



Capacity Building in EURAMET

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR

2016-02-04, CEM, Spain
Tanasko Tasić, CB & MS Officer



Outline

- Rationale, Evolution and Objectives
- Capacity building instruments
- Planning and realisation
- EURAMET BoD Working Group for Capacity Building
- Role of EURAMET TCs ?

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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

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Evolvement of capacity building over the years



<p>“Ad-hoc” activities</p> <p>Training courses</p>	<p>Strategic approach</p> <p>Workshops, “enabling environment”</p> <p>EMPIR Research Potential projects (RPot)</p>
<p>EURAMET-WELMEC Focus Group on Facilitating National Metrology Infrastructure Development FG-FNMID</p>	<p>EURAMET-BoD Working Group for Capacity Building BOD-WGCB</p>
<p>South-East European focus</p> <p>SEE + AT + DE</p> <p>2007</p>	<p>Europe-wide participation</p> <p>IE, LU, CZ, ES, PL, EE,</p> <p>2015</p>

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Trainings & workshops until now (some examples)



<p>Technical (hands-on) trainings</p> <ul style="list-style-type: none"> • Mass calibration and dissemination training • Training on dissemination of T & F • Applications of gamma-ray spectrometry to environmental samples. • ... 	<p>CIPM-MRA, QMS, MU*, project drafting</p> <ul style="list-style-type: none"> • Workshop on CIPM MRA • Training on Measurement Uncertainty • Training on PRT** drafting (EMPIR) • ...
<p>Preparatory trainings for intercomparisons</p> <ul style="list-style-type: none"> • Thermocouple and WTP Comparisons • DMM comparison • Mass multirange comparison • ... 	<p>NMI strategic management and planning</p> <ul style="list-style-type: none"> • Training and Workshop on Principles of Strategic Management • ...
<p>Legal metrology</p> <ul style="list-style-type: none"> • Implementation of MID and New Legislative Framework • WELMEC Software Guides • Breath alcohol analysers testing • ... 	<p>Communication</p> <ul style="list-style-type: none"> • Principles of Awareness-Raising, Communication and Public Relations • Small Media and Low-cost Video Production • Approaching media (for NMI management) • ...

*) Measurement uncertainty
**) Potential research topic

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Capacity building instruments 2016 ...



EMPIR Human and Institutional Capacity Building (HI-CB)

Researcher Mobility Grants (EMRP Projects)*

- Researcher Mobility Grants (RMG)
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Researcher Mobility Grants (EMPIR Projects)

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

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR 2016-02-04, CEM, Spain

Human and Institutional Capacity Building (HI-CB)



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)

EURAMET TC-IR Contact Persons Meeting 26-28 January 2016 Berlin

HI-CB: supported activities



- **Trainings & workshops**
- **Consultancy on strategic planning**
- **Identification of needs for intercomparisons**
(Intercomparisons shall be performed within EURAMET TCs!)
- **Legal metrology activities are not included**

Please note:

This will be a pilot year for HI-CB under EMPIR

Proposal for activities can come from whole EURAMET community

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR 2016-02-04, CEM, Spain

11

	Interested NMIs	Foreseen host	Dur. (days)	Timeframe	Status	Trainer
Calibration of resistance (daily activities on maintenance of national standards)	BA, AL, MK, ME	TUBITAK UME, INRIM	4	Sept. 2016		-
Calibration Power Quality parameters	BA, AL, MK, ME	TUBITAK UME	2-3	Sept. 2016		-
Calibration and calculating MU of electrical energy standards	BA, AL, MK, ME	TUBITAK UME	2	Sept. 2016		-
Determination of hydraulic pressure	BA, MK, AL, ME, KO, RS	DMDM	2	TBD*		From other NMI
Calibration of air temperature and humidity sensors (instruments)	ME, AL, IR, KO, LI	IMBiH,	2	Oct. 2016**		INRIM
Calibration of climatic chambers and furnaces	ME, AL, IR, KO, LI	IMBiH	2	Oct. 2016**		INRIM
Training for system for on-site calibrations of temperature and humidity	ME, AL, IR, KO, LI	IMBiH	2	Oct. 2016**		INRIM
Training on drafting proposals for EMPiR (PRT, JRP, RPT, SIP)	5	CEM	1	4 Feb. 2016	Reg. Open	EURAMET Secretariat
Project administrative and financial issues	5		1	May/June 2016		EURAMET Secretariat
Training/workshop on NMI strategic planning (follow-up)	8	DMDM	2	June 2016		External expert
Round table and workshop for NMI communication officers	10	TBD	2			From host NMI

*) to be defined **) to be confirmed

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPiR 2016-02-04, CEM, Spain

EMPIR Human and Institutional Capacity Building (HI-CB)		EURAMET
Costs covered		
<ul style="list-style-type: none"> • Logistic costs for activity organisation (i.e. renting the lecture rooms, catering, laboratory consumables) • Trainer fees for external trainers (not staff members of an EURAMET member/associate) • Support (if needed) for management if intercomparison exercises 		
Costs not covered		
<ul style="list-style-type: none"> • Trainers' fees for trainings hosted by EURAMET members (associates) where trainers are staff of EURAMET members • T&S for participants 		

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Capacity building instruments 2016 ...



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Researcher Mobility Grants The idea behind



Less experienced researcher from an emerging NMI joins an EMRP JRP-partner institution to undertake research additional to an EMRP project (the same for EMPIR)

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

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR 2016-02-04, CEM, Spain

15

EMPR RMG 2015 call



12 EMRP projects (out of 55)
18 RMGs (adverts)
10 researchers' applications

Applications coming from

- Croatia
- JRS (Italy)
- Estonia
- Serbia
- Portugal
- Poland
- Germany
- REG (UK)

Available 210 k€,
 expected spending 90-100 k€.

Why not more applications?

- Workload & staff limitation in institutes which might send researchers
- Administrative limitations (i.e. absence from office max 1 month)
- Understanding of CB mechanism (both projects and sending institutes)
- Facilitator's lower availability

Use of RMGs should be better in 2016 !!

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR 2016-02-04, CEM, Spain 16

Possible Hosting Projects for 2016 RMG Calls (4 July – 5 September)



<p>EMRP call 2013</p> <table border="0" style="width: 100%;"> <tr><td>ENG</td><td>ENV</td></tr> <tr><td>SolCell</td><td>MeTra</td></tr> <tr><td>SmartGrid II</td><td>HIGHGAS</td></tr> <tr><td>ThinErgy</td><td>MetEOC2</td></tr> <tr><td>Biogas</td><td>MetroDecom</td></tr> <tr><td>PhotoClass</td><td>MetNH3</td></tr> <tr><td>DriveTrain</td><td>KEY-VOCs</td></tr> <tr><td>VITCEA</td><td>MetroERM</td></tr> <tr><td>MultiFlowMet</td><td>MeteoMet2</td></tr> <tr><td>NNL</td><td>ATMOZ</td></tr> <tr><td>LNG II</td><td>IMPRESS</td></tr> <tr><td>FutureGrid</td><td></td></tr> <tr><td>MESaIL</td><td></td></tr> <tr><td>GridSens</td><td></td></tr> </table>	ENG	ENV	SolCell	MeTra	SmartGrid II	HIGHGAS	ThinErgy	MetEOC2	Biogas	MetroDecom	PhotoClass	MetNH3	DriveTrain	KEY-VOCs	VITCEA	MetroERM	MultiFlowMet	MeteoMet2	NNL	ATMOZ	LNG II	IMPRESS	FutureGrid		MESaIL		GridSens		<p>EMPIR call 2014</p> <table border="0" style="width: 100%;"> <tr><td>IND</td><td>RPT</td></tr> <tr><td>3DMetChemIT</td><td>ACQ-PRO</td></tr> <tr><td>PlanarCal</td><td>AWICal</td></tr> <tr><td>Strength-ABLE</td><td>ENVCRM</td></tr> <tr><td>EMPRESS</td><td>Absorb</td></tr> <tr><td>MIQC2</td><td>Eura-Thermal</td></tr> <tr><td>pres2vac</td><td></td></tr> <tr><td>3D Stack</td><td></td></tr> <tr><td>ElPow</td><td></td></tr> <tr><td>MethPM</td><td></td></tr> <tr><td>MET5G</td><td></td></tr> <tr><td>HIT</td><td></td></tr> <tr><td>Innanopart</td><td></td></tr> <tr><td>PhotInd</td><td></td></tr> <tr><td>MNm Torque</td><td></td></tr> </table>	IND	RPT	3DMetChemIT	ACQ-PRO	PlanarCal	AWICal	Strength-ABLE	ENVCRM	EMPRESS	Absorb	MIQC2	Eura-Thermal	pres2vac		3D Stack		ElPow		MethPM		MET5G		HIT		Innanopart		PhotInd		MNm Torque		<p>EMPIR call 2015</p> <table border="0" style="width: 100%;"> <tr><td>HLT</td><td>SIB</td></tr> <tr><td>MetVBadBugs</td><td>FreeFORM</td></tr> <tr><td>ReMIND</td><td>InK2</td></tr> <tr><td>EARS II</td><td>OC18</td></tr> <tr><td>NeuroMet</td><td>QuADC</td></tr> <tr><td>PerfusImaging</td><td>OFTEN</td></tr> <tr><td>MRTDosimetry</td><td>NanoMag</td></tr> <tr><td>AntiMicroResist</td><td>FuturePhotometry</td></tr> <tr><td>MetMRgRT</td><td>e-SI-Amp</td></tr> <tr><td>MetrAMMI</td><td>3DNano</td></tr> <tr><td></td><td>MetroBeta</td></tr> <tr><td>RPT</td><td></td></tr> <tr><td>UNAC-LOW</td><td>NRM</td></tr> <tr><td>RFMicrowave</td><td>Sulf-Norm</td></tr> <tr><td>UNAC-LOW</td><td>UHV</td></tr> <tr><td>HUMEA</td><td>Hydrogen</td></tr> <tr><td>TracePQM</td><td>ROCOF</td></tr> </table>	HLT	SIB	MetVBadBugs	FreeFORM	ReMIND	InK2	EARS II	OC18	NeuroMet	QuADC	PerfusImaging	OFTEN	MRTDosimetry	NanoMag	AntiMicroResist	FuturePhotometry	MetMRgRT	e-SI-Amp	MetrAMMI	3DNano		MetroBeta	RPT		UNAC-LOW	NRM	RFMicrowave	Sulf-Norm	UNAC-LOW	UHV	HUMEA	Hydrogen	TracePQM	ROCOF
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Available 150 k€

For HI-CB activities and RMGs together available 150 k€

EURAMET TC-IR Contact Persons Meeting 26-28 January 2016 Berlin 17

Capacity building instruments 2016 ...



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Research potential (RPT) projects



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

- stakeholders needs!
 - impact this will have on the industrial competitiveness and societal needs of the region,
- and
- how the research capability will be sustained and further developed after the project ends.

The development of the research potential enabling 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.

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20

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HI-CB Planning



<i>Discussion of ideas (categories) of CB activities for next year workplan</i>	Spring meeting of EMPIR Sub-Committee for Capacity Building
<i>Approval of proposed categories of CB activities</i>	Summer EMPIR Committee meeting
<i>EURAMET Secretariat collates proposals from FG-FNMID and TCs, consults TCs and experts and searches for trainers and venues for proposed activities</i>	
<i>Confirmation of proposed activities</i>	Fall EMPIR Committee meeting
<i>EURAMET Secretariat organises performance of confirmed activities</i>	

Planning



Researcher Mobility Grants (Projects EMRP call 2013 and EMPIR calls 2014 and 2015)

4 July 2016 – 5 September 2016

Research Potential Projects

Call for PRTs 18 Januar 2016 – 29 February 2016

Call for JRP 16 June 2016 – 30 September 2016

Additional information on calls:

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

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

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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

- demand-oriented,
- recognises national, regional and European needs,
- avoids unnecessary duplication (EU's Smart specialisation)
- knowledge transfer across Europe.

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

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPiR 2016-02-04, CEM, Spain

29

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29

Role of EURAMET TCs



Capacity Building does not only concern the BOD-WGCB
Inputs from TCs are important and expected

26 BoD meeting conclusions, related to Capacity building.

- Capacity Building should be a standing item on the agendas of the TC-meetings
- Each TC should establish a working group for CB and deal with CB at each of its annual meetings

Training on drafting proposals (PRT, JRP, SIP and RMG) for EMPIR 2016-02-04, CEM, Spain

Bringing (TC) inputs related to CB



CB Instrument	What	When
HI-CB	proposals for trainings	between summer and fall EMPIR Committee meeting
RMG	interest to send a researcher interest to host a researcher	in the time of RMG call preparation (Feb-May 2016)
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)
		But also over the whole year for all
		And now and here!

Contact EURAMET CB Officer tanasko.tasic@euramet.org

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Thank you for the attention!

tanasko.tasic@euramet.org

32

The slide features a large, abstract graphic on the left side composed of overlapping blue and white circular and semi-circular shapes. The EURAMET logo is positioned in the top right corner of the slide area. The text 'Thank you for the attention!' is centered in the middle, with the email address 'tanasko.tasic@euramet.org' centered below it. A small page number '32' is located in the bottom right corner of the slide frame.