

Use of the Hybrid Comparisons in the Framework of the COOMET

Explanatory material for the interregional review experts and NMIs of the COOMET countries

According to the JCRB recommendation 40/1 “The JCRB agrees that the Hybrid Comparison scheme proposed by APMP may be used as an example of "Other available knowledge and experience" in Section 3 of CIPM MRA D-04, which underpins CMCs.“

COOMET as the JCRB member has supported this decision, however:

1. As a results of discussions inside the COOMET JCMS between the TC Chairs and representatives of the COOMET NMIs the decision was taken that in the framework of the COOMET the use of the concept of hybrid comparisons is presently not foreseen. To confirm their calibration and measurement capabilities (CMC) national metrological institutes and designated institutes (further NMIs) of the COOMET countries should use the methods that are already well-established. Namely, key and supplementary (including bilateral) COOMET comparisons. The need of conducting such comparisons has always been taken into account and will be henceforth when developing the COOMET Program of Comparisons. It is recommended to the NMIs of the COOMET countries that have CMC-lines registered in the KCDB to respond as far as possible to requests of colleagues from other NMIs – members of the COOMET and to conduct with them supplementary comparisons that are needed to the last-mentioned ones for submitting CMC lines for interregional review. The COOMET Committee, the COOMET Joint Committee on Measurement Standards (including all the technical committees and subcommittees) will provide comprehensive support in the search of possible partners for comparisons, including the support within the support of countries with developing metrological infrastructure.

2. In those cases when the procedure of hybrid comparisons will be implemented by other RMOs for submitting CMC lines, COOMET experts on interregional review when taking decisions on assesment of other RMOs CMC lines supported by hybrid comparisons, should follow the basic principles laid out in the APMP document on hybrid comparisons ([attached](#)). The expert of interregional review should make sure and has a right to ask for proofs that the requirement of the APMP document has been met. Namely the confirmation of the following points is required:

- HC scheme should was not used when key or supplementary comparisons were available. Even when key or supplementary comparison were unavailable, an NMI has made every effort to find the partner NMI of a bilateral comparison before the HC scheme is considered.
- The result of HC as the CMC evidence and capability of Applicant NMI have been thoroughly reviewed by the on-site peer reviewer(s) before the CMC was submitted for intra-RMO review.

As the evidence of such an assessment the RMO report of the intraregional review corresponding to the requirements of the given RMO and the requirements of specific CC if any could be used.

With all these conditions fulfilled, CMCs should not be rejected at interregional review stage due to the reason that CMC evidence is HC.