

15th CCM meeting
26-27.02.2015

Dr. Philippe RICHARD
CCM President



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CCM WGS Conclusions

1. The CCM WGS took note of the written reports of all technical WGs.
2. The present chairmanship of the CCM WGs is confirmed for a new period (for CCM approval).

CCM WGS Conclusions

3. The list of KCs was reviewed. The KCDB was updated accordingly.

4. The *CCM Guidelines for approval and publication of the final reports of key and supplementary comparisons* were updated, the work to be completed was attributed to:
 - John Wright (template for Draft report)
 - Karl Jousten (CCM appendix, methods and best practice for KC analysis)
 - Hao Fang and Philippe Richard will update the checklist for the approval of reports
 - Richard Davis and Hao Fang will add a section on the impact on the CMCs (results of KC reports)

CCM WGS Conclusions

5. KC and CMC for refractive index

Decision:

- Refractive index of liquid → CCM
- Other optical properties → CCPR
- The service categories will be updated by the WG chairs accordingly

6. The CCM WGS reviewed its action plan 2014 and defined its action plan for 2015 – 2016.

7. Revision of the CIPM MRA

An update on the revision of the CIPM MRA was presented by the chairman. Further actions will follow after the CIPM meeting.

CCM actions and conclusions

1. The CCM took note of the update from the President on decisions from the CIPM and the CGPM, on the CCM & CCU roadmap 2018, on the new CCM WG structure.
2. The CCM took note of the technical report from the majority of members.
3. The CCM WGS took note of the written reports of all technical WGs and of the oral report of the WGS.
4. WGDV
The CCM confirmed the new merged WG.
The CCM approved 4 new KC: CCM.D-K5 liquid density measurement by oscillation-type density meter; CCM.D-K6 Density measurement under high pressure; CCM.D-K7 refractive index of liquids; CCM.V-K7 viscosity standards in a wide temperature range.

CCM actions and conclusions

5. **WGFF**
The CCM approved the new KC CCM.FF-K1 water flow.
6. **WGF**
The CCM approved the new KC CCM.F-K X 200 N .. 500 N.
7. **WGG**
The CCM approved the KC CCM.G-K3 free fall acceleration.
The CCM requests convincing arguments to keep a periodicity of 4 year between KCs before the approval of the next KC.
8. **WGH**
The CCM approved a minor update of ToR (removal OIML TC).

CCM actions and conclusions

9. WGPV

The CCM confirmed the new merged WG.

The CCM approved the KC CCM.P-K3.201X (low pressure).

10. WGR-kg

The CCM took note of the major progresses realized according to the CCM & CCU roadmap. All activities are on time according to the CCM & CCU roadmap. The extraordinary calibration is finished.

The CCM approved provisionally the mep.

The CCM took note of the general principles of the pilot study and of the revised time scale. The work need to be continued on the technical protocol. The CCM took note of the information about the special edition of *Metrologia*.

The CCM approved the following new members of the WGR-kg: NPL, KRISS, and as personal member: Leonid Vitushkin.

CCM actions and conclusions

11. The CCM reviewed the situation with the CCM Recommendation G1 (2013) and will keep this under review as further results will come available in 2015 and 2016.
The discussion will be reported to the CIPM. The CCM President will continue to work with Walter Bich with this analysis in order to inform the CIPM at each meeting.
12. The CCM recognized the work performed by Lars Nielsen on the analysis of historical data.
13. The CCM took note of the technical work performed at the BIPM and specially the progresses with ... results and consequences of the extraordinary calibration, future maintenance of the BIPM traceability chain, pool of mass standards and BIPM watt balance. The CCM specially recognized the work performed by Estefania de Mirandes on the simulation or wear effect and corrections of the calibrations.
14. The list of KCs was reviewed during the WGS meeting. The KCDB was updated accordingly.

CCM actions and conclusions

15. The *CCM Guidelines for approval and publication of the final reports of key and supplementary comparisons* was updated, the work to be completed is planned.
16. The CCM approved the Recommendation to NMIs on managing the consequences of the corrections to the BIPM «as-maintained» mass unit.
The BIPM will send the corrections if possible before end of March 2015.
17. The CCM took note of the technical presentations from Turkey and Egypt.
18. The CCM took note of the update from the JCRB.
19. The CCM took note of the reports from the RMO TCs.
20. The CCM took note of the conclusions of the WGS.
21. The CCM decided that the next CCM meeting will take place in May 2017 (18 - 19).

Philippe.Richard@metas.ch



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