19 May 2010



# 1. General Aspects

EURAMET TC-L has currently representatives from 33 EURAMET members and 2 corresponding NMIs (Egypt and Israel). EURAMET will take care of the CMC-process for these two countries.

## 2. Projects

In the period under review there were a total of 34 active projects with 17 being comparisons. This is a slight increase compared to the last year.

## 3. Comparisons

3.1 EURAMET Key/Supplemental Comparisons

Designation	Title	Status
EURAMET.L-K1.2	Gauge blocks by interferometry	in progress since 2010
		few participants
EURAMET.L-K3.1	optical polygons	Final, in CCL-review
EURAMET.L-K3.2009	Angle comparison using an autocollimator	protocol complete
EUROMET.L-K4.2005	Diameter standards	Final
EUROMET.L-K5.2004	Step gauge	Draft A
EUROMET.L-K6	2D-CMM artefacts	Draft B
EUROMET.L-K7.2006	Linescales	Draft A
EURAMET.L-K8	Surface texture - Roughness	in progress
EURAMET.L-S15.a	Step height standards	Final, in CCL-review

### 3.2 CCL Key Comparisons

Designation	Title	Status
CCL-K1.2010	Gauge blocks (short and long) by interferometry	2009, proposed
		4 EURAMET NMIs participating
		"old style" type CCL KC
CCL-K11	Comparison of optical frequency and wavelength standards	in progress since 2008
		ongoing

## 4. CMCs

An overview of the past and present CMC submission is given in the table below. At the last TC-L meeting it was decided that there should be two sets per year and a strict time schedule will be followed. Also a number of "fast track" changes were submitted during this period which can not be found in the table (since they do not bear a special designation)

Designation	Comment	Status
EUROMET.L.1.2001	Full submission, almost all services, most EUROMET NMIs	published, 2001-10-30
EUROMET.L.2.2002	Minor updates/submissions from GB and FI.	published, 2003-01-09
EUROMET.L.3.2004	Submissions from AT, CH, CZ, DE, HU, IT, NO. Also first submis- sion from BG, LT, LV, RO, SI, YU.	
EUROMET.L.4.2006	24 minor updates and 35 new submissions.	published, 2006-05-10
EUROMET.L.5.2007	19 updated or new CMCs from 7 NMIs	published, 2007-05-21
EUROMET.L.6.2008	37 CMCs (new and updated) from 8 countries including EG	published, 2009-02-11
EUROMET.L.7.2009	33 CMCs (new and updated) from 8 countries	published, 2009-11-21
EUROMET.L.8.2010	35 CMCs (new and updated) from 12 countries	published, 2010-04-21
EUROMET.L.9.2010	14 CMCs (new and updated) from 5 countries	EURAMET review passed, currently under inter-RMO review

In the period reported a total of 8 CMC sets from other RMOs were treated by TC-L, most of them already published on the KCDB now (one from SIM, seven from APMP).

## 5. Activities of the Sub-Committees

There are no sub-committees in TC-L





## 6. Participation in iMERA-Plus

Obviously TC-L is responsible for the targeted programme in length (TP3). Four Joint research programs (JRPs) are funded by the European Commission and a currently operated by several EURAMET NMIs:

JRP	JRP Short name	JRP Title
J1.1	Nanoparticles	Traceable characterization of nanoparticles
J1.4	NANOTRACE	New Traceability Routes for Nanometrology
J3.1	Long distance	Absolute long distance measurement in air
J2.2	NIMTech	Metrology for New Industrial Measurement Technologies

A number of meetings and workshops have been held in the meantime (see item 7)

## 7. Meetings

Previous meetings

- 2009 TC-L CP meeting, 19-21 October 2009, IPQ, Porto, Portugal
- Meeting of the CCL-CCTF, 2 June 2009, BIPM Sevres, France
- Meeting of the CCL-WGDM, 8-9 June 2009, BIPM Sevres, France
- 14<sup>th</sup> Meeting of the CCL, 10-11 June 2009, BIPM Sevres, France
- J3.1 Meeting (Long distance), 4-5 May 2009, MIKES, Espoo, Finland
- J2.2 Meeting (NIMTech), 11 May 2009, CMI, Prague, Czech Republic
- J2.2 Meeting (NIMTech), 6 November 2009, NPL, Teddington, UK
- J1.4 Meeting (NANOTRACE), 16-17 April 2009, NPL, Teddington, UK
- J3.1 Meeting (Long distance), 3-4 May 2010, PTB, Braunschweig, Germany
- J1.4 Meeting (NANOTRACE), April 2010, UME, Istanbul, Turkey

### upcoming meetings

- 2010 TC-L CP meeting, 19-22 September 2010, SP, Boras, Sweden
- Meeting of CCL-WGs, 7-11 June 2010, A\*STAR, Singapore
- [date of meetings regarding EMRP-issues not known now]

## 8. Issues

Most of the issues identified as strategic last year have been solved in a way in a satisfying way:

- CIPM concerns on CCL-RMO KC After discussions within CCL record set straight. Upcoming CCL-K1.2010 will be of "old style".
- Long time storage on comparison data in operation now in EURAMET TC-L, apparently no concern in other TCs or CCs
- Issues related to CCL-K11 operating in smooth way

### 9. Outlook for 2010/2011

It can be foreseen that a significant amount of labour has to be spend regarding collection of topics for the calls "Metrology for industry" and "Environment" in the framework of the article 169 funded EMRPs.

Michael Matus TC-Length Chairman, 19 May 2010