

**EURAMET e.V.**

**European Association of National Metrology  
Institutes**

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[www.euramet.org](http://www.euramet.org)

6th EURAMET GA Chairpersons' Report Past Year  
Lyngby, DK 22 May 2012

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## Regional Metrology Organisations (RMO)

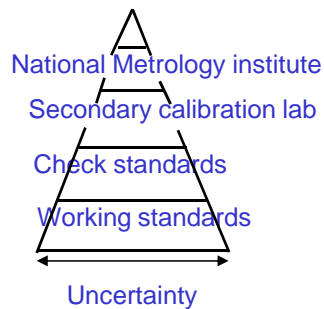


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Lyngby, DK 22 May 2012

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# Objectives & Strategies

## European Association of National Metrology Institutes



Cooperation quality-assured measurement

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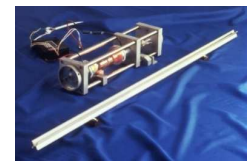
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## Metrology – “quality-assured measurement”



*Traceability => measurements can be compared*

- Under both repeatability and reproducibility
- Even different measurement quantities



*Uncertainty => declared measurement quality*

- 'Fit-for-purpose'
- Quantified risks of decision errors

**1,234 m ± 0,016 m**



*This gives processes and products which have:*

- Interoperability
- Improved communication
- Can be traded, are safe and lie within specifications




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**EURAMET**  
European Association of National Metrology Institutes

# EURAMET Newsletters



**EURAMET**  
European Association of National Metrology Institutes

**2009**

**EURAMET Newsletter**  
Issue 1

**EURAMET Newsletter**  
Issue 2

**EURAMET Newsletter**  
Issue 3

**EURAMET Newsletter**  
Issue 4

**EURAMET Newsletter**  
Issue 5

**EURAMET Newsletter**  
Issue 6

**EURAMET Newsletter**  
Issue 7

**EURAMET Newsletter**  
Issue 8

**EURAMET Newsletter**  
Issue 9

**EURAMET Newsletter**  
Issue 10

**EURAMET Newsletter**  
Issue 11

**EURAMET Newsletter**  
Issue 12

**2010**

**EURAMET Newsletter**  
Issue 1

**EURAMET Newsletter**  
Issue 2

**EURAMET Newsletter**  
Issue 3

**EURAMET Newsletter**  
Issue 4

**EURAMET Newsletter**  
Issue 5

**EURAMET Newsletter**  
Issue 6

**EURAMET Newsletter**  
Issue 7

**EURAMET Newsletter**  
Issue 8

**EURAMET Newsletter**  
Issue 9

**EURAMET Newsletter**  
Issue 10

**EURAMET Newsletter**  
Issue 11

**EURAMET Newsletter**  
Issue 12

**2011**

**EURAMET Newsletter**  
Issue 1

**EURAMET Newsletter**  
Issue 2

**EURAMET Newsletter**  
Issue 3

**EURAMET Newsletter**  
Issue 4

**EURAMET Newsletter**  
Issue 5

**EURAMET Newsletter**  
Issue 6

**EURAMET Newsletter**  
Issue 7

**EURAMET Newsletter**  
Issue 8

**EURAMET Newsletter**  
Issue 9

**EURAMET Newsletter**  
Issue 10

**EURAMET Newsletter**  
Issue 11

**EURAMET Newsletter**  
Issue 12

**www.euramet.org**

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Lyngby, DK 22 May 2012

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## Happy 5th Anniversary!



EURAMET celebrates its 5<sup>th</sup> Anniversary on 11<sup>th</sup> January this year. On that date in 2007 in Berlin, the new Association of National Metrology Institutes in Europe was formed, replacing the earlier EUROMET dating from the 1980's.

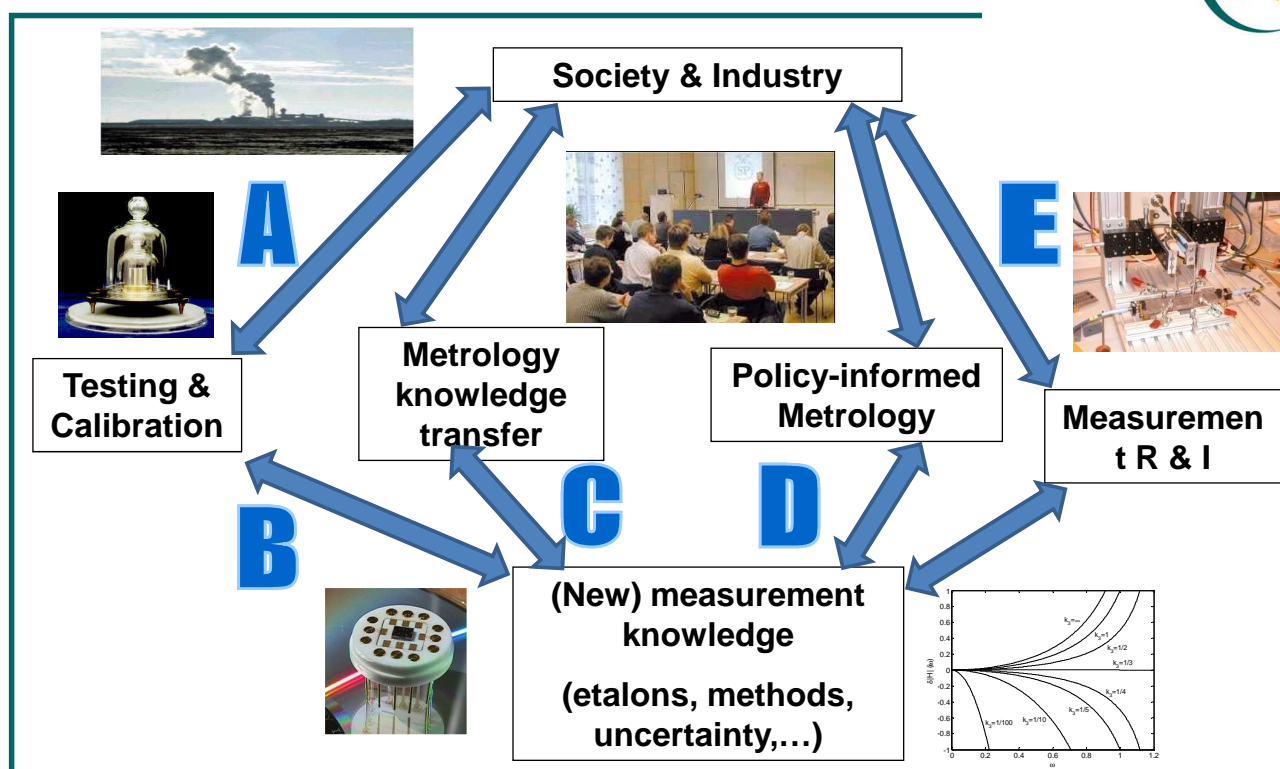


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Lyngby, DK 22 May 2012

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- 0) Governance & membership
- 1) Administration & secretariat
- A) Traceability of measurements to SI
- B) International recognition:
  - National measurement standards
  - Calibration and Measurement Capabilities (CMC) of members
- C) Knowledge exchange & infrastructural support
- D) Policy support
- E) Research in metrology
  - European Metrology Research Programme (EMRP)

## *Critical factors for success in innovation & trade*







## EURAMET Vision

## 2020 Strategy

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

## EURAMET Mission

Our mission is to:

- 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

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Lyngby, DK 22 May 2012

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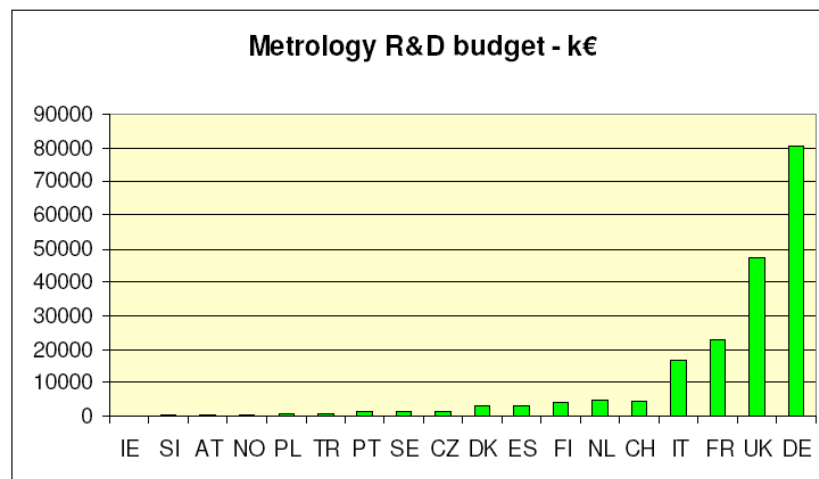
100+ organisations (NMI, DI)

- employ about 4000 persons
- circa 2000 persons work on R&D activities
- spending about 200 M€ per year (50% of total budget) on R&D activities

*EURAMET new members 2011:*

37th: Montenegrin Bureau of Metrology (MBM)

4 New DIs



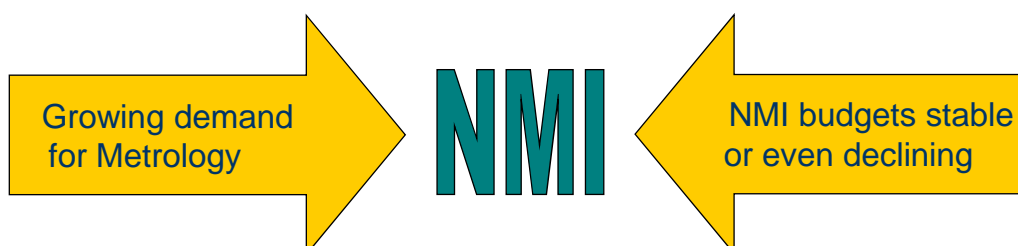
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## Objectives & Strategies

### “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



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# RMO – symphony orchestra?

**Metrology  
&  
Innovation!**



**3% GDP  
Impact!**

**Necessary redundancy –  
more than one player in  
each section**

**Advantages of cooperation**

**European added value –  
more than simple sum**

**Small & big players –  
from double bass to  
piccolo**

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## B

## International recognition

### **EURAMET proposes:**

- **Impose strict deadlines for intra- and RMO-review (for reviewers and as well for submitting NMI)**
- **Coordinate inter-RMO review in order to avoid unnecessary duplication of work**
- **Work on classification of entries, trying to keep number of categories on a manageable level**
- **Improve tools for handling of CMC entries**

CMC reviews  
Draft paper for JCRB consideration  
February 2012

### **Reflection on CMC processes**

#### **1 Motivation**

The CIPM MRA should provide for the mutual recognition of national measurement standards and of calibration and measurement certificates issued by national metrology institutes, and founded on the efforts of each individual national metrology institute to base its measurements and measurement uncertainties on SI units.

In this frame, the RMOs are essential bodies in the implementation of the CIPM MRA, in particular for performing Supplementary Comparisons and reviewing the CMCs.

At the present time, the CIPM MRA processes represent an important workload for all the RMO Technical Committees. The experience on CMC reviews shows that the CMC review processes are becoming more and more difficult to handle:

- The number of entries steadily increases.
- It is difficult to review all entries properly and to ensure their validity over time.
- For an external customer, it is difficult to compare services published in the KCDB and to choose the services, the data base entries are often not comparable enough.

The aim of the present paper is to have a reflection at the JCRB level on the CMC making propositions.

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## Legal metrology



## EURAMET 2010 MoU & Collaboration Agreements

## Quality infrastructure



Sharm-el-Sheikh  
(Egypt) Sept  
2010

## Standardisation



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Lyngby, DK 22 May 2012

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European Metrology Research Programme  
Outline 2008

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

Edition - November 2008

1/49

## 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



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Lyngby, DK 22 May 2012

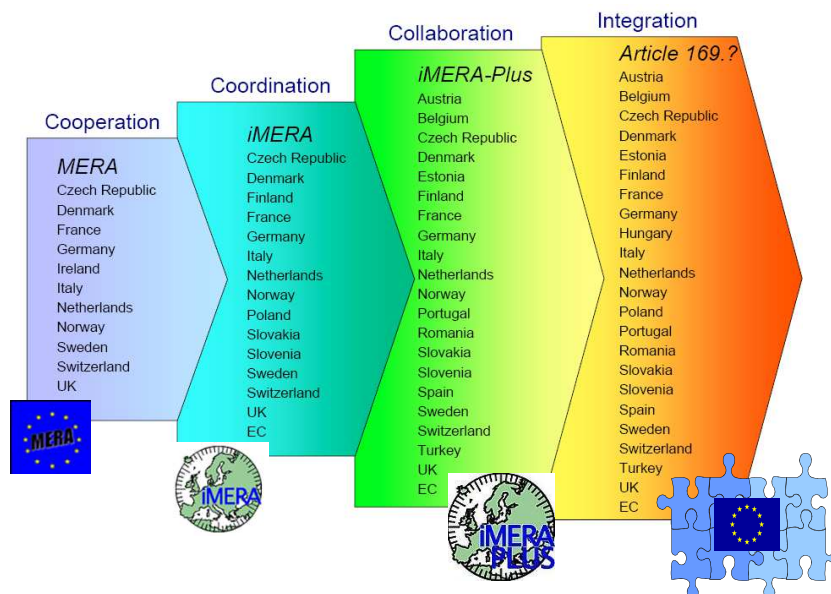
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## Working together to deliver on Europe 2020

**Considerable commitment from majority of 36 national metrology programmes**

e.g. in EU projects FP6 MERA, ERA-NET iMERA, FP7 ERA-NETplus iMERA+, Art185(169)



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Lyngby, DK 22 May 2012

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**Berlin, 27th  
November 2009**

For EURAMET:  
Mr. Leslie PEEDRILL  
Chairperson

[signature]  
Mr. Luc ERARD  
EMRP Chair

[signature]  
Done at ... Berlin, 27<sup>th</sup> Nov. 2009  
[place, date]  
In duplicate, in English language

### SIGNATURES

For the Commission  
Mr. Robert-Jan Smits  
Director RTD.B  
Directorate-General for Research

EUROPEAN METROLOGY RESEARCH  
PROGRAMME

GENERAL AGREEMENT

RTD/B1/2009/EMRP

\*\*

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Lyngby, DK 22 May 2012

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## Working together to deliver on Europe 2020

Particular features of national metrology **which work together in support of this effective leveraging of funds are:**

- **All partners – the NMIs and their governmental programme owners – share a common, well-defined mission**
- **Most partners know each other and have cooperated internationally for many decades**
- **Metrology relies on obtaining consensus amongst different laboratories**
- **National metrology is considered in all countries as a public mission rather than a commercial concern, an area of ‘Market failure’**

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Lyngby, DK 22 May 2012

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The screenshot shows the European Commission Research & Innovation website. At the top, there is a navigation bar with links: A to Z, Sitemap, About this site, Legal notice, Contact, and Search. Below this is a header with the European Commission logo and the text 'RESEARCH & INNOVATION'. The main content area features a 'News Alerts on EU Research' banner with a background image of red and blue vertical bars. Below the banner, a 'News Alert' section highlights a 'successful European public-public partnership – Commission report on the interim evaluation of the European Metrology Research Programme (EMRP)'. The date 'Brussels, 16 April 2012' is noted at the bottom right of the alert. A sidebar on the left contains links for 'Home', 'Guided tour', 'Search', 'Browse', 'Index', 'Site map', 'Ask', 'FAQs', 'Research Enquiry Service', 'Receive', and 'RSS'.

***“Commission shares expert panel view of EMRP:***

- **Well managed and progressively more and more integrated European programme**
- **Transformed specialised and fragmented community into successful public-public partnership**
- **Confirming advantages of European Research Area.”**

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Lyngby, DK 22 May 2012

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## RESEARCH & INNOVATION



European Commission > Research & Innovation > Press centre > News Alerts

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**Home**

Guided tour

Search

Google Custom Search

Browse

Index

Site map

Ask

FAQs

Research Enquiry Service

Receive

RSS



### News Alert

#### A successful European public-public partnership – Commission report on the interim evaluation of the European Metrology Research Programme (EMRP)

Brussels, 16 April 2012

**“Commission will during next years be open to engage with EURAMET e.V.:**

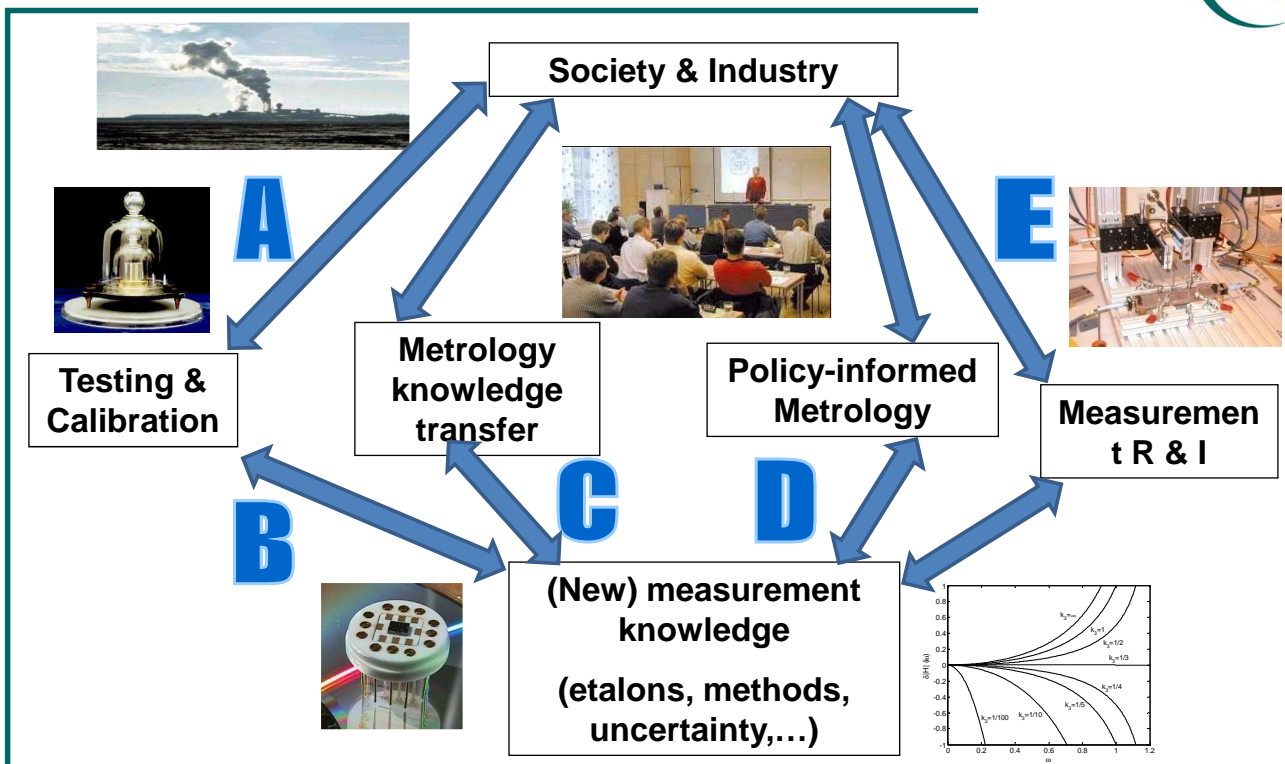
- Preliminary discussions on possible follow up for current EMRP in context of next programming period,
- without prejudice to final decision about HORIZON 2020 and EU Multi-Annual Financial Framework,
- taking into consideration the wider political context of the EUROPE 2020 strategy.”

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Lyngby, DK 22 May 2012

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## Critical factors for success in innovation & trade



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Thank you for your attention

**Leslie PENDRILL, EURAMET  
Chairperson**

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[www.euramet.org](http://www.euramet.org)