



**SUMMARY**  
**of the COOMET–BIPM Workshop**  
**“CIPM MRA review outcomes: comparisons and CMCs”**  
*2 April 2019, Dresden, Germany*

2 April 2019, Dresden, Germany, the one-day COOMET–BIPM workshop was held for the Chairpersons of TC 1.1 – TC 1.12, TC 3.1 due to the expected revision of the CIPM MRA within the BIPM Capacity Building & Knowledge Transfer Programme (CB&KT) and also SC 4.1 “Capacity building in the field of education and knowledge transfer”.

The workshop was attended by 50 specialists-metrologists – Heads of COOMET Technical Committees and invited guests from 14 COOMET member-countries (Armenia, Belarus, Bosnia and Herzegovina, China, Cuba, Germany, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan), as well as representatives of international and regional metrology organizations – Andy Henson, Head of International Liaison and Communication Department of BIPM; Chingis Kuanbayev, specialist of International Liaison and Communication Department of BIPM; Ian Dunmill, Assistant Director of the BIML; Wolfgang Schmid, EURAMET Member Service Manager.

**The goal of the workshop** – development of recommendations for coordinating the actions of the TCs Chairpersons when introducing new approaches aimed at improving the efficiency and effectiveness of the CIPM MRA processes.

**The agenda of the workshop included 4 sections with the following topics:**

1. Representative CMCs (broad scope)
2. Reducing workload
3. Interpretation of comparisons
4. Sharing workload

**Lecturers:**

Andy Henson, Head of International Liaison and Communication Department of BIPM, France;

Chingis Kuanbayev, specialist of International Liaison and Communication Department of BIPM, France;

Nikita Zviagin, ex-Executive Secretary of JCRB, VNIIM, Russia;

Anna Chunovkina, Chairperson of COOMET Joint Committee of Measurement Standards, VNIIM, Russia;

Iryna Kolozinska, Chairperson of TC 1.6 “Mass and related quantities”, NSC “Institute of Metrology”, Ukraine.

**The main outcomes of the workshop**

Within the first section of the workshop, topics related to representative CMCs and expansions of broader scope were addressed, namely:

- CIPM MRA requirements on CMCs;
- Recommendations of the WG on the implementation and Operation of the CIPM MRA;
- Use of equations for uncertainty determination and matrices to reduce the number of CMCs;

- Better consistency in the expression of CMCs (e.g. units, uncertainty ranges);
- Avoiding of artificial subdivision of CMCs;
- Percentage of coverage by CMCs = metric of success.

This topic was highlighted in presentations made by A. Henson and C. Kuanbaev.

There was an active discussion among the participants of the approach which has been adopted in COOMET Technical Committees to ensure concise CMCs (matrices and broad scope) and to avoid artificial subdivision.

While considering the topic of the second section of the workshop, N. Zvyagin presented information on reducing the load on the RMOs during the CMC review process, namely:

- CMC review process;
- Recommendations of the WG on the implementation and Operation of the CIPM MRA;
- ‘Efficient and effective review’ = ‘risk based approach’;
- Sharing the workload = distribution of CMCs among reviewers.

TCs Chairpersons shared their experience in reducing the workload during the CMCs review process within their TCs.

The topic of the third section of the workshop included questions regarding the interpretation of comparisons, including:

- CIPM MRA requirements on comparisons;
- Recommendations of the WG on the implementation and Operation of the CIPM MRA;
- ‘Silent’ comparisons;
- ‘How far the light shines’ approach to indicate coverage of CMCs;
- Available evidences supporting CMCs when not covered by comparison.

Lecturer on this issue was A. Chunovkina. Within this section a discussion was held on the experience of interpreting key and additional comparisons within COOMET.

The fourth section of the workshop was devoted to the distribution of the workload while performing the comparisons, which I. Kolozinskaya highlighted in her presentation. The topic included the following questions:

- Recommendations of the WG on the implementation and Operation of the CIPM MRA;
- Sharing the roles involved in coordinating comparisons;
- Promoting new TC Leadership.

The Chairpersons of the TCs shared the experience of mentorship in comparison piloting.

The participants of the workshop highly appreciated organisation and relevance of the workshop topics and approved COOMET activity in the BIPM Programme on Capacity Building and Knowledge Transfer (CB&KT).

Coordinator from COOMET  
in the BIPM CB&KT Programme,  
Secretary of TC 4



Yu. Bunyayeva