/remaining listed in the JCTLM Database. Some members of the Committee had concerns with respect to the JCTLM endorsement of a particular PT provider. In the discussion that followed it was agreed that the relevant JCTLM procedure document should describe the appropriate requirements for suitable PT provider. Prof Siekmann agreed to review the sections 6.4.13 and 7 of the procedure document WG2-P-02 that were addressing the requirements for suitable proficiency testing provider at the international level.

Action(A/16-11): Prof Siekmann to review the requirements for EQAS providers for Reference Measurement Services and to draft a revised document for the procedure WG2-P-02.

16. Future meeting of the JCTLM

16.1 JCTLM Members and Stakeholders meeting 2017

The Committee confirmed that the next JCTLM Members' and Stakeholders' meeting would be held at the BIPM on 4 and 5 December 2017. The programme of the meeting would be discussed at the next Executive meeting on December. This would be followed by a WGs meeting on 6 December as well as a JCTLM Executive meeting on 7 and 8 December 2017.

16.2 JCTLM event in Athens June 2017

This was dealt with under agenda point 2.1, A/15-27, and Dr Beastall confirmed on 20/06 the programme for a two hours symposium for JCTLM on Traceability which would be held at the EuroMedLab meeting in Athens on Wednesday 14 June 2017.

17. Close

The Chairman closed the meeting on 4 June at 16:00.

Annex 1: Summary List of Actions

Actions from the 16th Executive Meeting:

Action (A/16-01): Secretariat to send a second circular to the participants of the 2015 Members' and Stakeholders' Meeting in order to request their suggestions for the 2017 Meeting for inclusion in the draft programme for comment and approval at the next Executive Meeting.

Action (A/16-02): Executive Members to send their comments on the draft of the revised documents for the Executive and Database WG procedures by the end of September 2016. Action (A/16-03): JCTLM Secretariat to contact IFCC, BIPM and ILAC for nominations for JCTLM President, and Secretariat host organization

Action (A/16-04): Secretariat to develop a leaflet for introducing JCTLM and distribution to potential JCTLM Member Organizations

Action (A/16-05): Dr Wielgosz to consult the CCQM and in particular the NMIs providing these Reference Materials to canvas opinion on the requirement for the CRM certificate and certification report to be available in English as a acceptance criteria for a higher order CRM. Action (A/16-06): Secretariat to update the BIPM JCTLM website to include the JCTLM structure diagram, and Database WG structure and JCTLM member categories.

Action (A/16-07): Secretariat to distribute complete nominations to Database WG Chairs by 15 June, and to JCTLM review teams by 15 July 2015.

Action (A/16-08): Database WG vice-chairs to draft a proposal for the nomination and review process that will apply for the replacement of materials.

Action (A/16-09): BIPM to draft a response to NIM's request for a fast track review process of their materials already listed in the BIPM KCDB and invite them to provide the relevant document for consideration of their materials by JCTLM review team.

Action (A/16-10): Dr Wielgosz to send a request to the IFCC Scientific Division to review the IFCC reference measurement procedures for pH, Blood Gases, and Electrolytes and consider nominating these for listing in the JCTLM database.

Action(A/16-11): Prof Siekmann to review the requirements for EQAS providers for Reference Measurement Services and to draft a revised document for the procedure WG2-P-02.