

A large, abstract graphic on the left side of the slide, composed of several overlapping, curved blue shapes in various shades of blue, creating a sense of motion and depth.

CB in EURAMET instruments and activities

10th EURAMET General Assembly
24 May 2016, Oslo, Norway

Tanasko Tasić, Capacity Building Officer,
Janko Drnovšek, Vice-chair (GA)
Wolfgang Schmid, Member Service Manager
Ahmet Ömer Altan, BOD-WGCB Convenor

Outline:

Capacity Building in EURAMET



- Rationale, Evolution and Objectives
- Capacity building instruments
- EURAMET BoD Working Group for Capacity Building
- Information about CB
- Upcoming events

Rationale



Many European NMIs represent the cutting edge of global measurement expertise (i.e. implementation of EMRP and EMPIR)

At the same time there are some NMIs

- in the early development stages,
- or less research and more service oriented,
- or small with very limited resources but have to catch-up with their stakeholders' needs.

(i.e. some do not yet have CMCs or a QMS acknowledged by EURAMET TCQ)

These NMIs need support in establishing and developing their infrastructures and in their integration into the existing EURAMET structures

Evolution of capacity building over the years



“Ad-hoc” activities

Training courses

Strategic approach

Workshops, “enabling environment”

EMPIR Research Potential projects (RPot)

EURAMET-WELMEC Focus Group on Facilitating National Metrology Infrastructure Development
FG-FNMID

EURAMET-BoD Working Group for Capacity Building
BOD-WGCB

South-East European focus

SEE + AT + DE

Europe-wide participation

IE, LU, CZ, ES, PL, EE, BE,

2007

2015

Performed activities 2015



	Host	Dur.	
Training on PRT preparation	IMBiH	17 Feb 2015	PTBQ5 / EMPIR
Training on PRT preparation	METROSERT	19 Feb 2015	EMPIR
Training / Workshop: Principles of Strategic Management 2	DMDM	12-13 Mar 2015	PTBQ5
Training on Small Media and Low-cost Video Production	UME	18-20 May 2015	PTBQ5
Training and Workshop for Assessors of Inspection Bodies Operating under ISO/IEC 17020:2012	DMDM	20-21 May 2015	PTBQ5
Training for NMI management on approaching media	CMI	9-11 Nov. 2015	PTBQ5
Training on dissemination of T & F	DMDM	19/20 Nov. 2015	PTBQ5

Training for NMI management on approaching media
CMI, Nov 2015

Objective:

How to make a good use of media for addressing the most important stakeholders

TV statement

TV interview

Controversial TV-interviews

Non-verbal language, body language

Press release, press conference

Exercises with and without camera

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Capacity Building Instruments 2016 ...



- 1) EMPIR Human and Institutional Capacity Building (HI-CB)
- 2a) Researcher Mobility Grants (EMRP Projects)*
 - Researcher Mobility Grants (RMG)
 - Early-Stage Researcher Mobility Grants (ESRMG)
- 2b) Researcher Mobility Grants (EMPIR Projects)
- 3) EMPIR Research Potential Projects

CB is open to all EURAMET members and associates

*) Calls for Mobility Grants attached to EMRP Projects will end in 2016

Human and Institutional Capacity Building



Short (2-3 days) trainings focused in:

- **Specific technical topic**
(i.e. calibration, measurement uncertainty)
- **Various aspects of metrology system**
(i.e. CIPM MRA, NMI management, communication, QMS)
- **Supporting EMPIR calls**
(i.e. drafting proposals, project administration and finances)

HI-CB: Action Plan 2016



	Host	Dur.	Timeframe	Status	Trainer
Calibration of resistance (daily activities on maintenance of national standards)	INRIM	4	Sep. 2016		-
Calibration Power Quality parameters	TUBITAK	3	19-21 Sep. 2016	Conf.	-
Calibration and calculating MU of electrical energy standards	UME				
Determination of hydraulic pressure	DMDM	2	TBD*		
Calibration of air temperature and humidity sensors (instruments)					
Calibration of climatic chambers and furnaces	IMBiH	2	17-21 Oct 2016	Conf.	INRIM
Training for system for on-site calibrations of temp. and humidity					
Training on drafting proposals for EMPIR	CEM	1	4 Feb. 2016	Done	Secretariat
Project administrative and financial issues	BEV	1	10/11 May 2016	Done	Secretariat
Training/workshop on NMI strategic planning (follow-up)	DMDM	2	13-14 Oct 2016		External
Round table and workshop for NMI communication officers	NPL	2	Sep-Nov 2016		host NMI

Remaining from 2015 (FG-FNMID)

Training on testing breath alcohol analysers	DPM	2	16/17 Jun 2016	Conf.	PTB
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*) to be defined

HI-CB: Action Plan 2016



More trainings in sequence
(travel cost reduction)

		Dur.	Timeframe	Status	Trainer
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Host - emerging institute
Trainers from experienced institute

Remaining from 2015 (FG-FNMID)

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*) to be defined

Researcher Mobility Grants: The idea behind



Less experienced researcher from an emerging NMI joins a JRP-partner institution to undertake research additional to the project.

Duration 1 - 18 months, reasonable allowance

RMG benefits

- Contribute to a world leading metrology project
- Build links to key metrology organisations and researchers
- Opportunity to publish papers with world leading scientists
- Develop key skills to apply to your own research
- Financial support to attend conferences

This professional networking significantly facilitates collaboration between involved institutions in future

JRP: Joint Research projects

Researcher Mobility Grants (RMG) 2015/2016



	Running projects	Interest (Adverts)	Realised RMGs	Available funds k€
2015	55	18	9 !!	210
2016	69	Ca 37	<div data-bbox="1122 715 1301 1270" style="background-color: yellow; padding: 5px;"> 9-T 6-IR 6-MC 5-EM 4-F 4-AUV 1-L 1-PR 1-M </div>	150 (EMRP) + < 150 (EMPIR)

Contact the facilitator
(if not yet did)
before 31 May 2016

Additional information on calls:
<http://www.euramet.org/knowledge-transfer/capacity-building/>
 EMRP RMGs: <http://www.emrponline.eu/>
 EMPIR RMGs: <http://msu.euramet.org/calls.html>

Researcher Mobility Grants (RMG) 2016 Call process – next steps



Finding projects for researchers and vice-versa : 31 May 2016

Preparation of documentation for the call: 17 June 2016

Technical preparations (i.e. web site)

**Call for Researcher Mobility Grants 4 July 2016 – 5 September 2016
(Projects EMRP call 2013 and EMPIR calls 2014 and 2015)**

Evaluation of applications Sept. – Oct. 2016

**Preparation of documents (RMG contracts,) November 2016 ...
& start of work**

Additional information on calls:

<http://www.euramet.org/knowledge-transfer/capacity-building/>

EMRP RMGs: <http://www.emrponline.eu/>

EMPIR RMGs: <http://msu.euramet.org/calls.html>

EMPIR Research Potential Projects

RPT



should enable emerging NMIs them to develop their scientific and technical research capabilities in areas of national and regional strategic priority.

- Stakeholders needs
- Impact
- Coordination, sustainability
- Enabling later participation in other TPs

No funds for required infrastructure and capital equipment

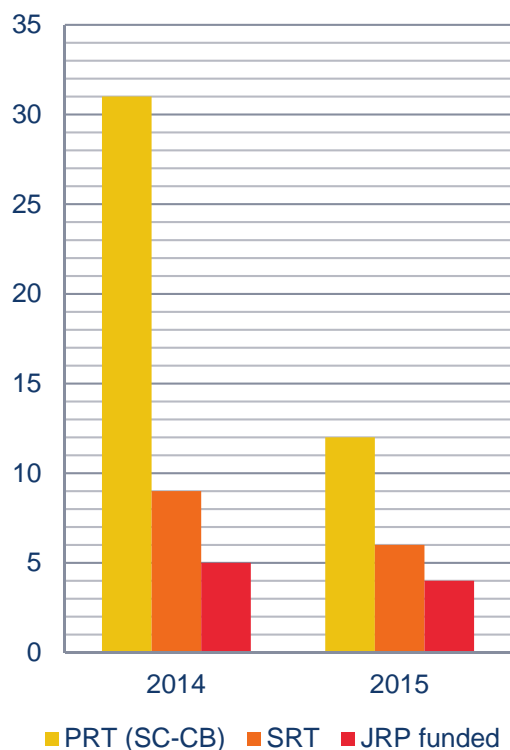
PRT can focus on national needs,
JRP must combine the strategic priorities of several states, coordinated response (“smart specialisation”) at the European or regional level.

Research Potential

An overview of process until now



RPT: PRTs, SRTs, JRPs per Call



RPT: Research Potential
 PRT: Potential Research Topic
 SRT: Selected Research Topic
 JRP: Joint research Project

2014			
14RPT01	ACQ-PRO	Towards the propagation of ac quantum voltage standards	Javier Díaz de Aguilar (CEM)
14RPT02	AWICal	Traceable calibration of automatic weighing instruments operating in the dynamic mode	Matej Grum (MIRS)
14RPT03	ENVCRM	Matrix reference materials for environmental analysis	Alper Isleyen (UME)
14RPT04	Absorb	Absorbed dose in water and air	Jean Marc Bordy (LNE-LNHB)
14RPT05	Eura-Thermal	Developing traceable capabilities in thermal metrology	Jean-Remy Filtz (LNE)
2015			
15RPT01	TracePQM	Traceability routes for electrical power quality measurements	Věra Nováková Zachovalová (CMI)
15RPT02	HUMEA	Expansion of European research capabilities in humidity measurement	Nedžadeta Hodžić (IMBiH)
15RPT03	Underwater	Underwater acoustic calibration standards for frequencies below 1 kHz	Alper Biber (MRC MI-UAL)
15RPT04	RF Microwave	Development of RF and microwave metrology capability	Murat Celep (TUBITAK UME)

Research Potential

An overview of process until now



Evolution, (no step function)

2015 call: First JRP co-ordinated by an emerging NMI

2015 call: 2 EURAMET non-EMPIR members joined JRPs

2016 call: new EMPIR members drafting PRTs

2016 call: another EURAMET non-EMPIR member participated in PRT drafting

2017: last planned call (might be expanded to later calls too)

Strategic / coordinated approach still not always reflected.

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EURAMET BoD Working Group for Capacity Building (BOD WG-CB)



Newly established (October 2015)

Assists all EURAMET members, especially the new and/or emerging EURAMET members, in the development of a national metrology infrastructure

Members: METAS (CH), IMBiH (BA), BEV (AT), NPL (UK), DMDM (RS), FTMC (LT), METROSERT (EE), BIM (BG), BoM (MK), NSAI NML (IE), MBM (ME), PTB (DE), HMI/FSB-LPM (HR)

All EURAMET members welcome to join!

Convenor: Ahmet Ömer Altan, UME TUBITAK (Turkey)

Guardian: Janko Drnovšek, Vice-Chairperson (GA)

First annual meeting: 6/7 October 2016 in Dublin, Ireland

Activities started (meeting with WGCB convenor on 24 March in PTB)



A view in future



Increasing Participation of Emerging NMIs in EMPIR RPT Projects and RMGs

Broadening participation in CB activities across EURAMET

Review of existing CB instruments and actions and development and implementation of new ones

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New webpage established: Knowledge Transfer



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Knowledge Transfer

KNOWLEDGE TRANSFER


The Knowledge Transfer pages provide different opportunities to share expertise, skills and knowledge with the metrology community in EURAMET and worldwide:

Training & Materials
Find out more about upcoming trainings and browse through selected training materials >>

Capacity Building
EURAMET aims to improve the research and operational capacity of emerging European National Metrology Institutes and Designated Institutes, through [capacity building activities](#) >>

Board of Directors' Working Group for Capacity Building
The group assists all EURAMET members, especially new and emerging ones, in the development of their national metrology infrastructure and its integration within the European metrology network in a coherent, efficient and sustainable way >>

Guides
EURAMET has published a variety of [calibration and technical guides](#) >>



iStock.com/maxkabakov

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- [Guides](#)



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CAPACITY BUILDING

The capabilities of National Metrology Institutes (NMIs) in EURAMET member states vary from country to country.

Many European NMIs represent the cutting edge of global measurement expertise, actively participating in the development of new measurement technologies, new realisations of SI units and projects to accelerate the redefinition of the SI units. These institutes have a leading role in supporting global competitiveness of the European economy as well as the development of measurement technologies required by modern society, such as those in the field of the 'Grand Challenges' of Health, Environment and Energy.

Other NMIs are in the early development stages, and are less research- and more service-oriented, or are small with very limited resources but have to keep-up with their stakeholders' needs. Some do not have approved and published calibration and measurement capabilities (CMCs) in the BIPM key comparison database or a Quality Management System (QMS) acknowledged by the EURAMET Technical Committee for Quality.

EURAMET intends that EMPIR will bridge the gap between emerging and well-developed NMIs and Designated Institutes, thus developing a balanced and integrated metrology system in the participating states.

CAPACITY BUILDING ACTIVITIES

Capacity Building within EURAMET consists of:

[EMPIR Research Potential Projects](#)

Human and Institutional Capacity Building (HI-CB)

Short (2-3 days) training course related to:

MENU

- [Research Potential Projects](#)
- [Knowledge Transfer](#)
- [Training & Materials](#)
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CAPACITY BUILDING NEWS

NEWS

[SEE ALL EURAMET NEWS](#)

AHMET ÖMER ALTAN IS FIRST CONVENOR OF THE WORKING GROUP FOR CAPACITY BUILDING
08-03-16

SAVE THE DATE: 1ST ANNUAL MEETING OF EURAMET'S WORKING GROUP FOR CAPACITY BUILDING
11-01-16
6th & 7th October 2016 in Dublin, Ireland

REGISTRATION NOW OPEN: TRAINING ON DRAFTING PROPOSALS FOR EMPIR

CAPACITY BUILDING

The capabilities of National Metrology

Many European NMIs represent the cutting edge of measurement technologies, new realising a leading role in supporting global competitiveness in modern society, such as those in the field of

Other NMIs are in the early development stage and have to keep-up with their stakeholders. The BIPM key comparison database of

Central point for EURAMET CB and training events

Introduction of page with links to training pages of EURAMET members

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Expression of interest for CB



CB Instrument	What	When
HI-CB	proposals for trainings Offer to host a training Offer to provide a trainer	between summer and fall EMPIR Committee meeting BOD-WGCB and TC meetings
RMG	interest to send a researcher interest to host a researcher	RMG call preparation (Feb-May) BOD-WGCB and TC meetings
Research potential	ideas for potential research topic (PRT) for RPT invitation to join potential consortia	in the time of PRT consideration and drafting (beginning of the year) BOD-WGCB and TC meetings

But also over the whole year for all

And now and here!

Contact	EURAMET CB Officer BOD-WGCB Convenor	tanasko.tasic@euramet.org omer.altan@tubitak.gov.tr
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Upcoming CB related events



Training on testing breath alcohol analysers	DPM	16/17 June 2016
Workshop on delivering impact	UME	22 June 2016
Partnering meeting RPT	UME	23/24 June 2016
Trainings on electrical power and energy	UME	19-21 Sep. 2016
1st annual meeting of the BOD-WGCB	NSAI	6/7 Oct. 2016
Trainings on thermometry	IMBiH	17-21 Oct. 2016

CB in cooperation with BIPM



BIPM Capacity Building and Knowledge Transfer programme

1 st training "Leaders of Tomorrow" course for new, inexperienced and potential RMO TC Chairs and WG Convenors (November 2016)

Focus of the training SIM and AFRIMET

1 participant from EURAMET (15 in total)

Great interest from EURAMET members (26 applications)

Discussions with BIPM to perform such a training for EURAMET in 2017

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Thank you for the attention!

tanasko.tasic@euramet.org