

A large, abstract graphic on the left side of the slide, composed of several overlapping blue shapes: a large semi-circle, a smaller circle, and a curved band, all in different shades of blue.


EURAMET cooperation with NMIs and DIs.

Responsibility for representing the national metrology system to EURAMET, participation in EURAMET life and work

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Outline

- 
- The EURAMET logo, consisting of the word "EURAMET" in blue and a circular icon of two blue arcs.
- 1 Introduction
 - 2 National metrology system
 - 3 Difficulties to integrate DIs in EURAMET
Suggestion to enhance DIs participation
 - 4 Benefits to participate in EURAMET live
 - 5 European metrology integrated system

- ☐ it becomes very expensive and difficult to maintain traditional metrological structures, where the NMI was solely responsible for the practical realization of all units of measure (national standards) and disseminate them to provide traceability to other users of metrology.
- ☐ This reality has led countries to decentralize, in a coordinated manner, the realization of the units of measurement through the designation of Institutes (DIs) of recognized experience and knowledge in different physical or chemical quantities

Role of DIs

DIs play a crucial role in complementing the fields of activities of the NMI and are part of the National Metrology system.

NMIs and DIs have the responsibility to develop and maintain national measurement standards and to be the source of traceability to the SI for metrology users at the highest metrological level in their country.

DI activities are on top of the national metrology system, so should be considered as being at the same metrological level than NMI

Scientific Metrology and dissemination

NMI + DIs

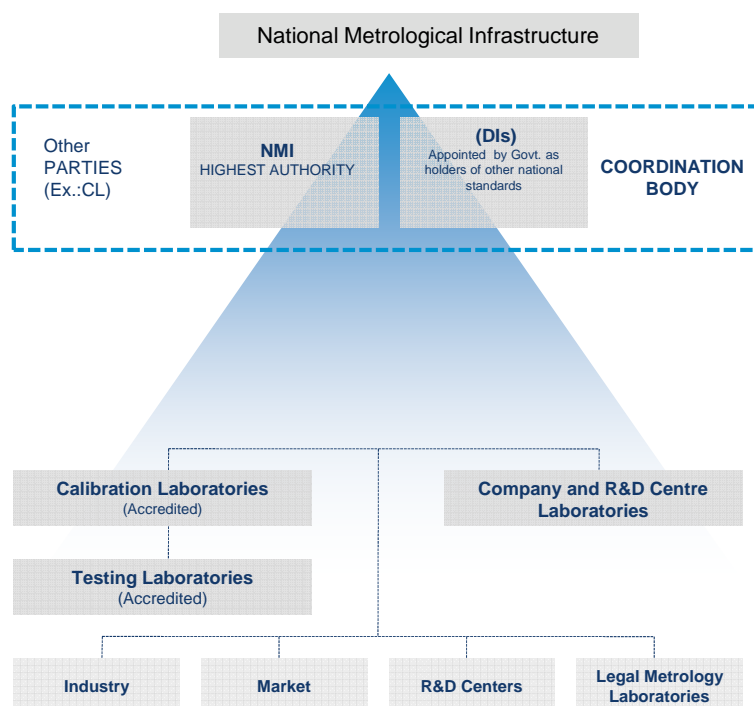
Development and materialization of national standards and the first step of dissemination

→ First level calibration of infrastructure (collected in BIPM database)

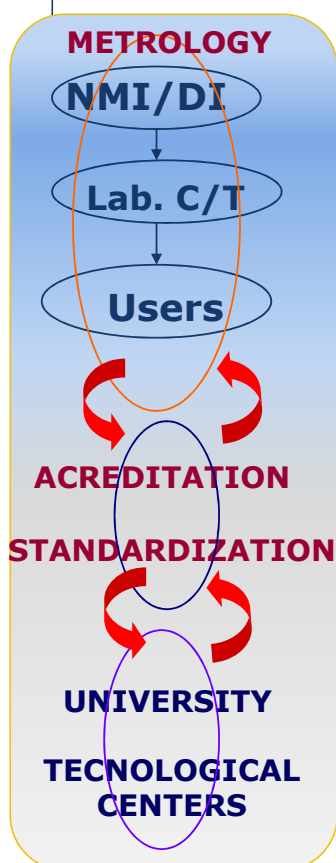
Business Sector

Accredited laboratories

→ Calibration
→ Testing

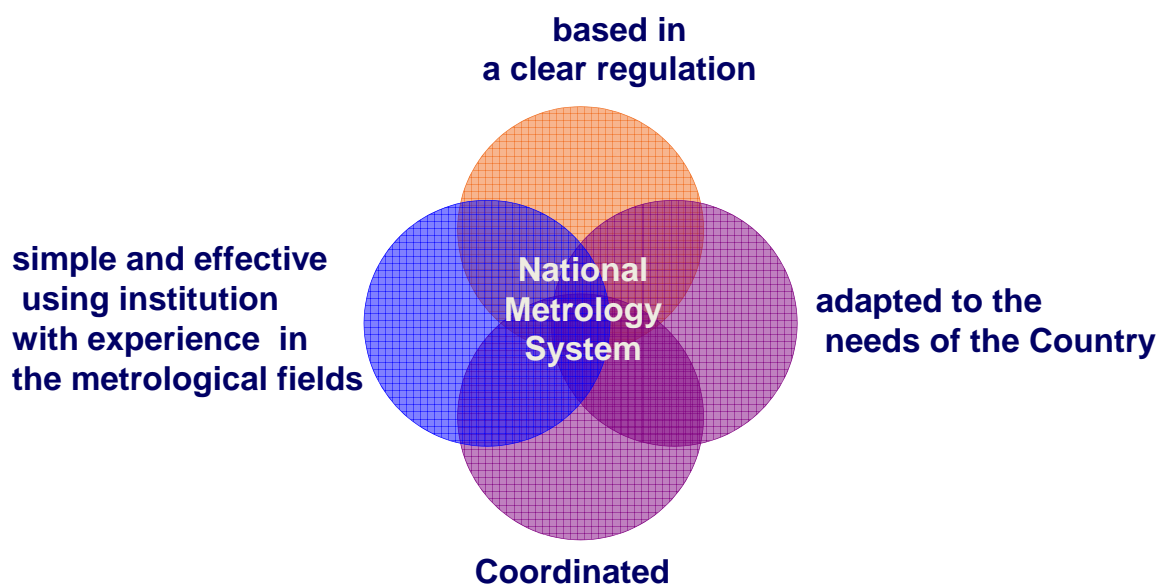


National infrastructure and its role



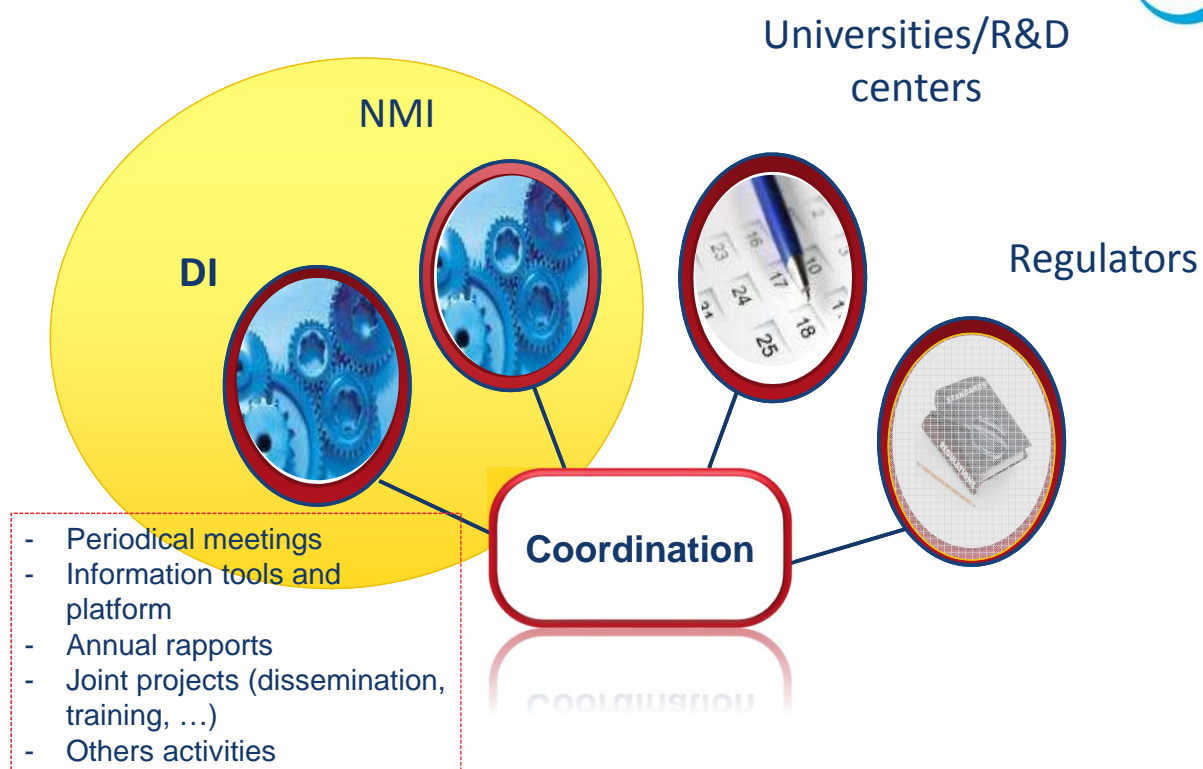
The metrological infrastructure of a country has become a very important technical infrastructure, which provides guarantees:

- ✓ To improve technical capacity for innovation
- ✓ To promote economic growth and social progress
- ✓ To increase competitiveness in international trade
- ✓ To enhance international exchanges and cooperation
- ✓ To facilitate the use of high technology in the industry



Same goal and effective coordination

National coordination



HIGH COUNCIL FOR METROLOGY (CSM)

(Maximum consultative body on metrological policies. Inter-ministerial character)

Defines the metrology strategies and co-operation policies

PLENARY

Technical Secretariat

CEM

Commission of Associate Laboratories (DIs)

Discusses and coordinates scientific policies

Commission of Legal Metrology

Studies draft regulations and harmonizes the implementation of the State Metrological Control

EURAMET Membership

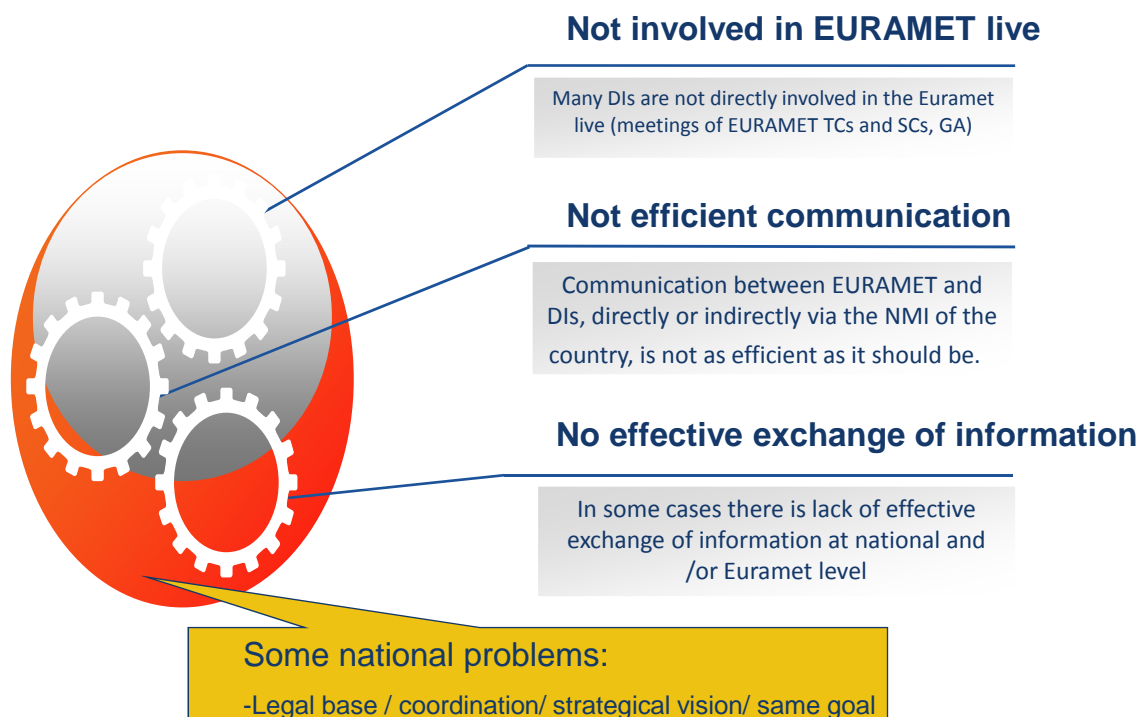
European Association of National Metrology Institutes

- bilateral co-operations since \approx 1900
- EUROMET since 1990
- EURAMET e.V. since 2007

- ❑ **Members:**
37 European NMIs
- ❑ **Associates:**
IRMM (EC)
75 DIs
- ❑ **Liaison Organisations:**
4 RMOs & BIPM
3 NMIs beyond Europe: DSSU, INPL, NIS
KMA (Kosovo under UNSCR 1244)
6 regional/international Organisations



Difficulties to integrate DI in EURAMET

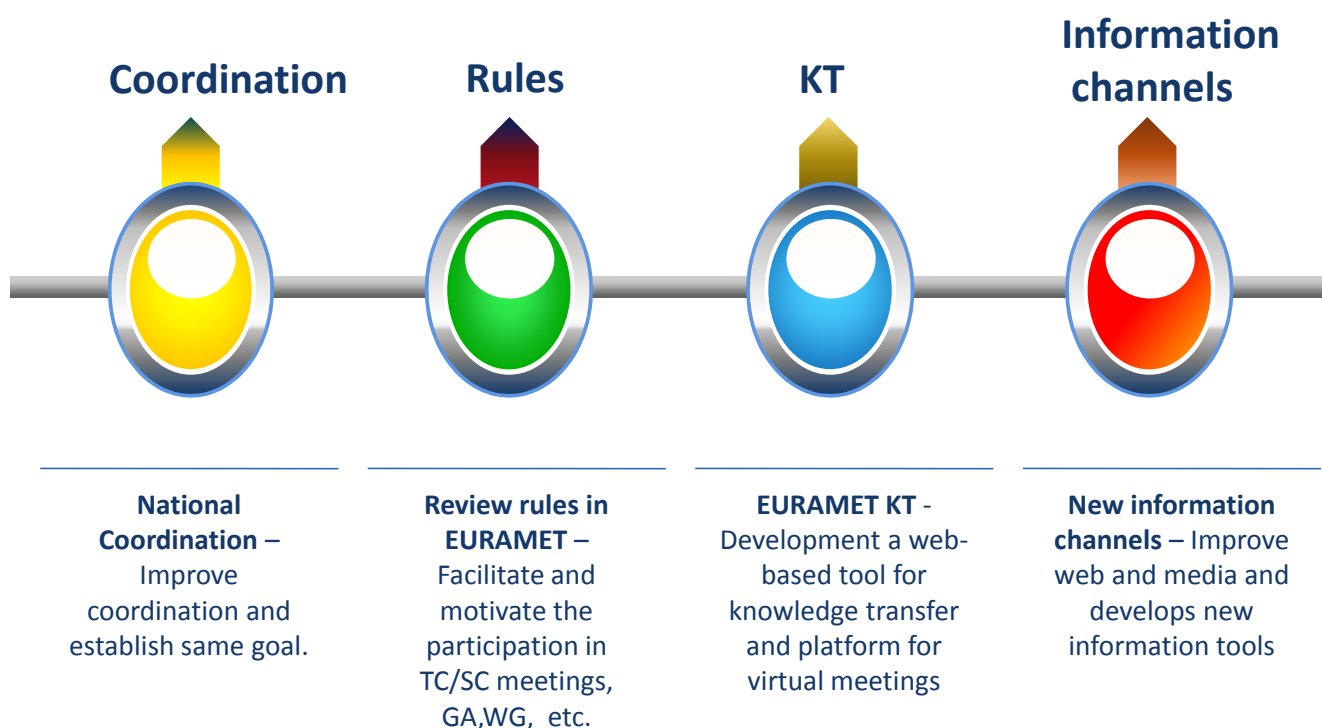


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EURAMET cooperation with NMIs and Dis.

February 2016

Enhance DI participation. Suggestions



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EURAMET cooperation with NMIs and Dis.

February 2016

KT	<ul style="list-style-type: none">• To have available very specialized information and knowledge.• To share experiences with qualified experts in the fields.
R&D	<ul style="list-style-type: none">• To participate in cooperation projects.• To take part in European research program: EMRP, EMPIR,
STRATEGIC	<ul style="list-style-type: none">• To be VISIBLE at National and European level• To have a global vision of European metrology needs that facilitate to design strategic plans.• To be recognized for third parties as a member of a well known RMO and have some technical advantages in competitions for services.
INTERNATIONALIZATION	<ul style="list-style-type: none">• To collaborate with NMI/DIs abroad Europe.• To open markets
Relationships	<ul style="list-style-type: none">• Friends, ...

European metrology integrated system

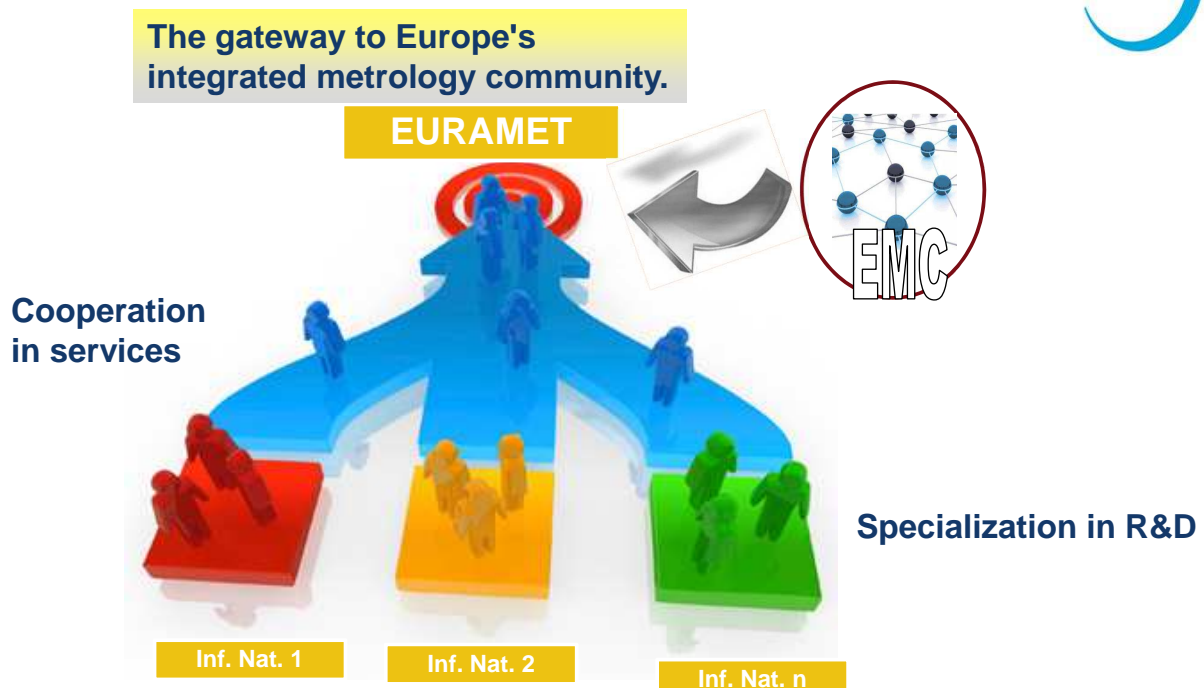
Euramet Mission

- 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

- Many of the challenges we face are the global challenges of Health, Climate change, Environment, Energy, and Sustainability. Such challenges require global solutions supported by reliable measurement, requirements for which often exceed the capacity and capability of individual nations and their National Metrology Institutes (NMIs). Thus pooling of metrological resources across national boundaries is essential to tackle key societal challenges.
- Inevitably the demand for metrology and metrological services is growing in tandem and is entering a new era. Innovation and investment in metrological capability and dissemination are essential to match the trend in demand. However, with the constraint on national resources in recent years, NMI's in Europe must co-operate and EURAMET provides an excellent framework and a vehicle for such co-operation.

EURAMET e.V 2020 Strategy

European metrology integrated system



Thank you for your kind attention!

