

# **EURAMET**

## **Important developments during last year**

**Wolfgang Schmid, Head of Secretariat**

**22<sup>nd</sup> COOMET Committee Meeting**

**Cholpon-Ata, Kyrgyzstan, 18 / 19 April 2012**

## **OUTLINE:**

- ❑ EURAMET today – Members, Officials, internal organisation**
- ❑ EURAMET 2020 Strategy**
- ❑ Cooperation in Infrastructure Development**
- ❑ European Metrology Research Programme (EMRP)**

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# EURAMET today



## EURAMET e.V.



- Inaugurated in 2007
- Successor of EUROMET
- Legal Entity: German non profit association

### Members:

37 European NMIs

### Associates:

IRMM (EC)

71 DIs (Designated Institutes)

### Liaison Organisations:

4 RMOs & BIPM

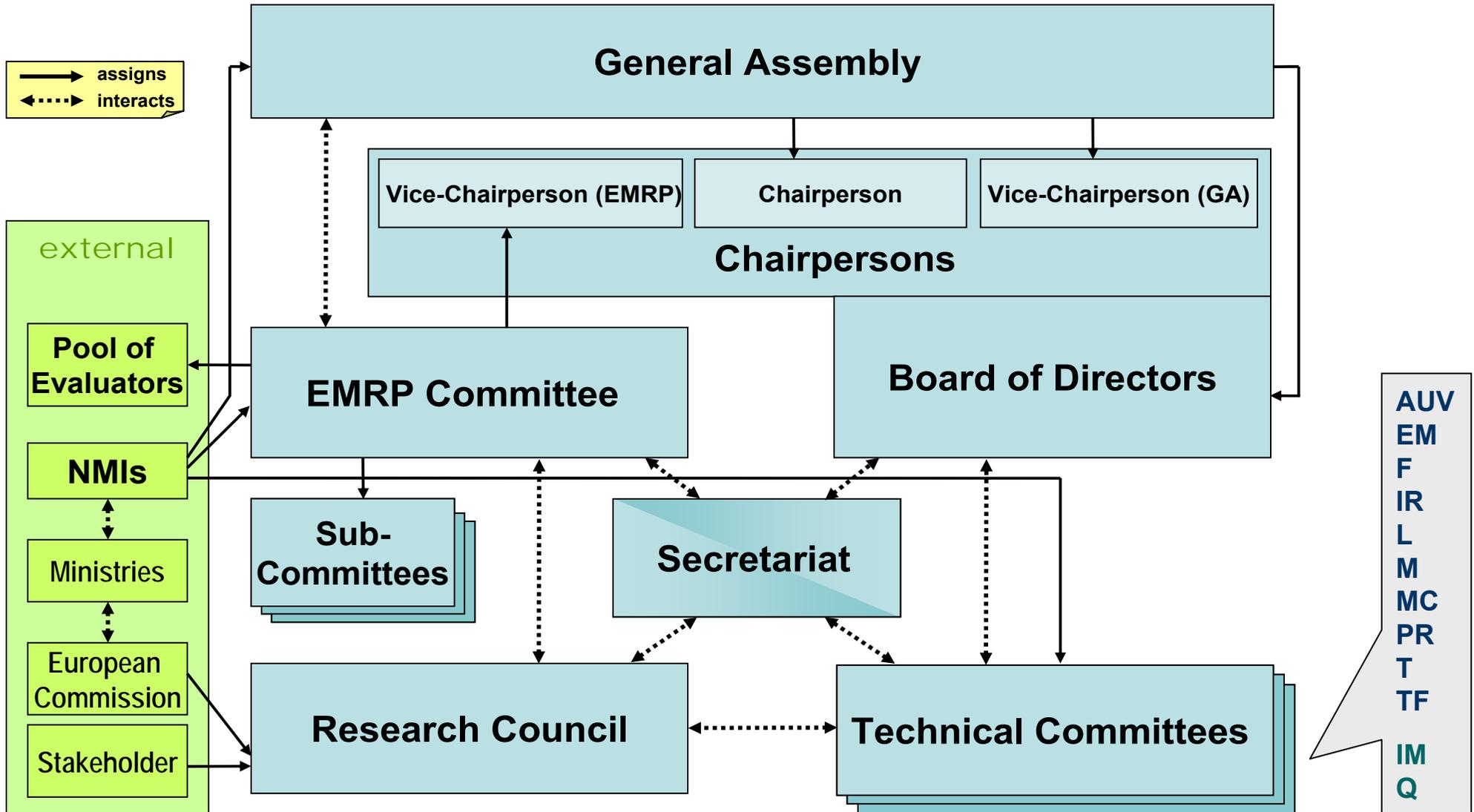
3 NMIs beyond Europe

KDM (Kosovo under UNSCR 1244)

6 regional/international Organisations



# Internal Organisation



# Chairpersons

**Chairperson:**  
**Leslie Pendrill**

SP Measurement Technology  
Technical Research Institute of Sweden  
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**Next EURAMET Chair**  
starting end May 2012

**Chairperson-elect:**  
**Kamal Hossain**

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**Vice-Chairperson (GA)**  
**Janko Drnovšek**

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Internet: [www.mirs.si](http://www.mirs.si)

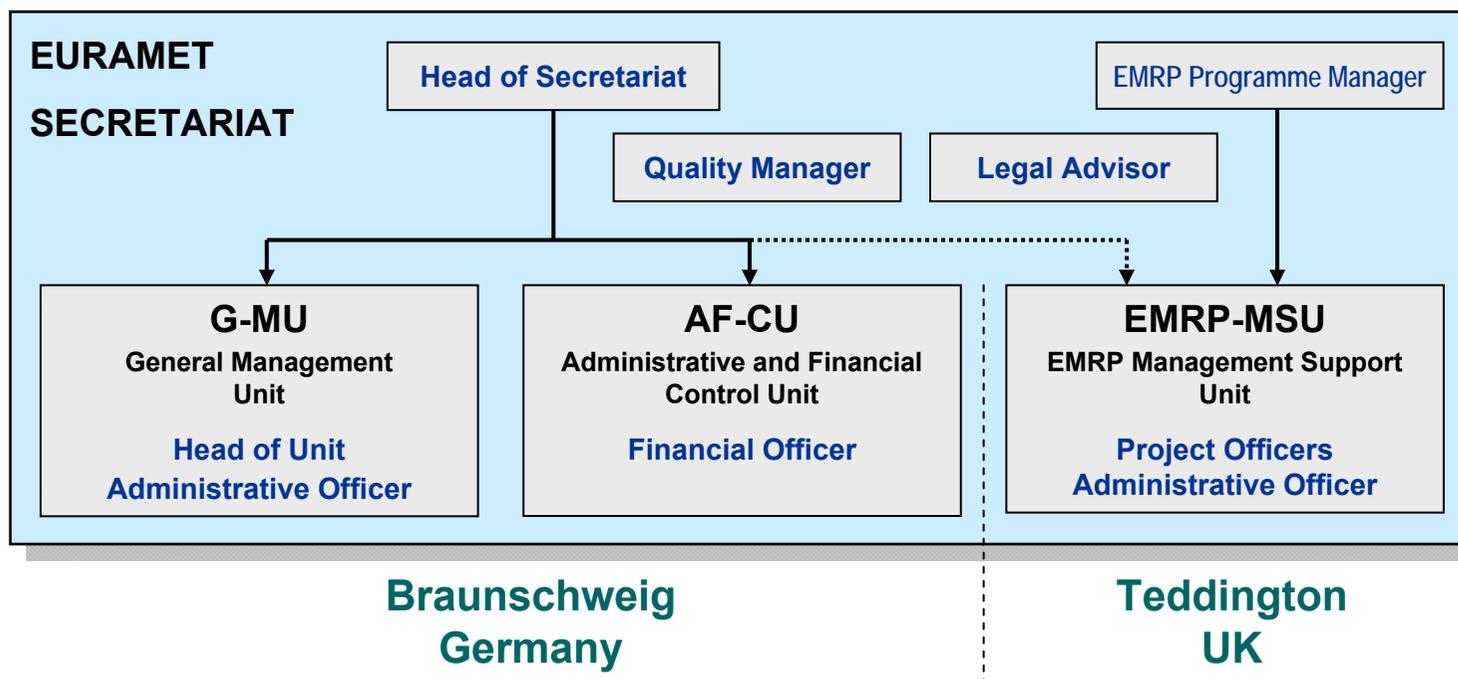


**Vice-Chairperson (EMRP)**  
**Jörn Stenger**

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# Secretariat



## Head of Secretariat:

Wolfgang Schmid

## EMRP Programme Manager:

Duncan Jarvis

## Quality Manager:

Enver Sadikoglu (10%)

## Legal Advisor:

Barbara Tafel (10%)

- 2 sites (Braunschweig and Teddington)
- Permanent staff, part of it directly employed by EURAMET
- Supported by secondments from Members for specific tasks and projects

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D-38116 Braunschweig  
 +49 – 531 – 592 1960  
Mail: [secretariat@euramet.org](mailto:secretariat@euramet.org)  
[http:// www.euramet.org](http://www.euramet.org)

# Secondments in 2010 /2011

**Majlinda Hoxha, DPM, Albania:**

- Preparation of a training course

April 2010

**Chris Noble, NPL, UK**

- EMRP website & promotion

since January 2011

**Željko Stijepović, MBM, Montenegro:**

- Barriers to cross-frontier provision of services

July 2011

Continuous support:

**Haris Memić, IMBiH, Bosnia and Herzegovina:**

- Follow-up of FG-FNMID activities

**Silvie Hoffmanova, CMI, Czech Republic:**

- TC-Q Secretary
- Analysis of the registration information of A-DIs

**Enver Sadikoglu, UME, Turkey:**

- EURAMET Quality Manager



# Technical Committees



- 12 TC's coordinate the technical and scientific cooperation within EURAMET (traceability, R&D projects, comparisons, consultancy, CMC review)
- 1 contact person per member country (appointed by the Delegate)
- TC-Chair (elected by GA)
- Annual meetings
- Sub-Committees

Period	20..	08/09	09/10	10/11	11/12	12/13	13/14	14/15
<b>AUV</b>	Salvador Barrera	DK		1st	2nd			
<b>EM</b>	Francois Piquemal	FR			1st			
<b>F</b>	Elsa Batista	PT			1st			
<b>IM</b>	Maguelonne Chambon	FR		1st				
<b>IR</b>	Hans Bjerke	NO		1st	2nd			
<b>L</b>	Antti Lassila	FI			1st			
<b>M</b>	Nieves Medina	IT			1st			
<b>MC</b>	Michela Segal	IT			1st			
<b>PR</b>	Mark Smid	CZ			1st			
<b>Q</b>	Pavel Klenovsky	CZ			1st			
<b>T</b>	Andrea Peruzzi	NL		1st				
<b>TF</b>	Andreas Bauch	DE		1st	2nd			

# Major Activities of EURAMET



## ❑ Cooperation in National Measurement Standards:

- Facilitating traceability to the SI
- International recognition: CIPM MRA

## ❑ Cooperation in R&D in Metrology:

- Research projects of the TCs (“ad-hoc”)
- Coordinated research programmes co-financed by the EC: EMRP

## ❑ Infrastructural Support & Knowledge Transfer:

- Facilitating national metrology infrastructure development (emerging members)
- Cooperation with EC in development programmes
- Development of KT material

## ❑ Policy Advice, Liaison Activities, Publicity:

- Cooperation with European organisations in Q-Sector: EA, WELMEC, CEN, ...
- Strengthening links to the European Commission (EC)
- Metrology congresses: participation / co-organisation

# Financing of EURAMET Activities



<u>Source</u>	<u>Use</u>	<u>Budget 2011</u>
1. <b>Membership fees</b> (Members + Associates)	General operation of EURAMET	<b>230 k€</b>
2. <b>EMRP management fees</b>	Coordination of EMRP + researcher grants	<b>1,6 M€</b>
3. <b>Research funds EC</b>	Joint Research Projects + researcher grants	<b>16,4 M€</b>
4. <b>Technical assistance funds of PTB</b>	Support to FG-FNMID (development cooperation)	<b>150 k€</b>
5. <b>EURAMET Members</b> BEV, MIRS, UME, EIM	Support to FG-FNMID activities in kind and cash support	

# EURAMET General Assembly 2011



## Some Results:

- MBM, Montenegro accepted as 37<sup>th</sup> full member
- Election of Kamal Hossain, UK as next EURAMET Chair (2012 to 2015)
- new BoD member: Jose Angel Robles (Spain)
- EURAMET 2020 Strategy was accepted

**Next GA:**  
**Lyngby, Denmark**  
**21 to 25 May 2012**

## Important matters of 15<sup>th</sup> BoD meeting:

- Implementation of EURAMET strategy
- Preparation of the “European Metrology Programme for Innovation and Research – EMPIR” (successor programme of the EMRP)
- Capacity Building in EURAMET - increasing importance for EURAMET:  
How to achieve that EURAMET emerging members to benefits from the EMRP?
- EURAMET publicity concept:  
Employment of a Publicity Officer in progress

## Important matters of 5<sup>th</sup> joint TC-Chair-BoD meeting:

- Issues of the CIPM-MRA:  
EURAMET proposals for making the inter-RMO CMC-review more efficient
- Input for the EMPIR

## OUTLINE:

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- ❑ Cooperation in Infrastructure Development
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# EURAMET 2020 Strategy



## EURAMET Vision:

EURAMET to be the leader in the development and application of measurement enabling Europe to be competitive, healthy and sustainable through innovation.

## EURAMET Mission:

- Develop and disseminate an appropriate, integrated and cost effective measurement infrastructure for Europe taking into account the needs of end users in industry, business and Government.
- Ensure that the European measurement infrastructure is internationally competitive and recognised, and is based on robust and high quality science and R&D.
- Support members in meeting their own national requirements through collaboration and a balanced European measurement infrastructure.

### **EURAMET 2020 Strategy:**

- prepared by the BoD between Sept. 2010 and June 2011
- coordinated by Kamal Hossain
- approved by the GA, June 2011
- currently BoD is preparing an action plan for the achievement of the strategic objectives

# Our vision is to be the leader in the development and application of measurement enabling Europe to be competitive, healthy and sustainable through innovation.

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- Support members in meeting their own national requirements through collaboration and a balanced European measurement infrastructure

To deliver the mission strategic priorities for EURAMET are:

### Stakeholder Engagement

EURAMET will strengthen its links and influence with key users and stakeholders to prioritise its work and increase uptake and impact

### Policy Support

Increase influence with European Policy Makers and National Governments by providing inputs to policy development and raising awareness of the contribution metrology makes to business and society

### R&D Collaboration

Further develop collaborative R&D in metrology to enable Europe to achieve its strategic goals

### Support to Members & Associates

Provide added value to all members and associates through collaboration and mutual support to help meet their national objectives

### Enhance Quality Infrastructure

Help improve efficiency of members and associates in meeting quality requirements for European and International calibration and measurement standards

**Available  
on website**

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www.euramet.org

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# National Metrology Infrastructure in EURAMET Member Countries



## EURAMET Guide 11:

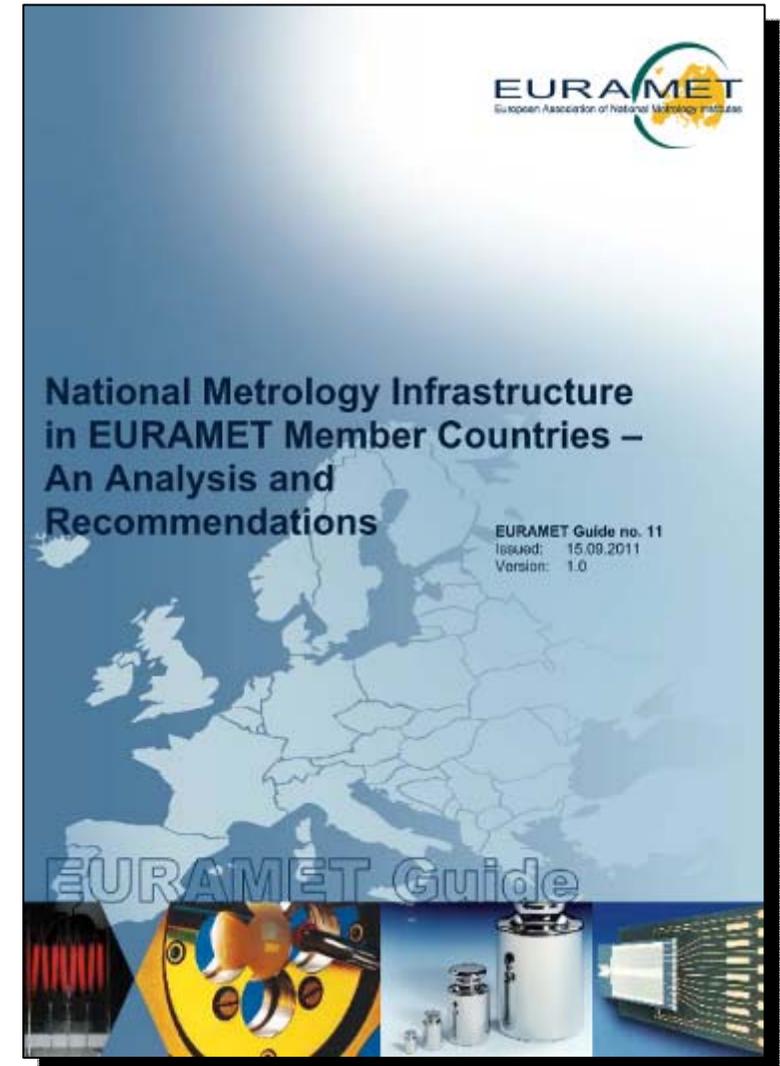
Analysis how national metrology infrastructure composed by NMI and DIs is organised in EURAMET member countries and recommendations for an effective operation.

Analysis and recommendations are based on

- EURAMET database
- Registration process of DIs
- Landscaping (Survey among Delegates)
- Survey within JCRB
- other sources (e.g. TC-Q)

**Available  
on website**

<http://www.euramet.org/index.php?id=guides>



# TC-IM Focus Group on Facilitating National Metrology Infrastructure Development



## Joint Focus Group WELMEC – EURAMET



### Goals of the Focus Group:

- promotion and development of the metrology infrastructure by **increased cooperation**
- facilitation and acceleration of the **integration** of its member NMIs **into EURAMET activities** and of WELMEC Associates into **WELMEC activities**
- **raising awareness** about the development in metrology and quality infrastructure

## **“Upgrade” of the Focus Group to a TC**

- 1) Principal decision taken by BoD to establish the FG as TC, in order to achieve more impact and visibility
- 2) Role for capacity building within EMPIR needs to be developed

**Objective:** Facilitating the participation in the CIPM MRA in particular of EURAMET members which are preparing for CMC entries

**Activities:**

- Lectures
- Exercises
- Preparation of „roadmaps to CMCs“, identify obstacles and solutions



**26 participants from:**

DPM, Albania  
IMBiH, Bosnia-Herzegovina  
CRP Henri Tudor, Luxembourg  
MBM, Montenegro  
BoM, FYR Macedonia  
DMDM, Serbia  
IRB, Croatia  
KDM, Kosovo UNSCR 1244/1999

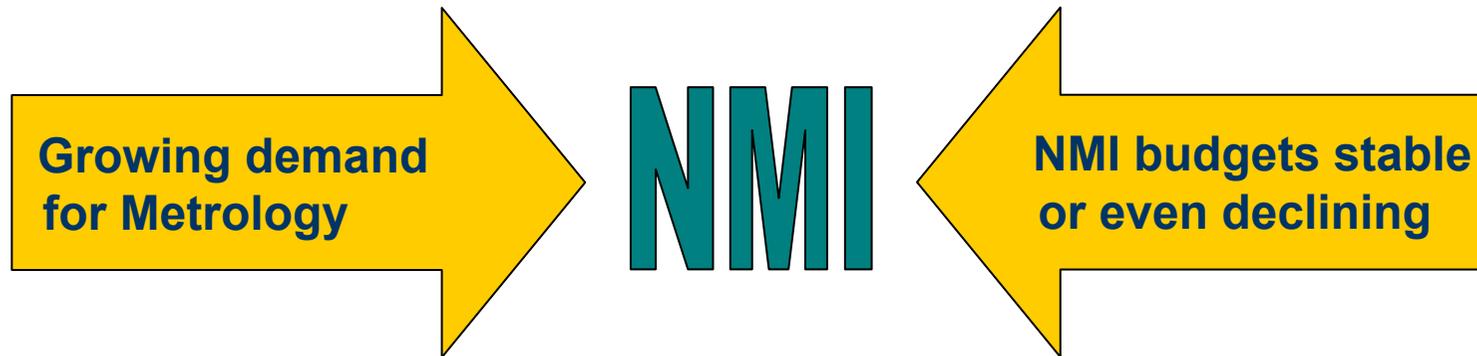
**Lecturers:**

Omer Altan, BIPM  
Silvie Hoffmanova, CMI  
Enver Sadikoglu, UME  
Wolfgang Schmid, EURAMET

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# The “Metrology Dilemma”



- **Traditional areas of industry**
  - becoming more complex
  - requiring broader measurement ranges and lower uncertainties
- **New areas of technology**  
e.g. nano-technology or biotechnology
- **Areas in which metrology is increasingly recognised**  
e.g. chemistry, clinical analysis, food safety

## MERA Study: 2002/2003

- How to address the evolving needs with not-growing national budget for metrology?
- Can the European “Metrology Dilemma” be addressed through closer collaboration?

*Funded by the European Commission (EC)*

# The iMERA Project



## iMERA

= “implementing the  
Metrology **E**uropean **R**esearch **A**rea”

EC “ERA-NET” Coordinating Action

04/2005 to 12/2008

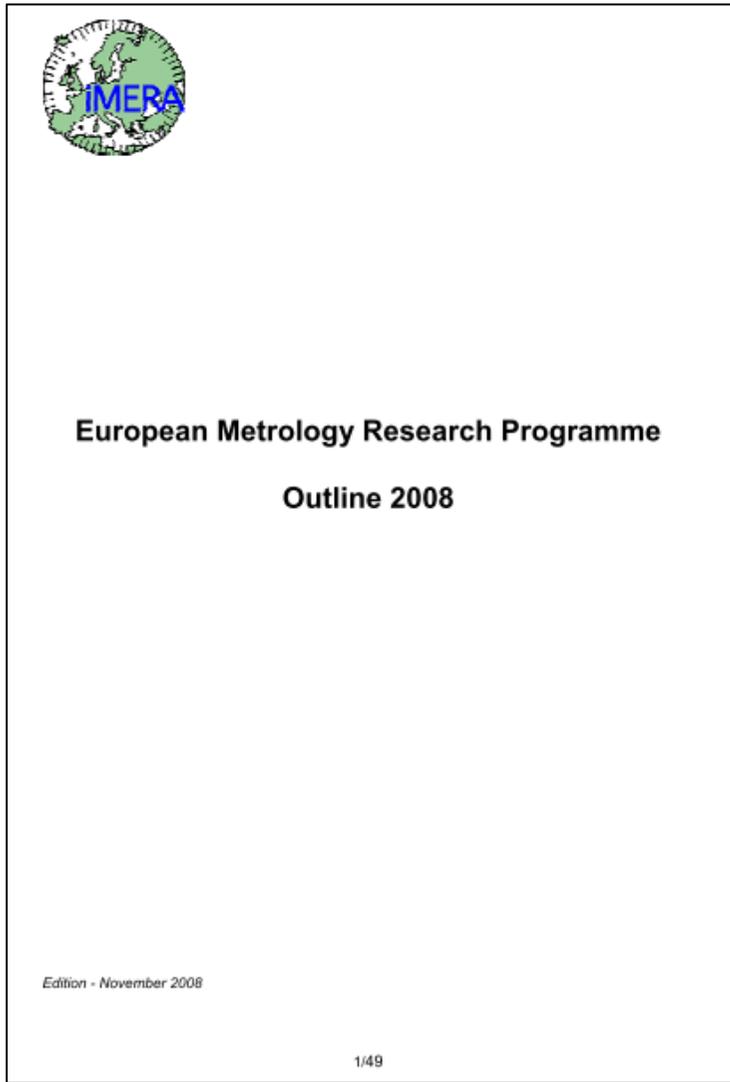
Coordinated by NPL



## Major Objectives:

- Elaboration of an **EMRP**  
= European Metrology Research Programme
- Establishment of **Structures**  
for the execution of the EMRP
- **Funding Aspects:**  
ERA-NET Plus, A-169 (*now A-185*)
- Knowledge Transfer

# Structure of the EMRP



Document available on: [www.euramet.org](http://www.euramet.org)

## Grand Challenges

- Health
- Energy
- Environment
- New technologies  
(nano-sciences, security, etc.)

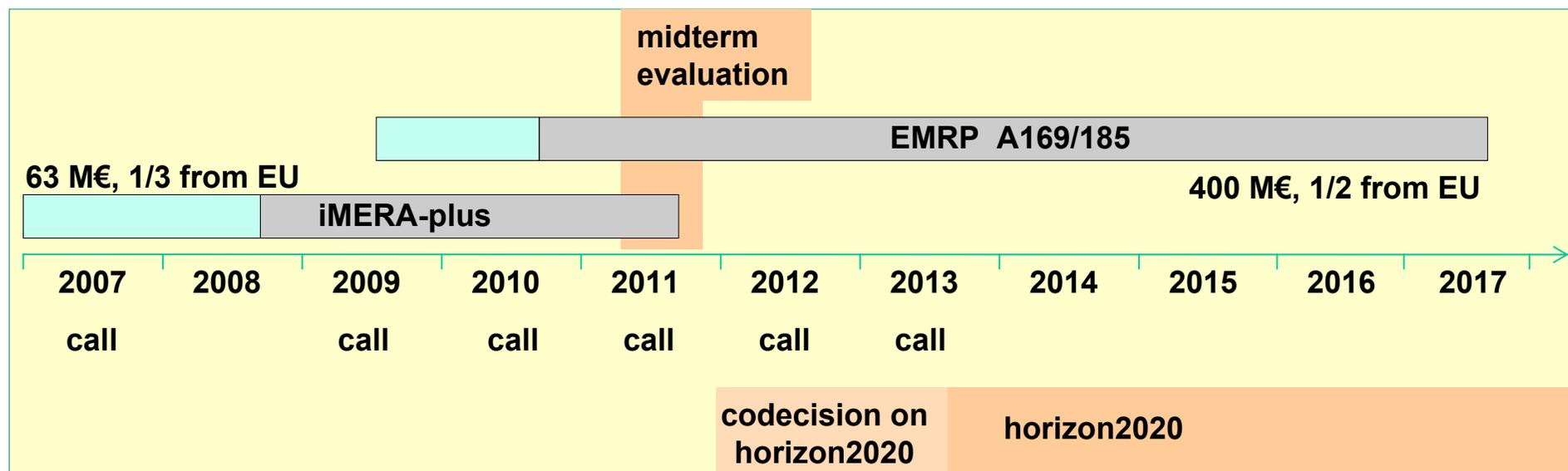
## R&D for fundamental and applied metrology

- Fundamental metrology
- Focused single discipline  
(including SI, Fundamental Constants, Biotechnology, Materials)

## Capacity Building and KT



# Funding instruments of the EMRP



EMPIR proposal

# Funding of the A-169 EMRP

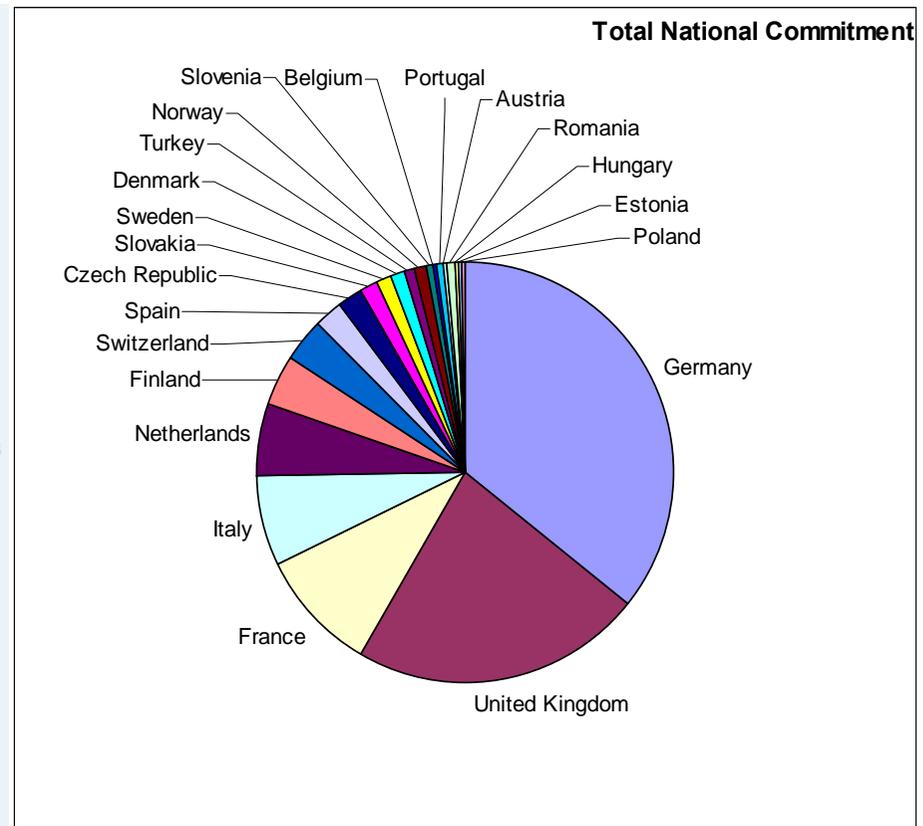


**200 M€ from COM**  
(common pot)

**200 M€ from participating countries**  
90% “in kind” + 10% cash (common pot)



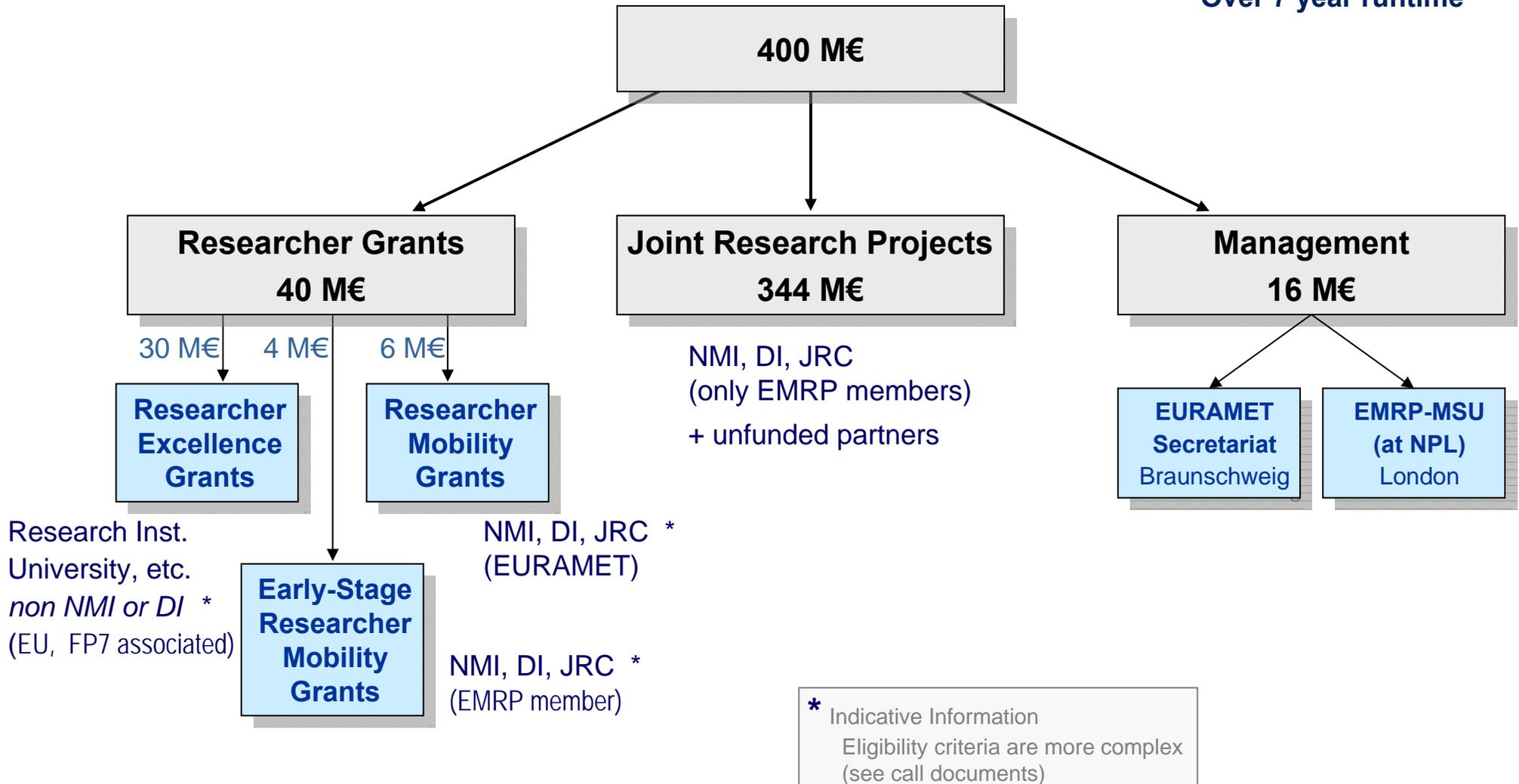
- Austria
- Belgium
- Czech Republic
- Denmark
- Estonia
- IRMM - European Commission
- Finland
- France
- Germany
- Hungary
- Italy
- The Netherlands
- Norway
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom



# Use of resources of the A-169 EMRP



Over 7 year runtime



# EMRP Calls: iMERA-Plus & A-169

<b>iMERA-plus 2007 call</b>	total budget <b>63 M€</b>
SI fundamentals	21
Health 1 <sup>st</sup>	21
Length	9
EM	12

project duration: 3 years  
 typical project size: 3 M€  
 typical # of partners:  
     7 (iMERA-plus)  
     13 (TP energy)

<b>A169</b>	Targeted Programme (TP)	total budget <b>400 M€</b>
2009	Energy (1 <sup>st</sup> )	34
2010	Environment (1 <sup>st</sup> )	48
	Metrology for Industry (1 <sup>st</sup> )	48
2011	Health (2 <sup>nd</sup> )	30
	SI broader scope (1 <sup>st</sup> )	30
	New Technologies	30
2012	Metrology for Industry (2 <sup>nd</sup> )	40
	SI broader scope (2 <sup>nd</sup> )	40
	Open excellence call	10
2013	Energy (2 <sup>nd</sup> )	55
	Environment (2 <sup>nd</sup> )	35

# EMRP Call & Selection Process (A-169)

## STAGE 1

**Call for proposals for potential metrology research topics: PRT**  
Interested institutes or individuals worldwide submit ideas

**Selection and processing of PRTs → SRT**  
EMRP-Committee, as input for stage 2

## STAGE 2

**Call for proposals for Joint Research Projects (JRP)**  
Scientists write proposals, create consortia, develop JRPs  
may include proposals for Researcher Excellence Grants

**Review Conference**  
Independent joint evaluation: ranked list of JRPs proposed for funding

**Decision on funded JRPs**  
EMRP-Committee, confirmation by Research Council and Commission (EC)

## STAGE 3

**Call for proposals for Researcher Grants**  
Following the selected JRPs, supporting the JRPs

# Summary: Guiding principles of the EMRP



- **European** rather than national **planning and coordination** of the R&D programme
- Systematic stakeholder input
- **Co-Funding**: European + national resources
- Joint Research Projects:
  - **Collaborative** projects (minimum 3 partners)
  - Create critical mass beyond the capabilities of a single NMI
  - **Coordinated research** to avoid unnecessary duplication
  - Projects selected by independent experts based on **excellence criteria**

# THANK YOU FOR YOUR ATTENTION

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