17 May 2012



1. General aspects

At the Euramet General Assembly in 2010, new Terms of Reference have been defined. New actions was defined, regarding the needs of all Euramet members, with the input of the BoD. TC-IM should report on the on going actions to the EURAMET BoD.

The last meeting of TC-IM was held at INRIM (Italy) in February 2012.

2. Main issues

From the last meeting, TC-IM, the following topics where identified as a first priority : CIPM MRA matters, EMRP, the next programme EMPIR and the promotion of EURAMET activities.

• CIPM-MRA / JCRB matters

Considering the content of the CIPM MRA, its evolution from 1999 up to now, the increased number of laboratories involved and the workload of each RMO, some actions were proposed to improve what can be done within EURAMET from the CIPM MRA.

- Considering the result of the landscaping of EURAMET NMIs and DIs, performed by a group within TC-IM, leaded by Wolfgang Schmid (Euramet secretariat) and Janko Drnovsek (Euramet Vice-Chair), results presented at the last EURAMET General assembly in June 2011, important issues have been achieved :

- following the proposition of EURAMET, BIPM elaborated "a procedure for the registration of designated institutes participating in the CIPM-MRA" (JCRB-P-05). This emphasises the role of DIs for the dissemination of the unit and the traceability to the SI. The purpose of this procedure is to set out a clear course of action to be followed upon notification of the designation of an institute to participate in the CIPM MRA. The course of action specified in the document is expected to have the BIPM informed of the designation scope of the DI, the DI fully informed of its obligations under the CIPM MRA, and all this information shared by BIPM and RMOs.
- □ a reflection paper has been proposed by EURAMET at the JCRB on CMC processes, and to see what could be the possible improvements for CMC reviews by making propositions. The motivation was to try to reduce the important workload done by the different RMO-TCs. Even JCRB did not conclude on this point the EURAMET paper will be considered as an input for the workshop organised by the BIPM on « CMC review best practices », in March 2013.

- A "guidance rule document" was prepared and discussed at the last TC-IM meeting. It is proposed (with some light addendum) to be followed and endorsed by EURAMET. These Guidance rules paper for EURAMET ILC is a complement to the guidelines for CIPM key comparisons, to agreed on a realistic timetable, in view to get the ILC completed in a « reasonable time », to be useful for the CMC review process. The proposed guidance is given in annex I.



• EMRP

- TC-IM participated to the EMRP interim report by giving concrete examples of JRPs with the greatest impacts from iMERA-Plus projects (TP1 / SI : "N_AH / Avogadro and molar Planck constant", TP2 / Health : "Regenmed / Metrology on a cellular scale for regenerative medicine", TP3 / Length : "Long distance / Absolute long distance measurement in air", TP4 / Electricity & Magnetism : "Power & Energy / Next generation of power and energy measuring techniques").

- All the TC-IM Contact persons agreed unanimously that the work performed so far with the EMRP programme should be emphasized to support the next EMPIR Programme. It has then been decided that a focus on success stories underlying industrial/societal impacts, scientific benefits and knowledge/technology transfer would certainly be an added value. We will speak may be more about "successful outcome" or "added value".

TC-IM also discussed on the fact that it was important to consider not only a few number of projects, but to really increased the number as soon as possible. After exchanges of view with the EMRP-PM, it is clear that this action has to be continue along the EMRP, and should involved a majority of persons within NMIs. The format of the way to communicate should be finalised with EMRP-PM team.

It has been decided to start with "energy call", and to continue with the finalised iMERA-Plus projects.

- To give a greater possibility to "small countries" to better participate in a R&D programme, a question raised was to see what could be the best way to inform these countries and universities which does not belong to the EMRP Programme. It is proposed to clear the rules for REG, Grants, etc.. and to disseminate it among all EURAMET members.

• EURAMET promotion and dissemination

- It appears essential to develop some actions to promote EURAMET activities (including EMRP). in 2011, José Robles (Spain) proposed to consider different ways of presentation, but also emphasised the fact that it will be essential for EURAMET to provide some knowledge transfer to its members. José Robles proposed to implement on the EURMAET website an interactive e-learning.

To start this project, on teaching materials, a group was defined to :

- to formulate what are the objectives
- to decide and agree on the required format
- to set up independent modules
- to define what could be the profile of the graduates

Considering the huge amount of work to be realized, it was agreed to start with one module to see how it works. Once tested, it could start quickly.

- It was proposed to have a EURAMET general presentation on EURAMET activities, available for all members. A finalised presentation will be available.

• Supportive arguments for NMIs facing questions from their governments

NMIs are often requested to give some figures to their governments. It was suggested to give some global figures giving a clear picture of all members and of the metrology network. A relevant questionnaire that could be filled in by the members (including Technical Committees) will be proposed.



3. Projects

- 1148 : Follow up on the Coordination of Nanometrology : this project should be closed. Hans Jensen will provide a short report
- 1078 : Development of methods for the evaluation of uncertainty in dynamic measurements This is an ongoing project. A short report should be provided by Clemens Elster
- 1026 : Metrology knowledge transfer in the European Metrology Reasearch Programme The status needs to be check.
- 1001 : Agreement of traceability in measurements fields. This project is ongoing. Heikki Isotalo to provide a short report

4. Meetings

The next TC-IM meeting will be hosted by VSL in Delft (The Nederland), on the 7th and 8th of March 2013.

5. Other issues

Maguelonne Chambon is proposed by the TC-IM group for a second term as TC-IM Chairperson.

Maguelonne CHAMBON, LNE EURAMET TC-IM Chair

20 May 2012



ANNEX I One page guidance rule for EURAMET ILC

Inter-laboratory comparisons (ILC) are a powerful tool in research and quality assurance for testing and validating new measuring principles, methods or instrumentation and for assuring the long term quality of high end measuring services. World class inter-laboratory comparison guidelines have been developed by the Consultative Committees of the International Committee for Weights and Measures (<u>CIPM</u>).

EURAMET Inter-laboratory Comparisons are conducted according to these <u>Guidelines</u> for CIPM key comparisons, in particular to the chapters 4 to 10. The responsibility of the Consultative Committees for key comparisons is assumed in a EURAMET ILC, however, correspondingly by the EURAMET Technical Committees.

An ILC can deploy its full value only if the initial agreed timetable and the agreed procedures in case of a failure of the traveling standard or an unexpected delay are respected by the participants.

To this end, the CIPM guidelines are complemented by the following additional guidelines:

- If the timetable cannot be hold by a participating laboratory, the participant contacts the pilot laboratory as soon as possible in order to find a solution for managing the incurring delay. The pilot laboratory, however, has the competence to accept the delay, to set another deadline or organizational measure, or to exclude the participant from the ILC.
- If the participating laboratory does not observe the timetable and does not alert the pilot laboratory and the next participant in due time (within one or two weeks after the deadline, latest), the pilot laboratory is entitled to exclude the delayed participant from the ILC. The timetable is then adjusted in agreement with the remaining participants.
- If some delay occurs because of the pilot laboratory, it is proposed that the partners discuss of this question with the Chairperson of the technical committee. The TCC can then alert the EURAMET GA Delegate of the country of the pilot laboratory.

Preparation of the report:

- The first draft, draft A, is prepared as soon as all the results have been received from the participants and is sent to the participants not later than six month after receiving all necessary data. Results should be unanimously accepted.
- The end date of the ILC the date at which draft A is sent to the participants shall not be later than typically of two years after the initially fixed starting date or after the time schedule defined at the beginning of the ILC.

Guidelines for an inter-laboratory comparison are effective only if all participants observe them. If an ILC – despite of all written determinations – runs out of the agreed frame, participants are free to appeal to the EURAMET Board of Directors (BoD) asking for appropriate measures for bringing the ILC to an acceptable end.

These Guidance rules for EURAMET ILC do not preclude comparisons carried among laboratories for developing new measuring methods or services. These comparisons – however – are then not declared as an "inter-laboratory comparison", but rather as an ordinary EURAMET project. These comparisons may include developing work that bears more risk for unexpected difficulties.