



# EURAMET Governance & Strategy 2 Policy support

Chairperson Leslie Pendrill



As the Regional Metrology Organisation of Europe, EURAMET brings together metrology laboratories of 37 member countries and world leading metrology capabilities supporting European innovation, industrial competitiveness, trade, and regulation.

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

### 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

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

EURAMET e.V.







Society & Industry

Critical factors for success in innovation & trade



Testing & Calibration



Metrology knowledge transfer

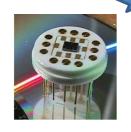


Policy-informed Metrology



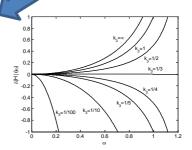
Measurement R & I





(New) measurement knowledge

(etalons, methods, uncertainty,...)



# **Objectives & Strategies**



	1) Engagement of key stakeholders	2) Increase influence with European policy makers and National Governments	3) Further develop co- operation in R&D	4) Deliver high value to members and associates	5) Supporting quality infrastructure in Europe and internationally
0) Governance &				X	
membership					
1) Administration				X	
& secretariat					
A) Traceability					X
of measurements to					
SI					
B) International					X
recognition					
C) Knowledge					
exchange &	X	X			X
infrastructual	,		/		
support					
D) Policy support	X	\ X /			
E) Research in			X		
metrology					



# **Strategic Objectives**

- 1) Engagement of key stakeholders
- 2) Increase influence with European policy makers and National Governments
- 3) Further develop co-operation in R&D
- 4) Deliver high value to members and associates
- 5) Supporting quality infrastructure in Europe and internationally

# 2) Increase influence with European policy makers and National Governments

- 2.1) Identify suitable **policy areas & mechanisms** for EURAMET to contribute
- 2.2) Establish mechanism for **rapid response to EC consultations** to support European Policy development and implementation
- 2.3) Ensure appropriate **results from EMRP projects** contribute effectively to development of **European standards** of major importance

## **Our Key Stakeholders**

- •Industry and Business
- National Government
- •EC
- •Standards Organisations
- Universities
- •Legal and Conformity Assessment Organisations

### **Engagement with Policy**

In many European Directives measurements are a basic building block.

### Examples are:

- Water Framework Directive
- In-vitro Diagnostic Directive
- •Air Quality Directive
- -Directive on Greenhouse Gas Emissions

EURAMET members actively support the implementation of many EC Directives through measurement and monitoring work.





# 2.3 Ensure appropriate results from <u>EMRP projects contribute effectively</u> to development of European standards

Action 2.2.10: Identify contact persons for Standards body related to EMRP project activity, Date 111230

• CEN/CENELEC Contact person(s): ?

Action 2.2.11: Identify/confirm each Standards body's major committees & working groups [EURAMET participation] related to EMRP project activity, Date 111230

• CEN/CENELEC: ?

•

Action 2.2.12: Formulate how EMRP project activities (including new EMPIR potential programme) enter into each Standards body's major activities, Date 120630









### COOPERATION AGREEMENT

Between

The EUROPEAN ASSOCIATION OF NATIONAL METROLOGY INSTITUTES and
The EUROPEAN COMMITTEE FOR STANDARDIZATION

The EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION



Mrs Elena Santiago (Director General CEN-CENELEC) and Prof. Leslie Pendrill (Chairperson, EURAMET)

### CEN-CENELEC/EURAMET CA Signed June 29th 2010 Brussels

Strategic goals and projects of common interest:

- in fields of metrology and standardization
- in support of scientific advancement and technological innovation
- to meet societal challenges with a significant impact on the economy and the quality of lives within Europe

# Review status of CEN/CENELEC Collaboration Agreement (2010) with EURAMET Key areas for consideration:

- EURAMET's & CEN/CENELEC's Strategies cooperation possibilities?
- o Translation of EMRP results into valuable European Standards
- CEN input into formulation of EMRP calls
- National metrology/standardisation interactions
- Increased collaboration in Innovation/Horizon 2020

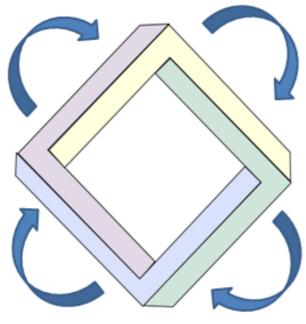




# Policy & societal issues

- Grand challenges
- Energy
- · Climate change

• ....



Regulation

Rules

Specifications

Safety limits

# Metrology

- Instruments
- Test methods
- Laboratories
- Traceability
- Measurement uncertainty

# Standardisation

- Harmonization
- Transparency
- ....





# Policy support, regulation and written standards

Quality-assured measurement => development of both generic standards and sector-specific standards:

• Sometimes unrealistic and ambiguous measurement specifications and unclear requirements.

# Pre-normative R&D in context of conformity assessment

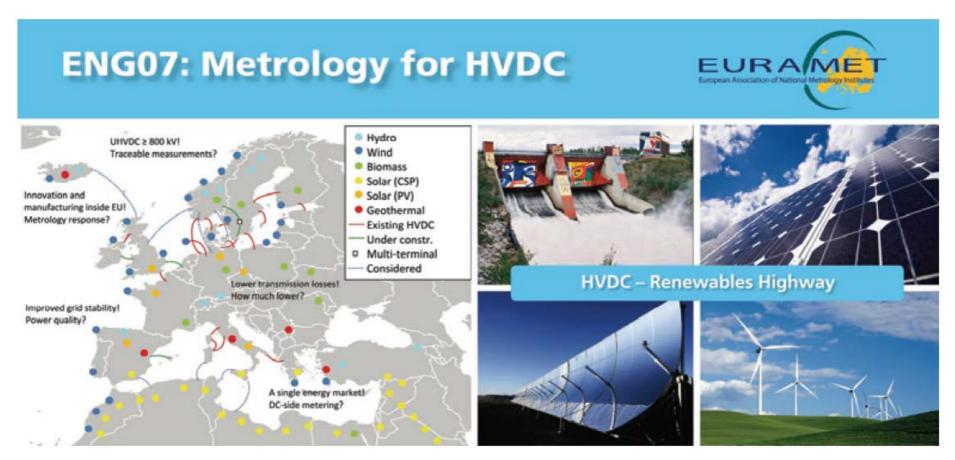
Industry and society place increasingly exacting demands:

- Meeting 'grand challenges' such as in energy & the environment, health & safety
- Emergence of **new technologies** such as nano- and biotechnology.
- New science

EMRP Call 2009 to advance measurement science and technology in the field of Energy







EMRP A169 ENG07 HVDC, Co-ordinator: SP (Sweden)







# ENG07 - Enabling the efficient transmission of electricity generated by remote renewable energy sources

Suitable sites for renewable energy generation are often remote and the challenge is getting electricity from these remote areas to where it is needed. High-Voltage Direct Current (HVDC) offers a solution by enabling power transmission along electricity 'super highways' and distributing energy thousands of kilometres away from where it was generated.

HVDC provides low energy losses, enhanced grid stability combined with the economically viable transmission of electricity. However, no metrology infrastructure currently exists to support the technology at the proposed 800 kV working levels or to reliably measure or monitor its quality.

To assist the widespread implementation of HVDC transmission a new measurement framework, new calibration capabilities and equipment such as prototype DC energy meters are being developed.

# The work in the JRP is feeding into:

- IEC TC 13 Electrical energy measurement, tariff- and load control
- IEC TC 38 Instrument transformers
- IEC TC14 PT60076-19 Power transformers Rules for the determinations of uncertainties in the measurement of losses in power transformers and reactors
- o IEC TC 115 HVDC transmission for DC voltages above 100 kV
- o IEC TC 42 High voltage testing techniques and WG20, WG12 & WG19
- These standards support EC Directive 2003/87/EC and amendment 2004/101/EC (greenhouse gas emission allowance scheme), Directive 2009/28/EC (the promotion of the use of energy from renewable sources) and 2003/54/EC (concerning common rules for the internal market in electricity).





To bring nanotechnology through to successful business:

http://www.co-nanomet.eu/

- relevant metrology tools
- suitably skilled human resources able to implement appropriately such tools



New Technologica, Joint Becearch Brojecta / IBBo)						
New Technologies Joint Research Projects (JRPs)						
Number	Short Name	Full Name	JRP Coordinator			
NEW01	TReND	Traceable characterisation of nanostructured devices	Alice Harling (NPL)			
NEW02	Raman	Metrology for Raman spectroscopy	Alice Harling (NPL)			
NEW03	Nano ChOp	Chemical and optical characterisation of nanomaterials in biological systems	Damian Marshall (LGC)			
NEW04	Uncertainty	Novel mathematical and statistical approaches to uncertainty evaluation	Markus Bär (PTB)			
IEW05	MechProNo	Traceable measurement of mechanical properties of nano-objects	Ludger Koenders (PTB)			
NEW06	TraCIM	Traceability for computationally-intensive metrology	Alistair Forbes (NPL)			
NEW07	THz Security	Microwave and terahertz metrology for homeland security	Thomas Kleine- Ostmann (PTB)			
NEW08	MetNEMS	Metrology with/for NEMS	Ling Hao (NPL)			
NEW09	METCO	Metrology of electro-thermal coupling for new functional materials technology	Paul Weaver (NPL)			





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- What are economic and social **impacts of EMRP programme**?
- Which number of societal challenges such as environmental protection, health care, food safety, or public security was addressed by EMRP?
- Which level and deepness of integration could be achieved in EMRP to provide solutions to important European societal challenges (which challenges addressed)?
- What effect did programme have on competitiveness, growth, innovation capacity, employment, development of human capital?
- What achievements did relate to objectives of revised Lisbon Strategy, in particular "return of investment" in knowledge for growth and jobs?





CEN – European Committee for Standardization
CENELEC – European Committee for Electrotechnical Standardization





CEN Identification number in the EC register: 63623305522-13 CENELEC Identification number in the EC register: 58258552517-56

# **CEN-CENELEC**

Position Paper on Horizon 2020

# COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Horizon 2020 - The Framework Programme for Research and Innovation

Stronger support will be given to the market take-up of innovation, including by the public sector. This will include more proof-of-concept, piloting and demonstration. It will involve a better use of the potential of research infrastructures, as well as setting technical standards, pre-commercial procurement and strengthened loan and equity financing. New approaches





# Modalities of cooperation:

# **EURAMET projects:**

- awareness of importance and benefits of standardization,
- effectively contribute to better standards:

# **EURAMET** encourages CEN and CENELEC to:

• identify metrology research needs relevant to documentary standardisation and submit them for potential research within context of EMRP

# **CEN and CENELEC shall ensure:**

- awareness in standardisation community of importance and benefits of quality-assured measurement, both in the context of existing standards, their implementation as well as in pre-normative research and innovation
- shall seek involvement of EURAMET by inviting their representatives to CEN and/or CENELEC standardization activities.





# Thank you for your attention

# Leslie PENDRILL, EURAMET Chairperson

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