

RPT History

**what has been achieved
so far**

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EURAMET Capacity Building Officer**

**Webinar on
EMPIR Research Potential Call Scope 2019,
12 December 2018**

Evolution of capacity building over the years



“Ad-hoc” activities

Training courses

Strategic approach

Workshops, “enabling environment”

EMPIR Research Potential projects (RPT)



EURAMET-WELMEC FG on Facilitating National Metrology Infrastructure Development (FG-FNMID)

Supported by Secretariat

Sponsoring by PTB, UME and other NMIs

South-East European focus

SEE + AT + DE

BoD Working Group for Capacity Building (BOD-WGCB)

Capacity Building Officer

EMPIR providing funds for CB

Joint trainings events with the BIPM

Europe-wide participation

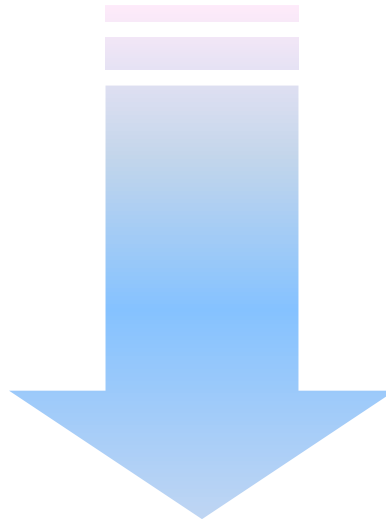
(36 countries)

Introduction of Targetted Programme „Research Potential“ in EMPIR



EMRP Midterm Evaluation 2011:

"EMRP is not having the desired effect in terms of capacity building in those countries with limited or no metrology research capability ..."



Introduction of Targetted Programme „Research Potential“in EMPIR (RPoT; RPT)

Capacity Building Instruments



1) Human and Institutional Capacity Building (HI-CB) training

- Training courses of 2-3 days: technical subjects, CIPM MRA, EMPIR processes, NMI management & communications, legal metrology
- Input / proposals from WGCB, TCs, Liaison Organisations
- Annual work plan (approved by EMPIR Committee)

2) Researcher Mobility Grants (RMGs)

- Researcher from EURAMET member/associate joins a JRP-partner (NMI/DI) to undertake research additional to the project for 1 - 18 months.
- Goal: develop employing NMI/DIs research capacity, enhance research of EMPIR projects, raise new researchers in metrology
- Calls based on adverts specific to JRPs and identifying area of research

3) EMPIR Research Potential Projects

- Specific JRPs supporting emerging NMIs to develop research capabilities in areas of national and regional strategic priority
- Annual calls

For more information: See EURAMET website
<https://www.euramet.org/knowledge-transfer/capacity-building/>

Eligible for participation:

- (1) & (3) open for NMIs beyond EURAMET
- (2) for EURAMET Members & Associates only

Capacity Building Instrument

Annual Financing 2018:



1) Human and Institutional Capacity Building

- Training courses of 2-3 days: technical subjects, CIPM MRA, EMPIR projects, legal metrology
- Input / proposals from WGCB, TCs, Liaison
- Annual work plan (approved by EMPIR Co-ordinating Committee)

HI-CB training courses

&

Researcher Mobility Grants

communications,

2) Researcher Mobility Grants (RMGs)

- Researcher from EURAMET member/associated country to undertake research additional to the project for 1 - 18 months
- Goal: develop employing NMI/DIs researchers, to raise new researchers in metrology
- Calls based on adverts specific to JRPs and identifying area of research

Ca 250 k€ available, financed from EMPIR members „cash contribution“

to undertake

EMPIR projects,

3) EMPIR Research Potential Projects

- Specific JRPs supporting emerging NMIs to address national and regional strategic priority
- Annual calls

RPT Annual Financing:

Ca 1 M€ EU funding

of national

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Research Potential Projects (RPT)



should enable emerging NMIs 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

Until now (2014-2018) 19 projects

Research potential projects



	Project		Field	Coordination	
2014	14RPT01	ACQ-PRO	EM	CEM	Spain
	14RPT02	AWICal	M	MIRS	Slovenia
	14RPT03	ENVCRM	MC	TUBITAK UME	Turkey
	14RPT04	Absorb	IR	LNE-LNHB	France
	14RPT05	Eura-Thermal	T	LNE	France
2015	15RPT01	TracePQM	EM	CMI	Czech Republic
	15RPT02	HUMEA	T	IMBiH	B&H
	15RPT03	Underwater	AUV	MRC MI-UAL	Turkey
	15RPT03	RF Microwave	EM	TUBITAK UME	Turkey
2016	16RPT01	ChemMet-Cap	MC	LNE	France
	16RPT02	ALCOREF	MC	BAM	Germany
	16RPT03	inTENSE	M	CMI	Czech Republic
2017	17RPT01	DOSEtrace	IR	IMBiH	B&H
	17RPT02	RhoLiq	M	IPQ	Portugal
	17RPT03	DIG-AC	EM	FER-HMI	Croatia
	17RPT04	VersICaL	EM	NSAI	Ireland
2018	SRT-r01	Traceability of blood presure measurement	M	CMI	Czech Republic
	SRT-r02	Traceability of contact probes and stylus instruments	L	TUBITAK UME	Turkey
	SRT-r04	Traceability of thermocouples	T	TUBITAK UME	Turkey

Impact of CB and EMPIR until now



Countries joined at EMPIR stage:

Ireland, Greece, Serbia, Bulgaria, Croatia – new participants in JRP projects,

New countries coordinating JRPs:

Slovenia, Bosnia & Herzegovina, Portugal, Croatia, Ireland

NMIs from non EMPIR countries (never participating in a JRP before) joining as external partners: Lithuania, FYR Macedonia, Montenegro, Moldova

Researchers mobility in EMPIR - 156 man-months within calls 2016, 2017 and 2018 (est).
Development of the researchers, significant improvement of EURAMET-wide networking among young metrologists

Emerging institutes started hosting training courses (DMDM, MBM, IMBiH, DPM)

New institutes started piloting intercomparisons within last 10 years:
DMDM, BIM, EIM, HMI, HMI/FSB-LPM, HMI/FSB-LPMD, IMBiH.

Many CMCs in preparation, some claims already submitted, some already approved

Impact of CB and EMPIR until now



15RPT02 HUMEA project: key output from each participant is the production of a national strategy for humidity measurement. NMI development of their scientific and technical capabilities + coordination for their country and region.

Establishment of new measurement services:

NSAI in Ireland - new calibration activity in noncontact thermometry as a direct results of its involvement in the 14RPT05 Eura-Thermal project.

IMBiH in Bosnia and Herzegovina has significantly improved environmental protection related measurements, thermometry (including construction of instruments) and, power quality measurements.

AS METROSERT (Estonia) is developing a calibration facility for automatic weighting instruments for vehicles, timely responding to customer requests.

GUM (Poland) is improving AC Voltage meas. capabilities and ionising radiation dosimetry.

EMPIR ENVCRM project: developing certified reference materials addressing environmental measurements and supporting implementation of relevant EU directives. A supplemental comparison within the context of this project will allow 10 NMIs/DIs to submit new or improve existing CMCs

Future improvements

- Research Potential TP continues with a modified scope to ensure that the TP is more strategically focussed
- Proposed Research Topics (PRTs) should build on developments in larger JRPs and / or to develop capabilities to participate in EMNs
- Abbreviations RPT+ or RPot+ for the new TP will be used where possible
- PRT call closes in February 2019

Annual Workplan 2019



For those states with limited metrology research capability, “Research Potential” projects should enable them to develop their scientific and technical research capabilities in areas of national and regional strategic priority. Project proposals shall:

- build on project outcomes under the Targeted Programmes when more research is needed to tailor the solution for wider implementation in Europe

OR/AND

- aim to develop capabilities to enable participation in a joint European metrology structure in a specific strategic area.

Those requirements, in practice, refer to earlier JRPs or/and EMNs.

Thank you for your attention!



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