

G09.05 TC IM Report

Robert Edelmaier



TC IM (INTMET)

- 27 nominated Contact persons from 37 Euramet members!
- Last TC IM meeting: 23 participants from 20 Euramet members
- Please nominate Contact persons and/or encourage participation (Sharing workload)

Actions (Spin off Project No. 1298):

- Report on the participation of laboratories in key comparisons, analyse the implications on the system
- Analysis of and proposed changes to the search interface of the KCDB



Actions:

- On metrology questions the EC only refers to JRC (with IRMM “technical questions database”)
- that EURAMET develops an own database with specific questions/answers
- TC-IM members were asked to provide some FAQs to have a starting point for this database



Actions:

- Analyse CMCs of the FG members
- Review ToR
- Encourage the co-operation between FG and TC-IM
-



Interactive e-Learning

- courses are structured in 6 modules and 15 thematic units
- the first two modules are linked to the EURAMET website
- starting point and proposal is needed to get funding and support
- Otherwise the project will be closed will be clarified until the end of the year



Metrology in short

- New project to update the successful booklet will be started
- PDF Version
- Publication additional as ebook?
- Proposal develop an App?
- Big interest within TC-IM to support this project. Aim is to have the update available at the end of the year



Smart Specialisation

- questionnaire
- topic is a quite a sensitive one
- will lead labs to disclose fields in which labs will or will not invest in the future
- try to identify “excellence niches”
- The R&D levels of the different NMIs are too different. One should bear in mind that a top-down solution is not a good idea
- TC-IM will provide a tool box (new Project)



CIPM-MRA (No. 1298)



- The project team (Ch. Bock, R. Edelmaier, R. Lapuh, M.-L. Rastello, I. Severn, I. Urdea Marcus, R. Wynands) has presented on May 16, 2014 – before the EURAMET General Assembly – a first public draft of a document titled „Making the MRA sustainable: MRA Phase II“
- After publication some inputs have been arrived.
Comments received from:

Robert Kaarls
Martin Milton
SI - DI
TC - EM
Claudine Thomas
VSL
Robert Wynands

CIPM-MRA (No. 1298)



- GCPM 2014 - Resolution No. 5:
On the importance of the CIPM Mutual Recognition Arrangement
- In March 2015 (before the TC-IM Meeting) the project group did come together, prepared the final paper which was be sent out for discussion
- For the 2015 EURAMET-GA the project-team has submitted its final report to the BoD and now for the GA.
- JCRB Meeting in March 2015 – first general Euramet contribution
- In October 2015 a Directors Meeting will take place at the BIPM specially dedicated to the CIPM MRA.

Opportunities to simplify the overall system:



- The number of CMCs is ultimately in the hands of the NMI directors: better use of Directors Meeting and new strategy process of the BIPM
- Improvement of KCDB (data entry, process management, search)
 - see supporting paper
- Review existing CMCs as to whether they are still needed, still valid and consistent with other TC's approaches



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Reduction of Key comparisons:



- each CC defines a set of “core competences” or “anchor points”, where comparisons are still performed
- An institute that has participated successfully in such a KC would then be trusted with other measurements within a certain range around the anchor point or with certain different combinations of matrix and species of interest
- „How far does the light shine?“
- process has already been started by several CCs



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Reduction of CMC entries:



- suggested to follow the approach currently being taken by some CCs, where entries are grouped in matrices or uncertainties are given by formulas,



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On-going comparisons:



- implemented by CCTF for the calibration of TAI and CCL for the comparison of optical frequency and wavelength standards (K11)
- SIR System (BIPM)
- think about adapting the concept of an “on-going comparison” also for other KCs



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Number of participants in KCs



- only laboratories with a primary realization participate in comparisons at the most demanding level
- appropriate comparisons have to be arranged for Labs with secondary realizations
- restrict participation to that subset of laboratories that will be able to reach a measurement uncertainty not worse by more than a factor of 5 (or 3, or 10?) compared to the second-best laboratory.



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Strict deadlines are set and enforced for each participant's



- The participants have to commit to follow the time schedule (including reporting)
- It is the responsibility of each participating laboratory that their infrastructure and documentation is up-to-date and the **necessary resources** are **dedicated** to the comparison



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Opportunities to improve the efficiency of the processes



We suggest to move from a system where entries are pre-checked to a system with an appeal mechanism:

- Check of new CMCs within RMO of origin
- Appeal mechanism open for all RMOs and signatories of the CIPM MRA against CMC entries (special rules for new participating RMOs/NMIs/Dis possible)
- Appeal decided by *body-to-be-defined* (e.g. JCRB)
- Alert mechanism (“what is new”) of KCDB



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What did we not propose:



- **Flexible scope!**

- Thank you very much for your attention!



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Opportunities to simplify the overall system:



- The number of CMCs is ultimately in the hands of the NMI directors: better use of Directors Meeting and new strategy process of the BIPM
- Improvement of KCDB (data entry, process management, search)
- Streamlining of processes (deadlines, kick-out)
- Improvement of readability of CMCs by grouping in matrices or indicating uncertainties by formulas
- Reduction of number of key comparisons by defining a set of “core competences” or “anchor points”, where comparisons are still performed
- Reduction of the number of participants in KCs
- On-going comparisons
- Review existing CMC entries (if still needed)



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